RIETI Discussion Paper Series 10-E-005

Stock Ownership and Corporate Performance in Japan: Corporate governance by institutional investors

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http://www.rieti.go.jp/en/

RIETI Discussion Paper Series 10-E-005

December 2009

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Abstract

Faced with an aging population and a low fertility rate, Japan finds it increasingly essential to shift diminishing national savings into productive investment in order to preserve the dynamism of its economy. Stock investment by institutional investors is important for corporate financing, and shareholder involvement in governance influences corporate growth. Using panel data for Japan's listed companies and foreign investors' votes on shareholder proposals, this paper demonstrates: (1) an increase in stock ownership by foreign investors' had a positive effect on productivity growth, but it has not recently improved other corporate performance indices, and (2) foreign investors' strong attitudes towards voting had a positive effect on productivity growth. This paper concludes that external stakeholders' active, qualitative involvement in corporate governance and their quantitative involvement by increasing stock ownership are key to improving corporate growth.

Key words: Stock ownership; Corporate governance; Productivity growth; Institutional investors; Voting rights; Panel data

The author is grateful for helpful comments and suggestions by Masahisa Fujita, Hiroshi Yoshikawa, Atsuyuki Kato, and other participants at the meetings of our project at Research Institute of Economy, Trade and Industry. The views in this paper are solely the responsibility of the author and should not be interpreted as reflecting the views of the Development Bank of Japan, to which the author belongs.

1. Introduction

Given the problems of an aging population and a low fertility rate, Japan finds it increasingly essential to shift diminishing national savings into investment to promote dynamism in the macro-economy and to sustain growth. Stock investment by institutional investors is a key factor in corporate finance and economic growth. Therefore, is important to investigate how large shareholders involve themselves in corporate governance and whether their involvement promotes corporate profitability, values, and productivity growth.

The relationship between stock ownership and corporate performance in Japan has been discussed, as it concerns the unique situation of ownership by main banks, cross-shareholdings, group companies, and close *keiretsu* clients. Morck, Nakamura, and Shivdasani (2000), Horiuchi and Hanasaki (2004), and other studies examine Japan's banking system and its relationship with corporate performance.

However, since the mid-1990s, the ownership structure of Japanese companies has changed following the introduction of new types of investment funds in Japan. Large funds, such as investment trusts and pension funds, have recently established a greater presence in corporate governance by exercising voting rights as shareholders.

Since the 1990s, the issue of corporate governance has attracted attention from investors and corporate management. As Japan's stock market continued to decline after the bubble era, from the late 1980s to the early 1990s, large institutional foreign investors, such as the California Public Employee Retirement System (CalPERS) that had established guidelines for exercising its voting rights in the 1980s, claimed to improve disclosure and governance of Japanese firms. Following CalPERS' lead, Japan's public pension funds began to establish their own guidelines for exercising voting rights.

This paper analyzes the relationship between stock ownership and corporate performance and extends previous studies in several areas. First, using the latest panel data of listed companies in FY2007, this study introduces multiple corporate performance indicators of ordinary profit ratios, Tobin's q, and total factor productivity

(TFP). This enables us to compare the effects of stock ownership by investor category on various corporate performance measures. Second, we use a detailed data set of shareholder votes cast by U.S. institutional investors to demonstrate the relationship between investors' attitudes towards exercising votes and corporate performance. By this approach, we capture both quantitative and qualitative effects of stock ownership on corporate governance.

The rest of this paper contains the following sections: Section 2 explains the characteristic roles of various internal and external stakeholders and their relation to corporate governance. Section 3 reviews previous empirical studies about the relationship between stock ownership and corporate governance in Japan. Section 4 covers this study's concepts, empirical framework, and contributions. Section 5 explains the specification of models employed in this study. Section 6 explains the data sets used in this study and how to construct them. Sections 7 and 8 present descriptive statistics of the data and the results of estimations from the models. Section 9 summarizes the results of this study and suggests policy implications.

2. Corporate governance and stakeholders

There are multiple ways in which stakeholders oversee the management of companies. Miyajima, *et al.*, (2002) and other related literature, discusses methods available to internal and external stakeholders and further divides external stakeholders into creditors and shareholders.

2-1. Internal stakeholders

Internal stakeholders long have had an important role in corporate governance, especially in Japan. In effect, most Japanese companies have a long-term employment agreement with employees. Their particular skills belong to business of their own companies, and employees recognize their company's investment in them as a sunk cost. Thus, when their company's business deteriorates, employees have an incentive to

monitor management in order to improve business performance rather than quit to change jobs (Miyajima, *et al.,* (2002)).

2-2. Creditors and debt holders

Creditors are typical stakeholders in Japanese companies that have had a strong relationship with main banks for a long time. As Jensen (1986) explains, creditors, in general, may take control of company when it faces bankruptcy, and have a right to force it into liquidation or be restructured under debt contracts. Creditors have an incentive to monitor whether management operates its business profitably, and management is aware of its creditors' watchfulness. For example, monitoring by creditors prompts management to maintain profits sufficient for debt repayment, to streamline assets and number of employees, and to adjust cash flows properly for repayment (Hirota (1996)).

The role of main banks has also been emphasized in Japan. Main banks have various relationships with debtors, such as providing loans, holding shares, and sharing managers. Until the 1980s, monitoring effects of main banks were highly evaluated. But since the 1990s, Japanese banks faced large problems with bad loans, and cross-shareholding was dissolved, numerous studies demonstrated that monitoring by main banks was not effective and actually created a moral hazard of debtors' management and made it inefficient (Hirota (1996), Miyajima, *et al.*, (2001), Weinstein and Yafeh (1998), Horiuchi and Hanasaki (2004)).

2-3. Shareholders and stock ownership structure

As Okabe (2007) explains, shareholders exercise two types of influence over management. First, shareholders have a role in controlling internal management at shareholder meetings. By exercising their vote at shareholder meetings, shareholders are able to monitor and influence management by criticizing their performance, electing board members, and approving or disapproving measures brought to a shareholder vote.

Second, a publicly traded company is monitored by capital markets. When the business performance of a company is deteriorating, shareholders express their disapproval to management by selling their shares. On the other hand, management has a possibility to be controlled by another company through a hostile takeover.

This paper focuses on the former type of involvement by shareholders and investigates how changes in the composition of stockholders and their willingness to exercise their voting rights influence corporate profits, values, and productivity growth. Accordingly, the next section explains characteristics of major groups of shareholders.

Stable shareholders

Nishizaki and Kurasawa (2002) suggest that the effectiveness of shareholder monitoring on corporate governance depends on stock ownership structure. In Japan, long-term stockholders—for example, cross-shareholders and employee funds—have had an important role in corporate governance. One of their main roles is to protect the corporation from being taken over by another firm, and they have an implicit contract not to oppose management's proposals and not to sell their shares. As Japanese capital markets de-regulated and trading volume of stocks increased in Japan, empirical studies of corporate governance have emphasized the possibility of moral hazard caused by this group of shareholders.

Foreign shareholders

Since the 1990s, cross-shareholding for maintaining stable shares has been dissolved and ownership by institutional and individual investors has increased. Especially, ownership by foreign institutional investors continued to rise, and they have taken a lead in exercising their rights as investors to monitor corporate management. In the 1980s, CalPERS, one of the largest U.S. pension funds, established guidelines for voting at shareholder meetings and has had a large influence on domestic institutional investors. However, some foreign investors actively trade stocks for short-term gains. Short-term investors pressure companies mainly by selling stock, and the monitoring effect of their ownership tends to be shorter than that of long-term investors. Therefore,

as Kimura and Kiyota (2003) point out, it is not necessarily accurate to suggest that increasing stock ownership by foreign investors increases various business performance indices.

Individual shareholders

On the other hand, individual investors have increased their share ownership recently. Because each investor owns a small part of shares and since their interests of investors are not concentrated, they do not have a strong incentive to monitor management of companies they invest in.

Financial institutions

The role of main banks as shareholders in corporate governance is similar to that of creditors. They have the right to vote at shareholder meetings and to monitor as debtors in non-public relationship as main banks. By installing board members in their client companies, main banks are able to influence and change management personnel. Kaplan and Minton (1994) and Kang and Shivdasani (1995, 1997) verify such effects. However, as Sharpe (1990) and Rajan (1992) suggest, the "hold-up" problem occurs when main banks use information of their clients to increase cost of borrowers that are not able to strongly negotiate with banks.

Thus, whether the ownership effect of main banks and other financial institutions is positive for corporate governance and business performance, this has yet to be determined by empirical studies. As described later, the previous literature shows conflicting results.

2-4. Voting rights exercised by investors

Votes by domestic investors

Exercising voting rights at shareholder meetings are typical measures for shareholders to monitor and influence the management of companies they invest in. In the mid-1990s, investment returns of institutional investors declined and, especially in

regard to pension funds, fiduciary responsibility began to be emphasized. Since public pension funds, unlike private investors, typically have not had close a business relationship with private companies, it has been easier for them to exercise voting rights without hesitation.

Since early in this decade, the Government Pension Investment Fund (GPIF), the largest public pension fund in Japan with 2 trillion yen invested in stocks, has declared the importance of exercising voting rights to improve corporate performance as well as to achieve its long-term, diversified investment strategies. Since FY2003, the GPIF has evaluated the external fund managers' exercise of voting rights, and at present it exercises all voting rights to which it is entitled. The Pension Fund Association for Local Government Offices, which invests in 0.2 trillion yen in stocks, established its investment policy in 2001, including its principles of corporate governance and its guidelines for exercising voting rights. The Federation of National Public Service Personnel Mutual Aid Associations, which invests in 50 million yen in stocks, also at that time, established its guidelines for exercising voting rights.

It is difficult for private funds to exercise voting rights freely because of their interests and relationships with other private companies. However, the Pension Fund Association, a federation of employees' pension funds created by the Employees' Pension Insurance Act, must act as a quasi-public investor because it provides pension benefits to those who seceded from employees' pension funds. It aggregates different corporate pension plans, including employees' pension funds, defined benefit corporate plans, and defined contribution plans. It established guidelines for exercising voting rights in 2001 and released its own criteria for exercising votes as it started in-house investment in 2003.

Investment trusts also began to emphasize voting rights as their invested assets increased in the 2000s. In 2003, the Investment Trusts Association of Japan released guidelines for fund managers to consider in exercising voting rights and specified that each fund should establish and publish its own criteria.

Votes by foreign investors

In the U.S., many public pension funds, other than CalPERS and TIAA-CREF, are relatively small and outsource their investments to external fund managers. The Employee Retirement Income Security Act 1974 mentioned fiduciary responsibility of investors, but it was the 1980s that the importance of exercising voting rights was emphasized, and a U.S. Department of Labor reply to the AVON letter ruled that voting was mandatory. Also, in 1994, the department's Sherman Letter declared that proper fiduciary responsibility specifically includes exercising voting rights.

As for investment trusts, after the Enron debacle, the SEC mandated that funds are obligated to establish policies for voting and to disclose their votes in detail. Although they cannot obligate foreign firms to vote on shareholder matters, most do vote because information systems and procedures are in place, making it easier for funds to exercise voting rights in the U.S. than other countries. In the U.K., where such infrastructure has not been well arranged, foreign firms seem less inclined to exercise their voting rights (Koda, Saito, and Matsuda (2007)).

3. Previous literature on corporate governance and stock ownership

As the importance of corporate governance has become more widely recognized in Japan, the number of empirical studies concerning effects of stock ownership structure on Japanese corporate governance has grown since the mid-1990s.

Using data of Japanese manufacturing companies in 1979–1989, Lichtenberg and Pushner (1994) analyze the relationship between stock ownership structure and corporate performance as measured by productivity growth and ROA. The result shows that the effect of financial institutions' ownership on performance is significantly positive, while the effect of cross-shareholding is negative.

Sasaki and Yonezawa (2000) use financial data of 278 Japanese companies from FY1992 to FY1998 to demonstrate that an increase in foreign investors' share ownership has a positive effect on Tobin's q. However, Japanese-type corporate governance represented by the system of main banks has a negative effect on corporate values, because labor share tends to be higher under the Japanese governance system

that understates shareholder values.

Nishizaki and Kurasawa (2002) conducted a study similar to Sasaki and Yonezaki (2000). They also suggest that concentration of ownership by major shareholders has a positive effect on Tobin's q, while the influence of cross-shareholding on corporate value is negative in the 1990s.

Miyajima, *et al.*, (2002), used financial data of Japan's approximately 1,000 manufacturing and non-manufacturing firms in 1990–1999 to demonstrate the positive effect of foreign investors' ownership on increasing Total Factor Productivity (TFP). However, ownership by long-term shareholders, particularly financial institutions and cross-shareholders, and by individual investors does not significantly improve TFP.

Using the unbalanced panel data of about 2,500 Japanese manufacturing and non-manufacturing companies for 1970–2000, Horiuchi and Hanasaki (2004) extended the above studies by introducing variables indicating the degree of competition in product markets. In regard to stock ownership structure, their results show that the significance on productivity growth of concentrated stock ownership, financial institutions' ownership, and foreign investors' ownership depends on the sample period and industry. A consistent relationship between ownership structure and productivity growth is not demonstrated.

In sum, previous studies other than Horiuchi and Hanasaki (2004) indicate that increasing stock ownership by financial institutions and foreign investors has a positive effect on corporate value and productivity, but cross-shareholding does not. However, the sample periods of these studies are mainly in the 1990s. Increasing share of foreign investors in stock ownership of listed companies were halted in the late 1990s to the beginning of the 2000s but increased again from the mid-2000s. Thus, it is necessary to prove whether the positive relationship would hold.

Also, the number of sample firms in the studies is limited because the authors use balanced panel data. Horiuchi and Hanasaki (2004), which cover more firms by using unbalanced panel data, draw more detailed conclusions.

Moreover, the previous studies consider the shares of major stockholders, but determining how strong or active investors' attitudes towards monitoring are is more

important for clarifying the effects of ownership on corporate governance.

4. Empirical framework

The basic purpose of this study is to demonstrate the effects of stock ownership structure on business performance measures such as profitability, productivity, and corporate values of Japanese listed companies. The study especially focuses on foreign investors' monitoring of management. One reasons for this focus is that, while foreign investors have increased their ownership of stock in Japanese companies for a long time, it is important to demonstrate the significant of their monitoring effect on corporate governance, and whether the significance has recently changed.

Another reason is that foreign investors are considered to be active in monitoring management active than are domestic investors; therefore, it is important to measure the strength of their attitude about monitoring management. Analysis of U.S. investors can be conducted because their activities at shareholder meetings, particularly their votes on shareholder proposals, are reported to the US Securities and Exchange Commission. Although Japanese institutional investors' activities at shareholder meetings are not publicly available, this study helps draw implications from the analyses of foreign investors' behavior.

Compared with previous studies noted above, this study has two characteristics: First, this study demonstrates the effects of stock ownership structure on multiple indices of business performance. We calculate ordinary profit ratio, total factor productivity, and Tobin's q for Japanese listed companies from FY1986 to FY2007. This enables us to compare the effects on those indices and also cover the latest sample periods.

Second, in order to evaluate external stakeholders' commitment to corporate management, this study considers not only quantitative ownership structure, that is, each share of stockholders that was introduced in most previous studies, but also qualitative ownership structure that represent investors' attitudes towards monitoring.

We use Proxy Watch released by IR Japan, Inc., a database of votes at shareholder meetings exercised by U.S. investors in Japanese companies, to obtain how many affirmative or dissenting votes were exercised and what kinds of proposals were voted on. Tracking this voting data helps to capture the strength of foreign investors' attitudes about monitoring management and to demonstrate qualitative effects on corporate governance.

5. Model specification

Our basic empirical model for estimation in this study is as follows:

$$PI_{i,t} = C + \alpha D_{i,t-1} + \beta_1 GOV_{i,t-1} + \beta_2 FIN_{i,t-1} + \beta_3 CRP_{i,t-1} + \beta_4 FRN_{i,t-1} + \beta_5 IDV_{i,t-1} + \gamma VT_{i,t-1} + \delta_1 TD + \delta_2 ID + \varepsilon_{i,t} \quad (1)$$

PI denotes three indices of business performance—ordinary profit ratio, total factor productivity, and Tobin's q (average q and marginal q)—of each sample firm, set as dependent variables. As independent variables, *D* denotes the debt ratio, calculated as interest-bearing debt divided by total capital, a control variable that is used in most previous literature. *GOV* denotes a share of stocks owned by government-affiliated institutions. *FIN* denotes ownership by financial institutions, *CRP* by non-financial institutions, *FRN* by foreign investors, and *IDV* by individuals.

VT denotes a ratio of affirmative or dissenting votes to all voting rights (affirmative, dissentient, abstention, and unexercised). It qualitatively represents the strength of investors' attitudes toward monitoring and commitment to corporate governance. *TD* represents a set of time (year) dummies, and *ID* represents a set of industry dummies. Parameter *i* denotes each firm of our sample, and *t* denotes each sample year.

It is widely known that the problem of causality of corporate performance and stockownership might arise. This specification tried to avoid such causality problem of the dependent variables with *PI* by using the dependent variables of one-year previous

t-1 periods.[1]

6. Data set and construction

6-1. Sample firms

Our sample consists of Japanese listed companies in FY1986–2007, financial statement data of which are obtained from the Corporate Financial Databank of the Development Bank of Japan (DBJ). This database covers all Japanese listed firms, excluding financial institutions, from FY1956, but our study focuses on the period from FY1986 to FY2007 and excludes agriculture, forestry and fisheries, utilities, and financials because of data limitations. As Table 1 shows, the number of sample firms in our unbalanced panel data set is around 2,000–3,000, enough to cover most listed firms.

6-2. Business performance indices

Ordinary profit ratio

As mentioned above, three different indices are introduced in this study. In Japan, ordinary profit, defined as operating profit plus non-operating profit, is a primary indicator of nominal, accounting performance of manufacturing and non-manufacturing firms. Since both internal management and external stakeholders emphasize the indicator, the ratio of ordinary profit over total sales is used as one of the dependent variables.

Tobin's q

Investors find it necessary to evaluate business performance of companies not only by nominal, accounting values but also by real, present values. This is because investors evaluate their investment performance by considering the present-value

[1] Although it could not be enough to completely handle the problem, we checked the reverse relationship between PI_{t-1} and the dependent variables of t periods, and confirmed it is not significant.

risk-and-return profile. Thus, as with the previous studies, this study estimates Tobin's q of each sample firm.

Empirically, Tobin's q is defined as marginal q and average q. The proxy for marginal q is calculated as follows:

$$MQ = \frac{MRC / CC}{IGP} \quad (2)$$

$$MRC \approx ARC = \frac{NI + DP + IP}{K} \quad (3)$$

$$CC = \frac{IPBP}{IL} \cdot (1 - \tau) + DPR \quad (4)$$

MQ denotes marginal q, *MRC* marginal return on invested capital, *CC* capital cost, *IGP* investment goods price, *ARC* average return on invested capital, *NI* net income after income tax, *DP* amount of depreciation, *IP* interest paid, *IPBP* interest paid including amortization of bond premium, *IL* interest-bearing liabilities, τ effective tax rate, and *DPR* accounting depreciation rate. This procedure is a similar to the estimation used in Suzuki (2001), and this marginal q assumes that a firm predicts the future marginal return on the currently invested capital under static expectations.

On the other hand, according to Hori, *et al.,* (2004), average q is calculated as follows:

$$AQ = \frac{\frac{(HPS + LPS)}{2} \cdot NS + IL - IA - MA}{K_{rp}} \quad (5)$$

AQ denotes average q, *HPS* highest share price, *LPS* lowest share price, *NS* number of shares outstanding, *IA* inventory assets, *MA* miscellaneous assets, and K_{rp} replacement value of fixed assets at the end of the previous period.

Total factor productivity (TFP)

Productivity is another important indicator represents a firm's efficiency of management and business growth. Total factor productivity, derived from a firm's production function, accounts for effects in total output not caused by inputs. As TFP and its growth are considered to represent efficiency and technology growth, TFP is an index directly related to firm-level business growth and to the aggregate level of economic growth.

A Cobb-Douglas type production function of a firm is assumed as follows:

$$Y = A \cdot K^{a} \cdot L^{1-a} \quad (6)$$

Y denotes real output measured by real value added, K denotes capital input, and L denotes labor input. We obtain capital share, a, from estimating the following equation for each firm, and calculate TFP growth from the series of residuals of ln A:

$$\ln Y_{i,t} = \ln A_{i,t} + a_i \ln K_{i,t} + (1 - a_i) \ln L_{i,t} \quad (7)$$

For calculating Tobin's q and TFP from firm-level financial statement data in FY1986–2007, we construct present-valued assets and liabilities, real output, labor input, and capital input. Real output is defined as firms' nominal value-added deflated by a wholesale price index defined at the industry level. As the DBJ database contains information on factor incomes from companies' financial statements, a measure of nominal value-added at factor cost is constructed as the sum of expenditures on labor, rental expenses, depreciation expenses, operating profits before interest-taxes-and-public charges, and patent license fees. Using the method suggested by Hayashi and Inoue (1991), we estimate capital input by multiplying industry-level utilization rates and firm-level real capital stock constructed from the time-series data of fixed investment of nonresidential buildings, structures, machinery, transportation equipment, and instruments and tools. Labor input is calculated by multiplying the firm-level number of employees and industry-level regular and non-regular working

hours.

Stock ownership structure

Share ratios of stocks owned by government-affiliated institutions, financial institutions, non-financial firms, foreign investors, and individuals are obtained from the DBJ database.

Exercises of voting rights

In order to qualitatively measure strength of investors' commitments to corporate governance, this study utilizes the data set of Proxy Watch by IR Japan, Inc, which provides proxy solicitation and voting trend search services. The data set collects information about voting rights exercised by U.S. investors at shareholder meetings of Japanese companies held between July 2004 and June 2008. Based on reports submitted to the U.S. Securities and Exchange Commission by the U.S investors, it covers more than 3,000 Japanese companies and approximately 900 mutual funds comprising about 200 institutional investors. We can determine how shareholders voted, how many voted, the number of votes, and the types of proposals investors voted for or against. The data set contains numbers of affirmative, dissenting, abstaining, and unexercised votes. In order to gauge attitudes of investors to participate in monitoring through voting, we calculate the ratios of affirmative and dissenting votes divided by all voting rights, and define them as an indicator presenting strength of investors' attitudes. In estimation of the model (1), significance of those ratios on business performance is compared with that of the ratios of other votes.

7. Descriptive statistics

Corporate performance indices

Table 1 shows descriptive statistics of corporate performance indicators constructed by the above methods. In terms of median values, ordinary profit ratios in the sample period FY1986 to FY2007 are almost fully correlated with macro-economic

trends. The ratios increased in the late 1980s, the bubble era, then sharply declined in the early 1990s. Until around FY2000 they continued to deteriorate, then steadily recovered to FY2006.

Trends of Marginal q are similar to those of ordinary profit ratios. The main reason for the similarity is that expected future corporate values, which are necessary for estimating marginal q, are guided by the assumption of adaptive expectations in the method described in Section 6. Historical values of profits are based on the estimation of marginal q, and thus those two series show a similarity.

On the other hand, time-series trends of median of average q are different from those of ordinary profit ratios and marginal q. The method introduced in Section 6 uses actual stock prices as corporate values, including expected values in the future. It assumes that the pricing function of stock markets properly assesses the present values implied in stock prices. The surge in stock prices during the bubble era boosted average q, and the q ratios sharply declined in the early 1980s. After that, overall stock prices continued in a long slump until the early 2000s.

If these trends in stock prices were biased by an inadequate pricing function of stock markets, average q is not an appropriate indicator of real corporate performance. However, if it is granted that one aim of corporate management is to improve the company's market value and to increase stock prices, average q is not necessarily ruled out. Also, if it is a case that external investors especially emphasize profits from gains of stock prices by short-term trading rather than from gains of dividends by long-term buy-and-hold strategies, they aim to immediately promote stock prices and average q is one of the useful indicators.

TFP growth rates showed an interesting trend in the sample period. The rates were higher in the 1980s, but, in the early and middle 1990s, remained in a narrow range between 0 to 2 percent, except for several years. Since FY2004, although nominal profits have increased, TFP growth has been negative. This means that the increase of real value-added has not surpassed increases in labor and capital inputs. In other words, business efficiency in real terms has weakened recently.

Stock ownership and other variables

Table 2 shows the time-series trends in debt ratios and stock ownership structure—that is, shares owned by various categories of investors. First, the debt ratios decrease continuously from the middle 1980s. This trend follows a long-term decline of main banks' share of debt and an increase in direct financing through capital markets. However, the ratios were flat during the economic boom in the mid-2000s. This implies that indirect finance from financial institutions still has an important role in supporting a company's growth.

Similarly, the number of stock shares owned by financial institutions has also decreased since the 1990s, following the dissolving of cross-shareholding, but the decline in the 2000s was limited compared with the sharp decline in the 1990s. It is not only because the Japanese Banking Law prohibits banks from owning more than 5% of another company's outstanding shares, but also because there still exists an important reason for banks to hold stocks in order to maintain business channels with their clients and to monitor them.

Non-financial institutions have decreased their holdings of stocks following the dissolving of cross-shareholding, but the decline has recently moderated in comparison to ownership by financial institutions. It is likely that some shares previously owned by banks have been transferred to non-financial firms.

The number of shares owned by foreign investors steadily rose until the 1990s, although stock market averages continued to deteriorate during that period. The number of the shares declined in the financial crisis of the late 1990s, but it has surged since 2000. Numerous factors potentially explain the uptrend, including the dissolving of cross-shareholding, the more attractive values of Japanese stocks relative to foreign stocks, and global excess liquidity flowing into Japanese markets.

Ownership of Japanese stocks by individual investors also has increased since the 1990s. In FY2007, sub-prime loan problems already arose in the United States, and the share of foreign investors began to fall, while the share of individual investors rose.

Figure 2-1 and 2-2 show the indicators of foreign investors' attitudes towards voting in FY2006 and FY2007. In terms of mean values of all firms contained in the

database, more than 30% of votes are affirmative, and about 4% of votes were cast against companies' proposals. On the other hand, about 50% of eligible votes were unexercised, perhaps because foreign investors face procedural obstacles in voting their shares.

Table 2-2 shows mean values of limited sample firms, more than 50% of the stocks of which are owned by foreign investors. More than 60% of votes are affirmative, while only 20%–30% of eligible votes were unexercised. This suggests that foreign investors, who own more than 50% of the outstanding stock in each of the firms sampled, have stronger attitudes towards voting.

8. Estimation results

Stock ownership

Table 3 shows the results of estimation models that include only debt ratios and variables for stock ownership by investor type.

First, in models using ordinary profit ratios as dependent variables, share ownership by financial and non-financial institutions has a significant negative effect on debt ratios until the early 2000s. This may imply that institutional ownership presents a moral hazard. As evidence of that possibility, the negative effect weakened since the early 2000s, as cross-shareholding dissolved.

Share ownership by individual investors had a negative effect during the same period. This suggests that the monitoring functions of such transient votes were insufficient to discipline management and influence corporate governance.

Share ownership by foreign investors had a positive effect on profit ratios until the early 2000s, suggesting that external monitoring worked to discipline the management. However, it should be noticed that such a positive effect turned insignificant in the late 2000s.

Second, in models using TFP growth as a dependent variable, the estimated results of signs of coefficients and their significance are nearly the same as in models using ordinary profit ratios. That is, cross-shareholding between financial and

non-financial institutions and stock ownership by individuals had significant negative effects on productivity growth. Debt ratios have not had a significant effect since the late 1990s, although they showed a positive influence before that time. On the other hand, foreign investors' ownership continued to have a positive effect on productivity growth. Most of these results are consistent with previous literature.

Third, in terms of Tobin's q, compared with the models with the profit ratios and TFP growth, the effect of stock ownership by financial institutions was not stable on both average q and marginal q, which depends on the variables and the sample periods. Stock ownership by non-financial firms, individuals, and foreign investors had results similar to the other models cited above. However, note that foreign investors' shares turned insignificant on marginal q in FY2002–2007. As is also shown in previous studies, the effect of debt ratios on Tobin's q was insignificant in most periods.

Exercises of voting rights

Table 4 represents the results of estimation models with the ratios of concrete votes as well as the share data of stock ownership. Since company-specific information about votes cast by Japanese investors is not comprehensively disclosed, only votes by U.S. investors are available for analysis. Accordingly, the sample firms are narrowed to those with more than 50% of their outstanding shares owned by foreign investors in FY2004 to FY2007. Thus, these firms are considered to be largely influenced by foreign shareholders' votes.[2]

First, in models using ordinary profit ratios as dependent variables, the qualitative variables representing voting attitudes were positive but not significant in regard to profit ratios, and the significance of share variables is almost identical to the models described in Table 1.

Second, the results of models using TFP growth as a dependent variable suggest a strong and positive relationship between productivity growth and foreign investors' involvement in shareholder voting and monitoring management. These results

[2] It should be noted that, due to the limitation of data availability, the degrees of freedom in the model are relatively small enough to be significant, and it is necessary to broadly interpret the estimation results.

support the hypothesis that investors' active involvement in corporate governance leads to improved corporate performance.

Third, in terms of the models with Tobin's q, neither quantitative variables of shares of stock ownership nor qualitative variables of votes had significant effects on corporate values.

Further conclusions emerge regarding foreign ownership and voting on shareholder issues: an increase in foreign ownership and vote ratios coincided with productivity growth but did not positively affect performance indicators, especially in recent years. This result suggests that obstacles weaken the effects of external monitoring, that voting procedures for foreign investors in Japanese companies are complicated, and that investors have little time to evaluate proposals and decide their votes. Therefore, it is important to resolve this problem in order to encourage investors to participate in corporate governance.

Concrete proposals voted by foreign investors

Additionally, we explore the types of proposals foreign investors voted on, using the Proxy Watch database. Table 5 describes specific proposals voted on by foreign investors. In FY2007, the ratio of affirmative votes is higher for stock repurchases and executive compensation than for other shareholder proposals. Increases in ratios of votes supporting those proposals from FY2006 to FY2007 suggest that foreign investors particularly supported stock repurchases when companies' performance was stumbling.

On the other hand, the ratio of dissenting votes is higher for proposals involving anti-takeover protection, election of company auditors, and issuance of stock options. Anti-takeover protections and issuance of stock options are directly related to interests and rights of external investors; their enactment and could conflict with investors' interests. In comparison with FY2006 and FY2007, the ratios of elections of external directors, company auditors, and anti-takeover protection largely increased. This trend likely suggests that investors attend more closely to elections of directors as board members' prerogatives over stock options and appropriation of retained earnings

increase.

When shareholder proposals conflict with their own financial interests, it is possible that dissenting votes reflect shareholders' self-interest, not their involvement in corporate governance and monitoring management.

9. Concluding remarks and policy implications

This study aims to investigate an issue that previous literature has not dealt with empirically: how shareholders' involvement in corporate governance by exercising their voting rights leads to improved corporate performance. Using panel data of Japan's listed companies and foreign investors' votes on shareholder proposals in FY1986 to FY2007, this study demonstrates that (1) an increase in foreign investors' stock ownership positively influenced productivity growth, but recently it has not influenced other corporate performance indices, (2) foreign investors' active involvement as voting shareholders had a positive effect on productivity growth. Therefore, one conclusion is that external stakeholders' active, qualitative involvement in corporate governance, as well as their quantitative involvement with increasing shares, is a key to improving corporate growth and is important in monitoring corporate management.

As described in Section 2, investment trustees, managers, and association groups recently have recognized the importance of corporate governance and their voting rights, and they have acted to establish appropriate standards. The empirical results of this study suggest these actions will improve the infrastructure for strengthening corporate governance in Japan.

However, the results of the estimations also suggest that foreign investors' shares and votes would have had weaker or insignificant influences on corporate performance. Thus, it is important for Japanese investors to establish the infrastructure for voting rights, to evaluate for themselves proposals submitted by companies, and to set their own policies for maximizing investment returns. It is not sufficient simply to follow voting attitudes of foreign investors.

In current discussions of corporate governance in Japan, the independence of

external directors and auditors is the topic mainly discussed, as suggested by the recent workshop concerning corporate governance organized by Ministry of Economy, Trade, and Industry. Although the requirements for voting on external board members in Japan's Companies Act are tighter than the U.S., shareholders in Japan have more voting authority to dismiss external managers than their U.S. counterparts. Thus, decisions at shareholder meetings have a critical impact on organizing board members and their ability to operate without considering shareholders' wishes.

In addition, better mechanisms should be developed for disclosing information about shareholder meetings and decisions, and a comprehensive database should be developed to guide the interests and decisions of external stakeholders and corporate management. These efforts to strengthen corporate governance should lead not only to growth of individual firms but also to economic growth at a time when Japan needs more effective investment of its national savings.

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Fiscal year	Ordinary profit ratio (%)	Marginal q	Average q	TFP growth (%)	Samples (N)
1986	3.1	1.21	1.52	2.5	1,768
1987	4.1	1.30	1.81	1.6	1,915
1988	4.9	1.38	2.54	4.2	2,031
1989	5.1	1.55	3.23	0.0	2,121
1990	4.6	1.63	2.34	1.9	2,202
1991	3.8	1.53	1.50	1.0	2,230
1992	3.0	1.25	0.62	-0.4	2,293
1993	2.6	1.10	1.00	-0.3	2,384
1994	2.8	1.08	1.03	1.4	2,510
1995	3.0	1.13	0.82	0.6	2,607
1996	3.3	1.15	0.99	1.8	2,622
1997	3.0	1.10	0.28	-5.5	2,701
1998	2.5	0.98	0.00	0.1	2,762
1999	3.1	1.01	0.11	3.4	2,833
2000	3.7	1.01	0.00	0.4	2,934
2001	2.8	0.88	0.00	-0.8	3,017
2002	3.2	0.99	0.00	0.8	3,076
2003	3.8	1.22	0.00	1.3	3,130
2004	4.5	1.34	0.02	0.2	3,188
2005	4.8	1.40	0.30	0.0	3,242
2006	5.0	1.46	0.18	-0.6	3,289
2007	4.7	1.31	0.00	-1.7	3,304

Table 1. Corporate performance indices (sample median)

Fiscal year	Debt ratio (%)	Financial institution share (%)	Non-financial institution share (%)	Foreign investor share (%)	Individual investor share (%)
1986	80.8	30.1	27.1	1.2	29.0
1987	76.1	30.2	26.5	1.0	29.1
1988	66.6	30.1	27.2	1.1	28.4
1989	60.8	31.3	27.9	1.7	27.3
1990	58.3	31.5	29.4	1.5	26.8
1991	58.5	31.6	30.2	1.6	26.6
1992	59.0	30.5	29.3	1.4	28.5
1993	58.4	29.7	28.3	2.0	28.7
1994	52.5	28.1	27.9	2.4	29.3
1995	50.6	27.7	27.7	2.5	29.6
1996	48.0	27.0	27.7	2.6	29.6
1997	47.4	24.9	28.1	2.1	32.0
1998	49.2	23.2	28.0	1.5	33.0
1999	43.9	21.5	27.2	1.5	35.0
2000	39.6	21.0	27.1	1.5	36.6
2001	36.7	20.9	26.9	1.4	37.5
2002	34.9	20.5	26.6	1.3	38.0
2003	31.3	20.8	25.1	2.5	37.6
2004	26.5	21.5	24.6	4.3	36.4
2005	24.2	21.3	24.3	6.6	34.8
2006	24.8	20.7	24.4	7.1	35.7
2007	24.7	20.0	24.8	6.8	36.2

Table 2. Debt ratio and stock ownership structure (sample median)

Dependent Variables	Gov.	Financial	Non-financial	Foreign	Individual	Debt ratio	Period
TFP growth	-0.17	-0.34***	-0.25***	0.20***	-0.11***	0.00**	1986-1992
	(0.27)	(0.03)	(0.03)	(0.06)	(0.02)	(0.00)	
	-0.10	-0.48***	-0.24***	0.23***	-0.13***	0.07***	1993-1997
	(0.23)	(0.05)	(0.04)	(0.07)	(0.04)	(0.02)	
	-0.09	-0.30***	-0.18***	0.29***	-0.20***	0.00	1998-2001
	(0.39)	(0.05)	(0.03)	(0.07)	(0.03)	(0.00)	
	0.20	-0.13***	-0.10***	0.40***	-0.25***	0.01	2002-2007
	(0.36)	(0.04)	(0.03)	(0.05)	(0.03)	(0.02)	
Profit ratio	0.10**	-0.01	-0.02***	0.08***	0.00	0.00	1986-1992
	(0.04)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	
	-0.01	-0.04***	-0.05***	0.08***	-0.02***	-0.03***	1993-1997
	(0.05)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	
	-0.05	-0.04***	-0.03***	0.13***	-0.03***	0.00	1998-2001
	(0.07)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	
	0.25	0.20	0.00	0.09	-0.20	0.01	2002-2007
	(1.33)	(0.21)	(0.18)	(0.27)	(0.17)	(0.14)	
Marginal q	0.13	1.57***	1.62***	2.06***	-0.47	0.00	1986-1992
	(0.85)	(0.41)	(0.41)	(0.45)	(0.41)	(0.00)	
	0.98	1.58***	1.85***	2.61***	0.08	0.01	1993-1997
	(0.74)	(0.09)	(0.06)	(0.21)	(0.05)	(0.11)	
	-0.13	-1.10***	-0.39	1.21***	0.30	0.00	1998-2001
	(1.10)	(0.37)	(0.36)	(0.41)	(0.34)	(0.02)	
	-2.33**	-1.64***	-1.64***	-0.69	-1.63***	0.10	2002-2007
	(1.12)	(0.51)	(0.51)	(0.52)	(0.50)	(0.06)	
Average q	-0.14	-2.80***	-2.39***	2.55***	-1.53***	0.02***	1986-1992
	(1.79)	(0.30)	(0.26)	(0.50)	(0.25)	(0.00)	
	-0.50	-3.27***	-1.82***	2.57***	-0.51**	0.07	1993-1997
	(1.41)	(0.31)	(0.27)	(0.46)	(0.26)	(0.13)	
	1.15	-0.15	-0.65***	3.66***	-0.83***	-0.33	1998-2001
	(2.27)	(0.26)	(0.19)	(0.40)	(0.16)	(0.02)	
	-2.77	0.23	-1.04***	2.75***	-1.41***	-0.10	2002-2007
	(1.71)	(0.25)	(0.19)	(0.29)	(0.18)	(0.09)	

Note: *** denotes significant at 1% level, ** at 5% level, and * at 10% level, respectively.

Table 3. Estimation results (1)

Dependent Variables	Gov.	Financial	Non-financial	Foreign	Individual	Debt ratio	Affirmative	Dissentient	Unexercised	Period
TFP growth	8.02	4.37***	-0.79	1.92***	3.39***	3.11	1.45**	1.13*		2004-2007
	(47.49)	(0.92)	(1.69)	(0.71)	(0.71)	(4.20)	(0.65)	(0.65)		
	4.31	3.42***	-1.60	0.95*	3.35***	-4.50			-0.72	2004-2007
	(51.88)	(0.72)	(3.36)	(0.58)	(0.70)	(4.60)			(1.08)	
Profit ratio	-3.84	1.14***	-1.62**	0.48**	0.39	2.39	0.39	0.35		2004-2007
	(10.57)	(0.43)	(0.81)	(0.23)	(0.32)	(2.35)	(0.38)	(0.38)		
	-4.40	0.58***	-1.97*	0.01	0.08	0.97			-0.04	2004-2007
	(10.41)	(0.21)	(1.08)	(0.15)	(0.24)	(1.91)			(0.52)	
Marginal q	76.89	15.98	-13.09	9.98	8.10	-76.02	-9.24	-9.67		2004-2007
	(121.41)	(12.98)	(21.66)	(12.94)	(13.68)	(61.80)	(12.77)	(12.80)		
	64.79	14.34	-17.22	8.15	7.03	-80.05*			-1.82	2004-2007
	(116.97)	(23.41)	(25.19)	(22.93)	(22.83)	(41.51)			(22.51)	
Average q	197.66	39.23	109.87*	51.81	52.45	-286.99*	-45.46	-38.27		2004-2007
	(343.58)	(38.39)	(58.42)	(37.83)	(41.15)	(169.46)	(37.84)	(38.25)		
	180.36	-5.98	67.52	8.70	3.12	-212.07			126.76	2004-2007
	(356.32)	(10.75)	(43.99)	(6.47)	(13.15)	(129.29)			(382.60)	

Note: *** denotes significant at 1% level, ** at 5% level, and * at 10% level, respectively.

Table 4. Estimation results (2)

	Affirmative (%)		Dissentient (%)	
	FY2007	FY2006	FY2007	FY2006
Proposal for disposal of profit for the year	31.8	27.6	5.5	2.5
Change of Articles of Incorporation	24.2	20.6	11.2	7.8
Election of directors (internal)	31.2	25.4	8.1	6.4
Election of directors (external)	26.9	28.3	16.8	8.0
Election of company auditors (internal)	30.2	25.4	12.6	6.7
Election of company auditors (external)	14.3	16.0	24.4	16.6
Granting of Retirement Gratuities	15.1	8.1	17.4	24.8
Change of executive compensation	37.6	31.8	6.4	8.2
Stock repurchases	46.4	31.3	14.3	15.6
Issuance of stock option	18.9	9.7	22.9	28.3
Decrease in legal reserve	18.2	11.0	9.1	7.7
Election of accounting auditors	17.6	21.6	0.0	4.4
Anti-takeover protection	0.7	4.3	61.7	54.1
Executive compensation	42.7	33.6	8.3	7.4
Rights plan	0.0	0.0	0.0	0.0
Shareholders' proposal	10.7	8.8	39.3	47.1
Other proposal	30.3	26.7	4.0	6.7

Table 5. Votes for proposal submitted to shareholder meetings

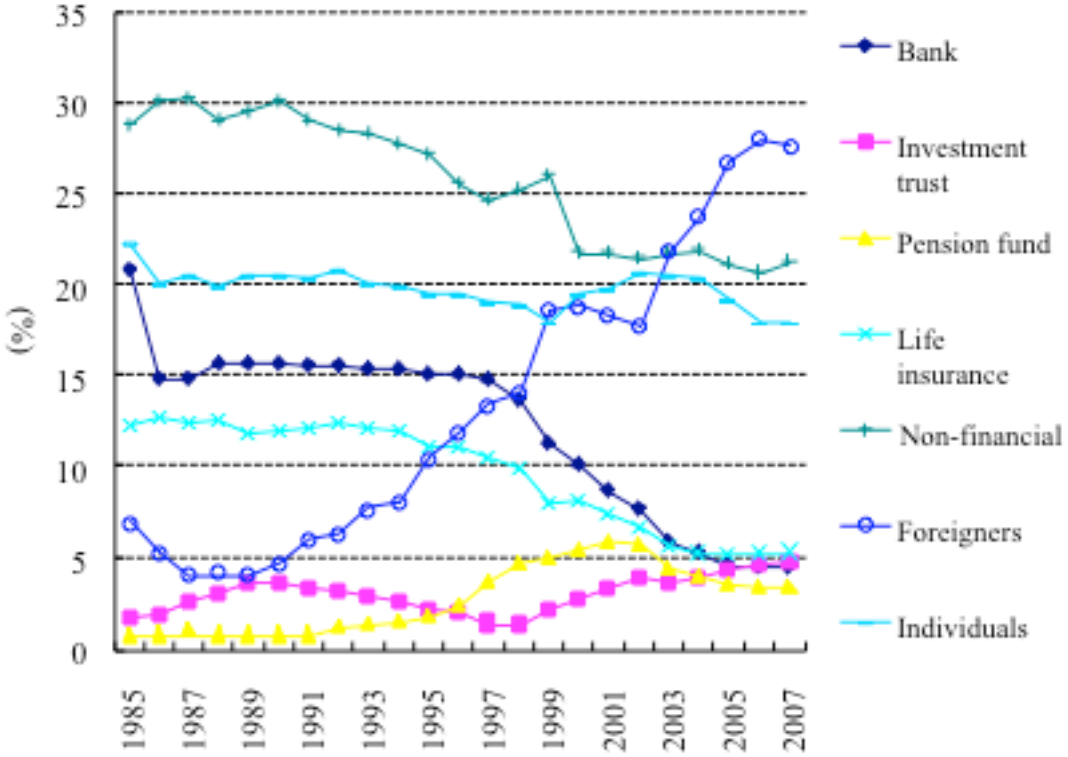

Figure 1. Stock ownership shares by investor type
(Tokyo Stock Exchange)

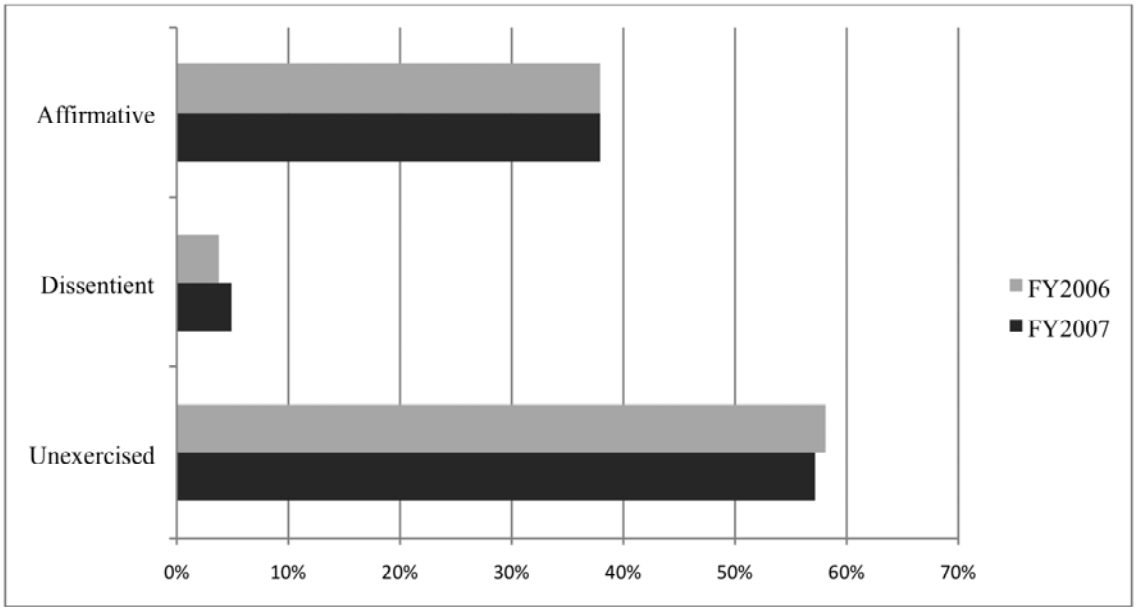

Figure 2-1. Foreign investors' votes, all sample mean (N=1,964 and 2,380)

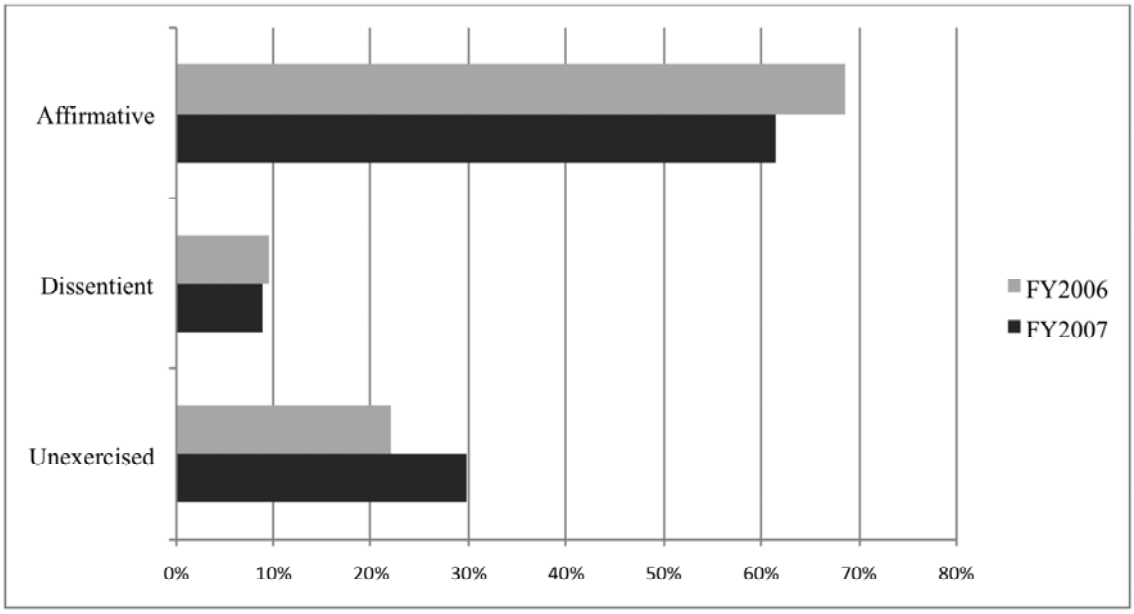

Figure 2-2. Foreign investors' votes, limited sample mean (N=18 and 26)
(Firms that more than 50% of stocks are owned by foreign investors)