Changes in Corporate Governance and President Turnover: The Evidence from Japan[☆]

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Abstract

The study aims to shed light on how changes in the Japanese corporate governance system since the 1990s have influenced company president turnover. We analyzed the determinants of president turnover between 1990 and 2013 for a random sample of 500 firms listed on the First Section of the Tokyo Stock Exchange. Though our analysis, we found that president turnover sensitivity to corporate performance has not changed, although we did find that return on equity (ROE) and stock returns displace return on assets (ROA) as performance indicators that president turnover is most sensitive to. Furthermore, while president turnover sensitivity to ROA is highest among firms believed to be heavily influenced by their main banks, firms with high foreign institutional investor shareholding ratios are more sensitive to ROE. These results are consistent with the curtailment of the scope of Japanese main banks and the increase in foreign institutional investors since the latter half of the 1990s. The influence of outside directors that had begun to increase as of the mid-2000s has varied depending on how many are on each board. The sensitivity of president turnover to performance tends to be lower in firms that have only one or two outside directors and higher in firms with three or more outside directors.

JEL Code: G34; G38; K22
Keywords: Corporate governance; President turnover; Main bank; Institutional investors; Independent outside directors

1. Introduction

It has long been argued that corporate governance practices commonly found in Japan differ markedly from those in the U.S. For instance, in the U.S., in the arena of corporate control, institutional investors and independent boards of directors are arguably important governance mechanisms. In contrast, corporate governance in Japan is conventionally considered as bank centered (Aoki and Patrick, 1994). However, following the process of financial deregulation and the collapse of the Japanese bubble economy in the early 1990s, the bank-centered corporate governance system deteriorated.

The financial deregulations in the early 1980s allowed firms to issue corporate bonds and equity at market prices, and thereby lessen traditional ties with their main banks. The financial difficulties caused by the nonperforming loan problem reduced the ability of banks to monitor and extend loans to borrowers, and forced them to dissolve cross-shareholding *(Mochiai*). However, parallel with financial globalization, foreign institutional investors have increased their equity holdings rapidly in Japan since the end of the 1990s. The average percentage share held by a foreigner on the Tokyo Stock Exchange increased from 4.2% in 1990 to 26.9% in 2013. In terms of board structure, the majority of Japanese public corporations did not have outside directors on their boards. In other words, boards were entirely composed of inside directors. However, after the weak economic climate of the 1990s, corporate board reform emerged as a serious issue in Japan. The amended Commercial Code enacted in 2003, reduced the personal liability of outside directors and allowed the adoption of a U.S.-style "committee system" to encourage the participation of outside directors. The corporate governance code formulated by the Tokyo Stock Exchange requires that all-insider

boards explain why they will not appoint outside directors. In response to these developments, many Japanese firms, for the first time, appointed outside directors to their previously insider boards. The ratio of the firms listed on the First Section of the Tokyo Stock Exchange with at least one outside independent director increased from 41.6% in 2006 to 62.3% in 2013.

Although substantial changes in Japanese corporate governance mechanisms have been documented in recent years (e.g., Aoki, Jackson and Miyajima, 2007), little is known about the impact of these changes on monitoring quality. In this study, we provide evidence on the effects of these changes on monitoring intensity by examining how top executive turnover changed in Japan during the period 1990 to 2013 for a sample of Japanese firms listed on the First Section of the Tokyo Stock Exchange. Certainly, replacing poorly performing top managers is argued to be a necessary condition for good corporate governance (Jensen and Reuback 1983; Shleifer and Vishny, 1997) and the sensitivity of top manager turnover to performance as a measure of the quality of corporate governance has been supported by a large number of studies (e.g., Weisbach, 1988).

We divide our 24-year sample periods into three eight-year sub-periods: 1990 to 1997, 1998 to 2005, and 2006 to 2013. Dividing our sample into these three sub-periods enables us to examine long-term trends in top manager turnover decisions, and how these decisions change with a weaker main bank presence, an increase in institutional investors, and the appointment of independent outside directors.

A comparison of the evidence for the three sub-periods reveals that although the frequency of “normal” turnover, in which departing presidents become the company chairperson or advisory director, is almost constant, that of disciplinary “forced”

president turnover increases significantly throughout the sample period. In fact, we find that forced turnovers represent 18.6% of all turnovers in the first sub-period from 1990 to 1997; 28.9% in the second sub-period from 1998 to 2005; and, 34.1% in the third sub-period from 2006 to 2013.

In addition, we examine the sensitivity of turnover to three firm performance measures: ROA, ROE, and stock returns. Consistent with previous studies on president turnover in Japan, the probability of forced turnover significantly increases as ROA deteriorates, and the sensitivity is constant during all sample periods. In contrast, the relation between the likelihood of forced turnover and ROE is significantly stronger in the most recent period. The probability of forced turnover increases by 0.72 percent when industry-adjusted ROE declines by one standard deviation in the first sub-period from 1990 to 1997. The corresponding values are 1.48 percent and 1.95 percent for the sub-periods from 1998 to 2005 and from 2006 to 2013, respectively. A similar trend is evident when stock returns serve as the performance measure. The probability of forced turnover increases by 0.71 percent when industry-adjusted stock returns decline by one standard deviation in the first sub-period. The corresponding value is 1.32 percent in the third period.

The changes in president turnover frequency and sensitivity could parallel the recent trends in corporate governance in Japan. Thus, we examine whether the weakened presence of a main bank, increase in institutional investors, and appearance of independent outside directors actually drive the changes in president turnover.

In terms of the main banks, the range of their influence has narrowed recently. In our sample, the number of firms that are highly dependent on bank loans and appoint directors from a main bank has decreased by half during the period 1990 to 2013. This

reduction in the range of main bank activity could affect changes in president turnover because the main bank cares more about the borrower's ROA than its ROE or stock returns. We also examine whether strong ties with a main bank still affect the turnover-performance sensitivity. Looking at the period 1985 to 1990, Kang and Shivdasani (1995) show that poorly performing top managers were likely to be replaced when a firm had a strong relationship with a main bank. We find here that the sensitivity of forced turnover to ROA is significantly higher for firms with strong ties to a main bank than for firms without such ties in the most recent sub-period examined, 2006 to 2013. These results show that while the scope of the main bank's authority may have substantially contracted, main banks continue to perform a certain role in disciplining management.

Foreign institutional investors, who have increased rapidly since the end of the 1990s, affect the performance sensitivity of forced turnover, and their influence is stronger in the most recent period. The sensitivity of forced turnover to ROE is not significantly higher for firms with high foreign institutional ownership in the first sub-period from 1990 to 1997, but it is significantly higher in the second and last sub-periods. In addition, we find that foreign institutional investors influence president turnover decisions through blockholding. The sensitivity of forced turnover to firm performance is significantly higher for firms with blockholding by foreign institutional investors. A similar tendency does not appear for blockholding by domestic institutional investors. We also find preliminary evidence that foreign institutional investors affect president turnover decisions through the pressure that arises from "voting with their feet" (selling their shares).

Independent outside directors, who have gradually appeared on the boards of

Japanese firms recently, significantly affect turnover-performance sensitivity. We find that the sensitivity of forced turnover to firm performance is significantly higher for firms with three or more independent outside directors than for firms with one or two or for firms without any, but not significantly higher for firms with only one or two than for firms without any. In other words, the relationship between the number (ratio) of independent outside directors and turnover-performance sensitivity is not linear.

Overall, further examination indicates that the change in the manner of the president's turnover could be driven by the reduction in the scope of a main bank's influence, the rise of blockholding by foreign institutional investors, and the introduction of three or more independent outside directors on the board.

This study is organized as follows. Section 2 provides an overview of previous research on president turnover, corporate performance, and governance systems. Section 3 presents stylized facts on the salient features of president turnover in recent years. Section 4 summarizes the results of the relationship between president turnover and performance. Sections 5 to 7 present analyses of the influence on president turnover of the main bank system, institutional investors, and independent directors. The final section presents our conclusions and discusses the implications of our analytical results.

2. Previous Research on President Turnover

2.1. Research on the U.S.

Jensen and Ruback (1983) pointed out that the association between president turnover and performance is one of the most important indicators for determining whether or not corporate governance is functioning effectively, and since the mid-1980s research in the U.S. has made further advances on this issue. Pioneering studies in this research area

include Coughlan and Schmidt (1985) and Warner, Watts, and Wruck (1988) who show that management turnover is sensitive to performance. Subsequent research has aimed to shed light on the mechanism that conveys the degree of sensitivity of president turnover to performance. Weisbach (1988), for example, analyzes the relationship between board composition and CEO turnover. Furthermore, Denis, Denis, and Sarin (1997) analyze ownership structure and executive turnover, showing that the sensitivity of turnover to performance was lower in firms with higher manager ownership ratios. Parrino, Sias, and Starks (2003) show that aside from the market for hostile takeovers and direct involvement by blockholders, the threat of exit (sale of their investment in the firm) by institutional investors serves as an important mechanism for CEO turnover.

Moreover, research in recent years has attempted to put the focus on how the relationship between executive turnover and performance has changed in relation to the evolution of the U.S. governance system. Huson, Parrino, and Starks (2001) analyzed CEO turnover from 1971 to 1994. According to their research, while internal governance improved in the U.S. during this period through, for example, an increase in the number of outside directors and a strengthening in their role, there were also advances in external governance, such as the development of a more active market of corporate control. The authors reported that although there was an increase in the frequency of forced CEO turnover, and the recruitment of CEOs from outside of the firms, the degree of sensitivity to performance did not change.

Following on Huson, Parrino, and Starks (2001), Kaplan and Minton (2012) analyzed CEO turnover for a later period: 1992 to 2007. Since governance had been strengthened through the Sarbanes-Oxley legislation by this time, their attention turned to the question of whether changes in the corporate governance system influenced the

probability of CEO turnover. According to their analysis, there was an increase in the frequency of CEO turnover and a higher sensitivity to performance. Kaplan and Minton (2012) pointed to the increase in blockholders and the increasing independence of directors as factors contributing to these changes. On the other hand, Helwege, Intintoli, and Zhang (2011) examined CEO turnover since 1980, and found that while turnover up to 1993 was based on pressure from large shareholders and the threat of the loss of institutional investors, the influence of the latter (threat of the loss of institutional investors) on turnover declined from 1994 to 2006.

At the same time, more studies examining countries outside of the U.S. have begun to analyze whether the increase in foreign institutional investors has encouraged executive turnover at poorly performing firms. On the one hand, Aggarwal, Erel, Ferreira, and Matos (2011), in examining the influence of change in ownership structure on executive turnover in 23 countries, pointed out that the increase in institutional investors increased the degree of executive turnover sensitivity to corporate performance. On the other hand, Becht, Franks, Grant, and Wagner (2015), who examined the role of hedge-fund activism in countries around the world, reported that in the Asia region (with Japanese firms comprising the majority of the sample) activism yielded meager results, and rarely influenced the appointment of company presidents.

2.2. Research on Japan

Research related to Japan has traditionally focused on the role of main banks in executive turnover. Kaplan (1994) was the first to shed light on this role. His study analyzed the relationship between executive turnover and performance in Japan and in the U.S. in the 1980s, and pointed out that the Japanese main bank system served the

same function as the market for corporate control in the U.S. Subsequent studies examined the relationship between executive turnover and performance, with Kang and Shivdasani (1995) analyzing the period 1985 to 1990, and Abe (1997) analyzing the period 1974 to 1990. Moreover, Miyajima (1998) analyzed executive turnover during five major recessionary periods between the 1950s and the 1990s. All of these studies noted that as in the U.S., when performance deteriorates in Japan, the probability of executive turnover increases, and the stronger the ties to the main bank, the higher the degree of turnover sensitivity to performance.

However, the corporate governance environment for Japanese firms has changed dramatically in recent years. How, then, have these changes in the corporate governance system influenced executive turnover at Japanese firms? Is the main bank system no longer performing a role in disciplining management? Has the increase in institutional investors, and foreign institutional investors in particular, exerted a real influence over executive turnover? If so, what kind of mechanism can be assumed to exert this influence? Furthermore, is it possible to confirm whether the increase in independent outside directors has had the expected influence on turnover? We have not come across any previous research that addresses these questions.

3. President Turnover: Stylized Facts

3.1. Data

We randomly selected 500 firms from the First Section of the Tokyo Stock Exchange to compile two samples. Sample 1 consists of 400 firms chosen from 1,070 non-financial, non-public utility corporations listed as of 1990. Of these, 279 were still in existence in 2013. The attrition can be attributed to business failure, dissolution,

acquisitions and mergers, and transformation into wholly owned subsidiaries. Sample 2 consists of 100 firms randomly selected from the 393 non-financial, non-public utility corporations that were either newly listed or had migrated their listing status on the First Section of the Tokyo Stock Exchange from 1991 to 2006. This selection procedure allowed us to compile two samples that largely reflect the distribution of firms listed on the First Section of the Tokyo Stock Exchange from 1990 to 2013.

The estimation period is 1990 to 2013, and our financial variables were basically compiled with information from consolidated balance sheets. Furthermore, we divided the period of our study into three eight-year sub-periods:

- 1990-1997: From the collapse of the bubble to the banking crisis;
- 1998-2005: Post-banking crisis to the period of rapid transformation of the ownership structure;
- 2006-2013: Period during which stock ownership structure stabilized and independent outside directors were gradually appointed.

In examining the above three sub-periods, the aim of this study is to shed light on (1) whether the frequency of executive turnover and its sensitivity to performance changed; and (2) what kind of relationship exists between such change and the evolution in the corporate governance system in Japan.

3.2. Types of President Turnover

Although there are various reasons for president or top executive turnover, we can observe two types of turnover—normal turnover that occurs after a president serves for a certain period and then voluntarily resigns due to illness or other health-related reasons, and punitive turnover that is forced after problems arise with regard to

managerial ability and low level of effort. Needless to say, governance research should pay attention to punitive turnover, and distinguish punitive turnover from normal turnover.[1]

Up until now, research has devoted considerable effort to drawing this distinction. For example, U.S. studies define resignations confirmed in newspapers and other media to have been caused, for example, by declining performance as punitive or forced turnover, as distinguished from voluntary, normal turnover (internal turnover), and have pursued their analyses with a focus on forced turnover.

The standard practice for postwar Japanese corporations has been to appoint the incumbent president to the post of chairman or vice chairman after the conclusion of his tenure (two terms for four years, or three terms for six years), as the presidency is filled by a successor promoted from within the firm. This study assumes that in contrast to the case in which a resigning president is appointed to the post of chairman or vice chairman (hereafter, normal president turnover), if the resigning president does not take up the post of chairman or vice chairman, the turnover is assumed to have a punitive component of some kind, and thus, the turnover is considered to be forced. Studies on Japanese firms up to now have viewed such cases as prototypical examples of forced turnover.[2]

Evidently, there are some Japanese firms that have adopted a custom of not appointing a retiring president to the post of chairman or vice chairman (for example,

[1] Parrino, Sias, and Starks (2003) distinguish forced turnover from normal turnover by consulting news stories in the Wall Street Journal. In contrast, Kaplan and Minton (2012) asserted that this determination could not be made from reading news stories, and instead analyzed all CEO turnover.

[2] For example, Kang and Shivdasani (1995) and Kaplan (1994) have adopted this definition.

Honda Motor Co.).[3] However, even in such cases, the retiring president is normally appointed advisory director; therefore, when a retiring president does not remain as a board member, the punitive aspect is even more pronounced. Thus, this study defines resignations in which the president does not remain with the firm as a director, a status that may also include the posts of chairman or vice chairman, to be cases of forced turnover.[4]

In addition, a different type of turnover that includes a punitive element would occur when the incumbent president loses his position due to a takeover, business integration, or business failure. Kaplan and Minton (2012) refer to such cases as external turnover to distinguish them from cases of normal or forced turnover. External turnover was rare in Japanese firms prior to the first half of the 1990s, when there was little merger and acquisition (M&A) activity, and firms facing financial hardship were primarily rescued through private main bank bailouts. However, after the banking crisis, there was a rapid increase in forced turnover. For example, there were 135 delisting cases in our sample during the period of our study, which is less than 10% of the 1,398 turnover cases among the firms that remained in existence. Hence, in M&As and cases of debtor-in-possession corporate rehabilitations that allowed the president to remain, we followed president turnover in such firms even after the delisting. For example, when president turnover follows the subsidiarization of a firm as the result of a takeover, we consider this to be a turnover of a forced nature, in contrast to cases in which there is no

[3] Honda Motor Co. is one of the most well-known corporations to have implemented such a practice, but there are also firms that have adopted policies preventing the appointment of a retiring president to the post of chairman.

[4] In employing the above distinctions, it is necessary to exclude retirement triggered by death or illness. We confirmed whether such circumstances played a role by consulting newspapers.

turnover as the president remains following subsidiarization.

When categorizing president turnover as normal or forced (with the president is not able to assume the post of either chairman or vice chairman, nor remain as a director), our yardstick is whether the president was serving as chairman, vice chairman, or director one year after resigning as president.

3.3. Turnover Pattern: Stylized Facts

Table 1 and Figure 1 summarize president turnover trends for 1990 to 2013. The president turnover ratio for 1990 to 2013 was 15.4%, with an average turnover ratio for 1990 to 1997 of 14.2%, rising to 16% for 1998 to 2005, and dipping to 15.4% for 2006 to 2013. Although the turnover ratio fell somewhat in 2013, we conclude that the turnover probability has been on an upward trend since 1990.

Examining long-term trends in the tenure of incumbent presidents, as seen in Figure 2, we found that the average tenure of presidents who retired between 1990 and 2013 was 7.59 years. The length of tenure, aggregated by sub-period, declined from 8.34 years in 1990 to 1997, to 7.64 years in 1998 to 2005, and then to 6.83 years in 2006 to 2013.

Historically, president tenures were comparatively long until the 1960s, and there did not appear to be a strong correlation between president turnover and length of tenure (Miyajima, 1996, Itami, 1995, Miyajima, 1998). However, entering the 1970s, following the shortening of the president (CEO) tenure, and given the tendency to treat the position of the president as a job assignment within the firm (Itami, 1995), there were signs that the length of tenure began to increase slightly from the 1990s onward. On the basis of this premise, incorporating our data from this study, and using the first half of the 1990s as a benchmark, we discovered that the probability of president

turnover began to increase, and length of tenure once again began to decline, in the latter half of the 1990s.

Furthermore, if we view this issue from an international perspective, considering that Kaplan and Minton (2012) estimated that the average CEO turnover probability at U.S. S&P 500 firms between 1990 and 2005 was 15%, we could say that president turnover in Japanese firms occurred at largely the same degree of frequency. Furthermore, since Kaplan and Minton (2012) also pointed out that the average turnover probability at S&P 500 firms increased 3.7% points, from 13.2% in 1990 to 1997, to 16.9% in 1998 to 2005, the upward trend in Japanese president turnover could be considered part of a global trend.

Next, we looked at type of president turnover and found that the frequency of forced turnover increased from 1996 to 2002, and then from 2007 to 2010. The former period corresponds to the period of business reorganization following the banking crisis, peaking in 2002, when 21 of 91 turnovers were forced. Furthermore, during the next peak year of 2008, 29 of the total of 72 turnovers were forced.

4. Has the Sensitivity of President Turnover to Performance Changed?

4.1. Estimation Model

While president turnover was increasing, was it sensitive to corporate performance? Using a probit model, we estimated the following standard model.

$$TURN_{i,j,t} = F\,(P_{i,t}\ ,\ TENU_{i,t},\ FAM_{i,t},\ SUB_{i,t},\ FAM_{i,t}*P_{i,t},\ SUB_{i,t}*P_{i,t},\ \mathrm{CONT}) \qquad (1)$$

Here, $TURN_{i,j,t}$ is president turnover dummy for firm i at period t, and j is comprised

of total turnover, normal turnover, and forced turnover. Turnover was determined by comparing the president approved at the general shareholders' meeting, held immediately after the end of the accounting period for each firm, to the office holder one year earlier. *Pi* is corporate performance for period *t*, consisting of ROA, ROE, and stock returns (RET). Following Kaplan and Minton (2012), we use industry-adjusted performance. Industry-adjusted performance is calculated by subtracting the industry median value calculated from all firms listed in First Section of the Tokyo Stock Exchange operating in the same industry.[5] It appears that up until now, disciplining of presidents (turnover) through intervention by banks (main banks) relied on performance prior to interest payments (ROA) as an indicator; however, one issue that we will devote considerable attention to is whether, as a result of the evolution of the corporate governance system after the banking crisis, the president turnover sensitivity to performance shifted to ROE as an indicator, which, in turn, is an indicator of the direct interests of shareholders, or stock returns.[6]

TENUi,t is a variable denoting president turnover at firm *i* for period *t*, and is introduced to capture the seniority-system aspect that has been said to have played a role in president appointments.[7] More specifically, we constructed dummy variables for length of tenure: one to two years; three to four years; seven to eight years; and nine or more years. Thus, the coefficients for the various dummy variables are indicators of the divergence from the turnover probability of a president, with the benchmark tenure

[5] Aggarwal, Erel, Ferreira, and Matos (2011) use abnormal returns (stock price minus MSCI index), and Parrino, Sias, and Starks (2003) use market-adjusted returns.

[6] ROA = (operating profit + non-operating profit)/total assets; ROE = net income/shareholders' equity; RET= (stock price at end of fiscal year – stock price at end of previous fiscal year + dividend per share)/stock price at end of previous fiscal year.

[7] Itami (1995) pointed out that as of the 1970s, the office of president had turned into a job posting that adhered to a seniority rule.

lasting five to six years.

FAMi,t is the family-run firm dummy. Generally, president turnover at family-run firms occurs through hereditary succession, thus president tenure is long, and turnover sensitivity to performance is low. *FAM* was introduced to control for this factor. We defined a family-run firm to be a firm in which the founding family held 5% or more of shares, and the president is either the founder or related to the founder. We found that 22.6% of the firms in our total sample met these criteria.

SUBi,t is the subsidiary dummy. Since the appointment of the president at a firm that has another listed firm (listed holding company) as its controlling shareholder is made as part of the personnel policy of the entire group, it is assumed that president turnover sensitivity to performance is low under such conditions. This dummy was introduced to control for this influence on listed subsidiaries, which is considered to be a common phenomenon in Japan. A shareholding ratio of 30% held by another corporation was set as the threshold for subsidiaries. This dummy was employed for 13.7% of the firms in our sample.

The time-series distribution of the above dummy variables that indicate corporate characteristics are summarized in Table 2.

4.2. Estimation Results

The basic estimation results are compiled in Table 3. The following points deserve attention.

First, president turnover was overall significantly negatively sensitive to all of the performance indicators: industry-adjusted ROA, ROE, and RET. A one standard deviation (4.1) decrease in ROA increased the president turnover probability by 3.2%,

which corresponds to 20% of the average turnover probability of 15.6%. Furthermore, president turnover had a high correlation with president tenure. According to Model 1, holding all other variables in the model at their means, the probability of president turnover in years one or two after assuming office is 17.0% lower than the benchmark probability for a president in years five and six of his tenure, and the turnover probability was 7.15% lower for a president in years three and four of his tenure.

Second, the results for president turnover, when classified as normal turnover and forced turnover, are presented in Models 4 and 5 in Table 3. While normal turnover was insensitive to performance,[8] it was significantly sensitive to the one- to two-year tenure, and three- to four-year tenure dummies. On the other hand, while the tenure dummy effect was small for forced turnover, the performance indicators ROA, ROE, and RET were all significantly negative for forced turnover.[9] For example, a one standard deviation increase in ROA produced a 2.0% increase in the probability of forced turnover, which is approximately half of the average of 4.1%.

Finally, we can confirm the influence of family succession and parent firms on president turnover. As is often pointed out, these factors reduce the frequency of president turnover. The coefficient of the constant term is negative, and the coefficient of the interaction term is positive. According to Model 1, the turnover probability at family-run firms is 8.8% lower than it is for other firms. Furthermore, president turnover sensitivity to performance (for example, -0.85 in Model 1) is largely cancelled

[8] The sensitivity of normal turnover to performance is not significant, even when ROE and RET are used as performance variables.

[9] For forced turnover, we also estimated turnover for those cases in which the president was not able to assume the posts of chairman or vice chairman, but the level of significance, and the coefficient of determination were both higher when the president was not appointed to the board of directors.

out by the characteristics of the family-run firm (interaction term coefficient of 0.596).

In cases in which another corporation holds 30% or more shares, the constant term was significantly positive in contrast to family-run firms. On the other hand, we were not able to obtain sufficiently significant results for the interaction term coefficient. At such firms, where there was a strong tendency to appoint a president as part of the overall personnel policy for the corporate group as a whole, the frequency of president turnover, compared to firms whose shares were dispersed, was estimated to be 7% higher overall, and 3% higher for forced turnover.

4.3. Period Effect and Performance Indicators

Next, we attempt to examine whether the probability of president turnover varied by period. Panel 1 of Table 4, we added a period dummy to equation (1) for Period II (1998–2005) and Period III (2006–2013), and report only the estimation results for the period dummies.[10] The coefficients for the period dummies are all significantly positive. When looking at all turnovers, the president turnover probability for Period II is 3.5% higher than for Period I, and 2.7% higher than for Period III due to factors that cannot be traced to performance and the incumbent president's term in office. This period effect is even larger for forced turnover, and when ROA is used as the performance indicator for Periods II and III, the president turnover probability is 1.9% and 2.4% higher than in Period I. Since the average forced turnover ratio is 4.1%, this means that around half of

[10] The correlation between ROA, ROE, and stock returns for each period are as follows:

	Period I	Period II	Period III
ROA-ROE	0.39	0.39	0.56
ROA-RET	0.23	0.19	0.29
ROE-RET	0.12	0.16	0.18

the variation in turnover is due to performance and factors not related to the period of incumbency.[11] Shedding light on the factors that increased the coefficient for these period dummies is the focus of our analysis below.

4.4. Did the Degree of President Turnover Sensitivity to Performance Change?

The change in the governance structure of Japanese corporations in the 1990s was triggered by the declining status of creditors as debt contracted, and the rising status of shareholders as institutional investors expanded. Such changes in the corporate governance structure lead to the expectation of a shift in the performance indicators related to president turnover. Thus, we have estimated equation (1) above for each period to shed light on this point.

According to Panel 2 of Table 4, while the coefficient of ROA for Period III declined to almost half of that for Periods I and II for all president turnover, the ROE coefficient nearly doubled from -0.16 to -0.29. This trend becomes even more apparent when we turn our attention to forced turnover, where the coefficient for ROE for Period III declined to less than a third of that for Period I, from -0.46 to -0.131. When the size of the ROE is measured by multiplying one standard deviation by the coefficient, we find that it rises from 0.7% in Period I to 2.0% in Period III; thus, we confirmed that ROE had become an important performance indicator that forced president turnover is sensitive to. Furthermore, in Period III, president turnover becomes significantly sensitive toward stock returns. The above results are consistent with the view that the governance structure of Japanese corporations had begun to shift toward a structure that

[11] During our sample period, there was no large variation in the effect of seniority factors (number of years worked) for each period.

places more emphasis on shareholders.

We confirmed the robustness of the above results using the following methodology. Previous research, including Kaplan and Minton (2012), focused on the change in profits, and not the profit level prior to turnover, so even if changes in industry-adjusted ROA and ROE are used as performance measures, the results are basically unchanged. The sample for this study is comprised of firms that were listed in the First Section of the Tokyo Stock Exchange as of 1990, and newly emergent firms that were subsequently listed. There is a possibility that the differences in the characteristics of these two groups of firms could determine a change between the above noted periods. Therefore, we created Sample 1 for already existing firms, and attempted an estimation. The results are not reported here, but we found that there were no major differences in the results regarding the rising trend in president turnover, president turnover sensitivity to performance, and the shift in performance indicators from ROA to ROE and stock returns.

Overall, president turnover at Japanese corporations, even during the period from 1990 to 2013, was significantly sensitive to performance, and thus it cannot be said that there has been a large void in corporate governance. However, we can assert that with regard to president turnover sensitivity to performance indicators, those indicators that directly represent the interests of shareholders, such as ROE and stock returns, have grown in importance.

5. The Impact of Change in the Governance System: The Declining Influence of Main Banks

Previous research showed that main banks play the role of imposing discipline on the

managers of Japanese firms. Aoki (1994) proposed a theoretical model, and Kaplan (1994), Sheard (1994), Abe (1997), and Miyajima (1998) assumed that when a client firm's performance deteriorates, the main bank, which has a strong interest in the firm, will dispatch, while performing either its creditor or shareholder role, directors to strengthen monitoring. Moreover, when performance declines decisively, the bank will in fact "take over" the board of directors, and begin initiatives for the president's removal.

In this subsection, we examine whether main banks are still capable of disciplining management. For this purpose, we estimated equation (2) based on equation (1) by adding a variable denoting the main bank (MB) relationship

$$TURN_{i,j,t} = F(P_{i,t}, MB_{i,t}, MB_{i,t} * P_{i,t}, \text{Control}) \qquad (2)$$

The MB is a dummy variable, which takes one when main banks meet the following conditions. To construct this variable, we first identify a bank as a main bank if it is designated by the client as the primary source of its banking transactions (based on the Kaisha Shikiho by Toyo Keizai Shinposha). We then check whether the main bank meets the following criteria.

(1) The relationship with the main bank is stable; namely, the main bank has not changed in five years.

(2) Since a main bank relationship assumes that the client's dependency on loans from the main bank is at or above a certain level, the degree of loan dependency, or LA (bank loan/total assets) must be at or above the industry median for each year.

(3) Directors have been dispatched from the main bank.

We constructed the MB dummy variable for when all conditions (1), (2), and (3) were met.[12] The percentage of firms with a positive MB dummy was 23% for 1996 in Period I, and 12% in 2009 in Period III. The estimation results are summarized in Table 5.

When the MB dummy includes the dispatch of directors as a condition, the forced president turnover sensitivity to performance did lead to an increase limited to the ROA indicator, but the significance level was not sufficiently high. On the other hand, the coefficient of the interaction term for ROE was similarly not sufficiently significant, but nevertheless positive, so a strong main bank relationship, in fact, reduces president turnover sensitivity to ROE, which is a direct indicator of the interests of shareholders.

When examining this in each period (Panel 2), we found that forced turnover sensitivity to ROE was lower in Period I. The diminished effect that we found in the estimations for all periods was primarily a reflection of the relationship found in this first period, and is consistent with the conventional understanding (Hoshi and Kashyap 2001) that the additional financing supplied by main banks in the 1990s impeded business reorganization. In contrast, in Period II, the coefficient of the interaction term for ROA had a negative sign for both all turnover and for forced turnover, but was not statistically significant. In Period III, which coincided with a waning in main bank relationships, the sign of the coefficient of the interaction term for ROA was negative and statistically significant at the 10% level. These results indicate that main banks continued to influence president turnover even after 2006.

The above results suggest that the number of firms with intimate relationships with

[12] We constructed the MB2 variable for when both conditions (1) and (2) were met, and the main bank's shareholding ratio was 3% or higher . The MB2 comprised 47% of the sample firms in 1996, and 24% in 2009.. The estimation result is almost the same, although the significance level is slightly lower.

main banks declined dramatically over the past 20 years, but these relationships continue to play an important role in corporate governance.

6. The Role of Institutional Investors

6.1. Increase in Institutional Investor Ownership and President Turnover

We now turn our attention to the question of whether institutional investors, who have rapidly increased their presence since the latter half of the 1990s, have actually influenced decision making on president turnover. Aggarwal, Erel, Ferreira, and Matos (2011) reported that firms in countries in which foreign institutional investors had high shareholding ratios also had high president turnover sensitivity to performance.[13] However, there are no studies that directly analyze the impact the rapid increase in institutional investors since the late 1990s has had on president turnover.

To shed light on this, we replaced the MB variable in equation (2) with variables for institutional investor shareholding ratio and foreign institutional investor shareholding ratio. The institutional investor shareholding ratio is the total shareholding ratio of domestic and foreign institutional investors, of which domestic institutional investors (funds managed by trust banks and asset management) are mainly capital investors for pension funds, but their shareholdings are not fully captured due to source limitations.[14] On the other hand, the shareholdings of foreign institutional investors represent foreigners with the shareholdings of foreign business corporations excluded. Furthermore, we also created a dummy variable for foreign institutional ownership,

[13] On the other hand, Becht, Franks, Grant, and Wagner (2015) examined the role of hedge fund activism and reported that results from activism in the Asia region, which comprises a major portion of the sample, were scant, and cases in which such activism influenced the appointment of a president were extremely rare.

[14] For details, see Miyajima, Hoda, and Ogawa (2015).

which takes a value of one, for firms whose foreign institutional investor shareholding ratios exceed 20%.

The shareholding distribution for institutional investors and foreign institutional investors for the observation period is summarized in Table 2. The estimation results are summarized in Table 6.

Panel 1 presents results for the shareholding ratio for all institutional investors, and Panel 2 presents results for the foreign institutional investor shareholding ratio. The results for both panels are similar. For forced president turnover, the interaction term for the institutional investor shareholding ratio and performance is at the 1% level of significance for ROE; the level of the institutional investor shareholding ratio at the beginning of the period influences president turnover. While main banks increased the president turnover sensitivity to ROA, a high institutional investor shareholding ratio or foreign institutional investor ratio increased the president turnover sensitivity to ROE. When the foreign institutional investor shareholding ratio was 20%, a one standard deviation decline in ROE led to a 0.68% (0.002 x 0.17 x 20%) increase in the forced turnover ratio. Furthermore, the result was the same even when the foreign investor shareholding ratio was replaced in the aggregate value with the 20%+ shareholding dummy.[15]

Furthermore, Panel 3 presents the results obtained after narrowing the institutional investor effect down to that of foreign institutional investors, and running estimations for each period. We confirmed that there was a significant influence on ROE in Periods II and III. In Periods II, the forced turnover ratio increased 1.3% when the foreign investor shareholding ratio rose 3%. On the other hand, the coefficient of the interaction

[15] The 20%+ shareholding dummy coefficient is 0.173 at the 5% significance level.

term for foreign institutional ownership and ROE for Period III was -0.001, or larger than the -0.004 in Period II, which at first glance seems to suggest that the influence decreased, but since the constant term declined from -0.057 to -0.119 we should place more emphasis on the fact that the increase in the foreign institutional investor shareholding ratio had the effect, on average, of increasing sensitivity. Moreover, when the foreign institutional investor shareholding ratio was replaced with the 20%+ shareholding dummy variable, the results were nearly identical, confirming the increase in president turnover sensitivity to ROE in Periods II and III at a statistically significant level.

Hence, the institutional investor shareholding ratio at the beginning of the period had a significant influence on the degree of president turnover sensitivity to ROE. In the next subsection, we examine the mechanism that leads to higher sensitivity.

6.2. Engagement of Blockholders

A rise in the institutional investor shareholding ratio can influence president turnover when institutional investors who hold a certain level of shares exercise their voting rights, or engage with the firm to influence president turnover. There is a possibility that the two types of blockholders – domestic institutional investors and foreign institutional investors – perform different roles in this regard. While domestic institutional investors, who may have a business relationship with the firm, may wield less influence, foreign institutional investors, who have a higher degree of independence from the firm, are able to exercise more actual influence (Ferreira and Matos 2008, Giannetti and Laeven 2009).

To examine the influence of blockholders, we replaced the institutional investor

shareholding ratio with a dummy variable, which takes the value of one when a single entity institutional investor holds more than 3% ownership.[16] This analysis was made possible for the first time by utilizing data supplied by FactSet. Empirical analysis up to now has not sufficiently taken into account the fact that the management of institutional investor voting rights, which increased entering the 2000s, had been delegated to trust banks and custodians (for example, Master Trust Bank of Japan, and for foreign institutional investors, State Street), and that most of the top shareholders on the lists of the 10 largest shareholders of firms with high institutional investor shareholding ratios were such custodians.[17] The shareholdings of these custodians included the holdings by multiple institutional investors, and thus was not an indication of the actual shareholdings of each investing entity. While caution needs to be exercised when using FactSet data,[18] which were not obtained from a comprehensive survey, they are valuable for the reporting of the ultimate holding entity, and we use such data to analyze the effect of blockholders. The estimation is for the period after 2006 when the institutional investor shareholding ratio peaked.[19]

Table 7 presents the distribution of institutional investor blockholders. Around 40% of the sample firms had institutional investors that held 3% or larger blocks. Of these,

[16] Research up to now has used a threshold value of 5% (Holderness, 2009), which is a standard that matches the reporting requirements for large shareholding reports. However, the incidence of ratios at 5% or higher is lower than at 3% or higher (an average of 19.7% from 2006 to 2013). Furthermore, there is no clear basis for the 5% threshold, and since there is a tendency for investors to keep their shareholding ratio below the large shareholding reporting threshold, we used a threshold of 3%, the level at which the rights of minority shareholders are protected.

[17] The sole exception is Hoda (2016).

[18] For example, while data collected for 2006 yield a foreign shareholding ratio of 24%, FactSet data yield a foreigner shareholding ratio of 14%, which is coverage of only around 60%. For this point, also see Hoda (2016).

[19] We have not conducted an estimation for 2005 or the preceding years because we have reservations pertaining to the FactSet's coverage of these years.

domestic institutional investors, such as Mitsui Sumitomo Trust, Nomura Asset Management, had invested in 23% of the sample firms and foreign institutional investors around 27%. We should make the following two points with regard to blockholder shares.

First, the shareholding ratio of the institutional investors increased, and the emergence of such outsider blockholders has been part of a major evolution since the mid-2000s, but the presence of these blockholders is still quite low when compared to the situation in the U.S. and the U.K. For example, in the U.S., where the stock ownership structure is understood to have a high degree of dispersion, and ownership of the shares of listed firms by other businesses and banks is considered to be rare, 89% of the firms on the S&P 500 report the existence of blockholders owning 5% or more of shares (Holderness 2009).

Second, there are huge biases in the dispersion of blockholders by firm size. As emphasized in an earlier study (Miyajima and Hoda, 2015), institutional investors, and foreign institutional investors in particular, have a strong investment bias toward size and liquidity, which is confirmed in Panel 2 of Table 7. When divided into four quartiles by market capitalization, 33% of firms in the fourth quartile (¥1.451 billion yen or more) have at least one foreign institutional investor holding 3% or more (and 17% of these firms have a foreign institutional investor holding 5% or more shares), while only 9.3% of firms in the first quartile have a foreign institutional investor holding a block of 3% or more (and 3.6% have foreign institutional investors who hold 5% or more). On the other hand, domestic institutional investors target somewhat different firms, with blockholder shareholdings the highest in the third quartile. These results are consistent with our interview results that show that while foreign institutional investors have

practically restricted their investments to firms with a market capitalization ranking from 300 to 400 on the MSCI index, domestic institutional investors prefer non-MSCI indexed firms.

Estimation results are summarized in Table 8, where we replace the institutional shareholdings ratio with the blockholder dummy.

When we did not distinguish between domestic and foreign institutional investors, and added a 3% blockholder dummy to the explanatory variable, the coefficient of the interaction term with performance was in all cases not significant. However, what is worthy of attention is that when a distinction is drawn between domestic institutional investor blocks and foreign institutional investor blocks, the results differ dramatically. These results are shown in Model 2. The sign of the interaction term for domestic institutional investors and performance is positive, and when ROA is used as the performance variable, it is significant at the 5% level for both all turnover and forced turnover. This is consistent with the view that the actions of domestic institutional investors are constrained by business ties with client firms (Ferreira and Matos, 2008). In contrast, the sign of the coefficient of the interaction term for the foreign institutional investor shareholding ratio and performance is negative, and when ROE is used as the performance variable, the results are significant at the 5% level for both all turnover and forced turnover. The existence of foreign institutional investor blockholders who, unlike domestic institutional investors, are unencumbered by business ties with client firms, particularly with respect to ROE (a direct indicator of the interests of shareholders), increased president turnover sensitivity to performance to a statistically significant degree. Although there were only a limited number of cases in which foreign institutional investors were blockholders, once foreign institutional investors possess

blocks of shares, we can assume that they influence president turnover through the exercise of voting rights and engagement.

6.3. Threat of exit (voting with their feet)

Channels such as voice and intervention are not the only means through which an increase in the institutional investor shareholding ratio may affect president turnover. Since most institutional investors, their increasing presence notwithstanding, lack sufficient commitment to intervene in the management of a firm with declining performance, there is a possibility that instead they sell off their shares in such firms. As a result, the selling serves via a declining stock price to encourage president turnover (Parrino, Sias, and Starks 2003). This is what is called "voting with their feet." If such a channel were operative, then president turnover might be influenced not only by the level of institutional investor shareholdings at the beginning of the period, but also the decline in institutional investor shareholdings in the previous period.

Thus, in order to shed light on this point, we focus on foreign institutional investors who invest in Japanese firms as part of their international portfolio diversification, and examine the relationship between changes in their shareholding ratio and president turnover.[20] Table 9 presents changes in the foreign institutional investor shareholding ratio for one period before turnover (t0), and the share of cases in which there has been a 2% or more decline for the four turnover options: all turnover, normal turnover, forced turnover, and no turnover.

This table shows that for 1998 to 2005 (Period II), there was no significant difference

[20] As seen in Table 7, the shareholdings of domestic institutional investors have a relatively higher weighting among the blockholders, and are more passively managed.

in the distribution of changes in foreign institutional ownership between turnover and no turnover, and normal turnover and forced turnover. In contrast, for 2006 to 2013 (Period III), the distribution of changes in foreign institutional ownership immediately prior to turnover was negative only for forced turnover, and there was a significant difference in the decline in forced turnover and no turnover. This relationship becomes even more apparent when viewing percentage shares when there is a decline of 2% or more. More than 25% of firms in cases of forced turnover, and 22% of firms in all turnovers, saw a decline of 2% or more in the foreign institutional investor shareholding ratio, which is higher to a statistically significant degree compared to the incidence of 16.9% for firms with no turnover. These results suggest that there is a possibility that there was a change in the behavior of foreign institutional investors preceding president turnover between the period prior to 2005, when the shareholding ratio for foreign institutional investors was increasing, and the period from 2006 onward, when the ratio was stabilizing, on average. This suggests the possibility that a segment of foreign institutional investors sold off their shareholdings when firm performance deteriorated in Period III. If the channel influences president turnover through the selling of shares and declining stock prices, then, unless the firm has a high foreign institutional investor shareholding ratio that was observed in the previous period, there is a possibility that the mechanism of voting with their feet is not operative. Therefore, we attempted the same estimation for each instance in which the foreign institutional investor shareholding ratio was 10% or higher at the beginning of the previous year period (i.e., the end of the year prior to the immediately preceding year) for each observation year beginning with 2006. The results, shown in Panel 2, are that when president turnover occurs, unlike in cases when it does not occur, there is a decline in the foreign institutional investor

shareholding ratio, and the difference is at a 5% level of confidence.

Furthermore, while more probing analysis is essential, we can tentatively conclude that as foreign institutional investor shareholding ratios have increased since 2006, the voting with their feet effect has begun to influence president turnover.

7. The Role of Independent Outside Directors

7.1. Independent Outside Directors and President Turnover

One of the changes in Japanese corporate governance in the 2000s has been that as board reform has led to the appointment of more independent outside directors, their traditional function as management boards involved in the execution of managerial policy has gradually transformed into monitoring boards, with the primary function to monitor management. In this section, we examine the degree of influence that such board reform has had on the increase in president turnover and changes to the performance indicators that such turnover is sensitive to in the 2000s.

In our estimation model, we added an independent director dummy to equation (2). According to Weisbach's (1988) pioneering study on this topic, the members of boards of directors can be classified into (1) inside directors, (2) outside directors, and (3) gray directors from an entity with business dealings with the firm. Outsider directors (2) were found to have a significant influence on CEO turnover. In addition, independent outside directors under Japan's Company Law, largely correspond to category (2) above. Hence, we confirmed data for outside directors that closely correspond to the definition for category (2) above from Nikkei NEEDS, and constructed a dummy for firms that appointed at least one independent outside director, which takes the value of one, and a dummy for firms that appointed three or more independent outside directors, which

takes a value of one. The incidence of the independent outside director dummy and the three or more independent outside directors dummy for the entire period 2006 to 2013 was 46% and 11% respectively, and 61% and 14% for the year 2013.

The estimation results are presented in Table 10. Panel 1 shows the results for the presence of the outside director dummy, and reveals that for all performances indicators, the coefficient for the interaction for independent outside directors and performance was, against our expectations, positive and partly significant. Thus, we discovered that there was a tendency for independent outside directors to reduce president turnover sensitivity to performance. Firms that appointed independent outside directors had president turnover sensitivity to performance 30% lower than firms without independent outside directors (0.047/-0.152).

On the other hand, if we add the dummy variable for three or more independent outside directors, the interaction term for ROA is negative at a 1% level of significance for forced turnover, and thus increases president turnover sensitivity to ROA.[21] These results suggest that the appointment of only one independent outside director not only does not increase president turnover sensitivity to performance, but also has a potential window-dressing effect that reduces sensitivity, and that the appointment of three or more independent outside directors may increase president turnover sensitivity to performance. In order to test the robustness of this point, we also conducted the following estimations. We constructed dummy variables for cases in which firms had one, two, or three or more independent outside directors. The interaction term for

[21] Even when a dummy is introduced for cases in which half or more of the board members are independent outside directors, the same results are obtained, and the interaction term with ROA is especially highly significant (t-ratio of 5.7). However, when this dummy variable takes one, the ratio is 1.54% for the entire sample, and there were only five cases where forced turnover was observed.

performance and the dummy variable was positive for the one and the two independent outside director dummies, and significantly negative for the three or more dummy variable. We replaced the dummy variables with a continuous variable for the independent outside director ratio, and introduced a 30% or more dummy, and then conducted estimations for both cases. The interaction term for the independent outside director and performance was not significant, and for the 30% or more dummy was significant at a 1% level of significance.

From the above results, we can conclude that the relationship between independent outside directors and president turnover sensitivity to performance was not linear, and that there were quite clear thresholds for three directors, and for a board composition of 30%.

7.2. Complementarity of Institutional Investors and Independent Outside Directors

There is a possibility that there is a complementary or substitutive relationship between the governance effect of independent outside directors and institutional investor shareholding ratios. On the one hand, the window dressing effect of few independent outside directors may be alleviated by strong pressure from institutional investors. On the other, however, institutional investors have a preference for firms that appoint independent outside directors, thus if firms formalistically appoint independent outside directors for the purpose of attracting institutional investors, the window-dressing effect could be further amplified.

Furthermore, although the management disciplining effect of appointing multiple independent outside directors (the case of three or more directors was tested here) may come into play for the first time with pressure from institutional investors, it is also

possible that the effect could be noticeably manifested as a substitute for institutional investors.[22] Thus, last, we divided our sample into two parts with a threshold institutional investor shareholding ratio of 20%, and re-estimated the effect of independent outside directors.

The results are presented in Table 11. The window-dressing effect of independent outside directors for those firms whose institutional investor shareholding ratio was under 20%, had a coefficient and a significance level that were both quite high. Among firms whose institutional investor shareholding ratio was 20% or higher, only those that had appointed multiple independent outside directors had president turnover sensitivity that was significantly negative toward performance, suggesting that there was a complementary relationship between the two.

8. Conclusion

In our analysis, we explored the relationship between president turnover and firm performance for 1990 to 2013. Entering the 1990s, president turnover at Japanese firms increased. Furthermore, Japanese president turnover was negatively sensitive to performance to a significant degree. However, that does not mean that the relationship between a firm's declining performance and president turnover has been severed over the past 20 years. In fact, the biggest change that has occurred during this period is that the performance indicator that president turnover is sensitive to has shifted from ROA, a measure of performance preceding interest payments, to ROE and stock returns, which are directly related to shareholder interests. This result is consistent with the evolution

[22] Uchida (2012) obtained estimation results that indicate that the performance effect of independent outside directors is substitutive for institutional investors.

of the corporate governance system as seen in the dissolution of cross-shareholding, the increase in foreign institutional investor ownership, and board reform. However, it is believed that this influence is not as strong as it has been in the U.S., where president turnover has traditionally been sensitive to stock returns, and where the degree of this sensitivity has increased in recent years.

The traditional main bank system has not been entirely deprived of its management-disciplining function. While the scope of the main bank authority may have substantially contracted, for firms that are highly dependent on banks for loans, and to which main banks have dispatched directors, main banks continue to perform a certain role in disciplining management.

On the other hand, the rapid increase in institutional investor shareholdings, and foreign institutional investor shareholdings in particular since the end of the 1990s, has not only increased president turnover but also increased president turnover sensitivity to performance. These results show that institutional investors have supplanted the main bank system and begun to function as a mechanism for disciplining management. In this manner, foreign institutional investor shareholdings have become an important mechanism for increasing president turnover sensitivity to performance along with blockholding and the pressure that arises from voting with their feet. However, it is important to pay note that the functioning of these mechanisms is limited to firms with large market capitalization that are well known to foreign institutional investors.

Finally, independent outside directors play a role in increasing president turnover sensitivity to performance only if there are multiple appointments of such directors to a board. As to whether appointment of independent outside directors increases president turnover sensitivity to performance, the estimation results here show that when only one

or two such directors are appointed to a board, the window-dressing effect exceeds the management-disciplining effect. In order to have an actual effect on president turnover, the important conditions are that at least three independent outside directors must be appointed to the board, or that independent outside directors must comprise at least 30% of the board.

There has clearly been a change in the relationship between president turnover and performance between 2006 and 2013 as compared to the relationship that existed prior to 1998. However, although there has been substantial change, this does not mean president turnover at Japanese firms in recent years has become highly sensitive to ROE and stock returns that directly reflect shareholder value. It is probably appropriate to describe the current situation as falling somewhere between behavior exhibited by Japanese firms and American firms in the past. We will have to continue to examine this situation closely while monitoring future developments to determine whether Japanese firms are in a transitional phase that is converging to the U.S. model of corporate governance or have achieved a new phase of stable corporate governance.

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Table 1. Trends in President Turnover

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. The position of the president after resigning is the position held one year after retirement. Forced turnover is considered to occur when the president resigns, and is not appointed to the post of chairman or vice chairman, or to another type of directorship, and excludes reasons such death and illness.

	Sample size	President Turnover	Ratio	Turnover after M&A	Turnover after collapse	Chairman, vice chairman after resigning	Directorship after resigning	Ratio	Forced Turnover	Forced Turnover Ratio
	(a)	(b)	(b)/(a)			(c)	(d)	((c)+(d))/(b)	(e)	(e)/(a)
1990	400	48	12.0%	0	0	36	8	92%	4	1.0%
1991	400	55	13.8%	2	0	46	4	91%	5	1.3%
1992	401	65	16.2%	1	0	45	8	82%	12	3.0%
1993	401	39	9.7%	1	0	29	4	85%	6	1.5%
1994	403	64	15.9%	2	0	38	10	75%	16	4.0%
1995	405	53	13.1%	0	0	43	7	94%	3	0.7%
1996	413	60	14.5%	1	2	34	7	68%	19	4.6%
1997	414	52	12.6%	1	3	29	7	69%	16	3.9%
1998	414	68	16.4%	3	1	39	9	71%	20	4.8%
1999	414	66	15.9%	3	3	40	8	73%	18	4.3%
2000	438	69	15.8%	0	0	36	9	65%	24	5.5%
2001	443	62	14.0%	3	11	33	5	61%	24	5.4%
2002	429	91	21.2%	3	0	58	12	77%	21	4.9%
2003	430	66	15.3%	1	1	42	5	71%	19	4.4%
2004	429	60	14.0%	2	0	37	6	72%	17	4.0%
2005	430	61	14.2%	4	0	36	11	77%	14	3.3%
2006	426	77	18.1%	2	0	41	7	62%	29	6.8%
2007	418	63	15.1%	1	0	43	5	76%	15	3.6%
2008	412	72	17.5%	5	1	36	7	60%	29	7.0%
2009	401	62	15.5%	2	0	28	9	60%	25	6.2%
2010	395	61	15.4%	1	1	32	4	59%	25	6.3%
2011	387	50	12.9%	2	1	30	2	64%	18	4.7%
2012	380	58	15.3%	1	0	39	2	71%	17	4.5%
2013	376	44	11.7%	3	0	33	3	82%	8	2.1%
Sum	9859	1466	14.9%	44	24	903	159	72%	404	4.1%
1990-1997	3,237	436	13.5%	8	5	300	55	81%	81	2.5%
1998-2005	3,427	543	15.8%	19	16	321	65	71%	157	4.6%
2006-2013	3,195	487	15.2%	17	3	282	39	66%	166	5.2%

Table 2. Corporate Governance of Sample Firms

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. When the firm has a stable relationship with a bank that it has designated as being responsible for most of its banking transactions (Toyo Keizai Shinposha. Kaisha Shikiho), the bank is considered to be its main bank.

	1990	1996	1999	2001	2006	2009	2013	All
Sample（No. of firms）	400	413	414	443	426	401	376	8466
Sample 1 (Mature・Existing firms)	400	394	380	372	330	302	277	1393
Sample 2 (New or newly listed firms）	0	19	34	71	96	99	99	9859
Main bank shareholding (%)	4.11	4.06	3.84	3.34	2.43	2.32	2.17	3.20
Main bank 3%or more	0.9%	83.3%	77.3%	64.6%	42.3%	40.1%	36.7%	61.8%
Main bank dispatches director	43.5%	36.1%	36.0%	32.7%	27.9%	22.9%	22.6%	32.3%
Average shareholding of founder/family (%)	3.93	4.60	4.94	6.62	6.70	6.78	6.83	5.57
Percentage of firms with blockholders with 5% or larger share	21.3%	21.8%	21.6%	23.9%	23.9%	24.2%	23.7%	22.6%
Shareholding of parent firm (%)	5.79	5.34	5.79	5.99	7.12	7.54	7.48	6.33
Percentage of firms with parent firms holding 30% or larger share	13.5%	12.3%	13.0%	13.3%	16.0%	16.5%	16.0%	14.2%
Institutional investor shareholding (%)	8.90	11.73	11.17	13.13	21.68	21.70	24.94	15.72
Foreign institutional investor shareholding (%)	3.28	6.94	6.68	6.44	14.48	13.09	16.64	9.18
Percentage of firms with foreign institutional ownership 20% or higher	0.0%	4.4%	9.4%	7.4%	29.8%	25.2%	35.6%	14.0%
Percentage of firms with Independent outside director	NA	NA	NA	NA	37.4%	43.3%	61.4%	NA
Percentage of firms with 3 or more independent outside directors	NA	NA	NA	NA	8.2%	11.3%	13.6%	NA
Percentage of board who are Independent outside directors (%)	NA	NA	NA	NA	5.67	7.65	11.59	NA

Table 3. Analysis of Influence of Corporate Performance on President Turnover

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. The period of analysis is 1990 to 2013. Industry-adjusted performance is calculated by subtracting the median of the industry to which each firm belongs from each firm's performance. Industry medians were calculated using data on all firms listed on the Tokyo, Osaka, and Nagoya Stock Exchanges. Normal president turnover is defined to occur when the president takes up the post of chairman or vice chairman after resigning as president. Forced turnover is defined to occur when the president does not take up the post of chairman, vice chairman, or other directorship after resigning as president. Resignations due to death and illness are excluded. The analysis was conducted using a probit model. Marginal effects are in the upper row, and cluster-robust standard errors are in the lower row. The clusters are at the firm level. *** denotes 1% level of significance, ** 5% level of significance, and *10% level of significance.

Dependent variable =	All president turnover	All president turnover	All president turnover	Normal president turnover	Normal president turnover	Normal president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices	ROA	ROE	RET	ROA	ROE	RET	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Industry performance (median)	-0.424	-0.261	0.002	-0.167	-0.174	0.004	-0.233 **	-0.074	-0.001
	(0.279)	(0.237)	(0.021)	(0.199)	(0.150)	(0.012)	(0.113)	(0.083)	(0.012)
Industry-adjusted performance	-0.785 ***	-0.179 ***	-0.038 **	-0.170	-0.035 *	0.000	-0.482 ***	-0.079 ***	-0.031 **
	(0.151)	(0.024)	(0.017)	(0.110)	(0.018)	(0.002)	(0.083)	(0.008)	(0.013)
Log (revenue)	0.003	0.003	0.001	0.008 ***	0.009 ***	0.008 ***	-0.004 ***	-0.005 ***	-0.007 ***
	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
Presidential tenure 1～2 years (dummy)	-0.168 ***	-0.168 ***	-0.168 ***	-0.130 ***	-0.130 ***	-0.130 ***	-0.027 ***	-0.028 ***	-0.028 ***
	(0.013)	(0.012)	(0.013)	(0.010)	(0.010)	(0.010)	(0.004)	(0.004)	(0.004)
Presidential tenure 3 ~ 4 years (dummy)	-0.071 ***	-0.070 ***	-0.070 ***	-0.065 ***	-0.065 ***	-0.065 ***	0.001	0.002	0.001
	(0.010)	(0.009)	(0.010)	(0.007)	(0.007)	(0.007)	(0.003)	(0.004)	(0.004)
Presidential tenure 7～8 years (dummy)	-0.004	-0.004	-0.006	0.000	0.000	0.000	-0.004	-0.003	-0.005
	(0.011)	(0.011)	(0.012)	(0.007)	(0.008)	(0.007)	(0.005)	(0.005)	(0.005)
Presidential tenure 9 or more years (dummy)	-0.039 ***	-0.041 ***	-0.044 ***	-0.016 **	-0.016 **	-0.017 **	-0.022 ***	-0.024 ***	-0.026 ***
	(0.010)	(0.010)	(0.010)	(0.008)	(0.008)	(0.008)	(0.004)	(0.004)	(0.004)
Age 70 or older (dummy)	0.139 ***	0.144 ***	0.143 ***	0.108 ***	0.110 ***	0.109 ***	0.020 ***	0.022 ***	0.023 ***
	(0.018)	(0.018)	(0.018)	(0.015)	(0.015)	(0.016)	(0.006)	(0.007)	(0.007)
Family-run firm (dummy)	-0.085 ***	-0.084 ***	-0.087 ***	-0.054 ***	-0.056 ***	-0.054 ***	-0.022 ***	-0.023 ***	-0.028 ***
	(0.008)	(0.008)	(0.008)	(0.006)	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)
Family-run firm×Industry-adjusted performance	0.596 ***	0.023	-0.050 **	0.061	-0.084 *	-0.070 ***	0.359 *	0.501 *	0.020
	(0.124)	(0.062)	(0.023)	(0.127)	(0.045)	(0.020)	(0.211)	(0.277)	(0.026)
Subsidiary (dummy)	0.072 ***	0.077 ***	0.070 ***	0.030 ***	0.032 ***	0.029 ***	0.032 ***	0.036 ***	0.031 ***
	(0.008)	(0.009)	(0.017)	(0.008)	(0.007)	(0.009)	(0.004)	(0.005)	(0.005)
Subsidiary×Industry-adjusted performance	0.084	0.078	0.017	0.248	0.036	0.012	0.067	0.034 *	0.014
	(0.290)	(0.058)	(0.052)	(0.243)	(0.056)	(0.042)	(0.097)	(0.018)	(0.019)
Pseudo-R^2	0.096	0.100	0.090	0.100	0.101	0.100	0.104	0.104	0.075
Sample size	9857	9854	9837	9857	9854	9837	9857	9854	9837

Table 4. Analysis of Degree of President Turnover Sensitivity to Performance

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. The period of analysis is from 1990 to 2013. Industry-adjusted performance is calculated by subtracting the median of the industry to which each firm belongs from each firm's performance. Industry medians were calculated using data on all firms listed on the Tokyo, Osaka, and Nagoya Stock Exchanges. Forced turnover is defined to occur when the president does not take up the post of chairman, vice chairman, or other directorship after resigning as president. Resignations due to death and illness are excluded. Panel 2 only displays performance results from the analytical results estimated for each period. The analysis was conducted using a probit model. Marginal effects are in the upper row, and cluster-robust standard errors are in the lower row. The clusters are at the firm level. *** denotes 1% level of significance, ** 5% level of significance, and *10% level of significance.

Panel 1: Dummy effect by period

Dependent variable =	All president turnover	Normal president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices=	ROA	ROA	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4	Model 5
Industry-adjusted performance	-0.797 ***	-0.170	-0.220 ***	-0.078 ***	-0.030 **
	(0.149)	(0.110)	(0.037)	(0.008)	(0.012)
Period Ⅱ (1998～2005) (dummy)	0.035 ***	0.015 *	0.019 ***	0.017 **	0.024 ***
	(0.010)	(0.008)	(0.006)	(0.007)	(0.007)
Period Ⅲ (2006～2013) (dummy)	0.027 **	0.000	0.024 ***	0.025 ***	0.025 ***
	(0.011)	(0.006)	(0.007)	(0.008)	(0.008)
Control variable	YES	YES	YES	YES	YES
Pseudo-R^2	0.099	0.100	0.113	0.114	0.085
Sample size	9857	9857	9857	9854	9837

Panel 2: Coefficient of industry-adjusted performance variable, estimation by period

Dependent variable =	All president turnover			Forced president turnover			Normal president turnover		
Performance indices=	ROA	ROE	RET	ROA	ROE	RET	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 4	Model 5	Model 6
Period Ⅰ (1990～1997)	-1.125 ***	-0.157 ***	-0.083 **	-0.403 ***	-0.046 ***	-0.032	-0.548 ***	-0.075 *	-0.044 **
	(0.210)	(0.036)	(0.034)	(0.119)	(0.014)	(0.021)	(0.103)	(0.041)	(0.020)
Period Ⅱ (1998～2005)	-0.970 ***	-0.144 ***	-0.036 *	-0.625 ***	-0.076 ***	-0.023	-0.191	-0.009	-0.009
	(0.264)	(0.028)	(0.020)	(0.155)	(0.007)	(0.019)	(0.158)	(0.017)	(0.015)
Period Ⅲ (2006～2013)	-0.537 ***	-0.291 ***	-0.015	-0.428 ***	-0.131 ***	-0.046 *	0.039	-0.022	0.040 *
	(0.202)	(0.049)	(0.039)	(0.119)	(0.011)	(0.024)	(0.164)	(0.040)	(0.022)

Table 5. Effect of Main Bank on Degree of President Turnover Sensitivity to Performance

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. The period of analysis is 1990 to 2013. Industry-adjusted performance is calculated by subtracting the median of the industry to which each firm belongs from each firm's performance. Industry medians were calculated using data on all firms listed on the Tokyo, Osaka, and Nagoya Stock Exchanges. Forced turnover is defined to occur when the president does not take up the post of chairman, vice chairman, or other directorship after resigning as president. Resignations due to death and illness are excluded. If borrowing from the main bank exceeds the industry median, and the relationship with the main transactional bank is stable, and the main bank has dispatched a director to the firm, the main bank dummy takes the value of 1. Of the analytical results obtained per period, Panel 2 presents only the results of the interaction term for the main bank dummy and performance. The analysis was conducted using a probit model. Marginal effects are in the upper row, and cluster-robust standard errors are in the lower row. The clusters are at the firm level. *** denotes 1% level of significance, ** 5% level of significance, and *10% level of significance.

Panel 1: Estimations for all periods

Dependent variable=	All president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices=	ROA	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4
Industry-adjusted performance	-0.667 ***	-0.436 ***	-0.085 ***	-0.030 ***
	(0.145)	(0.085)	(0.010)	(0.011)
Main bank （dummy）	0.006	0.008 *	0.013 ***	0.018 ***
	(0.010)	(0.005)	(0.004)	(0.005)
Main bank x Industry-adjusted performance	-0.693 ***	-0.171	0.019	-0.001
	(0.271)	(0.106)	(0.012)	(0.025)
Control variable	YES	YES	YES	YES
Pseudo-R^2	0.097	0.107	0.107	0.080
Sample size	9857	9857	9854	9837

Panel 2: Estimation by period, interaction term for main bank and performance

Dependent variable =	All president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices=	ROA	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4
Period I (1990 - 1997)				
Industry-adjusted performance	-9.730 ***	-0.390 ***	-0.058 ***	-0.044 *
	(1.974)	(0.124)	(0.014)	(0.026)
Main bank (dummy)	0.040 ***	0.015 ***	0.021 ***	0.019 ***
	(0.014)	(0.006)	(0.005)	(0.005)
Main bank x industry-adjusted performance	-0.325	0.056	0.036 **	0.030
	(0.570)	(0.136)	(0.018)	(0.034)
Period II (1998 - 2005)				
Industry-adjusted performance	-0.790 ***	-0.544 ***	-0.072 ***	-0.019
	(0.244)	-(0.168)	(0.015)	(0.013)
Main bank (dummy)	-0.020	0.015 **	0.018 ***	0.030 ***
	(0.018)	(0.007)	(0.005)	(0.007)
Main bank x industry-adjusted performance	-1.225 ***	-0.217	0.002	-0.006
	(0.364)	(0.150)	(0.022)	(0.024)
Period III (2006 - 2013)				
Industry-adjusted performance	-0.472 **	-0.388 ***	-0.126 ***	-0.039 *
	(0.205)	(0.120)	(0.018)	(0.022)
Main bank (dummy)	0.006	-0.002	0.004	0.005
	(0.022)	(0.006)	(0.007)	(0.007)
Main bank x industry-adjusted performance	-0.460	-0.285 *	-0.015	-0.036
	(0.438)	(0.176)	(0.033)	(0.036)

Table 6. Effect of Foreign Institutional Investors on the Degree of Sensitivity of President Turnover

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. The period of analysis is 1990 to 2013. Industry-adjusted performance is calculated by subtracting the median of the industry to which each firm belongs from each firm's performance. Industry medians were calculated using data on all firms listed on the Tokyo, Osaka, and Nagoya Stock Exchanges. Forced turnover is defined to occur when the president does not take up the post of chairman, vice chairman, or other directorship after resigning as president. Resignations due to death and illness are excluded. Estimation results for the institutional investor shareholding ratio are presented in Panel 1, and for the foreign institutional investor shareholding ratio in Panels 2 and 3. Panel 3 presents analytical results by period. The analysis was conducted using a probit model. Marginal effects are in the upper row, and cluster-robust standard errors are in the lower row. The clusters are at the firm level. *** denotes 1% level of significance, ** 5% level of significance, and *10% level of significance.

Panel 1. Institutional Investor Shareholding Ratio

Dependent variable	All president turnover	All president turnover	All president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices	ROA	ROE	RET	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Industry-adjusted performance	-1.116 ***	-0.154 ***	-0.057 ***	-0.566 ***	-0.064 ***	-0.034 *
	(0.218)	(0.026)	(0.025)	(0.089)	(0.009)	(0.020)
Institutional investor shareholding ratio	0.0002	0.0001	-0.0003	0.0003	0.0000	-0.0001
	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
Institutional investor shareholding ratio x industry-adjusted performance	0.0150 **	-0.0029 *	0.0010	0.0032	-0.0020 ***	0.0001
	(0.008)	(0.002)	(0.001)	(0.004)	(0.000)	(0.001)
Control variable	YES	YES	YES	YES	YES	YES
Pseudo-R^2	0.097	0.100	0.089	0.103	0.106	0.074
Sample size	9673	9670	9666	9673	9670	9666

Panel 2. Foreign institutional investor shareholding ratio

Dependent variable	All president turnover	All president turnover	All president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices=	ROA	ROE	RET	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Industry-adjusted performance	-1.021 ***	-0.165 ***	-0.040 *	-0.533 ***	-0.069 ***	-0.030 *
	(0.190)	(0.024)	(0.023)	(0.083)	(0.008)	(0.016)
Foreign institutional investor shareholding ratio	0.0006	0.0003	-0.0001	0.0005	0.0002	0.0001
	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)
Foreign institutional investor shareholding ratio x industry-adjusted performance	0.0151	-0.0027	0.0002	0.0033	-0.0020 ***	-0.0001
	(0.010)	(0.002)	(0.001)	(0.005)	(0.001)	(0.001)
Control variable	YES	YES	YES	YES	YES	YES
Pseudo-R^2	0.097	0.100	0.090	0.106	0.108	0.075
Sample size	9856	9853	9837	9856	9853	9837

Panel 3: Estimation results by period for interaction term for foreign institutional investor shareholding ratio and performance

Dependent variable =	All president turnover	All president turnover	All president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices=	ROA	ROE	RET	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Period Ⅰ (1990 - 1997)						
Industry-adjusted performance	-1.363 ***	-0.152 ***	-0.085 **	-0.316 **	-0.044 **	-0.044 ***
	(0.279)	(0.046)	(0.042)	(0.142)	(0.020)	(0.019)
Foreign institutional investor shareholding ratio	-0.001	-0.001	-0.001	0.000	0.000	0.000
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
Foreign institutional investor shareholding ratio x industry-adjusted performance	0.044 **	0.000	0.001	-0.018	0.000	0.002 **
	(0.020)	(0.006)	(0.005)	(0.011)	(0.003)	(0.001)
Period II (1998-2005)						
Industry-adjusted performance	-1.198 ***	-0.118 ***	-0.046	-0.646 ***	-0.057 ***	-0.024
	(0.267)	(0.024)	(0.033)	(0.163)	(0.007)	(0.023)
Foreign institutional investor shareholding ratio	-0.001 *	-0.001	-0.002 **	0.000	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Foreign institutional investor shareholding ratio x industry-adjusted performance	0.0257 *	-0.0051	0.0012	0.0032	-0.0042 **	0.0003
	(0.015)	(0.006)	(0.002)	(0.012)	(0.002)	(0.001)
Period III (2006 - 2013)						
Industry-adjusted performance	-0.596 *	-0.288 ***	0.001 ***	-0.470 ***	-0.119 ***	-0.038
	(0.306)	(0.051)	(0.046)	(0.119)	(0.011)	(0.030)
Foreign institutional investor shareholding ratio	0.001	0.001	0.001	0.000	0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)
Foreign institutional investor shareholding ratio x industry-adjusted performance	0.0005	-0.0002	-0.0011	0.0018	-0.0010 *	-0.0006
	(0.013)	(0.002)	(0.002)	(0.006)	(0.001)	(0.001)

Table 7. Distribution of Institutional Investor Block Shareholding

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. Data pertaining to blockholders were obtained from FactSet. Due to problems with data availability, we limited our analysis to 2006 and following years. Since some firms have both domestic and foreign blockholders, the total number of firms reporting domestic blockholders and foreign blockholders exceeds the total number of firms reporting blockholders. The market capitalization quartiles in Panel 2 were demarcated at ¥16.5 billion, ¥40.6 billion, and ¥145.0 billion.

Panel 1:Firms with blockholders with 3% or larger shareholdings

	Blockholders		Blockholder breakdown	
	None	Exist	Domestic	Foreign
2006	204	154	110	72
2007	197	163	109	96
2008	208	153	101	80
2009	234	127	83	69
2010	251	111	62	74
2011	244	118	62	78
2012	242	119	65	74
2013	213	148	82	98

Panel 2: 4th Quartile of Market Capitalization and Blockholder Ratio

	Smaller←Market Capitalization→Larger			
	1	2	3	4
Ratio of Firms with Blockholders（%）	18.95%	29.47%	51.15%	49.93%
Ratio of Firms with Domestic Institutional Investor Blockholders （%）	12.54%	19.60%	33.06%	27.28%
Ratio of Firms with Foreign Institutional Investor Blockholders（%）	9.33%	15.31%	29.42%	33.25%

Table 8. Results for Institutional Investor Blockholders

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. Industry-adjusted performance is calculated by subtracting the median of the industry to which each firm belongs from each firm's performance. Industry medians were calculated using data on all firms listed on the Tokyo, Osaka, and Nagoya Stock Exchanges. The period of analysis is 2006 to 2013. Forced turnover is defined to occur when the president does not take up the post of chairman, vice chairman, or other directorship after resigning as president. Resignations due to death and illness are excluded. The analysis was conducted using a probit model. Marginal effects are in the upper row, and cluster-robust standard errors are in the lower row. The clusters are at the firm level. *** denotes 1% level of significance, ** 5% level of significance, and *10% level of significance.

Dependent variable =	All president turnover	All president turnover	All president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices=	ROA	ROE	RET	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Model 1						
Industry-adjusted performance	-0.316 *	-0.165 ***	-0.014	-0.390 ***	-0.100 ***	-0.020
	(0.185)	(0.054)	(0.032)	(0.046)	(0.020)	(0.012)
Blockholders (dummy)	-0.017	-0.018	0.021	0.006	0.003	0.001
	(0.016)	(0.017)	-(0.017)	(0.008)	(0.007)	(0.004)
Blockholders x industry-adjusted performance	0.120	-0.118	0.016	0.233	-0.016	0.009
	(0.293)	(0.135)	(0.056)	(0.175)	(0.049)	(0.013)
Model 2						
Industry-adjusted performance	-0.257	-0.162 ***	-0.015	-0.314 ***	-0.095 ***	-0.021 *
	(0.186)	(0.052)	(0.033)	(0.049)	(0.019)	(0.012)
Domestic institutional investor blockholders (dummy)	-0.018	-0.009	-0.016	0.001	0.003	0.000
	(0.020)	(0.019)	(0.021)	(0.007)	(0.006)	(0.003)
Domestic institutional investor blockholders x industry-adjusted performance	0.741 **	0.270	0.035	0.335 *	0.074	0.0140
	(0.314)	(0.218)	(0.046)	(0.188)	(0.066)	(0.012)
Foreign institutional investor blockholders (dummy)	-0.011	-0.024	-0.017	0.001	-0.005	0.000
	(0.012)	(0.016)	(0.013)	(0.008)	(0.009)	(0.004)
Foreign institutional investor blockholders x industry-adjusted performance	-0.067 **	-0.426 **	-0.021	-0.236 **	-0.093 **	0.000
	(0.029)	(0.194)	(0.040)	(0.108)	(0.040)	(0.014)

Table 9. Changes in the Foreign Institutional Investor Shareholding Ratio Prior to President Turnover
The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. The change in the foreign institutional investor shareholding ratio is obtained by subtracting the ratio at the end of the year from the ratio at the end of the previous year. Forced turnover is defined to occur when the president does not take up the post of chairman, vice chairman, or other directorship after resigning as president. Resignations due to death and illness are excluded. Normal turnover is defined as occurring when the president assumes the post of chairman or vice chairman after resigning. *** denotes 1% level of significance, ** 5% level of significance, and *10% level of significance.

	All president turnover (a)	Normal president turnover (b)	Forced president turnover (c)	Other (d)	t-ratio (a)vs(d)		t-ratio (b)vs(c)		t-ratio (c)vs(d)	
1998-2005 (n=3140)										
Change in foreign institutional investor shareholding ratio (%)	0.717	0.680	0.630	0.848	0.863		0.152		0.809	
Decline of 2% or greater (dummy)	11.22%	14.72%	6.21%	11.18%	0.025		2.607	***	1.869	*
2006-2013 (n=3136)										
Change in foreign institutional investor shareholding ratio (%)	0.053	0.261	-0.213	0.240	1.177		1.409		1.744	*
Decline of 2% or greater	22.06%	19.49%	25.47%	16.89%	2.724	***	1.459		2.790	***
Foreign shareholding ratio is 10% or greater at beginning of period, 2006-2013 (n=1630)										
Change in foreign institutional investor shareholding ratio (%)	-0.217	0.132	-0.781	0.078	1.125		1.622		1.890	*
Decline of 2% or greater	32.43%	29.56%	37.66%	25.75%	2.229	**	1.248		2.311	**

Table 10. Effect of Independent Outside Directors on President Turnover Sensitivity to Performance

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. The period of analysis is 2006 to 2013. Industry-adjusted performance is calculated by subtracting the median of the firm's industry from each firm's performance. Industry medians were calculated using data on all firms listed on the Tokyo, Osaka, and Nagoya Stock Exchanges. Forced turnover is defined to occur when the president does not take up the post of chairman, vice chairman, or other directorship after resigning as president. Resignations due to death and illness are excluded. The independent outside director dummy takes 1 if at least one independent outside director has been appointed. The three or more independent outside directors dummy takes 1 if three or more independent outside directors have been appointed. The analysis was conducted using a probit model. Marginal effects are in the upper row, and cluster-robust standard errors are in the lower row. The clusters are at the firm level. *** denotes 1% level of significance, ** 5% level of significance, and *10% level of significance.

Panel 1. The Effect of Independent Outside Directors

Dependent variable =	All president turnover	All president turnover	All president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices=	ROA	ROE	RET	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Industry-adjusted performance	-0.604 ***	-0.295 ***	-0.005 *	-0.529 ***	-0.152 ***	-0.063 **
	(0.163)	(0.042)	(0.003)	(0.109)	(0.015)	(0.028)
Independent outside director (dummy)	0.012	0.011	0.015	0.003	0.003	0.002
	(0.011)	(0.012)	(0.009)	(0.007)	(0.006)	(0.007)
Independent outside director x industry-adjusted performance	0.169	0.013	-0.024	0.237	0.047 **	0.040 **
	(0.375)	(0.077)	(0.035)	(0.149)	(0.023)	(0.016)
Control variable	YES	YES	YES	YES	YES	YES
Pseudo-R^2	0.092	0.104	0.090	0.107	0.131	0.095
Sample size	3188	3188	3188	3188	3188	3188

Panel 2. The Effect of the Number of Independent Outside Directors

Dependent variable =	All president turnover	All president turnover	All president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices=	ROA	ROE	RET	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Industry-adjusted performance	-0.591 ***	-0.290 ***	-0.005	-0.485 ***	-0.151 ***	-0.063 **
	(0.160)	(0.041)	(0.047)	(0.104)	(0.015)	(0.029)
Independent outside director (dummy)	0.008	0.010	0.012 *	0.001	0.001	0.000
	(0.009)	(0.016)	(0.007)	(0.008)	(0.008)	(0.006)
Independent outside director x industry-adjusted performance	0.441	0.042	-0.029	0.352 ***	0.053 **	0.039 **
	(0.355)	(0.061)	(0.037)	(0.133)	(0.025)	(0.016)
3 or more independent outside directors (dummy)	0.020 *	0.008	0.013	-0.001	0.012	0.016
	(0.011)	(0.012)	(0.011)	(0.009)	(0.014)	(0.014)
3 or more independent outside directors x industry-adjusted performance	-1.972 **	-0.188 **	0.028	-1.436 ***	-0.037	0.001
	(0.935)	(0.093)	(0.095)	(0.353)	(0.029)	(0.045)
Control variable	YES	YES	YES	YES	YES	YES
Pseudo-R^2	0.095	0.105	0.090	0.118	0.132	0.096
Sample size	3188	3188	3188	3188	3188	3188

Table 11. Relationship between the Effect of Independent Outside Directors and the Foreign Institutional Investor Shareholding Ratio

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. The period of analysis is 2006 to 2013. Industry-adjusted performance is calculated by subtracting the median of the firm's industry from each firm's performance. Industry medians were calculated using data on all firms listed on the Tokyo, Osaka, and Nagoya Stock Exchanges. Forced turnover is defined to occur when the president does not take up the post of chairman, vice chairman, or other directorship after resigning as president. Resignations due to death and illness are excluded. The independent outside director dummy takes 1 if at least one independent outside director has been appointed. The three or more independent outside directors dummy takes 1 if three or more independent outside directors have been appointed. The analysis was conducted using a probit model. Marginal effects are in the upper row, and cluster-robust standard errors are in the lower row. The clusters are at the firm level. *** denotes 1% level of significance, ** 5% level of significance, and *10% level of significance.

Panel 1. The Effect of Independent Outside Directors when Divided by Foreign Institutional Investor Shareholding Ratio

	Foreign Institutional Investor Shareholding Ratio below 20%			Foreign Institutional Investor Shareholding Ratio at 20% or above		
Dependent variable=	Forced president turnover	Forced president turnover	Forced president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices=	ROA	ROE	RET	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Industry-adjusted performance	-0.633 ***	-0.174 ***	-0.063 **	-0.300 **	-0.092 ***	-0.080 *
	(0.170)	(0.015)	(0.030)	(0.138)	(0.033)	(0.047)
Independent outside director (dummy)	-0.003	-0.003	-0.005	0.020 ***	0.021 **	0.022 ***
	(0.012)	(0.010)	(0.010)	(0.008)	(0.009)	(0.008)
Independent outside director x industry-adjusted performance	0.223 **	0.053 ***	0.039 *	0.125	0.000	0.011
	(0.104)	(0.018)	(0.020)	(0.219)	(0.020)	(0.008)
Control variable	YES	YES	YES	YES	YES	YES
Pseudo-R^2	0.103	0.127	0.090	0.107	0.108	0.096
Sample size	2320	2320	2320	868	868	868

Panel 2. The Effect of the Number of Independent Outside Directors Divided by Foreign Institutional Investor Shareholding Ratio

	Foreign Institutional Investor Shareholding Ratio below 20%			Foreign Institutional Investor Shareholding Ratio at 20% or above		
Dependent variable =	Forced president turnover	Forced president turnover	Forced president turnover	Forced president turnover	Forced president turnover	Forced president turnover
Performance indices=	ROA	ROE	RET	ROA	ROE	RET
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Industry-adjusted performance	-0.620 ***	-0.173 ***	-0.065 **	-0.202 ***	-0.088 ***	-0.078 *
	(0.167)	(0.015)	(0.031)	(0.050)	(0.032)	(0.045)
Independent outside director (dummy)	-0.005	-0.007	-0.008	0.010	0.022 *	0.020 *
	(0.013)	(0.011)	(0.011)	(0.009)	(0.012)	(0.011)
Independent outside director x industry-adjusted performance	0.270 ***	0.046 **	0.021	0.326 **	0.114	0.064 *
	(0.090)	(0.022)	(0.020)	(0.154)	(0.120)	(0.033)
3 or more independent outside directors (dummy)	0.014	0.031	0.018	-0.009	-0.004	0.000
	(0.016)	(0.020)	(0.018)	(0.012)	(0.016)	(0.017)
3 or more independent outside directors x industry-adjusted performance	-0.829 **	0.089	0.161 **	-1.586 ***	-0.174	-0.074 **
	(0.364)	(0.126)	(0.073)	(0.530)	(0.152)	(0.034)
Control variable	YES	YES	YES	YES	YES	YES
Pseudo-R^2	0.106	0.129	0.095	0.168	0.119	0.102
Sample size	2320	2320	2320	868	868	868

Figure 1. Trends in the President Turnover Ratio

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. Forced turnover is defined as when the president does not take up the post of chairman, vice chairman, or other directorship after resigning as president. Resignations due to death and illness are excluded. The president turnover ratio is calculated by dividing the annual number of president turnovers by the sample size. The forced turnover ratio is calculated by dividing the annual number of forced turnovers by the sample size.

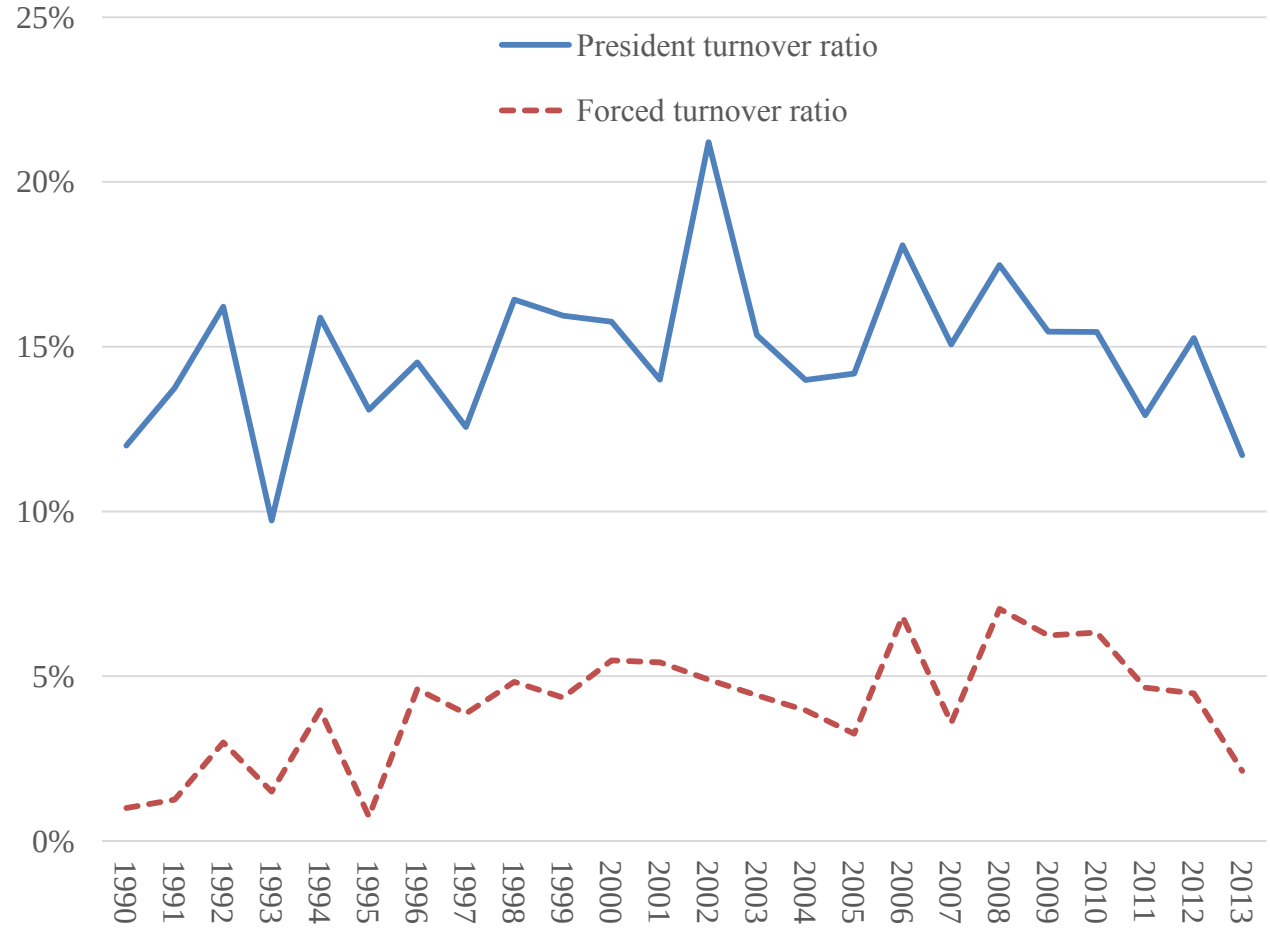

Figure 2. Trends in the Tenure of Resigning Presidents

The sample consists of 500 firms randomly selected from the First Section of the Tokyo Stock Exchange. The solid line shows the average tenure of presidents who resign each year. The dotted line presents the average tenure of presidents who resign each year, excluding presidents who are founders, or members of founding families that have a 5% or larger shareholding.