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## Do Foreign Institutional Investors Promote Governance Improvements in Japan? \*

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### Abstract

In this paper, we investigate whether foreign institutional ownership affects quality of corporate governance by analyzing equity ownership and investment horizon of foreign investors. While a number of studies indicate that foreign institutional investors play a significant role in promoting governance improvements in countries with weaker shareholder protection, there is little evidence about their impact in countries with strong shareholder rights. In line with extant evidence, our results show that foreign ownership is positively associated with corporate governance in Japan, where shareholder rights are “legally” better protected than those in other countries like the United States, the home of the major institutional investors, but in fact the corporate governance has been “shareholder-unfriendly” due to the presence of “management-friendly” cross-shareholders. On the other hand, we do not find evidence that foreign block-holders with longer investment horizons play a larger role in improving governance although literature suggests that such stable owners have greater incentives to actively monitor the firms. Similar evidence is found for large independent domestic institutions. In contrast, both the equity ownership and investment horizon of large domestic investors such as banks and insurance companies, who have potential business relationships with the invested firms, negatively impact corporate governance. Interestingly, such negative effect of relationship-oriented ownership is more likely to be mitigated when foreign institutional investors hold large stakes in the firms. Overall, our results suggest that foreign equity ownership promotes improvements in corporate governance of Japanese firms irrespective of their investment horizons.

**Keyword** : Foreign institutional investors; Domestic Investors; Corporate Governance; Investment Horizon

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## 1 Introduction

The effect of foreign institutional investors on corporate governance has attracted much attention in the recent literature. Gillan and Starks (2003) indicate that foreign institutional investors promote improvements in governance structures through external monitoring. Using international data on equity holdings, Ferreira and Matos (2008) document that firms with high foreign and independent institutions have higher firm value and better operating performance due to the arms-length monitoring ability of these investors. Aggarwal, Erel, Ferreira, and Matos (2011) find a more direct evidence that equity ownership by foreign institutional investors is related to enhancement in the quality of corporate governance in countries with weaker investor protection. In a similar vein, Garner and Kim (2013) show that foreign investors encourage better corporate governance practices using a sample of Korean firms. While a number of studies indicate that foreign institutions play a significant role in promoting governance improvements in countries where investor protection is weaker than the institutions' home country, less is known about their impact in countries like Japan, where shareholder rights are legally strong.

In this paper, we examine the impact of foreign institutional investors on corporate governance of Japanese firms. Japanese data provides a unique environment for our study in several points. First, shareholders' rights under Japanese law are among the strongest in the world and are "legally" better protected than the United States, the home of major institutional investors (Goto, 2014). Shareholders are granted power to alter a corporate charter without the consent of the board, majority voting for board elections, power to control dividend payments, power to replace the board of directors, and shareholders access to corporate ballots<sup>1</sup>. In Spamann (2010), Japan scored the highest for shareholder protection in 1996 and the fourth highest in 2005. Nevertheless, in fact, the corporate governance has not really been "shareholder-friendly" due to the traditional ownership structure in Japan, which has been mostly dominated by stable cross-shareholders<sup>2</sup>. Goto (2014) argues that "too strong" shareholders' legal rights induce managers to engage in cross-shareholding relationships, which in turn, weakens the rights of other shareholders in practice. Therefore, in Japan, even though shareholders' legal rights are quite strong, it is more likely that foreign institutional investors have a significant effect on corporate governance. Second, recent changes in corporate ownership structure along with the reforms in regulatory environment offers an interesting setting for our study. As briefly discussed above, the corporate ownership structure was mostly dominated by banks and stable cross-shareholders, and main banks used to have

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1 Kaisha-ho [Companies Act], Law No. 86 of 2005 (Japan) [hereinafter JCA], available at [http://www.cas.go.jp/jp/seisaku/hourei/data/CA1\\_4\\_2.pdf](http://www.cas.go.jp/jp/seisaku/hourei/data/CA1_4_2.pdf) and [http://www.cas.go.jp/jp/seisaku/hourei/data/CA5\\_8.pdf](http://www.cas.go.jp/jp/seisaku/hourei/data/CA5_8.pdf) (English translation of JCA as of Dec. 15, 2006) .

2 For detailed discussion about cross-shareholdings, see for example, Prowse (1992) .

close business relationships with client firms within keiretsu and acted as the provider of capital and governance (Prowse, 1992; Aoki, Patrick, and Sheard, 1994; Morck and Nakamura, 1999; Kaplan and Minton, 1994; Kang and Shivdasani, 1995; Hoshi, Kashyap, and Scharfstein, 1990). In 1991, Japanese banks owned 16.3% of the shares listed on the Tokyo Stock Exchange (TSE). However, the deregulation of financial markets in the early 2000s resulted in weakening of main bank influence. For instance, due to the Act on “Limitation on Shareholding by Banks and Other Financial Institutions” issued in 2001, banks drastically reduce their shareholdings. Coupled with the reduction in barriers for foreign investors to enter the Japanese market during this period, the decreased bank ownership has led to a substantial increase in foreign equity ownership during this period. According to Tokyo Stock Exchange (TSE), while the bank share ownership fell from 16.3% (1991) to 2.7% (2011), equity ownership by foreign institutional investors dramatically increased from 5.4% to 22.8% and became one of the major shareholders of Japanese firms. Since large institutional investors have incentives and potential abilities to monitor and confront firm’s management (Shleifer and Vishny, 1986; Kang and Stulz, 1997; Gillan and Starks, 2003; Hamao, Kutsuna, and Matos, 2011), increase in foreign ownership, especially with the legally strong shareholders’ rights, could be a constructive addition to the transition of Japanese corporate governance to a more market oriented structure.

In testing the impact of foreign institutional ownership, we use multiple measures to capture their monitoring incentives. First one is the fraction of the firm’s total shares outstanding owned by foreign institutional investors, which is common in the literature. In addition, we use several alternative measures of investment horizon (ownership stability) of foreign block-holders, since the incentive and ability of investors to engage in improving governance practices are more likely to increase with their investment horizon. Bushee (1998) shows that compared to transient owners, institutions with long-term investments more actively monitor the firms. Stable owners have greater incentives to engage in monitoring for longer and ongoing basis, and therefore they may be able to bring about improvements in the quality of corporate governance (Elyasiani and Jia, 2010; Attig, Cleary, Ghoul, and Guedhami, 2012). In addition, whether the long-term (stable) foreign institutional investors have a more significant effect on governance is likely to be especially an interesting question in the Japanese setting, given the presence of traditional “stable” institutional investors. Using Japanese data, Shinozaki, Moriyasu, and Uchida (forthcoming) find that stable shareholders who receive benefits from long-term business relations have a negative effect on governance, whereas firms mainly owned by arms-lengths investors including foreign institutions adopt good governance practices. Coupled with identifying their incremental impact on the governance of firms from strong shareholder protection market, this study adds new evidence to the literature by investigating how foreign shareholders with longer investment horizons affect corporate governance. This study also offers an insight into whether the negative effect of domestic shareholders with long-term business relations on governance can be mitigated by the increased presence of foreign institutional shareholders.

Consistent with prior evidence, our results show that the fraction of firm’s total shares

outstanding owned by foreign investors is positively associated with corporate governance of Japanese firms, whereas we do not find evidence that foreign block-holders with stable investment horizons play a larger role in improving corporate governance. Similar results were found for large independent domestic institutional investors; their equity ownership has positive effect on governance but their investment horizon does not have additional effect. In contrast, both the equity ownership and investment horizon of large domestic investors such as banks and insurance companies, who have potential business relationships with invested firms, negatively impact corporate governance. Interestingly, however, the negative effect of relationship-oriented ownership is mitigated when foreign institutional investors hold large stakes in the firms, suggesting that foreign block-holders have the ability to confront the traditional relationship-oriented shareholders. Overall, our results suggest that foreign equity ownership promotes improvements in corporate governance of Japanese firms.

This paper is organized as follows: Section 2 provides an overview of the previous literature and develops the hypothesis. Section 3 describes the sample, variables employed, and their calculations. Section 4 presents the empirical results. Summary and conclusion are presented in section 5.

## 2 Hypothesis Development

Gillan and Starks (2003) indicate that foreign institutional investors have the ability to enforce changes in governance through direct or in-direct interventions, and therefore, can improve the quality of corporate governance in place. Using international data, Ferreira and Matos (2008) show that because foreign institutional investors have fewer business relations with the invested firms, they are effective monitors and are able to exert pressure on firm's management which in turn results in enhanced shareholder value and increased firm performance. Aggarwal, Erel, Ferreira, and Matos (2011) also use an international dataset and find a more direct evidence that equity ownership by foreign institutional investors is related to enhancements in the quality of corporate governance in countries with weaker investor protection.

In terms of shareholders' protection, Japan is among the strongest in the world (Spamann, 2010; Goto, 2014). However, the interests of large relationship-oriented shareholders were more dominant than minority shareholders (Aguilera and Jackson, 2003). Main banks have been the primary monitors and disciplinarians of Japanese firms, where ownership was mostly concentrated among main banks and stable cross shareholders (Prowse, 1992). As discussed in extant literature, such traditional system is more likely to prioritize business relationships over shareholder returns. For example, Weinstein and Yafeh (1998) find suboptimal performance for firms with close main bank relationships. Similar findings are reported in Kang and Stulz (2000), Kang and Shivdasani (1999), and Wu and Xu (2005). In recent years however, the Japanese firms' ownership structure witnessed considerable changes due to a series of reforms in the regulation of financial markets (Miyajima and Kuroki, 2007; Hoshi and Kashyap, 2010). For example, the Act on "Limitation on Shareholding by Banks and Other Financial Institutions" was issued in 2001, which stipulates that

each bank's shareholdings should be less than the amount of its Tier 1 core capital. As a result of decrease in their equity holdings, the influence of main bank weakened. The financial deregulation also led to a substantial increase in foreign institutional ownership in the early 2000s as seen in Figure 1, making them one of the major shareholders in Japan. The increase in foreign institutional ownership brought significant changes in the ownership structure of firms and resulted in a shift in the balance of power between corporate insiders and outside shareholders (Hamao, Kutsuna, and Matos, 2011). Therefore, increase in foreign ownership may be a constructive addition to the transition of Japanese corporate governance from the previously bank dominated to a market oriented corporate governance structure. Based on the above discussion, we hypothesize that firms in Japan adopt good governance practices after the increase shareholdings by foreign institutional investors. More formally:

**H1a** : Equity ownership by foreign institutional ownership leads to improvements in corporate governance practices.

Our expectations for the positive impact of foreign institutional investors on the quality of corporate governance is based on the assumption that foreign investors are independent and have no close business relationship with the firms in which they hold equity stakes. In a similar manner, domestic institutional investors that are not bound by commercial ties may potentially facilitate better governance practices as reported in Aggarwal, Erel, Ferreira, and Matos (2011). In contrast, investors who have business ties with the invested firms are reluctant to challenge managerial decisions because they are unwilling to lose their business relationships (Brickley, Lease, and Smith, 1988). Based on their potential business ties, previous research classifies institutional shareholders as relationship-oriented (potentially passive monitors) and independent (active monitors) investors (Brickley, Lease, and Smith, 1988; Almazan, Hartzell, and Starks, 2005; Cornette, Marcus, Saunders, and Tehranian, 2007; Chen, Harford, and Li, 2007; Elyasiani and Jia, 2010).

Similarly, in the case of Japan, domestic investors can be grouped into "*antei kabunushi*" or "*seisaku toushika*" meaning stable shareholders (such as banks and insurance companies), and market investors (Gedajlovic, Yoshikawa, and Hashimoto, 2005). In addition to their equity stakes, stable investors usually have commercial ties with the invested firms such as lending, insurance sales, and other financial transactions. In contrast, since market investors mainly seek to maximize their financial returns on equity investments, they are independent from business relationships with the firms in which they hold shares. Shinozaki, Moriyasu, and Uchida (forthcoming) posit that compared to the relationship-oriented stable shareholders, firms mainly owned by foreign and independent institutional investors tend to adopt good governance practices. Hence, there could be a large variation in the effectiveness of monitoring performed by investors with and without having close business relations with the firms. Although our primary focus is on the role of foreign institutional investors, it would be interesting to further investigate how the relationship-oriented

and independent domestic investors impact the quality of governance. As discussed above, we propose that the former have a positive effect on corporate governance.

**H1b** : Domestic investors' type that is less likely to keep business relations with the invested firms (independent domestic institutions) is positively related to corporate governance.

The increase in foreign institutional shareholdings discussed above may not necessarily mean that all the foreign institutional investors in Japan actively and efficiently perform a monitoring role that leads to improvement in governance practices. While some investors could have more expertise, information, and incentives to be involved in monitoring firms' management, there could also exist short-term foreign investors who are less committed to intervene in corporate governance of individual firms since they may hold or sell equity stakes based on their investment portfolio rebalancing needs. Davis and Steil (2001) argue that foreign shareholders generally hold diversified portfolios of small stakes in many firms, thereby characterizing them as investors who actively engage in frequent trading based on information. Such short-term investors are less likely to influence management, and therefore are not expected to have a significant impact on corporate governance. In contrast, Bushee (1998) shows that institutions with long-term investments in firms more actively monitor than the transient owners. In a similar vein, Elyasiani and Jia (2010) argue that institutional investors with stable investment horizons have sufficient opportunities to learn about the invested firm in addition to greater incentives to effectively and frequently monitor the firm. Also, Attig, Cleary, Ghoul, and Guedhami (2010) document that institutional investors with longer investment horizons have expertise and incentives to monitor the management, which in turn mitigate the agency problems and information asymmetry. Similar arguments are also presented in Chen, Harford, and Li (2007). According to these arguments, foreign institutional investors with longer investment horizons have efficiencies and ample monitoring incentives, enabling them to bring about governance improvements.

Figure 1 Proportion of Foreign Shares in Japanese Stock Market



(Data Source: Tokyo Stock Exchange Website)

H2 : Foreign institutional investors with longer investment horizons are positively associated with corporate governance.

### 3 Data and Variables

#### 3.1 Sample

The sample consists of all Japanese publicly traded firms<sup>3</sup> with complete data. The data is taken from a number of sources. We obtain firm-specific financial information and shareholdings' proportion data for both foreign and domestic investors from Nikkei Economic Electronic Database System Financial Quest (NEEDS FQ). Individual data for foreign institutional investors, domestic institutional investors, and other financial institutions such as banks and insurance companies, is obtained from the Top 30 Major Shareholders Database in NEEDS FQ. The Top 30 Major Shareholders Database contains individual data for the 30 largest shareholders' common stock holdings of Japanese securities. In this database, shareholders are classified into individual investors, non-financial companies, banks, insurance companies, securities, financial holdings, credit and leasing, funds and trusts, and foreigners. Corporate governance data is taken from NEEDS Corporate Governance Evaluation System database (NEEDS CGES). To address the endogeneity of foreign institutional ownership, we obtain data for the constituents of Morgan Stanley Capital All Country World Index (MSCI) from Thomson Financial. Data for American Depository Receipt (ADR) listings is taken from [www.adr.com](http://www.adr.com). The sample period of our study extends from 2008 to 2011. Since the individual data for foreign and domestic individual investors was made available only after 2003<sup>4</sup> and it requires a 5 year time span to calculate the investment horizon of foreign institutional investors, we begin in 2008. We drop financial firms, utility firms, and firms with unavailable data. This restricts our sample to 10,009 firm-years from 2,831 non-financial firms. In order to control for the effect of outliers, we winsorize firm level ratios at 1% and 99% levels.

#### 3.2 Corporate Governance Measurement

Our measure of corporate governance, governance score (Gov-Score), emphasizes on the quality of firm's internal controls and includes 19 attributes from three major dimensions: board structure,

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3 Firms listed on Tokyo Stock Exchange, Osaka Stock Exchange, Nagoya Stock Exchange, Fukuoka Stock Exchange, Sapporo Stock Exchange, and Hercules.

4 In the Top 30 Major Shareholders Database, flags representing the stock holdings each investor type are available after 2003.

ownership concentration and compensation, and disclosure. Each governance attribute consists of a score between 1 and 5, where a high score indicates improvements in the quality of corporate governance. The scores are provided by NEEDS-CGES and are formed based on the underlying value of individual governance attributes. We explain the items comprising each sub-index below.

### 3.2.1 Board Structure

Empirical evidence points to the significance of board structure in directly monitoring the management and imposing effective internal controls that lead to reduction in agency costs and improved firm performance. In terms of size, previous literature points to a negative relation between board size and firm performance, depicting that smaller boards are associated with the increased ability to efficiently coordinate and control the firm's management (Yermack, 1996; Eisenberg, Sundgren, and Wells, 1998). Furthermore, the effectiveness of board's monitoring increases when it is composed of independent directors. Boards with outside directors are considered to be more independent and have greater control over managerial decisions (Fama and Jensen, 1983; John and Senbet, 1998). In the case of Japan, before 1997, the governance structure was traditionally characterized by larger boards that mainly comprised of promoted employees within the firm and directors from firms' main banks or parent company (Miyajima, 2007). Japanese corporate boards primarily engaged in managing, rather than monitoring the management. Moreover, the conventional board system included board of directors and the statutory auditors who were responsible for monitoring the board. Yet, the effectiveness of statutory auditors in monitoring the board was not guaranteed as they were often chosen from firm's employees (Chernobai and Yasuda, 2013; Shishido, 2007).

However, since the financial crisis in the late 1990s, firms in Japan began to implement changes in their board structure by appointing outside directors, introducing the executive officer system, and decreasing the number of board members<sup>5</sup>. In addition to the firms' own attempt to implement governance reforms, country level legal reforms were also introduced. To clearly separate the monitoring and execution functions of the board, the Commercial Law was revised in April 2003 which enabled Japanese firms to choose between the statutory auditor system and a committee style system similar to that adopted by U.S. listed firms. In addition, the board of directors of committee style companies are mandated to have to three committees, namely, the nominating committee, audit committee, and the compensation committee. Each committee comprises of at least three directors with majority being outsiders (Chernobai and Yasuda, 2013). Similarly, the compulsory requirement set forth by the Tokyo Stock Exchange in December 2009 to have at least

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5 The first notable example of firms' own attempt to reform the board of directors was commenced by Sony in 1997. For instance, Sony added outsiders to the board along with reducing the board size by adopting executive officer system (Chernobai and Yasuda, 2013)

one outside director or auditor further intends to facilitate the independence of corporate boards<sup>6</sup>. With respect to the impact of foreign institutional investors on board structure of Japanese firms, Miyajima (2009) shows that firms with high equity ownership by foreign investors are more likely to implement governance reforms such as reduction in board size, appointment of outside directors, and adopting an executive officer system.

Based on preceding discussion, we include several variables related to board structure. The board structure sub-index covers several attributes that incorporate significant aspects of board of directors such as board size, independence, and composition. The board structure attributes include number of board of directors (BRD\_NUM), number of insider directors (J\_NUM), proportion of outside directors (IDRTO), proportion of non-executive outside directors (NEIDRTO), proportion of auditors among board members (ADTRTO)<sup>7</sup>, proportion of interlocking directors (EXERTO)<sup>8</sup>, committee style system (FLG\_COMM), and frequency of board renewal (TNEED)<sup>9</sup>. NEEDS-CGES uses reverse scoring criterion for three board structure attributes: number of board of directors, number of insider directors, and proportion of interlocking directors. High scores are assigned to smaller boards, lower proportion of insider executives, higher proportion of outside directors, higher proportion of non-executive outside directors, committee style system, lower proportion of directors who hold executive positions in other firms, proportion of auditors among board members, and frequent board renewals.

### 3.2.2 Ownership and Compensation

Attributes from ownership and compensation deal with the level and effectiveness of monitoring. Jensen and Meckling (1976) posit that managerial ownership can help align the interests of managers with that of shareholders and therefore positively affects the firm value. Similarly, McConnel and Servaes (1990) show that managerial ownership leads to an increase in the value of firm. In the case of Japanese firms, Okabe (2004) argues that equity ownership by directors leads to an increase in their incentives and positively impacts the performance. In terms of incentive

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6 Since 2010, the Tokyo Stock Exchange requires its listed companies to secure at least one “independent director/auditor” (Dokuritsu Yakuin), which means a director or statutory auditor who is unlikely to have conflicts of interest with general investors (Tokyo Stock Exchange Securities Listing Regulations, Rule 436-2) (Goto, 2014) .

7 The presence of auditors provides the board with the means to perform the monitoring role efficiently (Aman & Nguyen, 2008) .

8 Firms may appoint employees from affiliated firms as outside directors (Yoshikawa & McGuire, 2008) .

9 In case of persistent evidence of low firm performance, board renewals may lead to improved firm performance.

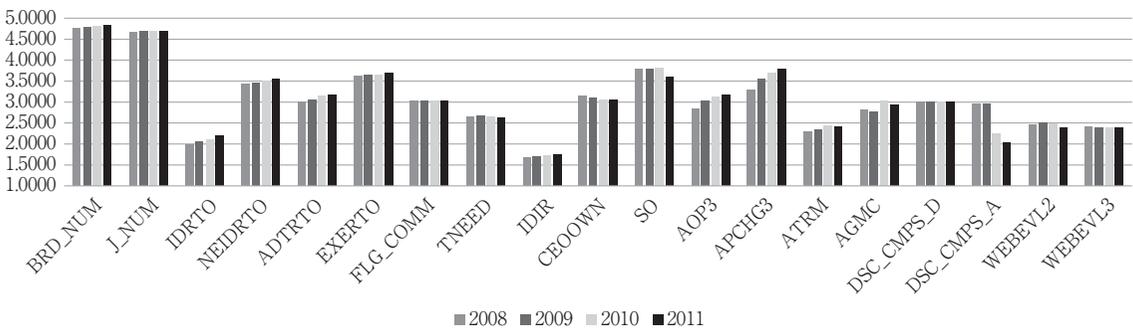
schemes for top managers such as stock options that were first introduced in 1997 in Japan, Shinozaki, Moriyasu, and Uchida (forthcoming) argue that only one third of the listed firms adopt such compensation plans. They find that firms in Japan are more likely to adopt stock option plans when arms-length shareholders such as foreign and domestic institutional investors own a higher stake. The ownership and compensation sub-index therefore focuses on the shareholding ratio of outside directors (IDIR), CEO stock ownership (CEOOWN), and stock option plans (SO).

### 3.2.3 Disclosure

In the last sub-index of our governance measure, we focus on governance attributes that deal with the disclosure quality. We include several attributes to capture the quality of firms' disclosures. We use the number of audit opinions (AOP3), changes in accounting policies (APCHG3), earnings announcement timing (ATRM), shareholders meeting concentration ratio (AGMC), disclosure of executive remuneration (DSC\_CMPS\_D), disclosure of total audit fee (DSC\_CMPS\_A), usability of firm's information (WEBEVL2), and sufficiency of firm's information on its website (WEBEVL3). Firms scoring high on disclosure have less audit opinions, less changes in accounting policies, timeliness of earnings announcement, high shareholder meeting concentration ratio, active disclosure of executive remuneration and audit fee, and ample information available on firm's website.

The governance attributes selected in this paper are similar to Aman and Nguyen (2008), and Chernobai and Yasuda (2013). Figure 2 shows average scores of the firm level governance attributes across the sample period 2008-2011. Respective scores of all governance attributes from each sub-index are aggregated to arrive at our measure of corporate governance, the governance score denoted as percentage (Gompers, Ishii, and Metrick, 2003; Aggarwal, Erel, Ferreira, and Matos, 2011).

Figure 2 Individual Governance Attributes



### 3.3 Ownership Proportion

We use ownership proportion for the period 2007 to 2011 since we investigate the impact of ownership on the future level of corporate governance from 2008 to 2011. We measure the proportion of foreign institutional ownership as the sum of the holdings of all foreign institutions in a firm's stock divided by the total number of shares outstanding at the end of each fiscal year. We also include the proportion of foreign institutional ownership in our analysis as an indicator variable by splitting the sample into quartiles: the highest quartile of foreign ownership, representing the largest stakes of foreign institutional investors, is coded as one whereas foreign ownership quartiles other than the highest are coded as zero.

The proportion of domestic ownership is measured as the ratio of sum of the holdings of domestic institutional investors and other financial institutions such as banks and insurance companies, to the number of shares outstanding at the end of each fiscal year. The domestic ownership therefore includes shareholdings by securities companies, financial holdings, credit and leasing, funds and trusts, banks, and insurance companies.

### 3.4 Ownership Investment Horizon

We use multiple measures to distinguish between investors with short-term and long-term investment horizons. The first measure is the institutional ownership persistence (IOP). Following Elyasiani and Jia (2010), we define IOP for an institutional investor (including banks and insurance companies) in a firm as the ratio of the average ownership proportion to the standard deviation of the ownership proportion over a 5 year period including the sample year. We measure IOP by using interim data<sup>10</sup> for the individual institutional block-holders<sup>11</sup> in a specific firm. For instance, IOP for each institutional investor in 2008 is calculated using 10 interims, from the first fiscal interim of 2004 to the second interim of 2008. The value of IOP is high if an investor's shareholding is stable across a 5 year period. IOP for a firm is then calculated as the average IOP across all the institutional and financial block-holders in the firm.

For the second measure of investment horizon, we follow Bohren, Priestley, and Odegaard (2005) and Elyasian and Jia (2010), and use the maintain-stake-points duration method. Our maintain-stake-points duration measure is the number of interims in which an investor is among the largest shareholders of a specific firm out of 10 interims. If an investor holds a high proportion of shares for many interims during a 5 year period including the sample year, the maintain-stake-points duration measure will be high. Maintain-stake-points duration for a firm is calculated as

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10 Quarterly data for individual institutional investors is not available in the Major Shareholders Database.

11 Investors among the top 30 largest shareholders.

the average maintain-stake-point durations across all the institutional and financial block-holders. Furthermore, for the third measure of investment horizon, we also use the stable investment duration variable. We define the investment duration to be stable if an individual institutional or financial investor stays as the largest shareholder of a firm for 3 consecutive years (six interims). Unlike the maintain-stake-points duration, this measure accounts for the number of investors instead of the number of interims. The higher the number of investors with consecutive presence in a firm’s largest shareholders category, the higher the value (stable) on investment duration variable will be and vice versa.

### 3.5 Control Variables

Following Ferreira and Matos (2008) and Aggarwal, Erel, Ferreira, and Matos (2011), we control the effect of several firm specific variables in our regressions. These variables include natural log of total assets (Firm Size), one year annual sales growth (Sales Growth), ratio of total liabilities to total assets (Leverage), ratio of sum of cash, deposits, and marketable securities to total assets (Cash Holdings), ratio of annual change in fixed assets plus depreciation to total assets (Capital Expenditure), ratio of market value of total assets to book value of total assets (Market-to-Book), operating income to total assets (ROA), research and development expenses to total assets (R&D expenses), plant, property, and equipment to total assets (PPE), foreign sales to net sales (Foreign Sales), and the ratio of number of shares held by special few shareholders to the total number of shares outstanding (Close). Similar to institutional ownership proportion, we use the control

Table 1 Summary Statistics

This table shows the summary statistics of governance score and firm characteristics for the period 2008-2011. Governance score that increases with increase in the quality of corporate governance. Firm characteristics include: the proportion of foreign institutional ownership, domestic ownership, investment horizon measure of foreign institutional investors (IOP), cash holdings, capital expenditures, R&D expenses, dividends, ROA, firm size, sales growth, leverage, market-to-book ratio, PPE, and foreign sales. Refer to Appendix table A1 and A2 for variable definitions.

	N	Mean	Std. Dev	25th Percentile	Median	75th Percentile
Governance Score	9,451	0.4226	0.1622	0.3000	0.4047	0.5250
Foreign Institutional Ownership	10,009	0.0883	0.1107	0.0079	0.0430	0.1321
Domestic Ownership	10,009	0.1813	0.1280	0.0769	0.1591	0.2670
IOP Foreign Ownership	9,451	0.1307	0.1327	0.0000	0.1348	0.2386
Cash Holdings	10,009	0.1509	0.1346	0.0555	0.1142	0.2018
Capital Expenditure	10,009	0.0169	0.1564	-0.0068	0.0162	0.0471
R&D Expenses	10,009	0.0148	0.0265	0.0000	0.0035	0.0194
Dividends	10,009	0.0110	0.0118	0.0044	0.0084	0.0143
ROA	10,009	0.0705	0.0763	0.0370	0.0644	0.1005
Firm Size	10,009	10.4309	1.5185	9.4116	10.2777	11.2766
Sales Growth	10,009	0.0283	1.4572	-0.1022	-0.0106	0.0595
Leverage	10,009	0.4692	0.2202	0.2974	0.4684	0.6375
Market-to-Book	10,009	1.0279	0.5434	0.7679	0.9222	1.1343
PPE	10,009	0.2566	0.1818	0.1174	0.2313	0.3636
Foreign Sales	10,009	2.2006	9.5701	0.0000	0.0000	0.0000
Close	10,009	0.5388	0.1544	0.4220	0.5320	0.6550

Table 2 Correlation Matrix

All variables are defined in Appendix table A1 and A2.

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Foreign Ownership	1.000												
2. Domestic Ownership	0.380	1.000											
3. Firm Size	0.581	0.644	1.000										
4. Sales Growth	0.020	-0.006	0.009	1.000									
5. Leverage	-0.162	0.050	0.144	0.007	1.000								
6. Cash	0.008	-0.253	-0.303	0.009	-0.422	1.000							
7. Capital Expenditures	0.026	0.040	0.081	0.018	-0.024	-0.035	1.000						
8. Market-to-Book	0.333	0.102	0.154	0.045	0.061	0.087	0.000	1.000					
9. ROA	0.164	0.045	0.065	0.055	-0.178	0.105	0.275	0.299	1.000				
10. R&D	0.201	0.145	0.143	-0.001	-0.141	0.047	-0.022	0.119	-0.009	1.000			
11. PPE	-0.177	-0.001	0.001	-0.029	0.162	-0.333	0.089	-0.121	0.096	-0.116	1.000		
12. Foreign Sales	0.141	0.112	0.130	0.003	-0.015	-0.021	0.014	0.077	0.048	0.185	-0.031	1.000	
12. Close	-0.145	-0.505	-0.328	0.012	-0.111	0.182	0.051	-0.022	0.163	-0.088	0.004	-0.098	1.000

variables for the period 2007 to 2011.

Table 1 shows the summary statistics of governance score, equity ownership of foreign and domestic investors, investment horizon variable, and firm characteristics over the period of 2008 to 2011. In addition, Table 2 reports Pearson correlations. In general, the variables are not highly correlated. The largest correlation is between foreign institutional ownership and firm size, and between domestic ownership and firm size ( $\rho = 0.644$ ).

## 4 Empirical Results

### 4.1 Foreign Institutional Ownership and Corporate Governance

Similar to Aggarwal, Erel, Ferreira, and Matos (2011), this section contains results from panel regressions that examine whether foreign institutional ownership leads to corporate governance in a country like Japan. For the panel regression analysis we use the firm level corporate governance score (Gov-Score) as the dependent variable. The main independent variable is the proportion of foreign institutional ownership. To capture the effect of foreign institutional ownership on future governance, all independent variables are lagged by one year. We use year and industry fixed effects in order to account for the macroeconomic and industry effects. For the industry fixed effects, we use industry dummies based on the 2-digit Nikkei Medium Classification industry code. Following Petersen (2008), t-statistics are computed using standard errors corrected for clustering at the firm level. Results are presented in Table 3. In column (1), we report regression results for the effect of foreign institutional ownership on corporate governance using the composite governance score (Gov-Score). The results in column (1) suggest that governance score is positively associated with foreign ownership, significant at 99% confidence level. The results are in accordance with our predictions and suggest that foreign institutional investors play a significant role in improving corporate governance even in markets where the shareholders are well protected by law. Control

Table 3 Foreign Institutional Ownership and Corporate Governance

This table shows estimates of regressions of proportion of foreign institutional investors on corporate governance. The dependent variables include governance score along with individual governance attributes (board size, stock option plans, and CEO ownership) at time t. The main independent variable is one year lagged foreign ownership. We estimate probit regression for the dependent variable “stock options” since it is a binary variable that takes the value one if firms have stock option plans. Control variables are lagged by one period. Refer to Appendix table A1 and A2 for variable definitions. All models report estimates of industry fixed-effects regressions with year dummies. All ratios are winsorized at the 1% and 99% levels. Standard errors are estimated with clustered errors at the firm level. t-statistics (z-statistics in the case of stock options in column 3) are presented in brackets. Superscripts \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% confidence levels, respectively.

	Gov-Score	Board Size	Stock Options	CEO Ownership
Foreign Ownership (t-1)	0.200*** (5.475)	0.0604** (2.059)	1.246*** (4.289)	-0.00998 (-0.121)
Firm Size (t-1)	0.00672*** (2.683)	-0.0387*** (-15.77)	-0.0340 (-1.463)	0.0134** (2.250)
Sales Growth (t-1)	-0.0226** (-2.377)	-0.00342 (-0.547)	-0.0873 (-0.954)	0.0497** (2.184)
Leverage (t-1)	-0.0770*** (-5.273)	0.00486 (0.446)	-0.384*** (-2.777)	-0.226*** (-6.481)
Cash Holdings (t-1)	-0.0313 (-1.260)	0.0105 (0.618)	-0.402* (-1.717)	0.423*** (6.822)
Capital Expenditures (t-1)	0.0700*** (2.846)	-0.0281 (-1.591)	0.129 (0.539)	0.301*** (4.897)
Market-to-Book (t-1)	0.0604*** (8.717)	-0.0110** (-1.967)	0.319*** (5.524)	0.0878*** (5.831)
ROA (t-1)	0.276*** (6.123)	-0.00943 (-0.300)	-0.282 (-0.668)	0.565*** (4.833)
R&D Expenses (t-1)	0.776*** (5.488)	-0.257** (-1.985)	5.095*** (3.965)	-0.394 (-1.219)
PPE (t-1)	-0.122*** (-7.164)	-0.0173 (-1.382)	-0.805*** (-4.858)	0.0236 (0.545)
Foreign Sales (t-1)	-0.000388* (-1.690)	-0.000229 (-1.012)	-0.00291 (-1.412)	-0.000766 (-1.518)
Close (t-1)	0.0349* (1.885)	-0.0152 (-1.109)	-0.0211 (-0.118)	0.0148 (0.316)
Observations	9,451	9,451	9,451	9,451
R-squared/Pseudo R-squared	0.247	0.211	0.094	0.164
Year	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes

variables have their expected signs.

In line with Aggarwal, Erel, Ferreira, and Matos (2011), we also examine the relation between foreign institutional ownership and a number of individual governance attributes<sup>12</sup>. We examine three individual governance attributes from board structure and ownership and compensation. We focus on board size, stock option plans, and CEO ownership. Results are reported in column (2)

12 Aggarwal, Erel, Ferreira, & Matos (2011) argue that governance indices and ratings have received numerous criticism over its methodological shortcomings.

though column (4). For stock options we estimate probit regressions since it is a binary variable that takes the value one if firms have stock option plans and zero otherwise. We find that foreign ownership is positively and significantly associated with board size and stock option plans. The results in column (2) show that foreign institutional ownership increases the efficiency of decision making and internal control through smaller boards. The findings in column (3) suggest that firms in Japan are more likely to adopt stock option plans when foreign institutional investors own a higher stake. However, we do not find any relationship between foreign institutional ownership and CEO ownership in column (4). Overall, we provide evidence that firms are more likely to improve corporate governance when they have a higher proportion of foreign ownership.

## 4.2 Control for Endogeneity

So far, the initial findings of our study depict that foreign institutional ownership leads to better corporate governance in Japan. However, We cannot rule out the possibility that foreign institutional ownership and corporate governance may be jointly determined and the positive relationship between foreign institutional investors and corporate governance could be the outcome of reverse causality. As in Leuz, Lins, and Warnock (2010), foreign institutional investors may have strong preferences for firms with improved corporate governance and therefore, may lead to a positive association without a causal effect stemming from foreign institutional investors. Although, we use lagged measures of foreign institutional ownership to mitigate the simultaneity issues, the possibility that foreign investors may also be attracted to firms with expected future governance improvements still raises a concern (Aggarwal, Erel, Ferreira, and Matos; 2011). To address this endogeneity problem, we run the two-stage least squares (2SLS) regressions where we use instrumental variables for foreign institutional ownership.

To select the appropriate instrumental variable, we follow the previous literature and consider variables that are associated with the foreign institutional ownership, but are uncorrelated with corporate governance. As the first instrument for foreign institutional ownership, we use membership of sampled firms in the Morgan Stanley Capital International All Country World Index (MSCI). We use indicator variable that takes the value of one if a firm is a constituent of the MSCI in the previous year and zero otherwise. Ferreira and Matos (2008) and Leuz, Lins, and Warnock (2010) show that foreign investors are more likely to invest in firms with MSCI membership. This also holds for our sample as firms with MSCI membership have an average proportion of foreign institutional ownership of 23.8%, while non-members have an average ownership of 7.1%. In terms of governance, MSCI members have an average governance score of 50.7% while non-members have an average governance score of 41.3%. The instrument appears to be valid. For the second instrument of foreign institutional ownership, we use the firm's listing on the American Depository Receipt (ADR). We use a dummy variable that takes the value of one if a firm has an active ADR in the previous year and zero otherwise. Kang and Stulz (1997) show that ADR increases the probability of investment by foreign investors. Firms with ADRs have an

Table 4 Foreign Institutional Ownership and Corporate Governance: Two-Stage Least Squares

This table shows estimates of two-stage least squares (2SLS) regressions. Column (3) through (4) report results of the second-stage regressions where the dependent variable is the governance score (Gov-Score). The main independent variable is the foreign institutional ownership at year t instrumented by one year lagged Morgan Stanley Capital International (MSCI) dummy in column (1) and American Depository Receipts (ADR) dummy in column (2). In column (3), the proportion of foreign institutional investors is instrumented using both MSCI and ADR dummies. Control variables are lagged by one period. Refer to Appendix table A1 and A2 for variable definitions. All models report estimates of industry fixed-effects regressions with year dummies. All ratios are winsorized at the 1% and 99% levels. Standard errors are estimated with clustered errors at the firm level. t-statistics are presented in brackets. Superscripts \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% confidence levels, respectively.

	1 <sup>st</sup> Stage	1 <sup>st</sup> Stage	1 <sup>st</sup> Stage	2 <sup>nd</sup> Stage	2 <sup>nd</sup> Stage	2 <sup>nd</sup> Stage
	Foreign Ownership	Foreign Ownership	Foreign Ownership	Gov-Score	Gov-Score	Gov-Score
Predicted Foreign (MSCI)				0.643** (2.094)		
Predicted Foreign (ADR)					1.394*** (4.875)	
Predicted Foreign (Combined)						1.029*** (4.309)
MSCI (t-1)	0.0396*** (5.478)		0.0302*** (3.957)			
ADR (t-1)		0.0526*** (6.030)	0.0407*** (4.368)			
Firm Size (t-1)	0.0388*** (26.34)	0.0397*** (26.22)	0.0371*** (24.42)	-0.0125 (-0.941)	-0.0449*** (-3.645)	-0.0291*** (-2.840)
Sales Growth (t-1)	-0.0161** (-2.507)	-0.0147** (-2.332)	-0.0139** (-2.197)	-0.0146 (-1.343)	-0.000869 (-0.0815)	-0.00753 (-0.735)
Leverage (t-1)	-0.107*** (-11.37)	-0.110*** (-11.64)	-0.107*** (-11.42)	-0.0291 (-0.802)	0.0536 (1.580)	0.0133 (0.454)
Cash Holdings (t-1)	0.0354** (2.060)	0.0346** (2.002)	0.0334* (1.947)	-0.0494* (-1.833)	-0.0779*** (-2.946)	-0.0640** (-2.477)
Capital Expenditures (t-1)	-0.000848 (-0.0492)	-0.00391 (-0.228)	-0.00145 (-0.0846)	0.0722*** (2.893)	0.0753*** (3.030)	0.0738*** (2.963)
Market-to-Book (t-1)	0.0551*** (12.56)	0.0580*** (12.62)	0.0542*** (12.29)	0.0332* (1.711)	-0.0126 (-0.702)	0.00969 (0.630)
ROA (t-1)	0.0637* (1.784)	0.0631* (1.771)	0.0666* (1.870)	0.248*** (5.165)	0.205*** (4.321)	0.226*** (4.855)
R&D Expenses (t-1)	-0.0153 (-0.181)	-0.0437 (-0.513)	-0.0530 (-0.626)	0.774*** (5.438)	0.764*** (5.348)	0.769*** (5.423)
PPE (t-1)	-0.0551*** (-5.553)	-0.0537*** (-5.457)	-0.0534*** (-5.437)	-0.0979*** (-3.986)	-0.0558** (-2.346)	-0.0763*** (-3.461)
Foreign Sales (t-1)	0.000131 (0.896)	0.000183 (1.242)	0.000156 (1.065)	-0.000437* (-1.874)	-0.000557** (-2.364)	-0.000499** (-2.144)
Close (t-1)	0.00506 (0.446)	0.00804 (0.704)	0.00682 (0.603)	0.0317* (1.695)	0.0271 (1.455)	0.0293 (1.578)
Observations	9,451	9,451	9,451	9,451	9,451	9,451
R-squared	0.506	0.506	0.510	0.239	0.245	0.244
F-test of Instruments	30.010***	36.361***	27.250***			
Hansen Over-identification p-value						3.821** 0.050
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes

average governance score of 56% while firms without ADRs exhibit an average governance score of 41.5%. Regarding the proportion of foreign institutional investors, firms having ADRs have an

average proportion of foreign institutional ownership of 27% while non-members have an average ownership of 8%. Thus, MSCI and ADR do not seem to be correlated with our dependent variable. Similar instruments are used in Nguyen (2012).

Table 4 presents the two-stage least squares regressions. Column (1) and (2) present the results of the first stage regressions that use the foreign institutional ownership as the dependent variable. MSCI is explanatory variable of interest in column (1) while ADR in column (2). The independent variables are lagged by one year. The first stage results in column (1) and (2) indicates that both MSCI and ADR are positively and significantly associated with foreign ownership. Moreover, the F-tests indicate that MSCI and ADR are significant instruments with robust F-values greater than 30 (MSCI) and 36 (ADR). The second stage results, reported in column (4) and (5), show that the predicted foreign institutional ownership is significant in explaining the improvements in governance. The results reported in Table 4 support our initial findings that foreign institutional ownership leads to better governance in Japan and suggest that endogeneity is unlikely to explain this relationship. In addition, we also examine the joint effect of the instruments where the results from first and second stage regressions are presented in column (3) and (6). Even though our results remain unchanged, MSCI and ADR appear to be endogenous. The Hansen over-identification test indicates that the hypothesis of absence of correlation between the instruments and the error term in the second stage is rejected, and therefore, it is inappropriate to simultaneously instrument foreign institutional ownership with MSCI and ADR.

### 4.3 Foreign Institutional Ownership, Domestic Ownership and Corporate Governance

Next, we analyze the impact of domestic investors on the quality of corporate governance as well as examine whether the positive relation between corporate governance and foreign institutional ownership is affected after considering the impact of domestic ownership. According to the results reported in column (1) of Table 5, domestic ownership negatively affects corporate governance, the coefficient is significant at 99% confidence level. In column (2), we use the proportion of both foreign ownership and domestic ownership in the same regression. We find that, even after controlling the effect of domestic ownership, our results do not change and show a strong positive relation between foreign institutional ownership and corporate governance. In terms of Japanese governance structure, the negative effect of domestic investors on the governance score can be associated with the potential business relations between such investors and the invested firms. Since, only independent investors have the ability to efficiently monitor a firm's management (Brickley, Lease, & Smith, 1988; Almazan, Hartzell, & Starks, 2005), commercial ties with the invested firms may compromise the active monitoring role of domestic investors. Consequently, investigating the governance role of domestic investors in aggregate may lead to significantly biased results, the reason being, not all the domestic investors have close business relations with the firms in which they invest.

We next classify the domestic investors into two groups according to the degree of their business

Table 5 Foreign Institutional Ownership, Domestic Ownership, and Corporate Governance

This table shows estimates of regressions of impact of domestic ownership on corporate governance. The dependent variable is governance score at time t. The main independent variables in column (1) and (2) are domestic ownership and foreign ownership. In column (3), the independent variables are relationship-oriented investors and independent domestic institutional investors. We use indicator variable for the highest quartile of one year lagged foreign ownership as independent variable in column (4). Control variables are lagged by one period. Refer to Appendix table A1 and A2 for variable definitions. All models report estimates of industry fixed-effects regressions with year dummies. All ratios are winsorized at the 1% and 99% levels. Standard errors are estimated with clustered errors at the firm level. t-statistics are presented in brackets. Superscripts \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% confidence levels, respectively.

	[1]	[2]	[3]	[4]
Foreign Ownership (t-1)		0.200*** (5.443)		
Domestic Ownership (t-1)	-0.109*** (-3.670)	-0.109*** (-3.720)		
Relationship-oriented (t-1)			-0.187*** (-5.708)	-0.196*** (-5.333)
Independent (t-1)			0.106*** (4.409)	0.0506* (1.885)
High Foreign (t-1)				0.0254** (2.499)
High Foreign (t-1) × Relationship-oriented (t-1)				0.134** (2.132)
Firm Size (t-1)	0.0201*** (7.847)	0.0114*** (4.064)	0.0152*** (5.291)	0.0116*** (4.008)
Sales Growth (t-1)	-0.0274*** (-2.846)	-0.0237** (-2.489)	-0.0317*** (-2.859)	-0.0288*** (-2.616)
Leverage (t-1)	-0.104*** (-7.240)	-0.0808*** (-5.503)	-0.0968*** (-5.819)	-0.0908*** (-5.462)
Cash Holdings (t-1)	-0.0337 (-1.368)	-0.0400 (-1.605)	-0.0309 (-1.030)	-0.0338 (-1.137)
Capital Expenditures (t-1)	0.0673*** (2.706)	0.0678*** (2.755)	0.0423 (1.464)	0.0423 (1.478)
Market-to-Book (t-1)	0.0732*** (10.86)	0.0612*** (8.727)	0.0626*** (7.999)	0.0575*** (7.303)
ROA (t-1)	0.306*** (6.812)	0.296*** (6.566)	0.340*** (6.337)	0.352*** (6.568)
R&D Expenses (t-1)	0.789*** (5.508)	0.782*** (5.533)	0.803*** (4.889)	0.776*** (4.753)
PPE (t-1)	-0.137*** (-7.908)	-0.125*** (-7.300)	-0.145*** (-7.355)	-0.142*** (-7.274)
Foreign Sales (t-1)	-0.000345 (-1.519)	-0.000398* (-1.732)	-0.000425* (-1.808)	-0.000477** (-2.008)
Close (t-1)	0.00640 (0.326)	0.00579 (0.299)	0.00815 (0.364)	0.0110 (0.489)
Observations	9,451	9,451	7,634	7,634
R-squared	0.241	0.250	0.274	0.280
Years	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes

relationships with the firms. These groups include: domestic investors that are likely to have business ties with the invested firms (relationship-oriented), and investors that are independent from close business relationships (independent). Relationship-oriented domestic investors include

banks and insurance companies, whereas securities companies, financial holdings, credit and leasing, funds and trusts are treated as independent type of institutional investors<sup>13</sup> (Brickley, Lease, and Smith, 1988; Chen, Harford, and Li, 2007; Almazan, Hartzell, and Starks, 2005; Shinozaki, Moriyasu, and Uchida, forthcoming). We are interested to investigate whether the impact of domestic investors on governance is different for the two categories of investors. According to column (3) of Table 5, the coefficient of relationship-oriented domestic ownership is negative and significant at 99% level, suggesting that such investors negatively impact the quality of corporate governance. In contrast, the results in column (4) depict that independent domestic institutional ownership is positively associated with corporate governance. This indicates that investors improve the quality of governance when they are independent of close relationships with the firms in which they hold equity stakes.

Moreover, in column (4) of Table 5, we report results for the relation between foreign ownership and corporate governance after controlling the effect of relationship-oriented investors and independent domestic institutional investors. The results remain unchanged. Although, we find that the negative impact of relationship-oriented domestic investors is reversed if firms have a higher ratio of foreign ownership as shown by their interaction term in column (4). The results on the interaction term suggest that increased foreign ownership mitigates the negative influence of relationship-oriented domestic investors. Since large foreign investors have the ability to import corporate governance mechanisms in the invested firms (Aggarwal, Erel, Ferreira, & Matos 2011; Hamao, Katsuna, & Matos, 2011), they may influence the association between relationship-oriented domestic investors and corporate governance by using voting power or pressurizing management to make amendments in the event of decisions that negatively affect shareholder value. Overall, our findings suggest that foreign institutional investors are effective in improving governance even when the shareholder protection is stronger in the portfolio firm's country.

#### 4.4 Investment Horizon of Foreign Institutional Investors and Corporate Governance

In this section, we investigate the impact of foreign institutional block-holders' investment horizon on corporate governance. We include our first investment horizon measure (IOP) in our analysis as an indicator variable that equals one if firms have above-median IOP and zero otherwise. Column (1) of Table 6 provides the results on the relation between investment horizon of foreign block-holders and corporate governance. Regression estimates shown in column (1) suggest that corporate governance is positively and significantly related to investment horizon of large foreign institutional investors. The results imply that corporate governance improves with the

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13 We use Top 30 Major Shareholders database for the classification of domestic investors based on their relationship sensitivity, because it offers a straightforward segmentation of overall domestic investors into relationship-oriented and independent institutional ownership.

Table 6 Investment Horizon of Foreign Institutional Investors and Corporate Governance

This table shows estimates of regressions of impact of investment horizon of foreign institutional investors on corporate governance. The dependent variable in all models is the governance score at time t. The main independent variable in column (1) is the indicator variable for investment horizon of foreign institutional investors. In column (2) and (3), we use additional measures of foreign institutional investors' horizon; maintain-stake-points and stable investment duration. Column (4) through (6) include both the proportion and investment horizon of foreign institutional investors. Control variables are lagged by one period. Refer to Appendix table A1 and A2 for variable definitions. All models report estimates of industry fixed-effects regressions with year dummies. All ratios are winsorized at the 1% and 99% levels. Standard errors are estimated with clustered errors at the firm level. t-statistics are presented in brackets. Superscripts \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% confidence levels, respectively.

	[1]	[2]	[3]	[4]	[5]	[6]
IOP(t)	0.0103** (2.038)			0.00292 (0.577)		
Maintain-Stake-Points(t)		0.0110** (2.190)			0.00325 (0.643)	
Stable Duration(t)			0.00270 (1.444)			-0.00143 (-0.755)
Foreign Ownership(t-1)				0.196*** (5.301)	0.196*** (5.278)	0.00695*** (2.743)
Firm Size(t-1)	0.0139*** (6.043)	0.0138*** (6.000)	0.0141*** (6.228)	0.00646** (2.515)	0.00644** (2.507)	-0.0228** (-2.388)
Sales Growth(t-1)	-0.0263*** (-2.728)	-0.0261*** (-2.711)	-0.0257*** (-2.672)	-0.0227** (-2.383)	-0.0227** (-2.378)	-0.0780*** (-5.342)
Leverage(t-1)	-0.0954*** (-6.652)	-0.0950*** (-6.627)	-0.0961*** (-6.688)	-0.0760*** (-5.199)	-0.0759*** (-5.193)	-0.0318 (-1.280)
Cash Holdings(t-1)	-0.0231 (-0.943)	-0.0228 (-0.930)	-0.0246 (-1.003)	-0.0306 (-1.238)	-0.0305 (-1.233)	0.0696*** (2.830)
Capital Expenditures(t-1)	0.0687*** (2.768)	0.0688*** (2.771)	0.0703*** (2.828)	0.0698*** (2.837)	0.0698*** (2.837)	0.0605*** (8.745)
Market-to-Book(t-1)	0.0717*** (10.75)	0.0716*** (10.74)	0.0711*** (10.64)	0.0604*** (8.712)	0.0604*** (8.713)	0.276*** (6.125)
ROA(t-1)	0.282*** (6.307)	0.281*** (6.290)	0.284*** (6.348)	0.275*** (6.108)	0.275*** (6.103)	0.778*** (5.501)
R&D Expenses(t-1)	0.784*** (5.468)	0.783*** (5.467)	0.780*** (5.437)	0.776*** (5.489)	0.776*** (5.489)	-0.122*** (-7.164)
PPE(t-1)	-0.132*** (-7.691)	-0.132*** (-7.673)	-0.133*** (-7.734)	-0.121*** (-7.150)	-0.121*** (-7.145)	-0.000380* (-1.657)
Foreign Sales(t-1)	-0.000335 (-1.481)	-0.000335 (-1.479)	-0.000355 (-1.558)	-0.000387* (-1.687)	-0.000387* (-1.686)	0.0362* (1.952)
Close(t-1)	0.0357* (1.910)	0.0356* (1.908)	0.0330* (1.762)	0.0349* (1.887)	0.0349* (1.887)	0.00695*** (2.743)
Observations	9,451	9,451	9,451	9,451	9,451	9,451
R-squared	0.239	0.239	0.238	0.247	0.247	0.247
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes

investment horizons by foreign institutional investors. Our results are consistent with the previous literature (Elyasiani & Jia, 2010; Attig, Cleary, & Guedhami, 2010; Chen, Harford, & Li, 2007) and indicate the active monitoring role played by large long term foreign institutional investors.

We next use two additional measures for the investment horizon of foreign institutional blockholders. Column (2) of Table 6 shows the estimates for maintain-stake-points duration method where the variable enters as an indicator that equals one if firms have above-median values on maintain-stake-points and zero otherwise. According to the results, the coefficient on the

explanatory variable of interest is positive and significant. Based on the widely used measures of investment horizon, IOP and maintain-stakes-points duration, we find that foreign block-holders with longer horizons improve governance, but insignificant results with the third measure of investment horizon, the stable investment duration in column (3).

Next, we investigate whether foreign block-holders' investment horizon has significant impact on governance improvements even after controlling for the equity ownership by foreign investors. We report the results in column (4) through (6) of Table 6. Consistent with our previous findings, the figures in column (4-6) depict that foreign ownership is positively and significantly associated with corporate governance. In contrast, the coefficients on all three investment horizon measures IOP, maintain-stake-points, and stable investment duration are found to be insignificant.

Although not tabulated here, we also perform additional tests. First, we divide the overall sample into long and short investment horizon quartiles and conduct regressions for each subsample using the foreign institutional ownership as the main explanatory variable. We find that foreign ownership positively and significantly impacts corporate governance in firms with longer investment horizons. Interestingly, similar results are found for firms with shorter investment horizon; the coefficient on foreign institutional ownership is positive and significant. Second, we estimate regressions by adding an interaction term between foreign institutional ownership and the indicator variable for long investment horizon. The coefficient on the interaction term is found to be insignificant. These results indicate that foreign institutional ownership is associated with governance improvements irrespective of their investment horizon in the portfolio firms. We predicted that stable (long-term) foreign investors have greater impact on governance because investors with long investment horizons are more likely to have expertise and incentives to monitor the management, which in turn mitigate the agency problems. However, the evidence suggests that equity ownership by foreign investors is a main driver of governance improvements in Japanese firms. It is possible that these results may have been affected by the data limitations of this study. Since the data of all the individual foreign institutional shareholders is not readily available, we measure the investment horizon of foreign institutional investors by using only the top largest shareholders. Although, our objective of using investment horizon is to account for both the length and size of foreign shareholding, this limitation, to some extent, may affect the results of investment horizon of foreign institutional investors.

We next examine the relation between investment horizon of domestic block-holders and corporate governance. Column (1) of Table 7 shows the results on the association between investment horizon of large relationship-oriented domestic investors and corporate governance. Based on the reported results, we find a negative association between the investment horizon of large relationship-oriented domestic investors and corporate governance. Furthermore, as reported in column (2), we find no evidence for the effect of large and stable independent domestic investors on governance. Moreover, in column (3), we control the effect of the relationship-oriented domestic ownership and find that both their ownership proportion and investment horizon negatively affect corporate governance. For the large independent domestic institutional investors, the findings are

Table 7 Investment Horizon of Domestic Investors and Corporate Governance

This table shows estimates of regressions of impact of investment horizon of domestic institutional investors on corporate governance. The dependent variable in all models is the governance score at time t. The main independent variable in column (1) is the indicator variable for investment horizon of relationship-oriented domestic investors. The main independent variable in column (2) is the indicator variable for investment horizon of independent domestic investors. Column (3) and (4) include both the proportion and investment horizon of relationship-oriented and independent investors. Control variables are lagged by one period. Refer to Appendix table A1 and A2 for variable definitions. All models report estimates of industry fixed-effects regressions with year dummies. All ratios are winsorized at the 1% and 99% levels. Standard errors are estimated with clustered errors at the firm level. t-statistics are presented in brackets. Superscripts \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% confidence levels, respectively.

	[1]	[2]	[3]	[4]
Relationship-oriented IOP(t)	-0.0242*** (-4.818)		-0.0181*** (-3.561)	
Independent IOP(t)		-0.00285 (-0.530)		-0.00604 (-1.119)
Relationship-oriented(t-1)			-0.138*** (-4.250)	
Independent(t-1)				0.0819*** (3.440)
Firm Size(t-1)	0.0195*** (7.954)	0.0191*** (7.727)	0.0208*** (8.336)	0.0144*** (4.953)
Sales Growth(t-1)	-0.0339*** (-3.061)	-0.0341*** (-3.062)	-0.0346*** (-3.123)	-0.0316*** (-2.836)
Leverage(t-1)	-0.112*** (-6.822)	-0.112*** (-6.797)	-0.110*** (-6.713)	-0.101*** (-6.017)
Cash Holdings(t-1)	-0.0287 (-0.954)	-0.0241 (-0.797)	-0.0369 (-1.221)	-0.0187 (-0.627)
Capital Expenditures(t-1)	0.0462 (1.585)	0.0554* (1.888)	0.0390 (1.343)	0.0553* (1.895)
Market-to-Book(t-1)	0.0698*** (9.263)	0.0720*** (9.556)	0.0679*** (8.994)	0.0676*** (8.735)
ROA(t-1)	0.354*** (6.626)	0.358*** (6.641)	0.355*** (6.632)	0.342*** (6.353)
R&D Expenses(t-1)	0.833*** (5.061)	0.823*** (4.995)	0.804*** (4.909)	0.834*** (5.041)
PPE(t-1)	-0.149*** (-7.521)	-0.156*** (-7.893)	-0.149*** (-7.463)	-0.150*** (-7.627)
Foreign Sales(t-1)	-0.000430* (-1.822)	-0.000441* (-1.870)	-0.000399* (-1.719)	-0.000463* (-1.929)
Close(t-1)	0.0244 (1.123)	0.0366* (1.689)	0.00283 (0.126)	0.0405* (1.877)
Observations	7,634	7,634	7,634	7,634
R-squared	0.266	0.261	0.271	0.265
Year	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes

similar to foreign institutional investors. This suggests that the equity ownership is a significant determinant of governance improvements for investors who are independent of close relations with the firms in which they hold equity stakes. In an untabulated analysis, we also examine the investment horizon of both relationship-oriented and independent domestic investors using maintain-stake-points and stable investment duration variables and obtain similar results.

## 5 Summary and Conclusion

We investigate the relationship between equity ownership by foreign institutional investors and corporate governance. Using a sample of Japanese firms, we compliment the evidence presented in previous studies and show that foreign institutional investors are beneficial in improving corporate governance even when the shareholder protection is stronger than the portfolio firm's country. In an attempt to alleviate the endogeneity of foreign institutional ownership, we employ two-stage least squares (2SLS) regressions and get qualitatively similar results. This suggests that foreign institutional investors not only have preferences to invest in firms with strong governance, but they also affect the quality of corporate governance. We also examine the governance role played by the domestic investors, and find that while investors having potential business relationships with the invested firms (relationship-oriented) negatively impact corporate governance, the association is positive for investors without close business ties (independent). Hence, there is a large variation in the effectiveness of monitoring performed by domestic investors with and without close business relations with the firms. However, we find that presence of large foreign institutional investors are more likely to reverse the negative influence of relationship-oriented domestic investors on governance, thereby change the way how such domestic investors affect the quality of corporate governance.

Unlike previous studies on the association between foreign ownership and governance, we explore whether the investment horizon of large foreign institutional investors has additional effect in improving the quality of corporate governance. Although literature suggests that owners with long-term investments more actively monitor the firms, we do not find evidence that foreign blockholders with stable investment horizons play a larger role in improving corporate governance. Results are similar for independent domestic institutional investors, whereas investment horizons of relationship-oriented domestic investors negatively impact corporate governance. These results suggest that in terms of investors who are independent of close business relations with the invested firms, the proportion of ownership is a significant determinant of governance improvements.

In this paper, while we were able to confirm that equity ownership by foreign institutional investors promotes corporate governance improvements in Japan, we have not yet completely uncovered the governance effect of foreign investors' investment horizon because of data limitations. Future research should revisit this issue with alternative measures that may better reflect each investor's investment style.

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