Managerial Incentive Mechanisms and Turnover of Company Presidents and Directors in Japan[1]

Institute of Economic Research

Hitotsubashi University

Naohito Abe[2]

2003/07/20

[1] The author is very grateful to seminar participants at Hitotsubashi University and the Spring Meeting of the Japanese Economic Association, and to Randall Morck, Noel Gaston, Yasuhiro Arikawa, Juro Teranishi, Tokuo Iwaisako, and Kiyoshi Matsubara for their input. I also thank Ms. Yuko Sagara for her excellent research assistance. This research was facilitated by financial support from the Ministry of Science, Culture, and Education.

[2] Kunitachi, Tokyo, Japan, 186-8603. Phone: 81-425-80-8347. Fax: 81-425-80-8333. E-mail: nabe@ier.hit-u.ac.jp.

Abstract

The role of directors in Japanese companies is unique in a number of ways. One such characteristic is the dual nature of their role, which encompasses both monitoring and managing responsibilities. This paper considers their role in management. Empirical analysis with detailed data for each director studied reveals that directors take responsibility for performance, and that executive turnover is one of the main managerial incentive mechanisms. Abnormal turnover of a president does not cause further resignation among directors. Outside directors decrease the turnover-performance sensitivity of presidents, suggesting their different role in corporate governance in Japan from that in the United States.

Keywords: Corporate Governance, Board of Directors, Turnover, Incentive Mechanism.
(JEL G30, J53).

[1] Introduction

It has long since been observed that the board of directors in Japanese companies are not only responsible for monitoring the company president as in the U.S., but are also involved in the management of the company.[3] This dual role is prescribed by the legal system. Article 260.1 of the Commercial Law stipulates, "[T]he board of directors shall determine the administration of company affairs, and supervise the execution of the duties of the directors." Several characteristics of Japanese boards of directors, such as their relatively large size and the dominant role of insiders, can be attributed to the fact that the board is responsible for management.

Although the above characteristics of Japanese companies have been long recognized, they have not been closely examined in previous studies. Most studies of management have focused on the company president. For example, in a very influential paper, Kaplan (1994) investigated the turnover of top executives in Japanese companies, finding a negative relation between turnover and performance. Later studies such as Kang and Shivdasani (1995) and Abe (1997) confirmed this result. These studies were based on evidence gleaned from U.S. data reported by Weisbach (1988), Gilson (1989), and Jensen and Murphy (1990) and did not consider the turnover of other directors on the board. While several studies, such as Morck and Nakamura (1999), have analyzed the monitoring role of directors sent by the "main bank," there have to date been few studies made of directors as managers.

---

[3] See, for example, Fukao and Morita (1997).

In the U.S., since a Chief Executive Officer (CEO) wields extensive authority and is responsible for company performance, it follows that the corporate governance system might be analyzed by investigating the turnover or remuneration of CEOs. In the Japanese context, however, where not only the company president but the entire board takes responsibility for company performance, as prescribed by commercial law, an analysis overlooking the role of board members other than the president would likely miss some important features of managerial incentive mechanisms. Moreover, president turnover is a rare event in Japan. According to Kang and Shivdasani (1995), the annual likelihood of nonroutine president turnover is 3.1 %. Other related papers estimate it at less than 5%. This implies that turnover occurs less than once every 20 years. Such an infrequent event can hardly be argued to be the main governance mechanism in Japan.

This paper analyzes the turnover of board members in Japan. If each board member takes responsibility for company performance, as prescribed by commercial law, we would expect to observe a negative relation between the likelihood of turnover and performance. Although there exist several studies on the appointment of board members sent by the "main bank," such as Morck and Nakamura (1994), to the author's knowledge this paper is the first attempt to investigate the turnover of all board members as a governance mechanism.

There are several additional advantages to this approach. The first is its sample size. Since at least one board member resigns each year in almost all listed companies, it is possible to collect a large amount of turnover data, thus increasing the weight of the test statistics. The second is its consistency to related studies. An increasing number of papers have begun to investigate board compensation as part of the governance system in Japan. Most of these papers, such as Xu (1997), Murase (1998), and Abe, *et al*.

(2001), have used the average compensation of the board.[4] In other words, they consider the entire board rather than simply the top executive to analyze governance mechanisms, finding a positive relation between pay and performance. These results are consistent with the hypothesis that the entire board is responsible for management. This paper, therefore, can be regarded as a natural extension of these previous studies of compensation.

This paper also investigates relations between the president, the entire board, and outside board members. The main findings are as follows: (1) the likelihood of the turnover of board members is a decreasing function of firm performance; (2) the turnover of the top executive does not induce additional resignations among other board members; (3) the outside board members decreases the sensitivity of the turnover of top executives to firm performance. It is possible to interpret the first finding as proof of existence of a mode of corporate governance realized by the turnover of board members. The second result suggests that company presidents in Japan are not as powerful as their U.S. counterparts, and that the role of outside directors in management is limited. The third result is surprising since this is opposite to the results in the U.S. reported by Weisbach (1988).

[2] Data

[4] Their use of average remuneration might be due to limited data availability in Japan. Kato (1997) is a rare exception: instead of using average compensation he used the tax payments of top executives as proxies of remuneration.

The sample used in this paper consists of all listed companies in manufacturing. The sample covers the 12-year period between 1990 and 2001 inclusive. Most data on board structures are taken from the *Yakuin Shikihou* (Quarterly Survey on Directors) complied by the Toyo Keizai Shinpou Sha. Table 1 reports the descriptive statistics with their data sources.[5]

The *Yakuin Shikihou* contains detailed information on individual directors such as age, tenure, schooling, and position in the board.[6] As auditors are not allowed to take part in management, I have excluded them from the dataset.[7]

Turnover as shown in Table 1 is the ratio of the number of directors who resign to the total number of board members excepting auditors. Abnormal Turnover of President is a dummy variable that takes one if there is a president who resigns but does not stay on the board as chairperson.[8] An Outside Board Member is defined as a director who worked in a different company prior to his/her appointment as a director. Bank Board Dummy takes one if there is at least one director on the board from a bank, otherwise it takes zero. Outside President is also a dummy variable that takes unity if the president was outside the company when he was appointed as a board member, otherwise it takes zero.

Table 2 shows the time variations for several key variables. We can observe several recent changes in the board over time.

---

[5] I have dropped several observations with extremely large ROA or ROR from the sample. I have also dropped firms for which data on the age or tenure of the president is not available.
[6] The data is unique in its wide coverage. Information is available, for example, on each director's hobbies and place of birth. Even after restricting the sample to the manufacturing industry, about ten thousand directors are listed each year. I assigned an individual index to each director in order to trace his/her movements among companies over time.
[7] Article 276 prohibits auditors from being directors, managers or any other employee of a company.
[8] Kaplan (1994) and other studies also use this type of definition for nonroutine turnover of a president.

(1) Size

The average size of boards of directors shows constant decline.[9] In 1990, the median size of the board was 13 members while in 2001 the median was 9. The rate of decline accelerated in 2000. The introduction of executive officers to the boardroom likely contributed to the decline. Prior to the major revision of the Commercial Law in 2002, executive officers in Japan had had no legal prescription. I do not include executive directors in the sample because they had no legal obligations or responsibilities for managing and monitoring during the sample period.

(2) Age and Tenure

The average age of directors has been increasing, probably due to the overall aging trend in Japan. Interestingly, the average age of presidents has not increased and has, in fact, decreased. Another interesting contrast can be seen in the data for tenure. While the average tenure of directors is almost constant, that of presidents has shortened. Although the determination of age and tenure of presidents are not issues central to this paper, I suggest that these differences in trends can be related to changes in the roles of directors and presidents.

(3) Presidents

The likelihood of abnormal turnover of presidents has increased. During the sample period, the frequency increased by roughly 200%, from 0.023 to 0.070. This increase may be related to the decline in president tenure. Using data from the late 1980's, Kang and Shivdasani (1995) calculate the frequency as 0.031, which does not differ greatly from the frequency in this sample. There is a slight increase in the ratio of

[9] I exclude president and chairpersons from the board and treat them separately.

presidents appointed from outside the company. The Appendix Table presents the correlation matrix of the variables, showing a negative correlation between outside presidents and their tenure. An increase in the appointment of outside presidents may be behind the decline in tenure.

(4) Banks

Relations between banks and companies have long been considered one of the most important governance mechanisms in Japan, known as the “main bank” system. Although recent studies have cast serious doubt on the effectiveness of the main bank system in governance, it is difficult to ignore these relations completely. The Bank Board Dummy in Tables 1 and 2 takes one if at least one director worked in a bank before his/her appointment to the board. It is worth noticing that since the sample does not contain auditors, a director coming from a bank is not auditing the company but working with the other board members. According to Table 2, despite the negative trend, more than 30% of listed companies in manufacturing have at least one director appointed from banks as full board members rather than as auditors.

(5) Outside Directors

The ratio of outside directors on the board in manufacturing firms has shown modest increase. 22% in 1990, it rose to 27 % by 2001. In view of the decline of board size over the same period, the actual number of outside directors on boards would seem to have remained fairly constant. Kaplan (1994) showed that the majority of directors are insiders, and there has been no significant change in board composition subsequently.

(6) Turnover Rate

Turnover rate at year t in Tables 1 and 2 is defined as follows:

Turnover Rate (t) = (The number of directors who were on the board in t but were not in t+1)/(The number of board members in t).

The turnover rate at year t of one company is calculated only when consecutive observations in both t and t+1 are available. Therefore, when a company ceases to exist, I exclude such a case and drop the observation. Although there is a level shift at year 1998 in turnover rate, no definite trend can be observed in this variable. On average, 10 % of board members resign during the sample period.

[3] Determination of Turnover

Where directors take responsibility for company performance, the likelihood of turnover should be a decreasing function of performance. Other factors that affect the likelihood of turnover include (1) director age and tenure, (2) the degree of autonomy or entrenchment of the board, and (3) liquidity in the job market. In order to control for the second factor, I include the ratio of shares held by board members and the Bank Board Dummy in the regression. The appointment of directors from banks might hinder the power of the board if the “main bank” hypothesis is correct. An increase in the ratio of shares held by board members obviously strengthens the power of the board in relation to that of other shareholders. As is clearly shown by Table 4, this ratio is very small. Although it is difficult to imagine that shareholding by the board would have an important overall effect, in view of relatively large standard deviations there may be some cases in which board shareholding significantly influences turnover.

The third factor is difficult to control, but potentially very important in the determination of turnover. If the labor market for directors is highly liquid, a competent director foreseeing an unprofitable future for the company would likely flee the board like a rat deserting a sinking ship. Should such desertion occur, the negative relation between turnover and performance might be the result of the desertion rather than the result of the incentive mechanism. One way to avoid this problem is to use the lag of performance as predetermined variance. Another way to control for these effects is to include the ratio of outside directors in the estimation since outsiders might find it easier than insiders to leave a company and secure positions elsewhere. I also include the number of firms directors are serving concurrently in the estimation because of the same expectation. Considering the fact that most directors are not outsiders but are promoted from inside a company, it is highly unlikely that such behavior like a rat would be observed in Japan. In year 2000, 7606 out of 36136 directors who are working for listed companies resigned.[10] Among 7606, only 362 directors, or 4.8 % of them got a position as a director in listed companies next year. This implies most directors retire from the job market after their resignation.

The equation to be estimated is as follows:

$$TurnoverRate_{it} = Const_i + \alpha_1 P_{it} + \alpha_2 X_{it} + \alpha_3 Y_{it} + \alpha_4 YearEffects_t + \alpha_5 Interactions_{it} + \varepsilon_{it}.$$

[10] Directors who are working for several companies simultaneously are not included in this calculation.

P_{it} : Performance such as departurse from the industrial median of ROA (Return on Assets) and ROR (Rate of Return on Investment). Dummy variable for negative operating profit is also used.

X_{it} : Natural Logarithms of Asset divided by the consumer price index.

Y_{it} : Average age of directors, average tenure, ratio of outside directors, bank director dummy, shareholding by directors, number of firms serving concurrently, ratio of directors of 59-61 years old.

$Interactions_{it}$: (ratio of outside directors, bank director dummy, shareholding by directors)×Performance.

The level effects of the bank director dummy and outside directors are expected to be positive, while board shareholdings might have negative effects. Since directors appointed from outside the company are not tied to the firm to the same extent as those appointed from within, the average turnover rate is larger for a company with more outside directors. The larger the shareholdings held by the board, the greater the board's power, thus potentially making it easier for directors to entrench themselves.

The interaction terms are expected to capture the effects of the three variables on the incentive mechanism. According to the conventional view, close monitoring by the main bank should decrease the sensitivity of turnover to performance since the turnover incentive is obsolete under close monitoring. Similarly, director shareholding should have negative effects on the sensitivity, as the incomes of directors with large shareholdings are sensitive to performance such that turnover need not be as sensitive as for other directors, and also because directors with large shareholdings have stronger control power to protect their positions. The effects of outsiders are expected to be

increasing the turnover-performance sensitivities. Using the US data, Weisbach (1988) found that turnover-performance relation of CEO is strong in companies dominated by outside directors. If outside directors play the same role in Japan as in the US, the sensitivity of turnover might increase with larger size of outside board members.[11] The hypotheses to be tested in this section can be summarized as follows:

Hypothesis 1

If directors take responsibility for performance, there should exist a negative relation between turnover and performance.

Hypothesis 2

The level of turnover is a decreasing function of the power of the board, which power can be augmented by board shareholding.

Hypothesis 3

The sensitivity of turnover to performance is a decreasing function of (1) appointment of directors from banks, (2) board shareholdings, and (3) the ratio of outsiders.

The turnover rate cannot take a larger value than unity or a smaller value than zero by construction. Therefore, estimations by linear regression are subject to serious bias.

[11] If outsiders are not monitoring and are merely superior to insiders in finding other jobs as directors, they would be more likely to leave a company than insiders when they foresee poor performance by the company in the near future, which turns out to be increasing sensitivities of turnover to performances.

There are several ways to achieve consistent estimators. One possible method is to use non-linear estimation such as Heckman's two-step procedure or TOBIT. The former procedure is difficult to implement as the first step involves multinomial estimation with panel data.[12] In order to implement TOBIT with panel data, we have to assume that individual effects are orthogonal to regressors.[13] In view of latent variable effects, fixed effects estimation is preferable. In order to control for effects through such latent variables, I conduct linear fixed effects regression with interior data; that is, I drop all the observations for which the turnover rate is zero or one. The drawback of this method is a decline in the power of the statistics since a significant amount of information is lost. The advantage of this procedure is that estimates become consistent. Since the number of interior observations remains sufficient, over 8000, the decline in power should be relatively insignificant.

Results are summarized in Table 3.[14] ROA and the Negative Operating Profit Dummy have significant effects on turnover as expected.[15] The coefficient of the Negative Operating Profit with asset is 0.024, which implies that the turnover rate increases by 0.024 points if the profit becomes negative. Since the median of the turnover rate is 0.1, the increase in turnover rate caused by negative operating profit is not negligible. The same is true for ROA but not for ROR.[16] The insignificance of ROR

[12] Multinomial LOGIT requires very restrictive assumptions, while conducting multinomial PROBIT is complicated, especially with panel data. Besides, PROBIT estimation with fixed effects is not consistent.
[13] Fixed Effects TOBIT does not maintain consistency.
[14] Year Dummies are included in all the regressions.
[15] Similar results can be obtained with different performance measures such as the level of ROA or ROR instead of their departures from industrial median.
[16] In this paper, I use the level of ROA and ROR as performances. The results do not change much when I use the departure of ROA and ROR from the industrial median. ROA is always significant while ROR is insignificant.

is not surprising since ROR reflects expectations of future profits. If the resignation of directors is taken as good news by the stock market, the ROR might increase before resignations occur. The negative significance of ROA is consistent with Hypothesis 1.[17]

The effects of Outside Board on the level of the turnover rate are all positive significant, suggesting that outsiders suffer a higher rate of turnover than insiders. Board Shareholdings have negative and weakly significant effects, which is consistent with Hypothesis 2.

Concerning Hypothesis 3, none of the interaction terms except outsiders have robust and significant effects on turnover. Outsiders and board shareholdings reduce the sensitivity of turnover to ROA and ROR. This result is opposite to the case in the U.S. found by Weisbach. The degree of the reduction is large so that a board with 90 % outside ratio does not react to performances at all. It is also worth pointing out that Table 3 does not show any evidence of monitoring by the "main bank".[18]

[4] Interaction of Turnovers between Presidents and Other Directors.

Another possibly important factor in the turnover of directors is the resignation of a president. Vancil (1987), in his case studies of CEO succession in the U.S., suggests that people in management can be regarded as a team in which people move together. If this metaphor can be applied to directors in Japan, one might expect mass resignation by directors to ensue when a president resigns.

---

[17] It is worth noticing that ROA is predetermined in the regression. Therefore, it is free from a simple simultaneous equation problem.

[18] It is also worth noticing that age and tenure have strong effects on the turnover. Age 59-61 dummy is also significant and the size of coefficient is not negligible. This fact implies that turnover of directors is affected by age and tenure strongly in Japan.

Table 4 contains the results of t-tests. The sample is divided into two groups by the occurrence or not of the abnormal turnover of a president. On average, 2.37 directors resign when the president leaves the board, which seems significantly greater than the 1.77 who resign when there is no prior resignation by the president. The difference, however, is not actually so large. The same is true for the turnover rate. As shown above, the turnover of directors is sensitive to performance. Previous studies of the turnover of presidents also show a negative relation between the abnormal turnover of presidents and performance. Therefore, the size of the differences in Table 4 might be spurious.

First, I investigate whether the data shows a negative relation between president turnover and performance. Following previous studies such as Kaplan (1994) and Abe (1997), I estimate the following equation:

$$P\left(AbnormalTurnover_{it}\right) = \alpha_1 P_{it} + \alpha_2 X_{it} + \alpha_3 Y_{it} + \alpha_4 YearEffects_t + \alpha_5 Interactions_{it} + \varepsilon_{it}$$

P_{it}: Performance such as departures from the industrial medians of ROA and ROR.
Dummy for Negative Operating Profit

X_{it}: Natural Logarithms of Asset divided by the consumer price index.

Y_{it}: Average age of the president, average tenure, outside president, ratio of outside directors, bank director dummy, shareholding by directors.

$Interactions_{it}$: (outside president, ratio of outside directors, bank director dummy, shareholding by directors)×Performance.

Apart from Abe (1997), most previous studies have used pooled LOGIT to estimate the probability of the abnormal turnover of a president. Since my data is longitudinal, I have three choices from (1) pooled LOGIT, (2) random effects LOGIT, and (3) fixed effects LOGIT. In order to conduct fixed effects LOGIT, I must drop all the firms that did not experience abnormal turnover of the president during the sample period, thereby greatly decreasing the power of the test statistics. In addition, the main objective in this section is not to investigate the determination of president turnover but, rather, to investigate the relation between the types of turnover, those of presidents and directors. Therefore, from the point of view of maintaining consistency with previous sections, the fixed effects model is inappropriate. Then, I conduct the likelihood ratio test, which turns out to prefer random effects to pooled LOGIT. Therefore, I adopt random effects LOGIT in this section.

Table 5 shows the results of the random effects LOGIT estimation. The results confirm those of previous studies; namely, that the probability of the abnormal turnover of a president is sensitive to performance.[19] Similar to Table 3, outsiders decrease the turnover-performance relation of CEO, which is opposite to cases in the U.S..

Because the turnover of both presidents and directors is sensitive to performance, they are not independent but closely related. The hypothesis I consider in this section can be phrased thus:

Hypothesis 4

[19] The fact that the t-statistics of Performance in Table 5 are greater than most previous studies is probably because I have used a larger amount of data.

If the board is a team in which the president has real authority over other directors, the abnormal turnover of the president should cause consequent resignations among other directors.

I conduct instrumental variable estimations of director turnover. Specifically, I use an outside president dummy, and age and tenure of the president as the instruments for abnormal turnover of the president.[20] Other specifications are identical to Table 3.

Table 6 presents the results of the instrumental variable estimations. Similarly to Table 3, performances are significant except for ROR. The coefficient of president turnover is negative, not positive. Therefore, the data does not support the team hypothesis.[21] The results in Table 6 have another implication for the role of the board in Japan. Hermalin and Weisbach (1988) showed that in the U.S., turnover of a president caused consequent resignations by directors since directors were competing for the position. If directors are competing for the top position, the new appointment of a president would be bad news for some directors, giving them an incentive to change company. If this hypothesis holds for Japan, we would expect to observe positive effects of the turnover of a president on the resignation of directors. Table 6, however, does not show such positive effects, which implies that the hypothesis of severe competition among directors is not supported by the data in Japan.

[5] Concluding Remarks

[20] All these three variables are significant in Table 5.
[21] If I use the data from between 1990 and 1997, president turnover becomes insignificant in all the specifications. Therefore, negative significant effects are not robust.

This paper has investigated the turnover of directors and its relation with the turnover of the company president. The findings of this paper can be summarized as follows:

(1) The turnover of directors is sensitive to performance, which can be interpreted as showing that turnover works as a managerial incentive mechanism in Japan.

(2) No proof of monitoring by the main bank is found.

(3) Abnormal turnover of a president depends on performance, but the turnover itself does not cause further resignations among directors, which finding casts doubt on both team hypothesis and competition hypothesis.

(4) The presence of outside directors reduces the level of turnover and decrease the sensitivity of turnover to performance.

The above results open up a number of further topics to be pursued. If outside directors do not increase the sensitivity of turnover to performance as in the U.S., but decrease the sensitivity, what kind of roles are they expected to play on the board? If turnover is one of the managerial incentive mechanisms, what is its relation to other mechanisms such as wage, bonus, and stock options? Since this paper is the first attempt to investigate the turnover of directors in Japan, there remain a number of issues to be investigated. Considering the drastic changes in the composition of boards of directors that occurred in 2003 due to changes in the Commercial Law, the role of outside directors is particularly worth studying.

[6] References

Abe, N., N. Gaston, and K. Kubo. 2001. Executive Pay in Japan: The Role of Bank-Appointed Monitors and the Main Bank Relationship, *CEI Working Paper* 2001-10.

Abe, Y. 1997. Chief Executive Turnover and Firm Performance in Japan, *Journal of Japanese and International Economics*, 11, pp. 2-26.

Blair, M. 1995. Ownership, *The Brookings Review*, Winter, pp. 16-19.

Fukao, M., and Y. Morita. 1997. '*An International Comparison of Corporate Governance*,' (in Japanese). Nihon Keizai Shinnunsha, Tokyo.

Gilson, S. 1989. Management Turnover and Financial Distress, *Journal of Financial Economics* 25, pp. 241-262.

Gilson, S. 1990. Bankruptcy, Boards, Banks, and Block Holders, *Journal of Financial Economics* 27, pp. 355-387.

Hermalin, B.E. and M. S. Weisbach. 1988. The Determinants of Board Composition, *The RAND Journal of Economics*, 19, 4. pp. 589-606.

Hermalin, B.E. and M. S. Weisbach. 1991. The Effects of Board Composition and Direct Incentives on Firm Performance, *Financial Management*, Winter, pp. 101-112,

Kang, J.K. and A. Shivdasani. 1995. Firm Performance, Corporate Governance, and Top Executive Turnover in Japan, *Journal of Financial Economics*, 38, 1. May, pp. 29-58.

Kaplan, S. N. 1994. Top Executive Rewards and Firm Performance: A Comparison of Japan and the United States, Journal of Political Economy, 102, no.3, pp. 510-546.

Kaplan, S. N., and B. Minton. 1994. Appointments of Outsiders to Japanese Boards: Determinants and Implications for Managers, *Journal of Financial Economics* 36, pp. 225-58.

Kato, T. 1997. Chief Executive Compensation and Corporate Groups in Japan: New Evidence from Micro Data, *International Journal of Industrial Organization* 15, 4. pp. 455-67.

Kubo, K. 2001. The Determinants of Executive Compensation in Japan and the UK: Agency Hypothesis or Joint Determination Hypothesis? *CEI Working Paper* 2001-2.

Morck, R. and M. Nakamura. 1999. Banks and Corporate Control in Japan, LIV, no.1, *Journal of Finance,* pp. 319-340.

Murphy, K. J. 1999, Executive Compensation, in *Handbook of Labor Economics,* vol. 3b, edited by O. Ashenfelter and D. Card. Amsterdam: Elsevier North-Holland, 2485-561.

Murase, H. 1998. Equity Ownership and the Determination of Managers' Bonuses in Japanese Firms, *Japan and the World Economy*, vol.10, pp. 321-331.

Vancil, F.R. 1987. *Passing the Baton*, Harvard Business School Press, Boston, Massachusetts.

Weisbach, M.S. 1988. Outside Directors and CEO Turnover, *Journal of Financial Economics* 26, pp. 175-191.

Xu, P. 1997. Executive Salaries as Tournament Prizes and Executive Bonuses as Managerial Incentives in Japan, *Journal of the Japanese and International Economies* 11, 3. pp. 319-46.

Table 1
Descriptive Statistics

	Mean	Median	Standard Deviations	Data Sources
Number of Board Members *	12.4964	11	6.4228	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
Turnover Rate	0.1322	0.1	0.1457	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
Return on Assets	0.0257	0.0261	0.0567	Company Financial Data (by Development Bank of Japa
Negative Operating Profit Dummy (=1 if Profit <0)	0.1231	0	0.3285	Nikkei Needs
Rate of Return on Investment (%)	-3.8717	-9.375	36.8076	World Scope
Abnormal Turnover of President Dummy	0.0477	0	0.2131	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
Asset (1000 yen, natural logarithms divided by CPI)	17.8473	17.7057	1.3432	Company Financial Data (by Development Bank of Japa
Tenure of Board Members (year)	5.5027	4.9334	2.6721	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
Age of Board Members	57.2084	57.4000	2.7698	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
Ratio of Board Members of 59-61 years old	0.2417	0.2222	0.1652	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
Ratio of Outside Board Members	0.2469	0.2	0.2260	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
Number of Firms Concurrently Working	1.0697	1	0.1388	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
Bank Board Dummy	0.3359	0	0.4723	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
Shares Held by Board (%)	3.6125	0.6	6.6801	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
President Age	61.4504	62	6.6470	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
President Tenure (year)	6.4858	4	8.2109	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
Outside President Dummy	0.3488	0	0.4766	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)
Bank President Dummy	0.0414	0	0.1992	*Yakuin Shikihou* (by Toyou Keizai Shinpou-Sha)

The Number of Observations: 13065

Sample Period: 1990-2001, Listed Companies in Manufacturing

*"Number of Board Members" does not include auditors, presidents, and chairpersons.

Table 2
Time Series

Year	Observations	Number of Board Members			Return on Assets			Rate of Return on Investment			Negative Operating Profit			Turnover Rate			Concurrent Numbers		
		mean	median	SD	mean	median	SD	mean	median	SD	mean	median	SD	mean	median	SD	mean	median	SD
1990	817	14.282	13	6.5253	0.0545	0.0488	0.0358	14.095	9.031	43.826	0.0294	0	0.1690	0.1098	0.0909	0.1057	1.0818	1	0.1510
1991	934	14.211	13	6.7030	0.0512	0.0466	0.0596	-12.874	-15.629	24.736	0.0310	0	0.1735	0.0765	0.0500	0.0972	1.0705	1	0.1333
1992	1059	13.823	12	6.6489	0.0384	0.0339	0.0555	-29.877	-31.917	18.873	0.0567	0	0.2313	0.1278	0.1111	0.1189	1.0675	1	0.1269
1993	1057	13.588	12	6.7092	0.0247	0.0241	0.0457	-2.453	-5.536	23.468	0.1400	0	0.3472	0.0967	0.0714	0.1146	1.0634	1	0.1225
1994	1066	13.232	12	6.5179	0.0195	0.0209	0.0466	14.736	10.221	27.415	0.2008	0	0.4007	0.1273	0.1082	0.1238	1.0685	1	0.1305
1995	1108	12.830	12	6.3361	0.0228	0.0220	0.0468	-12.635	-14.393	19.233	0.1453	0	0.3526	0.1007	0.0769	0.1164	1.0669	1	0.1266
1996	1141	12.700	12	6.4087	0.0261	0.0258	0.0578	24.786	20.217	38.336	0.1367	0	0.3437	0.1376	0.1250	0.1304	1.0676	1	0.1278
1997	1163	12.747	11	6.5200	0.0308	0.0281	0.0456	-21.913	-23.879	22.991	0.0894	0	0.2855	0.1117	0.0909	0.1266	1.0704	1	0.1356
1998	1195	12.268	11	6.3053	0.0246	0.0223	0.0500	-22.316	-26.984	24.887	0.1138	0	0.3177	0.1624	0.1429	0.1475	1.0705	1	0.1374
1999	1205	11.637	10	6.2602	0.0095	0.0152	0.0650	-4.037	-11.445	36.710	0.2299	0	0.4209	0.1780	0.1250	0.2023	1.0658	1	0.1292
2000	1211	10.169	9	5.2607	0.0106	0.0166	0.0669	9.328	-3.649	57.141	0.1453	0	0.3526	0.1740	0.1429	0.1771	1.0718	1	0.1608
2001	1109	9.638	9	5.0306	0.0097	0.0175	0.0691	-0.099	-3.969	34.637	0.1109	0	0.3142	0.1582	0.1250	0.1784	1.0749	1	0.1739

Year	Observations	Abnormal Turnover of President			Outside President			President from Bank			Ratio of Outside Board Members			Bank Board Dummy		
		mean	median	SD	mean	median	SD	mean	median	SD	mean	median	SD	mean	median	SD
1990	817	0.0233	0	0.1508	0.3329	0	0.4715	0.0477	0	0.2133	0.2252	0.1739	0.2045	0.3488	0	0.4769
1991	934	0.0246	0	0.1551	0.3148	0	0.4647	0.0471	0	0.2120	0.2034	0.1667	0.1888	0.3533	0	0.4783
1992	1059	0.0482	0	0.2142	0.3551	0	0.4788	0.0444	0	0.2060	0.2445	0.2000	0.2162	0.3484	0	0.4767
1993	1057	0.0350	0	0.1839	0.3586	0	0.4798	0.0435	0	0.2041	0.2424	0.1852	0.2175	0.3472	0	0.4763
1994	1066	0.0460	0	0.2095	0.3583	0	0.4797	0.0460	0	0.2095	0.2449	0.1875	0.2219	0.3499	0	0.4772
1995	1108	0.0343	0	0.1821	0.3538	0	0.4784	0.0442	0	0.2057	0.2459	0.2000	0.2211	0.3502	0	0.4772
1996	1141	0.0438	0	0.2048	0.3576	0	0.4795	0.0403	0	0.1968	0.2482	0.2000	0.2262	0.3444	0	0.4754
1997	1163	0.0456	0	0.2086	0.3465	0	0.4761	0.0378	0	0.1909	0.2492	0.2000	0.2277	0.3353	0	0.4723
1998	1195	0.0669	0	0.2500	0.3464	0	0.4760	0.0385	0	0.1925	0.2486	0.2000	0.2272	0.3289	0	0.4700
1999	1205	0.0498	0	0.2176	0.3535	0	0.4783	0.0398	0	0.1957	0.2521	0.2000	0.2339	0.3212	0	0.4671
2000	1211	0.0702	0	0.2556	0.3518	0	0.4777	0.0388	0	0.1932	0.2685	0.2174	0.2486	0.3097	0	0.4625
2001	1109	0.0703	0	0.2558	0.3472	0	0.4763	0.0325	0	0.1773	0.2743	0.2222	0.2508	0.3057	0	0.4609

Year	Observations	Age of Board			Tenure of Board			President Age			President Tenure			Shares Held by Board		
		mean	median	SD	mean	median	SD	mean	median	SD	mean	median	SD	mean	median	SD
1990	817	56.706	56.818	2.6668	5.6942	5.2106	2.3733	61.863	63	6.6052	6.7013	4	8.3222	3.1687	0.6	5.5751
1991	934	56.616	56.815	2.6986	5.4384	4.9330	2.4993	61.705	63	6.8731	6.8555	4	8.2711	3.1625	0.7	5.6141
1992	1059	56.793	56.933	2.8507	5.6878	5.2500	2.5119	61.539	63	6.9070	6.8432	4	8.0874	3.4710	0.7	6.0538
1993	1057	56.797	56.933	2.7762	5.4876	5.0000	2.5524	61.399	62	6.7258	6.5156	4	8.0788	3.5389	0.8	6.2995
1994	1066	57.099	57.237	2.8180	5.6288	5.1111	2.6818	61.625	63	6.7751	6.7176	4	8.1582	3.4606	0.7	6.3734
1995	1108	57.062	57.250	2.6836	5.4358	4.8750	2.5883	61.424	62	6.8092	6.5939	4	8.3000	3.5817	0.7	6.5642
1996	1141	57.375	57.636	2.6393	5.5617	5.0000	2.6069	61.387	62	6.7260	6.4838	3	8.3131	3.5386	0.6	6.6554
1997	1163	57.272	57.500	2.6702	5.2717	4.6364	2.6411	61.472	62	6.7210	6.5426	4	8.5182	3.6580	0.6	6.7727
1998	1195	57.496	57.667	2.6594	5.3981	4.7500	2.6439	61.595	63	6.4258	6.5699	4	8.3456	3.7152	0.6	6.7718
1999	1205	57.490	57.714	2.6877	5.4443	4.9000	2.7265	61.241	62	6.4359	6.1710	3	8.0376	3.9311	0.6	7.4174
2000	1211	57.811	58.000	2.8743	5.6906	5.0000	3.0864	61.319	62	6.4533	6.2130	3	8.1680	3.9344	0.6	7.5228
2001	1109	57.604	57.833	2.9004	5.3520	4.6923	2.8974	61.014	62	6.3646	5.8070	3	7.9076	3.9210	0.6	7.5109

Table 3

Dependent Variable = Turnover Rate of Board Member						
Variable	roa1	roa2	ror1	ror2	negaprofit1	negaprofit2
Performance(P)	-0.26903 ***	-0.2797 ***	-0.00015	-0.00016	0.02435 **	0.02565 **
	(-4.77)	(-4.97)	(-1.93)	(-1.95)	(2.74)	(2.89)
Asset	-0.02096 *		-0.02938 **		-0.02214 *	
	(-2.19)		(-3.1)		(-2.33)	
Average Age	-0.14257 ***	-0.14439 ***	-0.14245 ***	-0.14512 ***	-0.14454 ***	-0.14657 ***
	(-6.74)	(-6.83)	(-6.72)	(-6.85)	(-6.84)	(-6.94)
(Average Age)^2	0.00134 ***	0.00136 ***	0.00135 ***	0.00137 ***	0.00137 ***	0.00138 ***
	(7.27)	(7.35)	(7.27)	(7.39)	(7.39)	(7.49)
Average Tenure	0.02042 ***	0.02043 ***	0.01972 ***	0.01966 ***	0.02025 ***	0.02023 ***
	(7.04)	(7.04)	(6.79)	(6.77)	(6.99)	(6.98)
(Average Tenure)^2	-0.00095 ***	-0.00095 ***	-0.00092 ***	-0.00092 ***	-0.00095 ***	-0.00095 ***
	(-5.09)	(-5.09)	(-4.94)	(-4.93)	(-5.1)	(-5.1)
Age 59-61 Ratio	0.0285 **	0.029 **	0.0293 **	0.03017 **	0.02812 **	0.02872 **
	(2.65)	(2.7)	(2.73)	(2.81)	(2.62)	(2.68)
Concurrent Numbers	-0.07551 ***	-0.07633 ***	-0.07579 ***	-0.07693 ***	-0.07568 ***	-0.07654 ***
	(-4.22)	(-4.26)	(-4.22)	(-4.28)	(-4.23)	(-4.28)
Outside Board	0.05348 ***	0.05325 ***	0.04921 **	0.04917 **	0.04477 **	0.04451 **
	(3.43)	(3.42)	(3.17)	(3.16)	(2.81)	(2.79)
Bank Board	-0.00852	-0.00872	-0.00782	-0.00825	-0.01008	-0.01029
	(-1.43)	(-1.46)	(-1.31)	(-1.38)	(-1.67)	(-1.7)
Shares Held by Board	0.00016	0.00013	0.00015	0.00009	0.0002	0.00016
	(0.18)	(0.15)	(0.17)	(0.1)	(0.22)	(0.18)
P×Outside Board	0.31558 **	0.30845 **	0.00045 *	0.00044 *	0.00909	0.00953
	(2.65)	(2.59)	(2.4)	(2.36)	(0.46)	(0.49)
P×Bank Board	-0.08732	-0.08628	-0.00009	-0.00008	0.01851	0.01801
	(-1.33)	(-1.32)	(-0.96)	(-0.82)	(1.92)	(1.87)
P×Shares Held by Board	0.00755	0.00838	-0.00001	-0.00001	-0.00095	-0.00094
	(1.25)	(1.39)	(-0.77)	(-0.75)	(-0.88)	(-0.88)
constant	4.27309 ***	3.95101 ***	4.41478 ***	3.96616 ***	4.34145 ***	4.00401 ***
	(6.84)	(6.51)	(7.07)	(6.52)	(6.97)	(6.6)
Observations	8433	8433	8433	8433	8433	8433
F	54.97273	57.03365	53.53732	55.30024	55.34523	57.38895
R^2	0.1612	0.16064	0.15766	0.15652	0.16212	0.16148

Sample Period: 1990-2001, Listed Companies in Manufactures
roa: Deapature from the Industrial Median of Return on Asset
ror: Departure from the Industrial Median of Rate of Return on Investment
negaprofit: Dummy for Negative Operating Profit
*: p<0.05, **: p<0.01, ***: p<0.001
Each equation includes year dummies.
t-values are in parentheses

Table 4

T-Tests of the Abnormal Turnover of the President				
Abnormal Turnover	Yes	No	|t|	
Number of board members resigned	2.261637	1.691448	6.1219	***
Turnover Rate	0.211568	0.128264	10.9464	***
Observations	623	12442		

T-tests with unequal variances

Table 5

Panle Logit: Dependent Variable = Abnormal Turnover of the President						
Variable	roa1	roa2	ror1	ror2	negaprofit1	negaprofit2
Performance(P)	-5.57444 ***	-5.82389 ***	-0.00132	-0.00245	0.57911 **	0.68166 **
	(-4.74)	(-4.99)	(-0.45)	(-0.83)	(2.62)	(3.11)
Asset	-0.16221 ***		-0.18662 ***		-0.15754 ***	
	(-3.84)		(-4.34)		(-3.69)	
President Age	0.17017	0.15899	0.14437	0.12668	0.16511	0.15203
	(1.6)	(1.49)	(1.37)	(1.2)	(1.54)	(1.42)
(President Age)^2	-0.00062	-0.00053	-0.00044	-0.0003	-0.00059	-0.00049
	(-0.74)	(-0.62)	(-0.52)	(-0.35)	(-0.69)	(-0.57)
PresidnetTenure	0.06086 **	0.06917 ***	0.05488 **	0.0635 **	0.06103 **	0.06837 ***
	(3)	(3.4)	(2.74)	(3.16)	(3.02)	(3.38)
(PresidnetTenure)^2	-0.00265 ***	-0.00284 ***	-0.0025 ***	-0.00271 ***	-0.00265 ***	-0.00281 ***
	(-3.76)	(-4.02)	(-3.64)	(-3.92)	(-3.79)	(-4.02)
Outside President	0.30917 **	0.38383 ***	0.30305 **	0.38764 ***	0.3036 **	0.37324 **
	(2.72)	(3.39)	(2.64)	(3.38)	(2.66)	(3.27)
Outside Board	1.73724 ***	1.97733 ***	1.66304 ***	1.93854 ***	1.73808 ***	1.98455 ***
	(7.73)	(8.99)	(7.39)	(8.8)	(7.13)	(8.37)
Bank Board	-0.3145 **	-0.35501 **	-0.20633	-0.25211 *	-0.39296 **	-0.42442 ***
	(-2.85)	(-3.19)	(-1.94)	(-2.35)	(-3.24)	(-3.49)
Shares Held by Board	-0.02688 *	-0.01684	-0.0358 **	-0.02428 *	-0.02971 *	-0.02097
	(-2.26)	(-1.5)	(-2.89)	(-2.09)	(-2.35)	(-1.75)
P×Outside Board	5.77763 **	5.83447 **	-0.00526	-0.00394	-0.32685	-0.41438
	(2.68)	(2.72)	(-0.94)	(-0.7)	(-0.79)	(-1)
P×Bank Board	-4.13818 **	-4.05617 **	-0.00038	-0.00017	0.7369 **	0.69584 **
	(-2.82)	(-2.75)	(-0.11)	(-0.05)	(3.22)	(3.03)
P×Shares Held by Board	0.13774	0.09768	-0.00066	-0.00056	-0.00155	0.00203
	(0.92)	(0.68)	(-1.75)	(-1.56)	(-0.06)	(0.08)
constant	-9.83526 ***	-12.5758 ***	-8.47926 ***	-11.4681 ***	-9.73928 ***	-12.319 ***
	(-2.87)	(-3.73)	(-2.5)	(-3.44)	(-2.83)	(-3.64)
Observations	13065	13065	13065	13065	13065	13065
Log Likelihood	-2246.2	-2253.59	-2263.315	-2272.81	-2247.73	-2254.6
chi2	369.5537	356.9678	333.0762	319.7366	365.6116	356.2248

Sample Period: 1990-2001, Listed Companies in Manufactures
roa: Deapature from the Industrial Median of Return on Asset
ror: Departure from the Industrial Median of Rate of Return on Investment
negaprofit: Dummy for Negative Operating Profit
*: p<0.05, **: p<0.01, ***: p<0.001
Each equation includes year dummies.

Table 6

Instrumental Variable Estimations: Dependent Variable = Turnover Rate of Board Member

Variable	roa1	roa2	ror1	ror2	negaprofit1	negaprofit2
Performance(P)	-0.28794 ***	-0.29754 ***	-0.00015	-0.00015	0.02476 **	0.02597 **
	(-4.94)	(-5.13)	(-1.8)	(-1.82)	(2.73)	(2.87)
Asset	-0.01929		-0.02842 **		-0.02075 *	.
	(-1.97)		(-2.93)		(-2.14)	.
Average Age	-0.14775 ***	-0.14936 ***	-0.14805 ***	-0.15055 ***	-0.14978 ***	-0.15163 ***
	(-6.8)	(-6.88)	(-6.78)	(-6.9)	(-6.9)	(-7)
(Average Age)^2	0.00139 ***	0.0014 ***	0.0014 ***	0.00142 ***	0.00141 ***	0.00143 ***
	(7.31)	(7.39)	(7.31)	(7.42)	(7.44)	(7.53)
Average Tenure	0.02087 ***	0.02087 ***	0.02012 ***	0.02005 ***	0.02068 ***	0.02065 ***
	(7.03)	(7.03)	(6.75)	(6.73)	(6.97)	(6.97)
(Average Tenure)^2	-0.00097 ***	-0.00097 ***	-0.00095 ***	-0.00095 ***	-0.00098 ***	-0.00098 ***
	(-5.1)	(-5.1)	(-4.94)	(-4.93)	(-5.12)	(-5.12)
Age 59-61 Ratio	0.0325 **	0.03292 **	0.03377 **	0.03456 **	0.03211 **	0.03262 **
	(2.92)	(2.96)	(3.02)	(3.1)	(2.9)	(2.94)
Concurrent Numbers	-0.07776 ***	-0.07848 ***	-0.07813 ***	-0.0792 ***	-0.07783 ***	-0.07861 ***
	(-4.24)	(-4.29)	(-4.24)	(-4.3)	(-4.25)	(-4.3)
Outside Board	0.05855 **	0.05828 **	0.05491 ***	0.05479 ***	0.04867 **	0.04838 **
	(3.64)	(3.63)	(3.41)	(3.4)	(2.97)	(2.95)
Bank Board	-0.00833	-0.00852	-0.00763	-0.00804	-0.01024	-0.01044
	(-1.37)	(-1.4)	(-1.25)	(-1.31)	(-1.66)	(-1.69)
Shares Held by Board	0.00035	0.00032	0.00034	0.00028	0.00037	0.00033
	(0.38)	(0.35)	(0.37)	(0.31)	(0.4)	(0.35)
P×Outside Board	0.31925 **	0.31264 **	0.00036	0.00036	0.01302	0.01339
	(2.62)	(2.57)	(1.87)	(1.85)	(0.65)	(0.67)
P×Bank Board	-0.08703	-0.08607	-0.0001	-0.00008	0.02127 *	0.02076 *
	(-1.3)	(-1.29)	(-0.96)	(-0.82)	(2.14)	(2.09)
P×Shares Held by Board	0.0083	0.00906	-0.00000550	-0.00000538	-0.00087	-0.00086
	(1.34)	(1.47)	(-0.65)	(-0.64)	(-0.79)	(-0.78)
constant	4.39329 ***	4.09507 ***	4.55925 ***	4.12299 ***	4.46725 ***	4.14944 ***
	(6.86)	(6.57)	(7.09)	(6.58)	(6.99)	(6.67)
President Turnover	-0.08591 *	-0.08485 *	-0.09251 *	-0.0912 *	-0.08439 *	-0.08343 *
	(-2.27)	(-2.24)	(-2.4)	(-2.37)	(-2.23)	(-2.2)
Observations	8433	8433	8433	8433	8433	8433
R^2	0.124548	0.124805	0.11540988	0.11531956	0.126872	0.126963
chi2	25855.03	25861.51	25559.964	25551.593	25931.15	25932.15

Sample Period: 1990-2001, Listed Companies in Manufactures
roa: Deapature from the Industrial Median of Return on Asset
ror: Departure from the Industrial Median of Rate of Return on Investment
negaprofit: Dummy for Negative Operating Profit
*: p<0.05, **: p<0.01, ***: p<0.001
Each equation includes year dummies.
Instrumented: president
turnover
Instruments: age and tenure of the president, dummy for outside president, and
other regressors.
Estimation Methods: Fixed Effect Instrumental Variable Methods
Only interior observations are used, i.e., observations with turnover rate = 0 or 1 are excluded

Appendix Table
Correlation Matrix

	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	a14	a15	a16	a17
a1	1																
a2	0.0733	1															
a3	0.0143	0.177	1														
a4	-0.1603	-0.4251	-0.0993	1													
a5	0.0707	-0.1373	-0.0211	0.1133	1												
a6	0.0909	0.0021	0.0016	-0.0108	0.0729	1											
a7	-0.0658	-0.0824	-0.0305	0.078	0.1218	-0.0639	1										
a8	-0.1552	-0.0974	-0.0137	0.0802	0.0843	-0.0028	0.1091	1.0000									
a9	-0.0363	-0.0219	-0.004	0.0297	-0.0137	0.0149	-0.0050	0	1								
a10	-0.265	-0.1023	-0.0111	0.0828	0.1193	-0.0307	0.1305	0.	-0.0121	1							
a11	0.0544	-0.0374	-0.021	0.0019	-0.0138	0.0001	-0.1104		0.1515	0.0876	1						
a12	0.1612	-0.0317	0.006	0.0085	0.09	0.0298	0.0200	0.	-0.0423	0.2104	-0.0683	1					
a13	0.1127	-0.0376	-0.0267	0.0003	0.1731	0.054	0.0016	0.	-0.0025	-0.0043	-0.0083	0.1767	1				
a14	-0.1754	0.1202	0.0008	-0.0431	-0.0829	-0.0157	-0.3215		-0.0199	-0.2298	0.0299	-0.1219	0.1047	1			
a15	0.1348	0.0135	-0.009	-0.0309	0.0231	0.2201	0.0745	0.	0.0215	-0.0148	0.0101	0.0557	0.2633	-0.0692	1		
a16	-0.0976	0.1338	0.0223	-0.0646	-0.1133	0.0887	-0.2776		-0.0546	-0.1156	0.1004	-0.133	-0.1627	0.3467	0.2235	1	
a17	-0.2215	0.152	0.0261	-0.0348	-0.1335	-0.0602	-0.2545		-0.0518	-0.0423	0.113	-0.1734	-0.3207	0.4145	-0.1971	0.3954	1	1

a1	Number of Board Members	a10	Ratio of Outside Board Members
a2	Turnover Rate	a11	Concurrent Number
a3	Return on Assets(departures from industrial median)	a12	Bank Board Dummy
a4	Dummy for Negative Operating Profit	a13	Shares Held by Board
a5	Rate of Return on Investment(departures from industrial median)	a14	President Age
a6	Abnormal Turnover of President	a15	President Tenure
a7	Asset (logarithms)	a16	Outside President
a8	Tenure of Board Members	a17	Bank President
a9	Age of Board Members		