Convergence or Emerging Diversity?
Understanding the impact of foreign investors on corporate governance in Japan

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Abstract

The increasing share of foreign institutional investors has been a global phenomenon for the past few decades. Corporate ownership in Japan shifted from an insider-dominated to outsider-dominated structure after the banking crisis of 1997. On the role of increasing foreign ownership and its consequences, there are two competing views. The first view, or convergence view, is that foreign investors have high monitoring capability, and encourage improvements in the governance arrangements of firms, resulting in higher performance. Conversely, the skeptical view insists that they have a strong bias in their investment strategies and are less committed to a firm. Even though a correlation between foreign ownership and corporate polices and high performance could be observed, it could be superficial. Higher stock returns can be induced by their order demand, while performance can simply reflect foreign investors' preference for high quality firms. To answer which view is more persuasive, this paper analyzes the impact of dramatic changes in the ownership structure on corporate governance, corporate policies, and firm value, with a focus on the role of foreign investors, particularly in Japan.

1. Introduction

The increasing share of foreign institutional investors has been a global phenomenon for the past decades. Outside the U.S., leading firms that were formerly dominated by corporate insiders (families, other corporations, and banks) have been increasingly facing the pressure of growing foreign ownership.[1] For instance, the share held by foreign institutional shareholders in listed firms in UK increased from 20.0% in 1990 to 46.0% in 2007. The same trend could be observed in Germany, rising from 5.0% in 1990 to 18.2% in 2006. In Japan, outside ownership increased from 35% at the end of the 1990s to 65% by the mid-2000s, of which the increase of foreign ownership accounts for over 80 percentage points of this increase, as foreign ownership rose from 5% in 1990 to 30% in 2008. Does the increasing share of foreign ownership have a significant impact on corporate governance outside the U.S.? Does it mean that the corporate governance of countries experiencing this change are converging on the Anglo-American structure?

On the role of increased foreign ownership, there are contradicting views in the literature. The positive view, mainly advocated by finance scholars, insists that foreign investors are independent from firms in which they have invested, and different from domestic institutional investors who are sometimes called as "grey" investors. They have also had a high capability for both screening "growing" firms and correcting their strategy through intervention. They willingly put a premium on firms accepting the global standard of corporate governance (CG) arrangements (outside directors and high powered incentives schemes). Foreign investors were also under fiduciary duties, and exercised their control power (using voting rights), therefore they are a driver of governance reforms, and have been taking significant positions in corporate governance. They have also encouraged improvements in the governance arrangement of firms (Gillan and Starks, 2003), resulting in higher performance (Ferreira and Matos, 2008; Aggwaral et al., 2010). This view is also consistent to with the convergence view of corporate governance in the market-based system (Hansmann and Kraakman, 2000).

However, there is broad skepticism on the role of foreign institutional investors. One skeptical view emphasizes that foreign institutional investors are portfolio investors who are fundamentally less committed to the corporate policies of a particular firm. Since the foreign institutional investors lack sufficient monitoring capability, they suffer from significant information asymmetries. Therefore, they have had a strong bias in

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[1] For continental Europe, see Goyer (2011), Aggarwal et al. (2005) and Ferreira and Matos (2008); for emerging countries and the South Korean case, see Choi et al. (2007).

their investment strategies, preferring large firms with high liquidity and well-known firms such as firms incorporated into the MSCI (Morgan Stanley Capital International) Index (Stulz, 1981; Hiraki et al., 2003). Even though a positive correlation between foreign ownership and high performance has been observed, it may be a superficial one. Since higher stock returns can be induced by demand for a stock, high performance among firms with high foreign ownership can simply reflect their preference for a high-quality firms.

A skeptical view from another angle emphasizes that the foreign shareholder did not have enough capability to improve corporate governance. Even though aggregated shares held by foreign investors increased, this cannot improve firms' governance without active engagement. Empirical evidence indicates that activism in Asian countries has thus far been disappointing (Becht et al., 2015). The implication of both of these skeptical views is that firms outside the U.S. are still suffering from a vacuum of corporate governance.

A third skeptical view is rather critical, insisting that the increase of foreign institutional investors has been far less value enhancing than commonly believed. For instance, outside directors and high-powered incentives that foreign investors have preferred and encouraged are not necessarily good for all firms, especially firms which are based on firm-specific skills. Physical and R&D investment would deteriorate with a rise in foreign institutional investors who impose excessive myopic pressure on management. This understanding is also shared by non-financial academics in fields such as management, law, and others areas.

The purpose of this paper is to examine the role of foreign investors in corporate behavior and governance, focusing on Japanese firms. To gain an understanding of the impact of increasing foreign institutional investors on corporate behavior and governance, Japan presents a particularly interesting case. First, Japan has a large and active stock market with a large number of listed companies that are widely held (Franks, Mayer and Miyajima, 2014). Second, there is a striking absence of family ownership in Japanese firms which sets Japan apart from other Asian countries, and most other countries around the world. Third, there has been a marked change in patterns of ownership over the last twenty years after the banking crisis.

To determine whether foreign institutional investors have played a significant governance role as external monitors in Japan, this paper takes the following steps.

As a first step, we report on the investment behavior of foreign institutions, asking to what extent foreign investors have shown a home bias, due mainly to asymmetric information problems. The fact that they still show a strong home bias in spite of their

extensive activities in Japan since the mid-1980s is consistent with the understanding that foreign investors did not have sufficient monitoring capability, and were less committed to firms.

As a second step, we show the impact of increasing institutional investors on the choice of corporate governance arrangement. We insist that these institutional investors have encouraged firms not to choose the global standard arrangement (e.g. outside directors and stock option), but rather to select the governance arrangement that fits their fundamental factors such as the complexity of their business, the extent of potential contradictions between corporate insiders and shareholders as well as the difficulty that outsiders have in obtaining information. Furthermore, we examine the influence of foreign ownership on corporate polices, selecting a series of corporate policies such as physical investment, capital choice, and dividend payout. We found that higher foreign institutional ownership is associated with higher investment, higher leverage, and higher dividend payout, after controlling for reverse causality. We also show that high foreign ownership is also likely to affect more investment, if firms had sufficient growth opportunities, and higher payout if firms were already mature. These facts suggest that once the share held by institutional investors increases, corporate policies were appropriately affected as growth opportunities were evaluated.

Our final step is to assess the impact of increasing foreign ownership on governance and corporate performance. We report the results of standard regressions of presidential turnover and performance based on our previous work (Miyajima, Hoda and Ogawa, 2015).

The contribution of this paper is, therefore, threefold. First, we provide a more accurate understanding of the role of foreign investors, paying attention to reverse causality. In the existing literature, which insists that foreign investors play a positive role, causal relations are not made clear. Gillan and Starks (2003), and Chung and Zhang (2011) emphasize the selection of institutional investors for firms with good governance arrangements and shareholder-friendly corporate policies, while Ferrira and Matos (2008) emphasize the influence of increasing foreign investors on corporate policies and firm value, but reject the possibility of pathway working in the opposite direction. This paper reports that both pathways are observed in Japan, suggesting that a mutual promotional relationship between changing ownership and corporate policies is the real story.

Second, we put forth the view that there may be emerging diversity to contribute to the convergence-divergence debate. While globalization raises the question of whether distinctions among capitalist systems are eroding, more studies have begun to show that

changes in corporate governance systems are path dependent, thus enabling the persistence of current systems (Bebchuk and Roe, 1999; Schmidt and Spinder, 2004).[2] In Japan, changes have also been path dependent, but no single, clear pattern has emerged with regard to the future of the Japanese model. One of the authors' analysis with Gregory Jackson demonstrates that multiple forms of corporate governance mechanisms coexist within the Japanese economy: the traditional, J-type firms which retain the old relational patterns coexist alongside hybrids which combine old relational and new market-oriented elements of governance (Jackson and Miyajima, 2007, pp. 37-38). This paper extends this understanding, focusing on ownership structure.[3] We show that the emergence of new ownership patterns and the consequences are neither a sign of convergence nor persistence of traditional practices, but rather a sign of emerging diversity. The ownership of Japanese firms has evolved while adapting to convergence pressures, but in ways significantly conditioned by existing national constraints, resulting in a range of firms from those with high foreign institutional ownership to those that maintain cross-shareholding.

Third, this paper also presents a comprehensive picture of corporate governance in Japan. It is well known that former main bank system, which used to play a significant role in corporate governance in Japan, has malfunctioned after the bubble period of the late 1980s and has been dissolved after the banking crisis.[4] However, there is less consensus on what has emerged as a new arrangement in Japan, and whether the

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[2] For the convergence and divergence controversies, see Hansmann and Kraakman (2000), Hall and Soskice (2001), Yamamura and Streeck (2003), Streeck and Thelen (2005), Shishido (2007), Jackson and Miyajima (2007). For recent works on current change, see also Aoki (2010), Whittaker and Deakin (2009).

[3] Two types of hybrid firms have been identified. The Type I Hybrid Firm is exemplified by so-called "blue chips" such as Toyota, Canon, and Kao, as well as by Hitachi, NTT DoCoMo, and other large firms listed on the Tokyo Stock Exchange. They are based on market-oriented finance and outsider dominated ownership characteristics, combined with relational employment and partially insider board structures. The Type II Hybrid Firm is characterized by the combination of relational finance and market–based organizational characteristics such as a formal, contract-based employment system, performance-based payment, stock options, and board structures based partly on the U.S. model. Type II Hybrid Firms are mainly located in IT-related industries and distribution, and are of relatively recent provenance. Central to our analysis is the supposition that the hybrid firm is the result of mixing market-based principles and relational governance in different economic domains such as finance and organizational architectures (employment system). In this regard, the concept of hybridization does not conflict with but is nonetheless different from the layering suggested by Thelen (2004), which describes the coexistence of old and new institutions within an economic domain.

[4] Hoshi, Kashyap and Scharfstein (1993), Hoshi and Kashyap (2001), Peek and Rosengren (2005), Arikawa and Miyajima (2007), Caballero, Hoshi, and Kashyap (2008).

arrangement has really played a substantial governance role in lieu of the former main bank system. Aoki (2007) hypothesized that if the increasingly prevalent foreign institutional investors could evaluate business models appropriately as external monitors, they could play an important role in corporate governance in Japan. Testing this hypothesis, this paper emphasizes that foreign institutional investors began to play an important role in corporate governance among large market-capitalization firms with strong export orientations. We tentatively suggest that the channel through which they exerted their influence is not through activism which is common in Anglo-Saxon economies, but through exit and with some contribution through internal governance mechanisms.

The paper is composed as follows. The next section briefly reviews the theory of the role of foreign investors. Section 3 summarizes ownership change in the Japanese context. Section 4 addresses the investment behavior of foreign institutions. Sections 5, 6, and 7 examine the influence of foreign investors on corporate governance arrangements, corporate policies, and performance respectively. The last section suggests that not voice, but the threat of exit is a more plausible pathway through which institutional investors exert their influence.

2. The theory of the role of foreign institutional investors

The increase in foreign institutional investors is a major recent phenomenon that has swept the world. According to **Table 1**, the share held by foreign institutional investors has increased everywhere. In Japan, it increased from 5.7% in the early 1990s to 27.0% in the mid- 2000s. Germany and South Korea, which are regarded as insider (family and corporation dominated) economies also experienced substantial increases of foreign ownership. The majority of institutional investors are foreign institutional investors, even in the U.K. The U.S. is an exception.

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Table 1 "Cross-country comparison of ownership structure" about here

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However, on the role of rising foreign ownership, there are contradicting views. The positive view, which is mainly advocated by financial scholars, insists that foreign investors now play a very significant role outside of the U.S., particularly in emerging countries. The starting point of this view is that foreign investors are independent from firms in which they have invested, and are less concerned about transactional

relations compared to other domestic investors ("gray" institutions) (Ferreira and Matos, 2008). This view also assumes that foreign investors have had high monitoring capability, both in screening "growing" firms, and in correcting their strategy through intervention.

The positive view also emphasize that foreign investors willingly put a premium on firms accepting global standard corporate governance (CG) arrangements such as outside directors and high-powered incentives schemes. The foreign investors have fiduciary duties, and exercise their control power (using voting rights), therefore they are a driver of governance reforms, and have been taking significant positions on corporate governance around the world, and have encouraged improvements in the governance arrangements of firms (Gillan and Starks, 2003). They have also influenced corporate policies and governance practice. For example, Aggarwal et al. (2010) documented that high foreign ownership is associated with high sensitivity in presidential turnover. All these influences resulted in higher performance (Ferreira and Matos, 2008; Aggarwal et al., 2010). This view is also consistent with the convergence view of corporate governance regarding outsider-dominated systems (Hansmann and Kraakman, 2000).

However, there is also strong skepticism regarding the role of foreign institutional investors. First, one skeptical view emphasizes that although the positive view assumes that foreign institutional investors have sufficient monitoring capability, in fact they face serious asymmetric information problems. Therefore, they have had a strong bias in their investment strategies in that they prefer large firms with high liquidity, and well-known firms such as Sony and Honda in Japan, Samsung and Hyundai in South Korea, and generally firms incorporated into MSCI Index (Stulz, 1981; Hiraki et al., 2003). Even though a positive correlation between foreign ownership and high performance has been observed, it may be a superficial one. As higher stock returns can be induced by the demand for a stock, high performance among firms with high foreign ownership can simply reflect a foreign investor's preference for high quality firms.

Second, another skeptical view is that foreign investors are mainly portfolio investors, and therefore basically less committed to the corporate policies of a particular firm compared to other corporate blockholders, so thus unlikely to have any impact on the firm's choice of governance arrangement (Chung and Zhang, 2011) and corporate policies. The correlation between corporate governance arrangements and policies and foreign institutional ownership is simply a result of foreign investor preference for firms with "good" governance arrangements and shareholder-friendly policies, but the

corporate governance arrangement choices made by firms were not influenced by foreign investors. The correlation between certain types of corporate policies (high dividend, high leverage) is simply the result of the preference of foreign investors, and not the other way around.

The third skeptical view is rather critical. It insists that the influence is rather negative on firm value in the long run.   Foreign investors not only give birth to adverse selection issues under asymmetric information, but also foster managerial myopia by imposing excessive pressure on management decisions.   Necessary physical investment and R&D are likely to be reduced by the myopic pressure of foreign investors, while firms are also likely to pay excessive dividends to attract foreign investors (Bushee, 1998).   Similarly, even though independent outside directors and high powered incentives are both highly preferred by foreign institutional investors, these arrangements are not necessarily good for all firms (Linck et al., 2008).   This is also true outside the U.S. in non-Anglo Saxon economic systems, where information based on the shop floor is crucially important for corporate decisions.   Thus, there are no substantial (positive) relations between increasing foreign institutional shareholders and performance.   The implication of this understanding is that firms in these countries are still suffering from serious agency problems (insider control), and the vacuum of corporate governance has not been filled.

Lastly, since these views are skeptical of the influence of foreign institutional investors and rather highlight their costly side, they also cast doubt on the convergence view.   The first two skeptical views insist that the existing system will persist because foreign institutional investors are less influential.   The third skeptical view holds that there is no economic rationale for convergence, because foreign institutional investors are not value enhancing.

3.   Japanese context: Changing ownership

3.1.   From insider-dominated to hybrid structures

Since the late 1990s, Japanese listed firms have experienced dramatic changes in ownership structure.   First, let us stylize several important facts.   **Figure 1** shows the long-term time-series trend of insider and outsider holding ratios based on data from the *Share Ownership Survey*, which covers all Japanese domestic stock exchanges. Following Franks et al. (2014), we define insiders as the aggregate of banks (excluding

trust accounts of trust banks), insurance companies, and corporations.   In general, such shareholders maintain long-term business ties with each company they invest in, and their incentive is not to maximize investment return but to maintain a relationship with each company.[5]   On the other hand, outsiders refer to the aggregate of foreigners, individuals, mutual funds, and pension trusts, whose holding objective is to maximize investment return.   **Figure 1** shows the holding ratios of insider and outsider based on the aggregated market value basis of the Tokyo Stock Exchange.

The insider-dominated ownership structure, which had shown remarkable stability until the mid-1990s, changed radically after the 1997 banking crisis.[6]   The share held by banks, which formed the core of this structure, plummeted from 15.6% in 1992 down to 4.6% in 2006 (**Table 2**).[7]   Insurance companies also reduced their stock holding due to their consideration of solvency-margin ratio.   There are two points to be noted here. First, firms sold their bank shareholdings, and bank sold their client firm shares almost simultaneously (Miyajima and Kuroki, 2007), but the banks continued to sell stock up to 2004 at a rapid pace.   In this sense, the massive selling by banks was the main driver of the dramatic ownership changes.   Second, the government and Bank of Japan supported this process.   In order prevent the selling of shares from negatively impacting the stock market, the Banks' Shareholdings Purchase Corporation was established in 2001, which together with Bank of Japan, began to buy stock directly from banks.   A condition of its purchases was that firms had to have a BBB bond rating,

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Figure 1 "Long-term trend of ownership structure in Japan" about here

Table 2 "Transition of the ownership structure in Japan" about here

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In parallel with the declining shareholding of insiders, the ownership ratio surged among institutional investors, in particular foreign investors.   The share held by foreign investors increased from 6.3% in 1992 to 27.8% in 2006, with jump in1999 and 2003-06.   After that peak, the increasing trend of foreign shareholders came to a near standstill from 2008 to 2012, stabilizing between 26.3% to 28.0%.   After "Abenomics" was launched at the end of 2013, the share of institutional investors increased again.

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[5] While insider ownership overlaps with cross-shareholding and stable-shareholding, it is a broader concept.   Franks et al. (2014) analyzes the evolution and international characteristics of ownership structure in Japan from this perspective.

[6] Many observers had expressed surprise at the stability of ownership structure from the 1970s to mid-1990s (Flath, 1993).

[7] For several reasons for the rapid decline of bank shareholding, see Miyajima and Kuroki (2007).

This rapid increase of foreign ownership emerged evenly. As **Figure 2** clearly shows, at the beginning of the 1990s there were no significant differences between the 1st and 5th quintiles of the listed firms grouped in terms of market capitalization. However, in the mid-2000s, the average foreign ownership ratio rose to over 25% among firms in the 5th quintile, while it remained less than 5% among firms in the 1st quintile.

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Figure 2 "Trend of foreign investor ownership by company size" about here

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Nearly 30% of the aggregated share of foreign institutions is comprised of several groups: one segment consists of global portfolio investors (such as Goldman Sachs and Fidelity) whose fund managers are based outside Japan and send order from the main office to markets abroad.[8]   It is assumed that they have mainly invested in firms which are incorporated into the MSCI Index. Another segment are foreign institutional investors whose fund managers are based in Tokyo and who have organized active funds which will be sold to foreign clients (such as pension funds and large investors). [9]

3.2.   Impact of increasing institutional ownership

The increasing share held by institutional investors have caused at least three crucial changes to capital market in Japan.

First, the presence of institutional investors, especially foreign institutional investors in market transactions, has grown even more pronounced than their ownership. As shown in **Figure 3**, the share of transactions by foreigners in the Tokyo Stock Exchange First Section surpassed 30% in 1997, reaching 40% in 2006 and 55% in 2013. Furthermore, the stock turnover ratio of foreign investors is more than three-fold after 2006, which is a sharp contrast to that of corporations and banks (less than 0.2 times). The fact that foreigners became the dominant force in the market dramatically raised their influence in stock pricing in Japanese markets.[10]

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[8] Due to this presence, the CEOs and CFOs of Japanese firms began to explain their corporate strategy to main investors twice a year, in what are known as "road shows" among businessmen.

[9] Note that when the funds that foreign institutions (securities firms and investment advisors) manage are delegated by Japanese pension funds, the shares were categorized as those of domestic institutional investors.   It is because they are required to have their stocks managed by a Japanese custodian such as Japan Trust Service.

[10] According to a simple regression of the stock price index against net buying pressure ((purchase amount – sale amount) / total capitalization of TSE First Section x 100), the net buying pressure

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Figure 3 "Share of transactions and stock turnover ratio" about here

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Second, the increasing share held by institutional investors associated with the change of the role of shareholder voting and the general shareholders' meeting. In Japanese firms before the late 1990s, although CalPERS showed an active stance by using their voting rights (Jacoby, 2007), votes against company proposals were quite rare, thus the general shareholders' meeting were quite formal affairs (short in duration and devoid of substantial objections). But, after challenged by CalPERS in the 1990s, subsequently the fiduciary duties of institutional investors were imposed in parallel with the deregulation of pension funds, and the former situation has gradually changed. In the early 2000s, the Federation of Employees' Pension Funds (predecessor of the Pension Fund Association) and other pension funds required their designated investment advisory firms to actively exercise their voting rights.[11] Most foreign institutions received service from the proxy advisory firms (ISS and Glass Lewis) to reduce their monitoring cost when exerting their voting rights. Since both advisory firms recommended the global standard of board arrangement informally, there was increased pressure to adopt Anglo-Saxon practices. Sometime in the mid-2000s, listed firms had no choice but to pursue management that considers outside shareholders' interests -- in other words, to maximize shareholder value.

Third, against a backdrop of rapid ownership change, a series of hostile takeover bids were seen from the mid-2000s including Livedoor's TOB of Nippon Broadcasting (2005), Oji Paper's TOB of Hokuetsu Paper (2006), and Steel Partners' TOB of Bulldog Sauce (2007). It was about this time that the market for corporate control and shareholder activism first emerged in the Japanese corporate arena.[12] Since there was no such activism in Japan through the end of the 1990s except for Koito Seisakujo (Toyota Auto-related parts maker), the activism had a huge impact on corporate Japan. In spite of huge social attention paid to shareholder activism, however, the attempts at activism have mostly failed (Buchanan et al., 2012).

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coefficient rose from 10.19 in the period from January 1980 to December 1989, to 24.67 in January 1990 through December 1999, and still remained high at 17.5 in January 2000 through October 2009. For example in 2003 and mid-2005, the large net buying by foreigners pushed up the market.

[11] To facilitate the investment side, the Federation released the "Fiduciary Responsibility Handbook: Investment Institution Edition" in 2000 and "Practical Guidelines for Exercising Voting Rights" in 2001.

[12] For more details, see Hamao et al. (2011). While there is no clear definition of activist, in general the term refers to private investment institutions which are relatively unregulated, and to major shareholders who seek to exert influence on corporate activities in order to increase investment returns.

4. The determinants of ownership structure

4.1. Model and hypothesis

To understand the impact of the rise in institutional investors, our starting point is to identify the determinants of institutional shareholding.

There are several existing studies that emphasize that the investment behavior of foreign institutions has a strong investment bias known as the home bias. As for Japan, early works such as Stulz (1981), Kang and Stulz (1997), Hiraki et al. (2003) reported that foreign institutional investors are likely to invest in large, well-known firms with high overseas sales ratios, mainly focusing on the late 1980s and 1990s. Entering the 2000s, foreign institutional investors had already acquired enough experience in the Japanese market, and had a presence was much stronger than before.

Miyajima et al. (2015) have tested this issue. In consideration of the above points, we estimate the following model (1), according to Gompers and Metrick (2001). The sample includes all non-financial firms listed in the First Section of Tokyo, Osaka, and Nagoya Stock Exchange from 1990 to 2013. The number of sample firms in a year is roughly 1,100-1,700, depending on the year. The number of observations is approximately 24,000. The firm's financial and stock price data are drawn from Quick Astra Manager (Ouick). We estimate the 24 observation years with separate cross-sectional regressions, following Fama-MacBeth methodology.

$$FIO_{i,t} = \alpha_t + \beta_{1t}\,IB_{i,t} + \beta_{2t}\,QS_{i,t} + \beta_{3t}\,HB_{i,t} + \beta_{4t}\,GOV_{i,t} + \varepsilon_{i,t} \qquad (1)$$

Where $FIO_{i,t}$ is the level of foreign institutional ownership adjusted by floating stock for firm i in year t. $IB_{i,t}$ are variables which capture the bias of institutional investors. One of them is market capitalization, SIZE, and turnover ratio, TURN. Foreign institutional investors tend to prefer large and liquid stocks (Kang and Stulz, 1997; Gompers and Metrick, 2001). We also include the market-to-book ratio, MB, to capture the investment style.

$QS_{i,t}$ is the proxy of fiduciary concerns which are composed of several firm characteristics. Del Guercio (1996) insisted that institutional investors who pay close attention to fiduciary duties preferred high quality stocks. As variables, we apply investment opportunity, INVOP, dividends on equity, DOE, profitability, ROA, stock volatility, VOL, leverage, LEV, and cash holdings, CASH. If foreign investors take

their fiduciary duty seriously, and followed the prudent rule, the share of foreign ownership should be sensitive to these variables. They would prefer the stock of a firm that has a high ROA, is cash rich, has high yields, less volatile of stock returns, and is financially healthier.

$HB_{i,t}$ is the proxy of home bias among foreign institutional investors. We apply three variables; the overseas sales ratio, OS, the MSCI dummy, which is one if a firm is incorporated into the Morgan Stanley Corporate International Index, MSCI.[13] The distribution of MSCI is 20.7%. This variable makes it possible to capture foreign investors' home bias. Kang and Stulz (1997) and Hiraki et al. (2003) find that it exists in Japan strongly in the late 1980s and 1990s.

Lastly, $GOV_{i,t}$ are a series of variables to capture governance characteristics. DIR is the number of total directors, while INDIR is the independent directors ratio. Both variables are introduced to capture the preference of institutional shareholders on corporate boards. SUB is the % share held by the other firm, if it owns over 15% blocks of firm i. It is introduced to show that foreign investors were less enamored of listed subsidiaries considered to be exploited by the parents firm Lastly, CROSH is the ratio of a firm's shareholding divided by its total assets. If foreign institutional investors regarded such stock holding as the inefficient use of funds, the coefficient of CROSH would be negative. We also include a momentum factor and industry dummy in the above regression model. Detailed definitions of these variables are provided in Miyajima et al. (2015).[14]

As mentioned above, we summarize regression results by following Gompers and Metrick (2001), which applied the Fama and MacBeth (1973) cross-sectional regression approach. This approach consists of two steps. As a first step, we run cross-sectional regressions for each time period (year) to obtain estimates of the parameters. Then, as a second step, we use the time series of these estimates to obtain final estimates for the parameters and standard errors. These procedures enable us to treat the problem of cross-sectional correlation in the residuals.

4.2. Estimation results

The estimation results of the Fama-MacBeth type regression are summarized in **Table 3**,

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[13] Originally, we include an ADR dummy, which takes one if a firm is ADR listed. However, the number of firms which are ADR listed is quite limited (only 1.4% of the entire sample), so it was omitted.

[14] The Appendix of Miyajima et al. (2015) provides the descriptive statistics for these variables.

and we provide the average coefficient (first column) for the 24 yearly OLS regressions. The results are mostly consistent with our prediction as well as the results of previous studies.

First, the results are consistent with the normal institutional investors' bias. The coefficients of SIZE and TURN are positive and statistically significant, implying that foreign investors prefer large and highly liquid stocks. The regressions also show that foreign investors prefer "high quality" stocks of profitable (high ROE) and financially healthier firms (low leverage).

Second, the results are consistent with the strong home bias. The coefficients of OS (overseas sales ratio) and MSCI are positive and highly significant, suggesting that foreign investors have a strong home bias. The magnitude of the MSCI dummy is large. Firms incorporated into the MSCI Index have results that are 3.3% higher than other firms, other factors being equal.

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Table 3 "Determinants of foreign investors ownership" about here
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Next, to consider the historical change, we divide the sample into three periods: the first period is the period before Japan's banking crisis (1990-1997, hereafter Period I), the second is the reconstruction period after the banking crisis period (1998-2005, Period II) and Period III (2006-2013) is a period during which the level of institutional investors reached a peak and then achieved relative stability. There are several points to be noted.

First, the results on institutional investors bias and home bias are almost unchanged throughout all periods. Foreign institutional investors preferred large, liquid, high-quality stocks, and high overseas sales firms and MSCI firms across the three periods. They are consistently influenced by fiduciary motives and a strong home bias.

Second, however, it is worth noting that the coefficient of MSCI declined substantially from 5.726 in Period II to 1.578 in Period III, which implies that foreign investors expanded their investment target from MSCI firms to non-MSCI firms, Furthermore, the coefficient on VOL (volatility), which is negative and statistically significant before the banking crisis, changed to significantly positive after the crisis. In the same manner, the coefficient on MOM (momentum) changed from positive to negative but with less significance. These results imply that stock volatility and momentum are influential determinants of foreign investors' portfolio allocation at the beginning, but information asymmetry was gradually mitigated as foreign investors

expanded their business in the 1990s, and they came to consider extrinsic factors such as stock volatility and momentum to be less important. This result is at least not contradictory to the understanding that foreign shareholders are likely to encourage firms to take risks.

Third, estimation results further suggest that foreign institutional investors prefer firms with good corporate governance arrangements (e.g., small, efficient boards and a high independent director ratio), reflecting the strong fiduciary motives and prudence of foreign investors. The coefficient of DIR (number of directors) is negative throughout the three periods. Meanwhile, INDIR (independent directors ratio) is clearly positive in Period III. According to the yearly results, the coefficient has been positive since FY 2007.

Until 1996, the board of directors at Japanese firms was characterized by (1) the lack of organizational separation between management supervision and execution, (2) an excessive number of board members, and (3) insider dominance (composed of members promoted from within firms). Foreign institutional investors became increasingly critical of such insider-dominated organizations, which differed from the Anglo-Saxon arrangement, and demonstrated a stance to give priority to investing in firms that engaged in such board reform. After management reforms made progress in the mid-2000s, their concerns shifted to the independence of outside directors. The results in **Table 3** suggest that the foreign investor put a premium on firms at which board reforms had been implemented.

Similarly, foreign investors have strong preference for firms with less involvement in cross-shareholding. The coefficient of CROSH is negative and statistically significant in Periods I and III. Note that the coefficient of CROSH in Period III is larger than for Period I, which coincides with the period when foreign institutional investors increasingly criticized Japanese firms for holding the stock of other companies, insisting that these investments were inefficient. The result is consistent with the understanding that they discounted firms with higher shareholding in other companies.

5. Do foreign shareholders facilitate CG arrangement changes?

Thus far, we reported that while foreign institutional investors had a strong investment bias toward size, liquidity, soundness of firms, and familiarity, they also had a modest preference for certain governance arrangements of firms. These facts suggest that foreign ownership could also affect decisions on board structures and corporate policies

through either voice or the threat of exit. To test this issue, we focus first on the influence of changing ownership on the corporate governance (CG) arrangement, particularly board structures. Our main question is: did foreign ownership facilitate CG reforms?

The existing literature shows a positive relationship in both U.S. and non-U.S. countries. For instance, Gillan and Stark (2003) report that institutional investors influence the choice of board composition and the appointment of independent outside directors. Miyajima and Ogawa (2012) estimated a model (2) of board structures, following Coles et al. (2008) and Linck et al. (2008).

$$OUT_{i,t} = \alpha + \beta_1 COMP_{i,t-1} + \beta_2 MON_{i,t-1} + \beta_3 INFO_{i,t-1} + \beta_4 NEG_{i,t-1} + \varepsilon_{i,t} \qquad (2)$$

Where *OUT* is the dummy variable equal to one if a firm introduced outside directors, and otherwise zero.   Outside is defined as a person who comes from outside of the firm. Persosn who used to work for banks and subsidiary firms are excluded. *COMP* is a series of variables which are the proxy of the complexity of business. We take firm size, firm age, number of business segments, holding company dummy, and debt to asset ratio as proxies of *COMP*. *MON* is introduced to capture the extent of agency problems.   We use the free cash flow ratio, Herfindahl index, and the introduction of anti-hostile takeover measures as proxies of MON. *INFO* is the difficulty of getting information from outsiders. *INFO* consists of R&D expenditures, market to book, stock return volatility, and the intangible asset ratio. We used a probit estimation model, and the estimation period is from 2004 to 2011 among all non-financial and non-utility firms in the First Section of the Tokyo Stock Exchange.

According to estimation results (**Table 4**) from Miyajima and Ogawa (2012), there are two points to be noted.

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Table 4 "Determinants of board structure" about here
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First, the coefficient of *COMP* and *MON* is positive as predicted.   But, the explanatory power of this model as measured by R^2 is much less than the estimation of the U.S., and U.K. firms.[15]   This implies that the board structures of Japanese firms were determined by other factors that cannot be attributed to the basic model.

Second, the coefficient of foreign ownership is significantly positive, meaning that

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[15] R^2 of the estimation of Coles et al. (2008) for the U.S. firms is around 50%, and that of Guest (2008) for U.K. firms is 25%.

firms with higher foreign ownership are likely to have more outside directors. This result is consistent with the fact that foreign investors prefer firms with outside directors, as noted in the previous section. Foreign investors placed a premium on firms at which board reforms had been implemented. This is because if investors exhibit their preferences, managers will listen and respond with the expected and desired board reforms. However, the appointment of independent outside directors in Japanese firms is not necessarily an improvement, for sometimes outsider directors serve as mere window dressing.[16]

Last, more importantly, when we divide sample firms into firms with high and low foreign institutional shareholding (FOR) by using the sample median, the fit of the model to firms with high FOR is much better than to firms with low FOR. While the latter adjusted R^2 is 0.062, the former is 0.123. It suggests that high foreign institutional shareholding encouraged firms to choose board structures suited to their firm characteristic such as complexity of business and the extent of agency problems.

6. Influence on corporate policies

6.1. Policy sets

Next, we turn our concern to the question of whether the change in ownership really influenced corporate policies. We select a series of corporate policies: physical investments, leverage and dividends. These policies are chosen because policymakers believe that Japanese firms tend to be too conservative in their investment activities, reduce their leverage too much, and retain earnings rather than pay out to shareholders. The first two policies, investment and leverage, are highly related to a firm's risk-taking, while the dividend is directly related to shareholders' interests. These policy decisions are also assumed to be some of the main defects of Japanese firms dominated by insider ownership in recent years.

Investment in the 2000s stagnated, as the CAPEX (capital expenditures / total assets) was 4.2% on average in Panel A of **Figure 3**. Comparing two periods, 2003-2006 and 2010-2013, both of which were at similar points in the economic cycle, we found that the standard deviation of the investment ratio grew smaller for the latter

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[16] A typical case is Olympus Co., which had three outside directors when its accounting scandal was revealed, while Toshiba Co., was famous for having a sophisticated board structure with the committee system and a majority of outsider directors.

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period.

Leverage in the 2000s exhibited a downward trend, as shown in panel B of **Figure 3**. The Japanese economy experienced a serious cyclical economic downturn from FY 2000 to 2002, but deleveraging has continued in business upturns since 2003. Leverage slightly rises after the global financial crisis with increasing variance among firms. The economic media criticized Japanese firms for reducing their debt excessively in response to their default risks.

Lastly, DOE (the dividend /equity) has shown an upward trend in parallel with increasing institutional ownership, according to panel C of **Figure 3**. During the period that began in the early 1970s and was characterized by the dominance of insider ownership, it was a stylized fact that the payout ratio in Japanese firms was low and less sensitive to profit. However, from the beginning of the 2000s, Japanese firms began to raise their dividends payout and consequently attitudes toward payout policies have increasingly diverged between firms. This trend has continued after the Lehman shock of 2008.

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Figure 3 "Investments, leverage, and dividends" about here
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6.2. Empirical model

The starting point of our empirical model on the relationship between ownership and corporate policies is following equation (3).

$$POL_{i,t} = \alpha + \beta\, INST_{t\text{-}1} + \gamma\, CONT_{i,t} + \varepsilon_{i,t} \qquad (3)$$

Where, *POL* are policy variables, including investments (INV), Leverage (LEV), and Dividends (DOE). INV is defined as capital expenditures scaled by total assets at the beginning of the period. LEV is defined as the sum of the short-term and long-term debt divided by total assets at the beginning of the period. We also use Net debt issuance, which is defined as debt issuances minus debt repayments divided by total assets at the beginning of the period. DOE is defined as the amount of dividends divided by the book value of equity.

INST is the share held by institutional investors, which is the focus of this analysis. Controls are a series of variables that affected corporate policy. In the investments function, we include Tobin's Q, sales growth, cash flows, share issues, debt issues, and

Δcash holdings as control variables.   In the leverage equation, firm size, profits, sales growth, market to book, assets tangibility, and stock return volatility are included.   In the dividend equation, we include firm size, ROA, sales growth, market to book, debt to assets, stock returns, and volatility of stock returns.   Detailed definitions of the variables and descriptive statistics are available in Miyajima and Ogawa (2015).

According to **Table 5**, the estimation results of the fixed effects model show that investments are positively related to the level of institutional ownership, indicating that high institutional ownership enhances a firm's investment activity, other factors being equal.   Conversely, leverage is negatively affected by institutional ownership, suggesting that foreign institutions might force firms to deleverage.   This result contradicts the general understanding that institutional investors, especially foreign institutional investors, encourage firms to take on higher leverage due to tax considerations or to avoid dilution.   Lastly, the coefficient of institutional ownership is positive in the dividends equation, suggesting that institutional investors encourage high dividend payouts.

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Table 5 "Empirical results of corporate policies" about here
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However, similar to the relationship between ownership and performance, these results are affected by the reverse causality that institutional investors prefer firms with high investments, low leverage, and high dividends.   Even though institutional ownership is taken with a one-year lag (beginning of the firm year) in the fixed effects model (3), it is plausible that the one-year lagged policy variables are a good proxy of current corporate policies for investors and both are highly correlated.   To examine to what extent this reverse causality issue is serious, we estimate the following "selection" model (4) for institutional investors.

$$INST_{i,t} = \alpha + \beta\, POL_{i,t} + \gamma\, CONT_{i,t} + \varepsilon_{i,t} \qquad (4)$$

Where *INST* is the share held by institutional investors, and *CONT* are the control variables, which could be the determinants of the shareholdings of institutional investors.   We include the book to market ratio, firm size (market capitalization), stock volatility, stock turnover, and stock price, TOPIX 500, stock returns, firm age, and overseas sales ratio as in model (2) in Section 4.   Policy variables are the same as the dependent variables of the above "influence" model, i.e, investments, leverage and dividends.   Because ownership and financial data are annually based and short

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time-series data, we used pooled OLS regression.

According to the second line of **Table 6**, the coefficient of investments is positive during 2000-05, but not significant for 2006-13, suggesting that institutional investors preferred growing firms in the former period, but not clearly so in latter period. Meanwhile, the coefficient of leverage is consistently negative in both periods. This result is consistent with the view that institutional investors adhere to their fiduciary duties, resulting in an investment bias toward financially healthier firms (Del Guercio, 1996). The coefficient of dividends is also positive, but in contrast to investments, somewhat less significant in the 2000-05 period, and strongly positive in the 2006-13 period.

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Table 6 "Determinants of institutional ownership" about here
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In sum, the results of the "selection" model imply that the fixed effects model may capture the reverse causality, especially the positive effect on investments in 2000-05, and the negative effect on leverage and the positive effect on dividends in both periods.

6.3.   Addressing reverse causality

The reecent literature that addresses the effect of ownership on corporate policies has paid considerable attention to simultaneous determinations issues. Among several solutions, we chose the popular methodology of dynamic system GMM estimation, where all independent variables are treated as endogenous variables, and use the t-3 and t-5 independent variables as instruments.

The results are summarized in **Table 7**. There are several important results worthy of notice. First, in the investment equation, the coefficient of institutional ownership is only positive in the 2006-2013 period. This suggests that institutional investors encouraged firms to investment more after they had reached a certain level of ownership. This result is different from Ferreira and Matos (2008), which reports the inverse relationship between (foreign) institutional ownership and capital expenditures. This result allows us to surmise that institutional investors in Japan were less committed than in other non-U.S. countries when corporate restructuring was considered necessary.

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Table 7 "Empirical results implementing GMM estimation" about here
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Second, in the leverage equation (Panel B), the coefficient of institutional

ownership is positive at the 10% significance level in the 2006-13 period, suggesting that once shares held by institutional investors increased, this seemingly encouraged firms to raise more debt. This result is completely opposite to that obtained with the fixed effects model, which shows the negative relationship between them. This implies that even though institutional investors prefer firms with low leverage in their investments, they influenced firms to raise leverage once they had a certain stake of ownership. In order to further test this point, we use net debt issuance instead of the level of debt, and find that the coefficient of institutional ownership is positive at a 5% significance level.[17]

Lastly, in the dividends equation, the coefficient of institutional investors is positive at the 1% significance level in the 2006-13 period. Its magnitude is substantial in the sense that an increase of one standard deviation of institutional ownership is associated with a 0.32% point increase in dividends on equity (DOE), which accounts for about 20 percentage points of the DOE mean. This result suggests that both selective and influential relationships coexist between foreign ownership and payout policy.

6.4. Growing firms and matured firms

After the ownership structure shifted from insider-dominated structures to hybrid forms (combination of insider and outsider), institutional investors have clearly influenced corporate policies. Our next question then is whether the influence of institutional investors varies among firms with different characteristics and firm lifecycles. The encouragement of investment in and of itself is not necessarily value creating, and neither is the promotion of dividend payouts. If investment is encouraged in mature firms, it is likely to induce overinvestment problems. Similarly, if the payout is increased by growing firms under pressure from foreign investors, it is likely to give rise to excessive payout problems.

If foreign institutional investors played a significant role in corporate governance, it would be expected that the positive effect of institutional investors on corporate policies such as corporate investments or leverage is stronger in firms which have plentiful growth opportunities, while it would be weaker in firms which have a dearth of growth opportunities. On the other hand, conversely, the effect of institutional investors on dividend payouts would be stronger in mature firms rather than in growing firms.

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[17] For details, see Miyajima et al. (2015).

In order to test this conjecture, we divide sample firms into two groups, growing and mature firms, to which we give dummy variables. Then we included the interaction term of these dummy variables (growing or mature) with institutional ownership in the above influence model. To identify growing and mature firms, we use the mean of firm size, firm age, market to book ratio, and their combinations as thresholds. We assume small, young, firms with high growth opportunities to be growing firms, and large, old, firms with low growth opportunities to be mature firms.

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Table 8 "Growing firms and matured firms" about here
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According to **Table 8**, as for the investments equation the coefficient of interaction term is negatively significant in mature firms, but not significant in growing firms. This means that although institutional investors generally encouraged firms to invest actively, this relationship is much clearer in growing firms. In contrast, as for the dividends equation, the coefficient of interaction term is negatively significant in growing firms, when using the firm age and market to book combination. In growing firms, the joint effect of institutional shareholding is almost zero (0.015-0.014). This result suggests that institutional investors generally promoted reductions in cash flows by paying dividends to shareholders, while they encouraged growing firms to retain cash flows to realize investment opportunities. Unlike the investments and dividends results, the effect of institutional investors on leverage is not clear, which means that institutional investors encourage firms, not any particular type of firm, but generally, to raise their leverage.

In sum, even controlling for reverse causality issues, we find that the investment and dividend payout decisions are influenced by foreign institutional investors. They encouraged growing firms to invest more, while influencing mature firms to pay more dividends. This result is consistent with the view that foreign investors, acting as external monitors, began to evaluate the corporate decision appropriately.

7. **Foreign institutional investors and performance**

In the previous section, we show that even if foreign institutional investors have an investment bias, their presence has affected corporate policies through exit or voice (monitoring). Our final concern is whether the growing presence of foreign institutional investors contributed to corporate performance by enhancing managerial

effort. Being different from traditional, insider shareholders such as banks and insurance companies, foreign institutional investors are independent and shareholder-value maximizers, so they are assumed to actively exercise either voice or exit.   But is this view really correct?

With regard to the disciplinary effect of foreign institutional investors in Japan, numerous empirical studies have noted a positive performance effect. That is, they consistently find that corporate performance as measured by Tobin's Q, ROA, or total factor productivity (TFP) is positively correlated to the ownership ratio of foreign investors or foreign individuals including parent firms.   However, since the stock preference of foreign investors can be partly explained by the home bias and corporate governance factors, foreign ownership cannot be considered to be an exogenous variable.   In particular, when examining the effect on corporate performance, we must consider the reverse causality in which foreign investors prefer firms that perform well. The previous literature does not adequately address this problem, nor does it examine the current impact.

Therefore, to address the disciplinary effect of foreign institutional investors, we use a standard panel analysis method and simultaneous equation model, adding to the median regression.   As a first approximation, Miyajima et al. (2015) estimate the following base model (5), which takes into account the chronological compatibility of the causal relationship.

$$Log(Q)_{i,t} = \alpha + \beta_1 FIO_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 INVOP_{i,t} + \beta_4 LEV_{i,t} + \beta_5 IND\text{-}Q_{i,t} + \varepsilon_{i,t} \qquad (5)$$

Where dependent variable, $Log(Q)$, is the log of simple Q, which is calculated by the sum of total assets plus market value of equity minus book value of equity divided by total assets.   The dependent variables are firm size (log of total assets), $SIZE_{i,t}$, investment opportunities (prior two years' sales growth rate), $INVOP_{i,t}$, the leverage (debt to total assets ratio), $LEV_{i,t}$, and the industry median Tobin's Q, $IND\text{-}Q_{i,t}$.   Finally, $FIO_{i,t}$ is the level of foreign institutional ownership for firm i in year t.   The $FIO_{i,t}$ is our focus, and we expect a positive sign.   We introduced a year dummy variable to eliminate the mean time series trend of each variable.   The sample is the same as in the previous section, comprised of all non-financial firms listed on the First Sections of the Tokyo, Osaka, and Nagoya Stock Exchanges from 1990 to 2008.

Miyajima et al. (2015) first run the model (5) with the median regression. However, since the stock preference of foreign institutional investors can be partly explained by the home bias factor and corporate governance factor, the ownership ratio

cannot be considered to be an exogenous variable.   In particular, when examining the effect on corporate performance, we must consider the reverse causality in which foreign institutional investors prefer firms that perform well.   To alleviate this endogeneity problem, we use the standard panel analysis method (fixed effects model). Even using the fixed effects model, however, the reverse causality issues cannot be completely resolved.   As a third way of estimation, following Ferreira and Matos (2008), we use the simultaneous equation model (3SLS), which explicitly addresses the fact that the ownership ratio is determined by the home bias and corporate governance factor at the beginning of the estimation period. In the 3SLS, we run equation (5) and equation (1) in Section 4, which includes the investment bias of institutional investors, *IB*, the proxy of fiduciary concerns, *QS*, home bias factors, *HB* and governance factor, *GOV*.   Please note that the book-market ratio, BM, is excluded, since Tobin's Q and BM is highly correlated. In this model, we treat foreign intuitional investor ownership (FIO) as an endogenous variable, and the industry median Tobin's Q as an instrumental variable, which could influence Tobin's Q, but not FIO.

According to Miyajima et al. (2015), the coefficient of FIO is positive, suggesting that foreign ownership improves firm performance.   The result is unchanged, when we used the fixed effects model.   Furthermore, this result also holds when we use the 3SLS, suggesting that even controlling for reverse causality, there is robust positive relation between high foreign ownership and corporate performance.   For example, according to column 3 based on the 3SLS estimation, a one standard deviation increase in foreign ownership (9.2%) is associated with 0.056 increase of Tobin's Q (log Q), which is equivalent to 37% of the average log Q (0.151).   The economic magnitude is substantially large.

To further examine the robustness of these results, we test the following different specification.   Most results are unchanged, although they are not reported.

- The dependent variable is replaced with the change of Q_t (Q_t-Q_{t-1})   in the median regression and the fixed effects model.
- The explanatory variables are replaced with a one-year lag instead of current year in the median regression and the fixed effects model.
- Applying the system GMM model, we add a one-year lag to the dependent variables.

The results are also robust when we divided the sample into two periods: before banking crisis, and after banking crisis.   The coefficients of FIO are all significantly positive.   Meanwhile, according to column 7 and 10, which use the 3SLS model, a one standard deviation increase (0.057) is associated with a 0.046 increase of log Q, which

is equivalent to 17% of log Q average (0.264), while that of the post-banking crisis (10.3%) is associated with a 0.030 increase of log Q, which is equivalent to 36% of the log Q average (0.084). These results are consistent with the understanding that the influence of foreign institutional investors has grown as their ownership has increased.

8. Why and how did foreign investors affect corporate policies and firm values?

8.1. Increasing role of foreign investors and emerging diversity

This paper examined whether the increase in foreign institutional investors played a disciplinary role, in lieu of the former main-bank system in Japan.

There are competing views with regard to this issue. The positive view is that foreign institutional investors have high monitoring capability, and encouraged improvements in governance arrangements in the firms in which they invest, resulting in high performance. Conversely, the skeptical view insists that foreign investors have a strong bias in their investment. They are less committed and suffer from serious asymmetric information problems. Furthermore, their time horizon is too short to realize gains on long-term investment.

Having tested the investment behavior of foreign institutions. It is true that foreign institutional investors have a strong investment bias, and have a formal preference for certain corporate governance arrangements. On the other hand, however, according to the results of their effect on the choice of board structure, corporate polices and performance, once the share held by foreign institutional investors increased, they certainly influenced corporate polices and played a significant disciplinary role. After controlling for various factors that could affect corporate policies and performance and reverse causality, we still found a positive and significant relationship between foreign shareholding and corporate performance (measured by Tobin's Q). These results are robust using various specifications.

Thus, we can conclude that foreign shareholders began to play a significant role in corporate governance in Japan. Having made this assertion, however, we also provide an important caveat: this observation only applies to large firms. By the early 1980s, the governance arrangement of Japanese firms was homogenous in the sense that all firms were highly leveraged within the main-bank system, dominated by insider ownership, and had corporate boards composed of people promoted from within firms. There was no significant difference between blue chip firms and others in these regards.

As Jackson and Miyajima (2007) emphasized, however, the ownership of Japanese firms has clearly diversified after the banking crisis. Disparities in firm characteristics such as their size, reputation in foreign markets, and performance caused the ownership structure to be diversified through the preferences of institutional investors. As a result, foreign ownership increased significantly in firms with high market capitalization such as firms incorporated into the MSCI Japan index. But other relatively small firms remained attached to traditional corporate governance arrangements.

Figure 2 in section 2 clearly shows this point. At the beginning of the 1990s, there were no significant differences between the 1st and 5th quintiles of the listed firms grouped in terms of market capitalization. However, in the mid-2000s, the average foreign ownership ratio rose to over 25% among firms in the 5th quintile, while it remained less than 5% among firms in the 1st quintile. Furthermore, the strong variance of foreign ownership even among MSCI firms is further evidence that the monitoring role of foreign investors is limited to firms with the largest market capitalizations.

8.2. Are voice and engagement working?

Foreign ownership has actual influence on corporate policies and firm values through the disciplinary effect, although the impact has been mostly limited to larger firms. The natural questions are, then, why and how have foreign owners played a disciplinary role in spite of their investment bias? In general, a disciplinary role is exercised through voice, which usually is manifested through the following three channels: 1) direct intervention (engagement, shareholder proposals, and proxy fights) based on their block holding; 2) active monitoring of non-executive directors; and 3) takeover mechanisms.

The first channel has not yet been functional, as foreign institutional investors have not acquired large blocks. Although the aggregated share held by foreign institutional investors increased, reaching around 30%, each individual institutional investor did not have sufficient stakes in a particular firm and their holdings are mostly fragmented. The average share held by foreign investors when among the top ten shareholders is as low as 4.0% according to Franks et al. (2014) in 2009. Even though a foreign institution such as Fidelity may take a certain stake in a firm, there is no guarantee that the main office and Tokyo office of Fidelity will exercise their voting rights consistently. In fact, there have only been very few cases where foreign institutional shareholders proposed their own agenda, or were involved in proxy fights. It is also reported that there have only been a limited number of cases of shareholder activism and their

outcome has been largely unsatisfactory (Hamao et al., 2011; Becht et al., 2015).   In short, the voice (engagement) scenario is not common in Japan.

The second channel assumes that the foreign institutional investor encourages firms to appoint independent directors, who in turn contributed to improving corporate policies and performance.   It is true that since 2000 onwards, the number of independent directors in Japanese firms has increased, and ownership has clearly affected the board composition by favoring outside directors.   However, the appointment of outside directors does not necessarily imply enhanced corporate efficiency.   According to our tentative empirical results (Saito, Miyajima and Ogawa 2016), there is no evidence that the outsider directors improved the sensitivity of presidential turnover to corporate performance in general.   We found that if firms have over three outside directors, a rise in sensitivity is observed, but firms that have a sufficient number of independent directors (say three) are quite rare, and almost no firms had a majority of outside directors by 2014.   Thus, it is not realistic to expect that a performance effect will arise out of foreign ownership's efforts to encourage the appointment of outside directors.

The third channel is exercised through the market for corporate control, which is prominent in the U.S. and U.K.   Indeed, entering the 2000s, Japan experienced a number of hostile takeovers and corporate activist proposals for the first time in postwar history (Buchanan, Chai and Deakin, 2012).   These actions affected the financial policies of not only firms that were actually targeted but also firms that were potential targets because of large cash holdings.   However, there have been very few takeover cases and firms that would be targeted by activist funds such as Steel Partners are not likely to be large firms with high levels of foreign ownership, but have been limited to smaller firms.   Furthermore, it has been documented that the outcome of activism has been rather underwhelming in Japan (Becht et al., 2015).

8.3. Combination of vote with feet and internal governance mechanism

Thus, all three channels have not served foreign ownership as effective means for enhancing corporate performance in Japan.   A more realistic channel that the foreign institutional investors have wielded as monitors might be exit (voting with their feet).

The estimation of Miyajima et al. (2015) shows some evidence of this. They estimate the following simple model based on Gompers and Metrick (2001), which regressed stock returns on the level of and change in foreign ownership.[18]   According

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[18] The independent variable is the excess rate of return on the stock of firm i, which is estimated by taking the difference of the rate of return of stocks (including dividend) between firm i and TOPIX.   The

to their estimation results, the coefficient of the change of foreign ownership is positive. The economic magnitude of the change of foreign ownership is substantially large with a coefficient of 2.165, implying that 5% increase of foreign ownership is associated with a10% rise in the rate of return on stocks.

The economic magnitude of increasing foreign ownership is calculated by multiplying a one standard deviation of change of foreign ownership by the estimated coefficient of change in foreign ownership in Fama-MacBeth estimation. Changes of foreign ownership have always affected the stock returns throughout all estimation years. On average, one standard deviation (4.1% from 1990 to 2013) is associated with 7.8% of the change in stock returns. The maximum is 22.6% in 1999, when the huge ownership shift from domestic financial institutions to foreign institutions took place. The period average of 1990-96 is 6.9%, that of 1998-05 is the highest at 10.9%, and that of 2006-13 is 5.6%.

Thus, the impact of changing foreign institutional ownership is substantially large. It is true that this change could be caused by both superior screening, i.e. foreign investors could chose firms with high growth (smart investors hypothesis) and the increasing demand for a firm in which they invested (demand shock hypothesis). Even if we cannot identify which channels are important, however, the estimated impact was large enough for top managers to perceive that the changes in institutional shareholding was having an affect on stock prices.

In fact, top management's greater concern with stock price is reflected in the increase in IR activities and information disclosure since 2000 (Miyajima, 2007). Our survey (Miyajima et al., 2013) shows that 90% of the top management of firms has recently shown concern for shareholder value, which is quite a contrast with survey results obtained in the 1990s.

In Japan, however, the main concern of top management in regard to the exit of foreign investors is neither the threat of a hostile takeover nor the decreasing value of their stock holdings (stock options). Both of these mechanisms do not seem to have a direct impact on management behavior. Rather, first, a stock price decline may have a substantial effect partly because it could increase capital costs and therefore make it harder to raise capital. Second, more importantly the stock price decline could negatively affect the reputation of top management, which in turn could convince corporate insiders to withhold support. Thus, foreign institutional investors might play a significant disciplinary role - albeit not via external mechanisms, but rather via

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explanatory variables are a series of variables that could influence stock returns. We take the same variables as equation (1) in Section 4 with a one-year lag.

internal mechanisms. This understanding is consistent with other institutional characteristics of Japanese firms, but still needs to be verified.   Needless to say, these issues will have to be addressed later in our future research.

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Figure 1   Long-term trend of ownership structure in Japan

The figure shows insider and outsider ownership ratios based on the *Share Ownership Survey* reported by the Tokyo Stock Exchange.   The insider ratio is the aggregated ratio of banks (excluding trust accounts of trust banks), insurance companies, other financial institutions, and corporations.   The outsider ratio is the aggregated ratio of foreign investors, individuals, mutual funds, and pension trusts.   The ownership ratio is aggregated on a market capitalization basis.
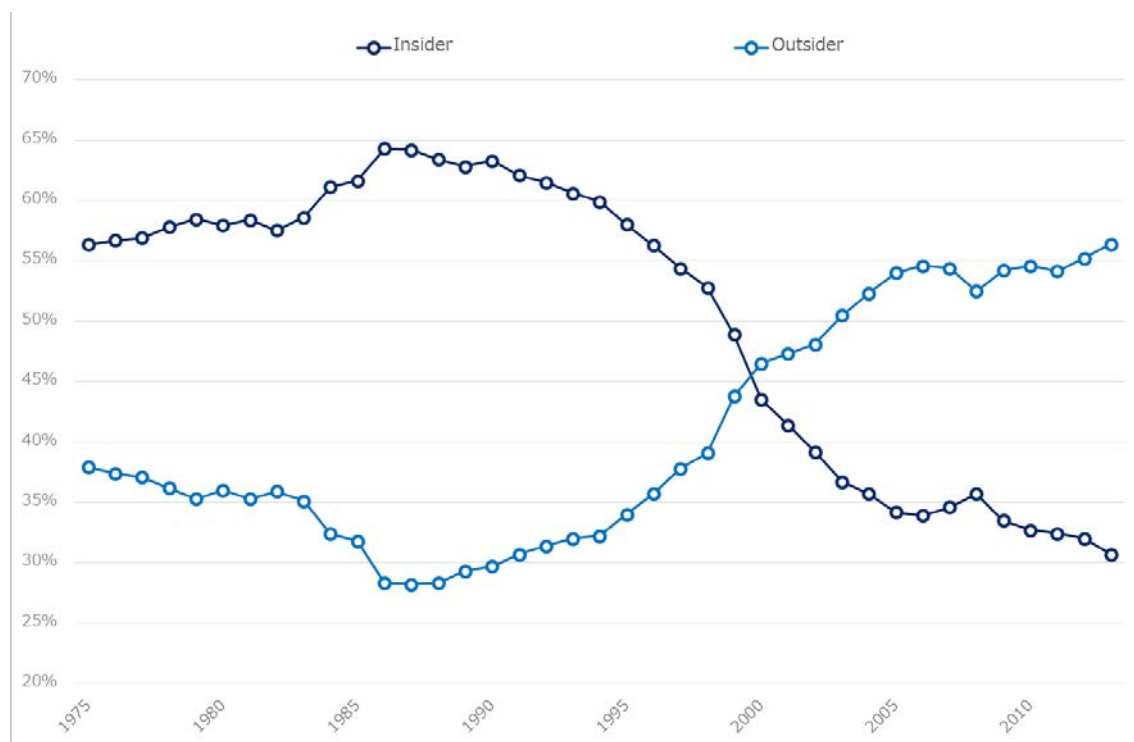
Figure 2　Trend of foreign investors ownership by company size

The figure shows time series mean of foreign investors ownership ratio by company size brackets. The sample consists of all non-financial firms listed on the First Section of the Tokyo Stock Exchange. Company size brackets (quintile) is based on market capitalization of each year (5th quintile the largest).
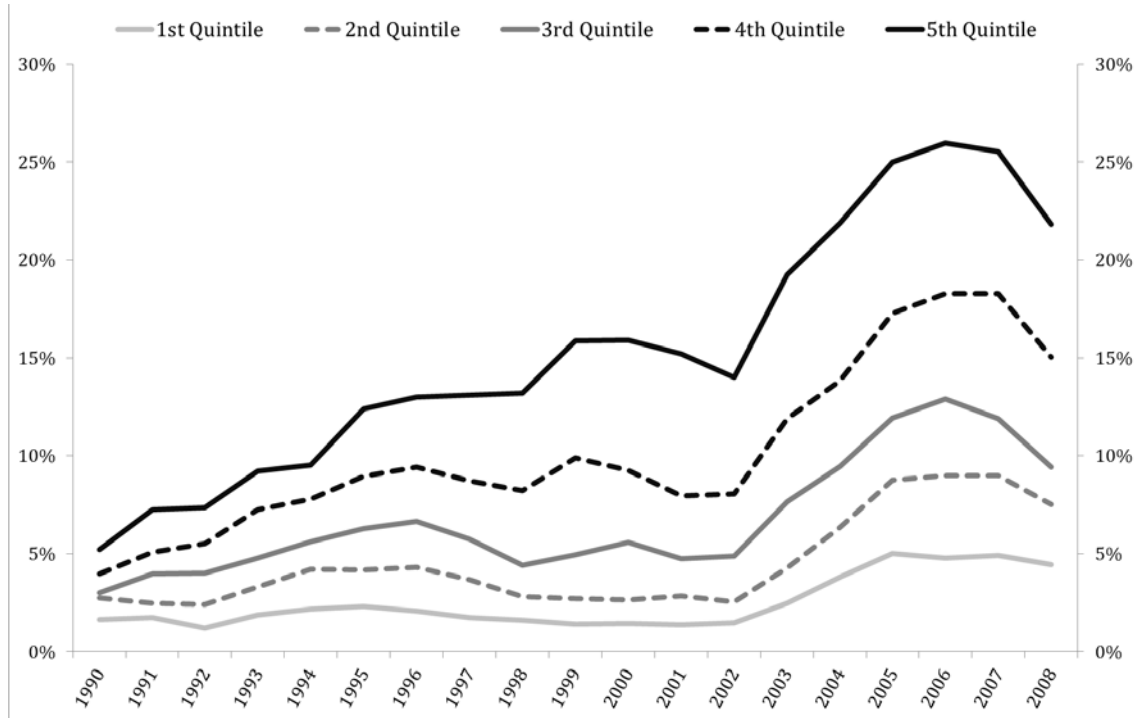
Figure 3   Share of transactions and stock turnover ratio of foreign investors

This figure shows the share of transactions and the stock turnover ratio of foreign investors.   The data is obtained from *Monthly Statistics Report*, *Investment Trends by Investor Category*, and *Share Ownership Survey* reported by the Tokyo Stock Exchange.   The share of transactions by foreign investors is calculated as the stock trading value of foreigners divided by the stock trading value of all market participants.   The stock turnover ratio is calculated as the stock trading value (of foreigners) divided by the market value (owned by foreigners).
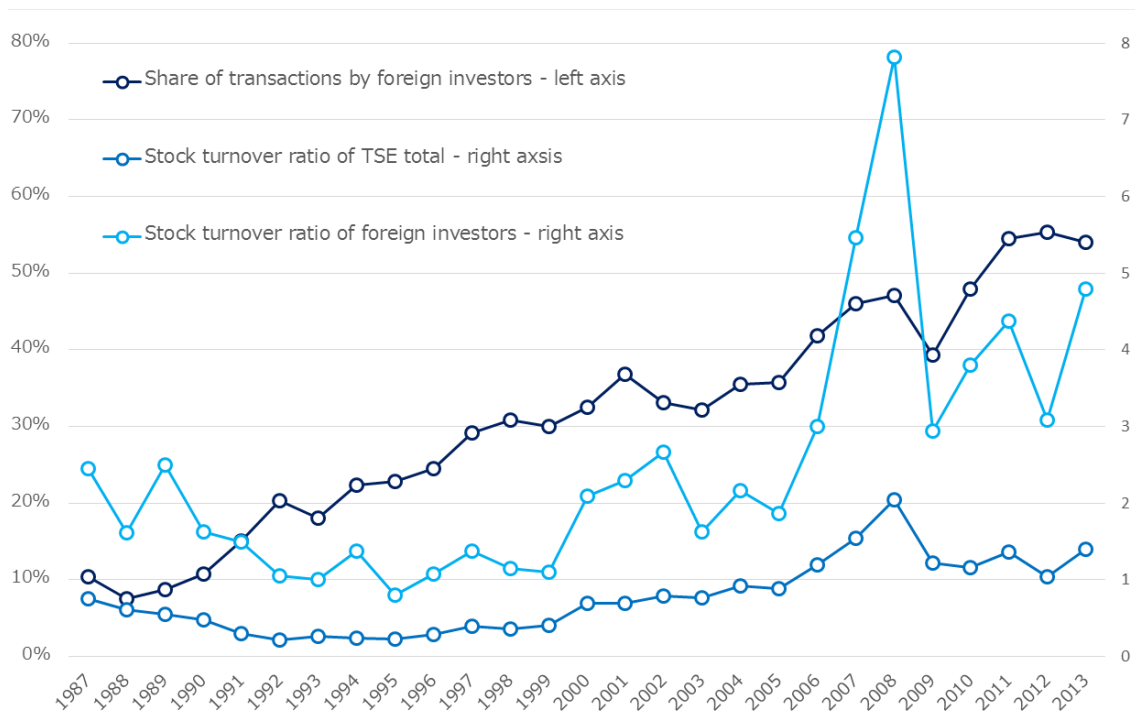
Figure 4 Investments, leverage, and dividends

This figure shows the trend of investments (panel A), leverage (panel B), and dividends (Panel C) in 2000s. The sample consists of non-financial firms listed on the First Section of the Tokyo Stock Exchange. Investments is defined as capital expenditures divided by total assets. Leverage is the ratio of total debt to total assets. Dividends is calculated dividends divided by book value of equity (dividends on equity).

Panel A: Investments
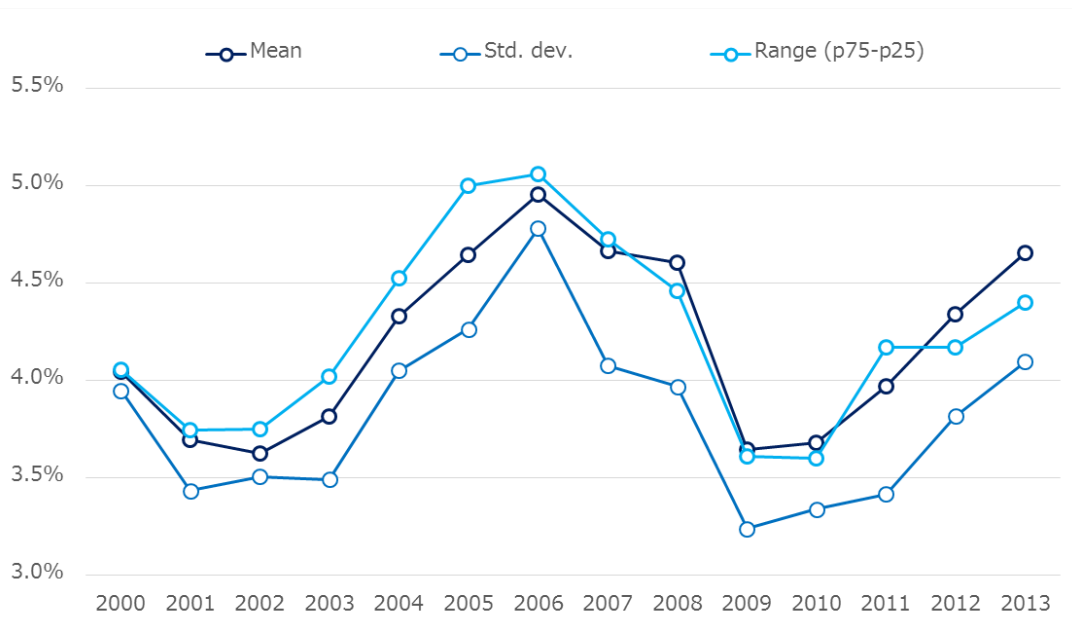
Panel B: Leverage
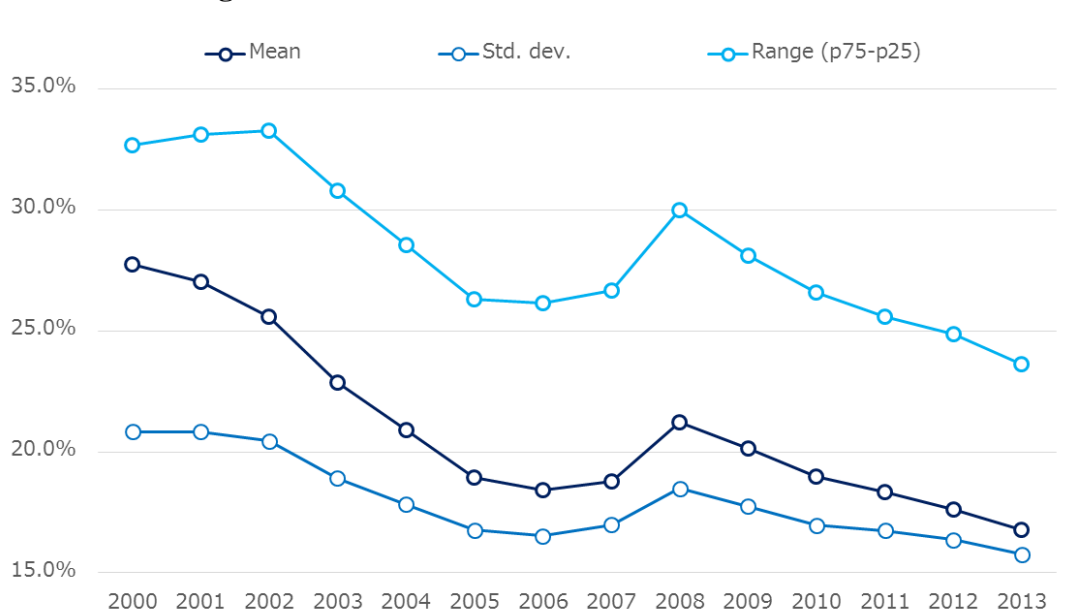
Panel C: Dividends
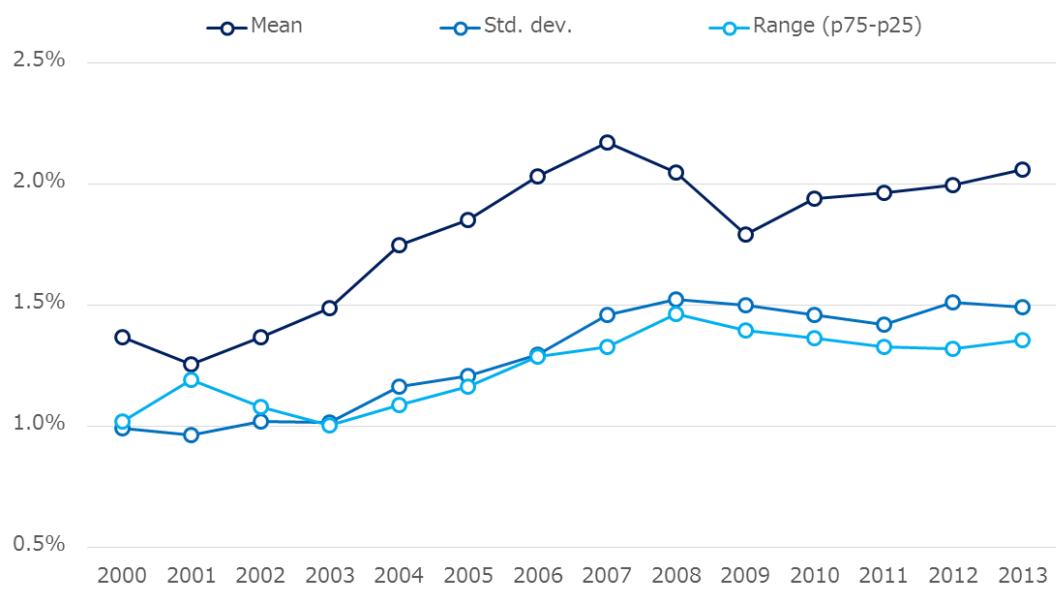
Table 1　Cross-country comparison of ownership structure

This table summarizes ownership structures in 5 countries: Japan, U.S., UK, Germany, and South Korea. "Insider" of Germany includes the share held by corporations, banks and government. "Outsider" is not perfectly identical to the sum of ownership of foreign and domestic institutional investors and individuals because "Outsider" is defined as 100% minus ownership of "Insider" and government.　The data is based on *Share Ownership Survey* reported by the Tokyo Stock Exchange, for Japan, *Financial Accounts of the United States*, Board of Governors of the Federal Reserve System, for U.S., *Historical Annual Tables 2005-2013*, Office for National Statistics, for UK, *Special Statistic Publication 4*, Deutsche Bundesbank, for Germany, *Annual Report*, Korea Exchange, and Park (2013) *Korean Capitalism*, for South Korea.

	Insider	Outsider	Foreign Institutional Investors	Domestic Institutional Investors	Individuals
Japan (avr. of 1990-92)	<u>62.3</u>	37.4	5.7	11.3	20.5
Japan (2010-12)	32.4	<u>67.4</u>	27.0	20.1	20.3
US (2011-13)	1.0	<u>98.6</u>	13.3	46.0	39.2
UK (2008, 10, 12)	5.2	<u>91.8</u>	46.0	35.4	10.3
Germany (2011-13)	<u>55.8</u>	44.2	18.4	17.2	8.6
Korea (2011-13)	<u>56.1</u>	40.3	34.3	15.8	20.3

Table 2 Transition of the ownership structure in Japan

This table shows the transition of the ownership structure in Japanese firms.   Insider ownership consists of financial institutions (excluding investment trusts and annuity trusts) and business corporations. Outsider ownership consists of investment trusts, annuity trusts, foreigners and individuals. The data is obtained from TSE *Share Ownership Survey*.

Year	Insider Ownership				Outsider Ownership			
	Total	Business Corporations	Banks	Insurance Companies	Total	Domestic (Trust Banks)	Foreign	Individuals
1972	60.4%	29.5%	15.9%	15.0%	35.6%	1.5%	4.5%	29.6%
1973	60.8%	29.9%	16.3%	14.6%	35.6%	1.4%	4.0%	30.2%
1974	59.8%	28.4%	16.6%	14.8%	36.8%	1.9%	3.2%	31.7%
1990	61.7%	30.1%	15.7%	15.9%	34.9%	9.8%	4.7%	20.4%
1991	60.7%	29.0%	15.6%	16.1%	36.0%	9.7%	6.0%	20.3%
1992	60.3%	28.5%	15.6%	16.2%	36.9%	9.9%	6.3%	20.7%
2004	34.7%	22.1%	5.2%	7.4%	63.0%	18.4%	23.3%	21.3%
2005	33.2%	21.3%	4.7%	7.2%	64.2%	18.0%	26.3%	19.9%
2006	32.9%	20.8%	4.6%	7.5%	64.1%	17.6%	27.8%	18.7%
2011	31.6%	21.6%	3.9%	6.1%	65.3%	18.6%	26.3%	20.4%
2012	31.2%	21.7%	3.8%	5.7%	65.9%	17.7%	28.0%	20.2%
2013	30.0%	21.3%	3.6%	5.1%	66.7%	17.2%	30.8%	18.7%

Table 3 Determinants of foreign investors ownership

The table summarizes the results from 24 yearly (cross-sectional) regressions for the sample period. The dependent variable is the foreign institutional ownership ratio. The definitions of the independent variables are as followings; SIZE(Market capitalization), CAPEX(Capital expenditures), INVOP(Investment opportunities), MB(Market to book), LEV(Leverage), CASH(Cash holdings), ROE(Return on equity), DOE(Dividends on equity), MSCI(MSCI dummy), TURN(Turnover ratio), MOM(Momentum), VOL(Stock return volatility), CROSH(Firm's shareholding), FLOAT(Floating stock), DIR(Number of directors), INDIR(Independent directors ratio), SUB(Subsidiary dummy). The table reports time series average of coefficients. Significance of the yearly coefficients is computed using White-corrected standard errors (1980). Each cross-sectional regression includes industry dummy.

	(1)	(2)	(3)	(4)
Dependent variables	1990-2013	1990-1997	1998-2005	2006-2013
SIZE	2.465 ***	1.360 ***	1.801 ***	4.233 ***
	(0.399)	(0.312)	(0.300)	(0.291)
CAPEX	0.016	-0.109 ***	0.077 **	0.080 ***
	(0.028)	(0.016)	(0.029)	(0.013)
INVOP	0.015 **	0.027 ***	0.004	0.016
	(0.006)	(0.006)	(0.011)	(0.011)
MB	0.026	0.653	1.568 ***	-2.142 ***
	(0.572)	(0.872)	(0.238)	(0.589)
LEV	-0.073 ***	-0.033 ***	-0.079 ***	-0.106 ***
	(0.010)	(0.007)	(0.007)	(0.004)
CASH	0.076 ***	0.026 **	0.083 ***	0.117 ***
	(0.012)	(0.010)	(0.011)	(0.005)
ROE	0.035 ***	0.041 ***	0.038 ***	0.026 *
	(0.005)	(0.005)	(0.003)	(0.014)
DOE	-0.420 **	-1.105 ***	-0.449 ***	0.294 **
	(0.180)	(0.095)	(0.108)	(0.113)
MSCI	3.269 ***	2.504 **	5.726 ***	1.578 **
	(0.622)	(0.752)	(0.351)	(0.610)
TURN	0.0040	0.0111 **	0.0015	-0.0004
	(0.002)	(0.004)	(0.004)	(0.001)
MOM	0.0005	0.0093	-0.0044	-0.0036
	(0.004)	(0.006)	(0.003)	(0.008)
VOL	0.017	-0.084 **	0.047 **	0.087 **
	(0.026)	(0.031)	(0.014)	(0.026)
CROSH	-3.950 **	-4.712 ***	1.944	-9.083 ***
	(1.636)	(1.227)	(1.542)	(2.279)
FLOAT	0.205 ***	0.178 ***	0.230 ***	0.207 ***
	(0.009)	(0.007)	(0.018)	(0.010)
DIR	-0.124 ***	-0.112 ***	-0.113 ***	-0.147 ***
	(0.016)	(0.022)	(0.020)	(0.037)
INDIR	0.912	0.849	-1.487 *	3.375 ***
	(0.683)	(0.529)	(0.669)	(0.599)
SUB	1.546 ***	2.771 ***	1.758 **	0.108
	(0.387)	(0.123)	(0.544)	(0.255)
Constant	-12.42 ***	-4.485 ***	-15.45 ***	-17.34 ***
	(1.768)	(1.150)	(1.882)	(0.294)
Observations	23,981	6,679	8,053	9,249
R-squared	0.468	0.350	0.498	0.556
Number of groups	24	8	8	8

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 4 Determinants of board structure

This table reports the results from logit regressions.　The dependent variable is a dummy variable which takes one if a firm introduced outside directors, otherwise, zero.　Outside is defined as a person who came from outside firms (excluding subsidiary firms and banks).　We categorize firms with above third quartile (below first quartile) of foreign institutional ownership as High (Low) FOR.　All regressions include industry and year dummies.　***, **, and * represent statistical significance at the 1%, 5%, and 10% level, respectively, and z-statistics, reported in parentheses. Standard errors are clustered at the firm level.

	(1)	(2)
	Logit	Logit
	High FOR	Low FOR
Firm size	0.129	0.088
	(1.38)	(0.74)
Firm age	0.005	-0.009
	(0.61)	(-1.46)
No. of business segments	0.176 *	0.112
	(1.91)	(1.31)
Holding company	0.914 **	0.081
	(2.33)	(0.21)
Debt to assets	-0.035	1.294 **
	(-0.05)	(2.04)
Free cash flow	0.023	-0.008
	(1.37)	(-0.80)
Herfindahl index	-0.001 **	-0.001 *
	(-2.13)	(-1.88)
Anti-takeover	0.581 ***	0.015
	(2.66)	(0.06)
R&D expenditures	0.103 *	0.026
	(1.89)	(0.38)
Market to book	0.430 **	0.281 **
	(2.40)	(2.03)
Stock return volatility	0.027	0.006
	(0.91)	(0.39)
Intangible assets	0.079	1.310 *
	(0.11)	(1.91)
Adjusted ROA	-0.047 **	-0.001
	(-1.99)	(-0.03)
CEO tenure	-0.039 ***	-0.008
	(-2.80)	(-0.71)
CEO ownership	-0.024	-0.023
	(-1.02)	(-1.57)
Industry dummy	Yes	Yes
Year dummy	Yes	Yes
Log Pseudo Likelihood	-1243.750	-1246.324
Pseudo R-squared	0.123	0.062
Obsevations	2046	2051

Table 5 Empirical results of corporate policies

This table reports estimates from panel regressions of policy variables on institutional ownership.   All regressions include year dummies.   ***, **, and * represent statistical significance at the 1%, 5%, and 10% level, respectively, and standard errors, reported in parentheses, are clustered at the firm level.

Panel A: Investments

	Investments		
	Fixed effects		
	2000-2013	2000-2005	2006-2013
	(1)	(2)	(3)
Institutional ownership $_{t-1}$	0.026 ***	0.025 ***	0.035 ***
	(0.00)	(0.01)	(0.01)
Sales growth $_t$	0.014 ***	0.022 ***	0.006 **
	(0.00)	(0.00)	(0.00)
Q_{t-1}	0.873 ***	0.674 ***	1.148 ***
	(0.13)	(0.17)	(0.23)
Cash flows $_t$	0.112 ***	0.071 ***	0.106 ***
	(0.01)	(0.01)	(0.01)
Share issues $_t$	0.129 ***	0.087 ***	0.119 ***
	(0.02)	(0.03)	(0.03)
Debt issues $_t$	0.188 ***	0.136 ***	0.198 ***
	(0.01)	(0.01)	(0.01)
ΔCash holdings $_t$	-0.076 ***	-0.041 ***	-0.091 ***
	(0.01)	(0.01)	(0.01)
Year dummy	Yes	Yes	Yes
Adj. R-squared	0.165	0.113	0.184
Observations	18306	7424	10882

Panel B: Leverage

	Debt to assets		
	Fixed effects		
	2000-2013	2000-2005	2006-2013
	(1)	(2)	(3)
Institutional ownership $_{t-1}$	-0.186 ***	-0.133 ***	-0.119 ***
	(0.019)	(0.020)	(0.021)
Firm size $_t$	4.930 ***	2.260 **	1.188
	(0.773)	(1.132)	(0.898)
Negative profit $_t$	3.858 ***	2.685 ***	3.907 ***
	(0.701)	(0.906)	(0.679)
Sales growth $_t$	-0.051 ***	-0.047 ***	-0.018 **
	(0.008)	(0.011)	(0.007)
Market to book $_{t-1}$	-0.708 **	-1.255 ***	-0.477
	(0.333)	(0.356)	(0.495)
Assets tabgibility $_{t-1}$	0.190 ***	0.172 ***	0.101 ***
	(0.035)	(0.053)	(0.038)
Stock return volatility $_{t-1}$	0.060 ***	-0.031 **	0.031 ***
	(0.011)	(0.012)	(0.010)
Debt to assets $_{t-1}$			
Year dummy	Yes	Yes	Yes
Adj. R-squared	0.218	0.296	0.097
Observations	18169	7362	10807

Panel C: Dividends

| | Dividends on equity | | |
| | Fixed effects | | |
	2000-2013	2000-2005	2006-2013
	(1)	(2)	(3)
Institutional ownership $_{t-1}$	0.007 ***	0.001	0.012 ***
	(0.002)	(0.002)	(0.003)
Firm size $_t$	0.686 ***	0.762 ***	0.729 ***
	(0.061)	(0.097)	(0.093)
Return on equity $_t$	0.013 ***	0.008 ***	0.013 ***
	(0.001)	(0.001)	(0.002)
Sales growth $_t$	-0.000	-0.000	-0.001
	(0.001)	(0.001)	(0.001)
Market to book $_{t-1}$	0.070	-0.110 ***	0.303 ***
	(0.047)	(0.034)	(0.083)
Debt to assets $_{t-1}$	-0.013 ***	-0.018 ***	-0.020 ***
	(0.002)	(0.003)	(0.003)
Stock return $_{t-1}$	0.002 ***	0.001 ***	0.002 ***
	(0.000)	(0.000)	(0.000)
Stock return volatility $_{t-1}$	-0.012 ***	-0.003 ***	-0.007 ***
	(0.001)	(0.001)	(0.001)
Year dummy	Yes	Yes	Yes
Adj. R-squared	0.231	0.209	0.214
Observations	18120	7324	10796

Table 6 Determinants of institutional ownership

This table reports estimates from OLS regressions of institutional ownership on policy variables.　　All regressions include year and industry dummies. 　***, **, and * represent statistical significance at the 1%, 5%, and 10% level, respectively, and standard errors, reported in parentheses, are clustered at the firm level.

	Institutional ownership		
	OLS		
	2000-2013	2000-2005	2006-2013
	(1)	(2)	(3)
Investments $_t$	0.070	0.142 **	0.016
	(0.046)	(0.060)	(0.052)
Debt to assets $_t$	-0.059 ***	-0.068 ***	-0.049 ***
	(0.014)	(0.015)	(0.017)
Dividends on equity $_t$	0.664 ***	0.494 **	0.764 ***
	(0.187)	(0.242)	(0.204)
Book to market $_t$	2.300 ***	0.915 ***	3.083 ***
	(0.306)	(0.319)	(0.394)
Firm size $_t$	5.311 ***	4.634 ***	5.561 ***
	(0.260)	(0.316)	(0.292)
Stock return volatility $_t$	0.134 ***	0.089 ***	0.152 ***
	(0.014)	(0.017)	(0.016)
Stock turnover $_t$	0.001 **	-0.001 *	0.001 ***
	(0.000)	(0.000)	(0.000)
Stock Price $_t$	1.510 ***	1.816 ***	1.452 ***
	(0.249)	(0.370)	(0.248)
TOPIX 500 $_t$	4.315 ***	3.845 ***	4.829 ***
	(0.733)	(0.854)	(0.891)
Stock return $_t$	-0.003	-0.001	-0.002
	(0.003)	(0.004)	(0.004)
Firm age $_t$	0.661 **	1.037 ***	0.516 *
	(0.274)	(0.336)	(0.310)
Oversea sales ratio $_t$	0.094 ***	0.098 ***	0.092 ***
	(0.013)	(0.015)	(0.014)
Constant	-61.855 ***	-58.889 ***	-65.756 ***
	(3.257)	(3.940)	(3.808)
Mean of dep. var.	21.03	18.55	22.71
Std. dev. of dep. var.	15.30	14.83	15.38
Year dummy	Yes	Yes	Yes
Industry dummy	Yes	Yes	Yes
R-squared	0.570	0.587	0.552
Observations	19749	7814	11935

Table 7 Empirical results implementing GMM estimation

This table reports estimates from system GMM regressions of policy variables on institutional ownership. All regressions include year dummies. ***, **, and * represent statistical significance at the 1%, 5%, and 10% level, respectively, and standard errors, reported in parentheses, are clustered at the firm level. AR(1) and AR(2) are tests for first- and second-order serial correlation in the first-differenced residuals under the null of no serial correlation. The Hansen test of over-identification is under the null that all instruments are valid. The Diff-in-Hansen tests of exogeneity are under the null that instruments used for the equations in levels are exogenous.

Panel A: Investments

	Investments		
	System GMM		
	2000-2013	2000-2005	2006-2013
	(1)	(2)	(3)
Institutional ownership $_{t-1}$	0.036 ***	0.035	0.032 ***
	(0.01)	(0.02)	(0.01)
Sales growth $_t$	-0.037 **	-0.030	-0.028
	(0.02)	(0.04)	(0.02)
Q_{t-1}	1.390 *	0.104	-0.779
	(0.74)	(0.92)	(0.57)
Cash flows $_t$	0.098	0.058	0.179 **
	(0.08)	(0.11)	(0.08)
Share issues $_t$	0.246	-0.537 *	0.246
	(0.28)	(0.31)	(0.23)
Debt issues $_t$	0.223 ***	-0.038	0.208 ***
	(0.08)	(0.12)	(0.08)
ΔCash holdings $_t$	-0.009	0.069	-0.095
	(0.10)	(0.10)	(0.11)
Investment $_{t-1}$	0.248 **	0.489 **	0.301 ***
	(0.12)	(0.21)	(0.10)
Year dummy	Yes	Yes	Yes
AR(1) test (p-value)	(0.000)	(0.000)	(0.000)
AR(2) test (p-value)	(0.710)	(0.471)	(0.591)
Hansen test over-identification (p-value)	(0.607)	(0.386)	(0.562)
Diff-in-Hansen tests of exogeneity (p-value)	(0.622)	(0.095)	(0.721)
Observations	16539	5924	10615

Panel B: Leverage

	Debt to assets			Net debt issuance		
	System GMM			System GMM		
	2000-2013	2000-2005	2006-2013	2000-2013	2000-2005	2006-2013
	(1)	(2)	(3)	(4)	(5)	(6)
Institutional ownership $_{t-1}$	0.027	0.006	0.078 *	0.009	-0.068	0.078 **
	(0.04)	(0.08)	(0.05)	(0.03)	(0.05)	(0.04)
Firm size $_t$	-0.177	0.694	-1.576 *	-0.190	0.535	-1.465 **
	(0.61)	(0.98)	(0.87)	(0.45)	(0.67)	(0.74)
Negative profit $_t$	-7.611	6.216	8.505	-10.522 **	4.830	-4.266
	(5.62)	(8.42)	(7.22)	(5.17)	(6.52)	(6.33)
Sales growth $_t$	-0.109 ***	0.049	-0.165 ***	-0.014	0.149 ***	-0.104 ***
	(0.04)	(0.06)	(0.05)	(0.04)	(0.06)	(0.04)
Market to book $_{t-1}$	1.151	-0.205	3.436 ***	1.370 *	-0.026	2.908 ***
	(0.96)	(1.05)	(0.90)	(0.81)	(0.95)	(0.89)
Assets tabgibility $_{t-1}$	0.092 ***	0.032	0.062	0.026	0.039	0.057
	(0.03)	(0.05)	(0.04)	(0.03)	(0.05)	(0.05)
Stock return volatility $_{t-1}$	-0.005	-0.134 **	0.045	0.065 **	-0.059	0.096 ***
	(0.03)	(0.05)	(0.04)	(0.03)	(0.05)	(0.04)
Debt to assets $_{t-1}$	0.843 ***	1.023 ***	0.784 ***	-0.108 ***	-0.137 ***	-0.124 ***
	(0.03)	(0.06)	(0.04)	(0.03)	(0.05)	(0.04)
Nebt debt issuance $_{t-1}$				0.460 ***	0.237 **	0.224 **
				(0.09)	(0.09)	(0.11)
Year dummy	Yes	Yes	Yes	Yes	Yes	Yes
AR(1) test (p-value)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
AR(2) test (p-value)	(0.959)	(0.329)	(0.027)	(0.000)	(0.046)	(0.241)
Hansen test over-identification (p-value)	(0.000)	(0.000)	(0.238)	(0.695)	(0.456)	(0.709)
Diff-in-Hansen tests of exogeneity (p-value)	(0.000)	(0.001)	(0.144)	(0.341)	(0.993)	(0.681)
Observations	18169	7362	10807	16524	5911	10613

Panel C: Dividends

	Dividends on equity		
	System GMM		
	2000-2013	2000-2005	2006-2013
	(1)	(2)	(3)
Institutional ownership $_{t-1}$	0.009 **	0.008	0.014 ***
	(0.00)	(0.01)	(0.00)
Firm size $_t$	-0.183 **	0.015	-0.316 ***
	(0.07)	(0.07)	(0.10)
Return on equity $_t$	0.005	0.005	0.006
	(0.00)	(0.01)	(0.01)
Sales growth $_t$	0.009 *	0.011	0.012 **
	(0.00)	(0.01)	(0.01)
Market to book $_{t-1}$	0.080	0.238 *	0.119
	(0.12)	(0.12)	(0.12)
Debt to assets $_{t-1}$	0.015 ***	0.009 *	0.008 *
	(0.00)	(0.01)	(0.00)
Stock return $_{t-1}$	-0.001	0.002 *	0.002
	(0.00)	(0.00)	(0.00)
Stock return volatility $_{t-1}$	0.002	-0.011	-0.005
	(0.01)	(0.01)	(0.01)
Dividends on equity $_{t-1}$	0.887 ***	0.715 ***	0.884 ***
	(0.05)	(0.10)	(0.05)
Year dummy	Yes	Yes	Yes
AR(1) test (p-value)	(0.000)	(0.000)	(0.000)
AR(2) test (p-value)	(0.577)	(0.011)	(0.086)
Hansen test over-identification (p-value)	(0.399)	(0.096)	(0.534)
Diff-in-Hansen tests of exogeneity (p-value)	(0.317)	(0.107)	(0.822)
Observations	18095	7302	10793

Table 8　Growing firms and matured firms

This table reports estimates from system GMM regressions of policy variables on institutional ownership. We regard small (below median of Firm size), young (below median of Firm age), firms with high growth opportunities (above median of Market to book) as growing firms, and large (above median), old (above median), firms with low growth opportunities (below median) as mature firms.　All regressions include other control variables and year dummies.　***, **, and * represent statistical significance at the 1%, 5%, and 10% level, respectively, and standard errors, reported in parentheses, are clustered at the firm level.

Panel A: Firm size & Market to book

	Investments	Debt to assets	Net debt issuance	Dividends
	(1)	(2)	(3)	(4)
Institutional ownership	0.061　***	-0.001	0.026	0.008
	(0.02)	(0.04)	(0.04)	(0.01)
Institutional ownership Growing*	-0.043	0.189	0.029	-0.016
	(0.05)	(0.13)	(0.09)	(0.01)
Growing	2.115 *	-5.603 **	-2.320	0.802 **
	(1.24)	(2.64)	(2.37)	(0.33)
Institutional ownership Matured*	-0.122 **	0.156	0.111	0.018
	(0.05)	(0.12)	(0.10)	(0.02)
Matured	3.264 *	-3.007	-1.604	-0.204
	(1.75)	(4.10)	(3.54)	(0.54)

Panel B: Firm age & Market to book

	Investments	Debt to assets	Net debt issuance	Dividends
	(5)	(6)	(7)	(8)
Institutional ownership	0.032 *	0.049	0.068	0.015 ***
	(0.02)	(0.06)	(0.04)	(0.01)
Institutional ownership Growing*	0.030	-0.082	-0.076	-0.014 *
	(0.03)	(0.06)	(0.06)	(0.01)
Growing	-0.332	2.915	2.975	0.398
	(1.24)	(2.19)	(2.11)	(0.27)
Institutional ownership Matured*	-0.011	0.056	0.009	-0.000
	(0.03)	(0.06)	(0.04)	(0.01)
Matured	-0.765	0.130	1.422	0.208
	(0.79)	(1.88)	(1.32)	(0.18)