

RESEARCH NOTES AND COMMENTARIES

STRATEGIC INVESTMENTS IN JAPANESE CORPORATIONS: DO FOREIGN PORTFOLIO OWNERS FOSTER UNDERINVESTMENT OR APPROPRIATE INVESTMENT?

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This paper investigates the effect of foreign ownership on strategic investments in Japanese corporations. Foreign owners are typically portfolio investors who frequently buy and sell shares and hold diversified portfolios of small stakes in many firms. Prior research has presented two conflicting perspectives on the role of such investors: (a) their frequent trading leads to pressure for short-term returns that fosters underinvestment; (b) their active trading fosters appropriate investments. We investigated the relationship between foreign ownership and strategic investments using dynamic panel data analysis of a sample of 146 Japanese manufacturing firms from 1991 to 1997. We found that foreign ownership enhances strategic investments (in R&D and capital intensity) to a greater extent when firms have growth opportunities than when they lack such opportunities. We conclude that foreign ownership fosters appropriate investment. Copyright © 2006 John Wiley & Sons, Ltd.

The 1990s marked a steep rise in global portfolio ownership, wherein foreign owners, typically institutional investors from the United States and United Kingdom invested in equities all over the world (Useem, 1998). Foreign portfolio investors usually have a large asset base, hold diversified portfolios of small stakes in many firms, and frequently buy and sell shares (Davis and Steil, 2001). Ownership structure has implications for long-term strategic investments that are needed to build competencies and exploit growth opportunities to maximize long-term profitability (Kochhar

and David, 1995). Prior research has presented two conflicting perspectives on the role of such investors: (a) their frequent trading leads to pressure for short-term returns that fosters underinvestment (Porter, 1992); (b) their active trading fosters appropriate investments (Allen, 1993). We test these competing perspectives by examining the effect of foreign ownership on two types of strategic investments—R&D and capital intensity—in Japanese corporations.

FOREIGN OWNERSHIP IN JAPANESE CORPORATIONS

Lee and O'Neill (2003) provide an overview of ownership structures and their effects on R&D

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investments in Japanese corporations. About half the equity stakes of Japanese corporations is held by stable domestic owners such as banks, insurance companies, and other corporations, often reciprocally. Stable owners do not frequently buy and sell shares for short-term gains, but implicitly commit to hold a majority of their shares long term. Many Japanese corporations are organized into business groups termed *keiretsus*, with a main bank which is both a major lender and owner. The web of long-term relationships between stable owners, main banks, and *keiretsu* partners provides monitoring while protecting managers from hostile takeover. Lee and O'Neill (2003) conclude that large block owners foster appropriate R&D investment. Their study, however, was confined to large block domestic owners, leaving the effects of foreign owners unexplored.

Globalization of equity ownership by institutional investors in the United States and United Kingdom, economic liberalization easing restrictions on foreign ownership of Japanese equities, and cheaper equity prices fueled a surge in foreign ownership in Japanese corporations (Nitta, 2000) from 5 percent in 1990 to over 13 percent in 1997 (Tokyo Stock Exchange, 2002). Although their aggregate ownership is high, foreign owners typically hold small blocks of shares. Out of a total of 2376 firms listed in the Nikkei Corporate Data Book in 1997, foreign owners were listed as major shareholders in only 36 firms. Aggregate ownership (Association of Japanese Stock Exchanges, 2002) and trading data (Tokyo Stock Exchange, 2002) for 1997 indicate that foreign owners held 13 percent of shares by market value but accounted for 23 percent of stock transactions; in contrast, stable owners such as corporations and insurance companies held 25 and 14 percent of equity, but accounted for just 3 and 2 percent of stock transactions, respectively. These data support the view that foreign investors own relatively small stakes and trade their shares frequently (Davis and Steil, 2001). For foreign owners, ownership of small stakes in multiple companies across the world reduces risk through diversification, and provides liquidity, i.e., the ability to easily exit their holdings (Tesar and Werner, 1992). In Japanese corporations, foreign investors tend to be predominantly institutional investors from the United States and United Kingdom; in 1997 investors from the United States and United Kingdom held 32 percent and 39 percent of total foreign

shares respectively (Bank of Japan, 2004). Foreign owners are profit-driven market investors and lack the close ties with firms enjoyed by stable domestic owners (Aguilera and Jackson, 2003; Charkham, 1994).

Prior research on the effects of portfolio owners on strategic investments has generally studied institutional investors in the United States. Empirical studies find that aggregate institutional ownership is positively associated with R&D (Baysinger, Kosnik, and Turk, 1991; Bushee, 1998; Wahal and McConnell, 2000) but ownership by investment funds that trade more frequently is negatively associated both with R&D (Bushee, 1998; Hoskisson *et al.*, 2002), and corporate entrepreneurship (Zahra, 1996). In the United States, institutional investors can exert pressure through activism and by selling off their shares. Mass sell-offs can negatively impact stock prices, raise the cost of capital, and enhance the likelihood of a hostile takeover (Porter, 1992). Parrino, Sias, and Stark (2003) provide direct evidence that sell-offs by investors has adverse consequences for managers including dismissal, as boards of directors act to retain investors.

Foreign portfolio owners in Japan share investment characteristics similar to the U.S. institutional investors studied in prior research: they have high aggregate ownership but low individual stakes and trade frequently. A first step is to understand the multiple ways in which foreign owners can affect the decisions and actions of Japanese corporations. In Japan, unlike the United States, hostile takeovers are rare because of a variety of social and institutional constraints (Hoshi and Kashyap, 2001). Nevertheless, the threat of sell-offs by foreign owners can provide influence.

First, failure to satisfy foreign owners can increase the cost of capital. Ownership signals information about the level of information asymmetry and managerial opportunism, both of which affect the default risk and cost of debt capital (Bhojraj and Sengupta, 2003). Their high frequency of trading increases stock liquidity, thus helping to reduce information asymmetry and the cost of capital (Brennan and Tamarowski, 2000). Their presence indicates confidence that the firm is well managed, while sell-offs can signal the possibility of managerial opportunism and poor management, thus increasing the likely threat of default and raising the cost of debt capital. Prior research has shown that ownership by institutional

owners reduces the cost of debt capital in U.S. corporations (Bhojraj and Sengupta, 2003). Similarly, market liberalization to ease restrictions on foreign purchase of equities in emerging markets leads to lower cost of capital (Henry, 2000). Appeasing foreign owners is important in raising new capital because a major source of new funding is bond issues, especially from foreign sources (Hoshi and Kashyap, 2001). Thus, failure to retain foreign owners may result in an increased cost of capital and constrain managerial discretion.

Second, during the economic downturn in the 1990s, foreign owners helped buy shares from stable domestic owners that needed to exit their holdings (Dvorak *et al.*, 2001). After decades of economic prosperity, the economic bubble burst in 1991, and the ensuing collapse of stock and land prices ushered a long period of economic stagnation and low annual growth rates of only 1.7 percent between 1992 and 1997 (Economic and Social Research Institute, 2002). Low economic growth reduced business opportunities, hurt stock and land prices, and ultimately the proclivity of stable owners to maintain their long-term stakes (Dvorak *et al.*, 2001). Several stable domestic owners were compelled to reduce their shareholdings in affiliated firms so that cash from stock sales could be used to offset losses. During the economic downturn, ownership by corporations and insurance companies dropped from 46 percent in 1990 to 39 percent in 1997 and foreign owners stepped in to fill the breach, increasing their ownership from 5 percent to 13 percent from 1990 to 1997, thus helping stable domestic owners to cash out (Association of Japanese Stock Exchanges, 2002).

Finally, failure to retain foreign owners may affect managerial incentives. As a majority of shares are held by stable owners who seldom trade their shares, the active trading by foreign owners can significantly affect stock price despite their relatively small holdings. Foreign owners often demonstrate herding behavior (Kamesaka, Nofsinger, and Kawakita, 2002) and dissatisfaction with individual firms can have a snowballing effect that causes significant drops in stock prices in individual firms. Although the absence of a market for corporate control protects managers from the threat of takeover, research has shown that managers in Japanese corporations are just as likely as U.S. managers to get pay cuts or lose their jobs on

account of poor stock performance (Kaplan, 1994). Managers are therefore likely to be responsive to foreign owners in order to maintain share prices and avoid pay cuts and job loss.

These arguments suggest that managers in Japanese corporations need to be responsive to foreign owners. Japanese firms have, in fact, stepped up investor relations efforts to attract foreign investors (Yoshikawa and Gedajlovic, 2002). Empirical research also provides some evidence that foreign owners do matter and affect corporate outcomes such as firm performance (Yoshikawa and Phan, 2003), layoffs (Ahmadjian and Robinson, 2001), and wages (Yoshikawa, Phan, and David, 2005). We argue that share ownership and trading by foreign owners (in the stock market) affect resource allocation in strategic investments (in the firm) and present two conflicting views on the effect of foreign owners on strategic investments.

Foreign owners foster *underinvestment*

Porter (1992) argues that frequent trading by portfolio investors imposes pressure for short-term returns and causes underinvestment in long-term strategic investments, leading to lower firm value. Froot, Scharfstein, and Stein (1992) explain that portfolio investors benefit primarily from near-term changes in stock price and therefore trade on information that is likely to be quickly reflected in the stock price. The presence of multiple foreign owners seeking short-term returns can cause herding on short-term indicators that are unrelated to long-term economic fundamentals, pressuring managers to pay undue attention to short-term indicators in a bid to retain foreign ownership. For example, foreign owners may rush to sell if short-term earnings shortfalls are interpreted as indicative of potential problems. Managers are therefore pressured to cut back on strategic investments in order to pump up earnings so that investor concerns can be alleviated (Stein, 1989).

The potential for strategic investments to enhance value is higher when firms have growth opportunities than when they lack such opportunities. Thus, reduction in investment is more likely to be detrimental and constitute underinvestment when firms have growth opportunities than when they lack growth opportunities. Accordingly, foreign owners are likely to foster *underinvestment* when they reduce strategic investment to a greater

extent in firms with growth opportunities than in firms lacking growth opportunities.

Foreign owners foster appropriate investments

Allen (1993) develops a competing perspective, arguing that frequent trading by small block foreign owners, far from fostering underinvestment, may actually facilitate appropriate resource allocation. Allen argues that companies operating in today's hypercompetitive technological landscape with rapid technological change face uncertainty about the nature and level of appropriate strategic investments. All of the knowledge needed to make optimal resource allocations is not available to managers but is dispersed in the economy (Hayek, 1945). Accordingly, input from multiple parties is likely to be helpful in determining the appropriate level of long-term investments. Ownership by a large base of foreign portfolio investors provides multiple owners with the incentive to monitor managers (Allen, 1993).

Although managers have more information than any single investor, the stock market as a whole can provide a superior mechanism for aggregating the dispersed knowledge needed for resource allocation (Grossman, 1995). The stock market provides incentives to investors to acquire knowledge, and by acting on the knowledge acquired, to disseminate it to other market participants. The stock prices of firms will come to reflect this aggregated consensus of knowledge and firms that fail to use this information in their investment decisions are likely to see their stock values decline. According to Dow and Gorton (1997), stock trading can have both a 'retrospective' and a 'prospective' role. The prospective role of the stock market arises because of the aggregation of information that permits stock prices to provide knowledge on appropriate resource allocation. The retrospective role arises from the ability of stock trading to influence managers. If managers fail to respond to the signals sent through trading behavior, foreign owners can sell off their shares, and if managers want to retain foreign owners, they are likely to make appropriate strategic investments. We have noted that the potential for value enhancement from additional investment is higher when firms have growth opportunities than when they lack such opportunities. Accordingly, foreign owners are likely to foster *appropriate investment* when they enhance strategic investments to a greater extent in firms

with growth opportunities than in firms lacking growth opportunities.

Competing hypotheses on strategic investments

Prior research provides ambiguous guidance about interpreting direct associations between ownership and strategic investment. Some studies assume that additional investments are invariably desirable: positive associations between ownership and investment are interpreted as evidence of appropriate investment, while negative associations are interpreted as underinvestment (Baysinger *et al.*, 1991; Bushee, 1998; Graves, 1988; Wahal and McConnell, 2000). By contrast, studies using a restructuring perspective assert that agency problems can lead to overinvestment by managers that can be checked by vigilant owners through restructuring: a negative association between ownership and investment is viewed as appropriate fostering of restructuring, while positive associations are viewed unfavorably as fostering overinvestment (Bethel and Liebeskind, 1993). Interpreting direct associations between ownership and investment presents a serious challenge because the implication of direct associations depends on assumptions as to whether or not additional investments are desirable. In practice, additional investment is not always desirable, but is appropriate only when firms have the potential to benefit from such investment; determining whether additional investment represents appropriate investment requires a means to identify the desirability of additional investment.

Tobin (1969) proposed the ratio of market value of capital to replacement value, termed Q , as a measure of the desirability of additional investment. Additional capital investments are desirable when market value exceeds the replacement cost of capital ($Q > 1$) because this indicates the availability of external opportunities wherein internal capabilities can be leveraged such that investments generate greater returns than their cost. When Q exceeds 1, each additional dollar of capital investment has the potential to raise market value by more than a dollar. Additional strategic investments are appropriate because the market value created from such investments is likely to exceed their cost. Conversely, when Q is less than 1, each additional dollar invested is likely to yield less than a dollar in market value, and additional investments become undesirable. Thus, benefits from additional strategic investments are likely to

be greater for firms that have growth opportunity ($Q > 1$) than for those that lack them ($Q \leq 1$).

The Q measure of growth opportunities has several advantages. First, it is an *ex ante* measure derived from forward-looking stock market expectations about the future, rather than an *ex post* measure of past growth. Second, it gauges growth opportunities for the firm by combining both external factors such as industry attractiveness, and internal capabilities by which these external opportunities can be exploited. Finally, Q has been used as a measure of growth opportunities in prior governance research (David, Hitt, and Gimeno, 2001; Lang, Ofek, and Stulz, 1996). In these studies, the use of Q as a moderating variable helps avoid the pitfalls arising from examining direct effects between ownership and investment. For example, David *et al.* (2001) show that investor activism results in increased R&D in high- Q firms and conclude that activist institutions facilitate appropriate investment by increasing R&D when such investments are desirable. Similarly, Lang *et al.* (1996) find that debt reduces capital investments in low- Q firms and conclude that debt facilitates appropriate investment by reducing capital investment when they are not desirable.

We adopt a similar approach. Strategic investments are more beneficial when firms have the potential to benefit from such investment, i.e., when firms have growth opportunities than when growth opportunities are unavailable. Accordingly, appropriate investment implies higher strategic investments when firms have growth opportunities than when they lack growth opportunities, while underinvestment implies lower strategic investment when firms have growth opportunities than when firms lack growth opportunities. If foreign owners foster appropriate investment, then they should encourage strategic investments to a greater extent when growth opportunities are present than when growth opportunities are absent. Conversely, if foreign owners foster underinvestment, they should reduce strategic investments to a greater extent when growth opportunities are present than when growth opportunities are absent.

Hypothesis 1. Foreign ownership is more negatively associated with strategic investments in the presence of growth opportunities than in their absence (underinvestment).

Hypothesis 2. Foreign ownership is more positively associated with strategic investments in the presence of growth opportunities than in their absence (appropriate investment).

Sample

The sample was chosen from the 200 largest industrial firms in Japan measured by sales in 1987. Several firms were dropped as they did not meet various criteria established for inclusion: four were privately held, 19 were not listed for part of the period studied, 12 changed their fiscal year-ends during the sampling period and therefore did not consistently report annual financial data over time, three were not listed in sources that provided data on some of the variables, one was in the quasi-government sector, and eight were outside the manufacturing sector that is the focus of our study. Also, as our theory is developed for small block portfolio owners, we carefully screened the names of major shareholders indicated in the *Japan Company Handbook* and eliminated eight firms with large block strategic foreign owners. Finally, we were left with 146 firms observed over 7 years from 1991 to 1997.

Variables

The dependent variable, strategic investments, was computed as R&D intensity (R&D expense to sales) and capital intensity (capital expense to sales). Foreign ownership, the independent variable, is the percent shares held by foreign investors obtained from the *Japan Company Handbook*. Growth opportunity is a dummy variable with value 1 when Q exceeds 1 and 0 otherwise. Q is computed as the ratio of market value (sum of market value of equity, book value of preferred stock, and book value of debt) to total assets (Chung and Pruitt, 1994). Several control variables that affect strategic investments were also included: cash flow (Fazzari, Hubbard, and Peterson, 1988), major domestic owners (Lee and O'Neill, 2003), return on assets (Hundley, Jacobson, and Park, 1996), debt to total assets (Lang *et al.*, 1996), and firm size. Cash flow is computed as sales less cost of goods sold, selling, general, and administrative expenditure, taxes, interest, and dividend paid as a ratio of total assets (Fazzari *et al.*, 1988). Firm size was computed as log of sales. Major domestic ownership was the proportion of shares

held by major Japanese financial and nonfinancial companies obtained from the *Japan Company Handbook* (Lee and O'Neill, 2003). All financial data were obtained from Worldscope.

Analysis

The Arellano–Bond method, a statistical technique designed for analyzing autoregressive-distributed lag models from panels with many cross-sectional units observed for relatively few time periods via General Method of Moments (GMM) estimates, has several advantages (Arellano, 2003). First, it controls for lagged values of the dependent variable as strategic investments are likely influenced by prior levels. Second, panel data analysis accounts for fixed effects from firm-specific heterogeneity that is constant over time, arising, for example, from differences in firm-specific investment practices. Unobserved firm-specific heterogeneity is eliminated by first-differencing, or subtracting the lagged values of regressors. Third, endogeneity issues that arise when explanatory variables are correlated with an error term are easily addressed by using lagged values of the regressors as instruments of the first-differenced regressors. Finally, GMM estimation provides improved estimates in the presence of the unknown heteroscedasticity and autocorrelation that often arise in dynamic panels.

Results

Summary statistics and tests of the competing hypotheses are reported in Tables 1 and 2, respectively. The positive and statistically significant

interaction effect of foreign ownership with growth opportunities on R&D and capital intensity indicates that foreign owners foster strategic investments to a greater extent when firms have growth opportunities than when firms lack growth opportunities. This result is consistent with Allen's view that foreign ownership fosters appropriate investment and counter to Porter's view that foreign ownership fosters underinvestment. We also plot separate regression equations for the two contexts—availability of growth opportunities and absence of such opportunities—in Figure 1 to provide a visual illustration of the effect of foreign ownership.

DISCUSSION AND CONCLUSION

We studied the effect of foreign ownership on strategic investments in Japanese corporations by developing and testing two competing perspectives. We found that foreign ownership is more positively associated with strategic investments for firms with growth opportunities than those lacking such opportunities. The relationship is robust across both types of strategic investments studied: R&D and capital intensity. Our results run counter to concerns expressed by some scholars (Porter, 1992) that owners that trade frequently pressure firms to underinvest by cutting back on strategic investments when they are desirable. On the contrary, our results support the view that foreign owners can foster appropriate strategic investments by increasing strategic investments when they are desirable (Allen, 1993).

Governance research tends to focus on the role of stable, large block owners that can monitor

Table 1. Descriptive statistics and correlations

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1 R&D intensity	3.46	2.30	0.02									
2 Capital intensity	7.38	5.50	0.02									
3 Industry R&D intensity	3.12	1.29	0.63	0.01								
4 Industry capital intensity	6.84	3.09	−0.01	0.56	0.04							
5 Cash flow	0.04	0.04	0.31	0.10	0.27	−0.08						
6 Debt to total assets	0.34	0.16	−0.23	−0.10	−0.11	−0.06	−0.25					
7 Log of sales	13.29	0.87	0.06	0.01	0.06	0.03	0.17	0.07				
8 ROA	2.89	2.09	0.08	0.37	−0.01	0.37	0.44	−0.30	−0.03			
9 Major domestic ownership	36.82	11.54	0.06	0.06	0.07	0.07	−0.16	−0.13	−0.32	−0.07		
10 Foreign ownership	7.60	5.99	0.25	−0.05	0.23	−0.30	0.51	−0.30	0.20	0.16	−0.33	
11 Tobin <i>Q</i> dummy	0.51	0.50	0.01	0.18	−0.07	0.17	0.18	−0.09	−0.23	0.36	−0.06	0.05

N = 1022 firm years (146 firms × 7 years, balanced panel)

Table 2. Results of panel data analysis of strategic investments

	Model 2 R&D intensity	Model 4 Capital intensity
R&D intensity	0.16***	
Capital intensity		0.12***
Industry R&D intensity	0.65***	
Industry Capital intensity		0.91***
Cash flow	-1.55***	-2.86
Debt to total assets	0.37**	10.21***
Log of sales	-0.48***	7.53***
ROA	-0.02***	0.26***
Major domestic ownership	-0.01***	0.07***
Foreign ownership	-0.01***	-0.15***
Tobin <i>Q</i> dummy	-0.11***	-0.09
Foreign ownership \times Tobin <i>Q</i> dummy	0.01***	0.11***
Wald χ^2	2781.31	1016.65

N = 1022 firm years (146 firms \times 7 years, balanced panel)

* $p < 0.050$; ** $p < 0.010$; *** $p < 0.001$

and gain direct influence in overseeing managers through ‘voice’ (Shleifer and Vishny, 1997). We find that foreign owners that hold diversified portfolios of small stakes in many firms and frequently buy and sell shares (‘exit’) can also have an important role in resource allocation. This result is consistent with a stream of macroeconomics research that has shown that factors that smooth the functioning of capital markets such as stock market liquidity that facilitate easy exit can lead to efficient resource allocation (see Levine, 1997, for a review). More research is needed to understand the role of ‘exit’ i.e., frequent buying and selling of shares by foreign owners, in releasing information, providing monitoring and their effects on resource allocation in strategic investments within firms.

R&D investments are likely to be more beneficial when firms have growth opportunities implying a positive association. Surprisingly, we found a negative association between growth opportunities and R&D investments, indicating that firms with growth opportunities have lower R&D investments than those that lack such opportunities. We infer that Japanese firms lacking growth opportunities may have overinvested in R&D. Although surprising, this result is consistent with considerable prior research on Japanese corporations. Japanese managers are aggressive in their strategic investments (Lazonick, 2002). Their stakeholders—stable owners and main banks—encourage a long-term perspective (Yoshikawa *et al.*, 2005) to the extent of fostering overinvestment (Henderson

and Cool, 2003). They tend to value growth over profit (Abegglen and Stalk, 1985) and weight long-term returns more heavily in making strategic investments (Poterba and Summers, 1995). Japanese firms react to underperformance by increasing R&D (Hundley *et al.*, 1996), and persist in investing even when growth opportunities are lacking (Thomas and Waring, 1999). The prosperity of Japanese corporations during the 1980s provided them considerable free cash, as well as easy access to cheap debt financing, that has the potential to exacerbate overinvestment (Kester, 1991). Interestingly, the negative association between Tobin’s *Q* and R&D is not unique to our study; similar results are reported by Lu and Beamish (2004). More research is needed to study the strategic and governance aspects of possible overinvestment in Japanese corporations.

Interpreting direct effects of ownership on strategic investments (Baysinger *et al.*, 1991; Wahal and McConnell, 2000) depends on assumptions as to whether strategic investments are desirable. If Japanese firms have overinvested in R&D (as indicated by the negative association between growth opportunities and R&D), the negative association between foreign ownership and R&D suggests that foreign owners may be fostering cutbacks to align R&D investments with the firm’s growth opportunities. This result is consistent with recent findings that foreign owners reduce strategic investments in human capital by reducing wages (Yoshikawa *et al.*, 2005) and employees (Ahmadjian and Robinson, 2001). More research is needed

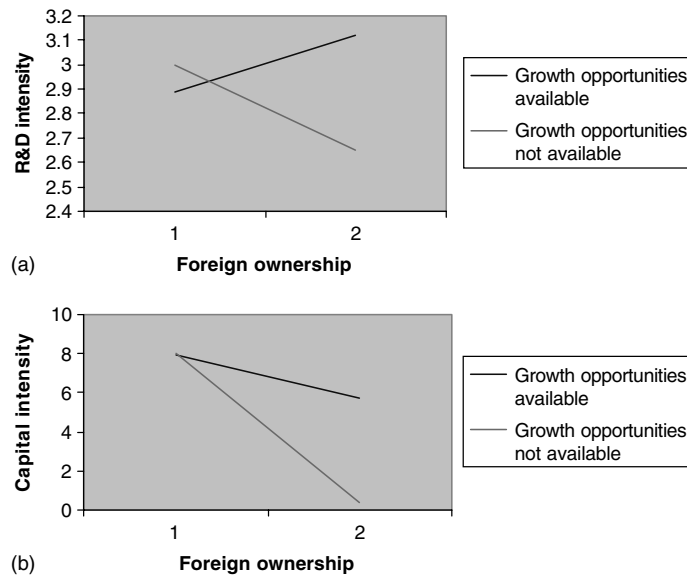


Figure 1. Relationship between strategic investment and foreign ownership

to evaluate if foreign owners can play a useful role in restructuring overinvestment in Japanese corporations.

In our study, we emphasize interaction effects—not main effects. Figure 1 illustrates that foreign ownership is positively associated with R&D investment when growth opportunities are available, and is negatively associated with R&D investment when growth opportunities are unavailable. It appears that foreign owners foster appropriate investment, enhancing R&D investments when growth opportunities enhance the likely benefits, and reducing R&D investments when the lack of growth opportunities threatens to limit the likely benefits. Interestingly, the pattern for capital intensity is somewhat different. We find, consistent with our hypotheses, that capital intensity is higher when growth opportunities are available than when they are absent. Nevertheless, the main effect of foreign ownership is to reduce capital intensity, presumably as a means to curtail overinvestment. Most of the prior research examining Porter's view has focused on R&D intensity; more research is needed to understand capital investments.

Recent ownership trends suggest that foreign owners are gaining importance all over the world (Useem, 1998). Our research suggests that these small block foreign owners have important implications for strategic investments by firms. This in turn has implications for global competitiveness and firm performance. Related research by

Aguilera and Cuervo-Cazurra (2004) finds that foreign ownership spurs adoption of global governance codes in a study of 49 countries, leading to increased convergence across national borders. More research on foreign ownership worldwide is likely to help us better understand ownership structures and their effects on governance, strategy, and performance.

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REFERENCES

- Abegglen J, Stalk G. 1985. *Kaisha: The Japanese corporation*. Basic Books: New York.
- Aguilera RV, Cuervo-Cazurra A. 2004. Codes of good governance worldwide: what is the trigger? *Organization Studies* **25**: 415–444.
- Aguilera RV, Jackson G. 2003. The cross-national diversity of corporate governance: dimensions and determinants. *Academy of Management Review* **28**: 447–465.
- Ahmadjian CL, Robinson P. 2001. Safety in numbers: downsizing and deinstitutionalization of permanent

- employment in Japan. *Administrative Science Quarterly* **46**: 622–654.
- Allen F. 1993. Strategic management and financial markets. *Strategic Management Journal*, Winter Special Issue **14**: 11–22.
- Arellano M. 2003. *Panel Data Econometrics*. Oxford University Press: Oxford.
- Association of Japanese Stock Exchanges. 2002. *Stock Distribution Research* (in Japanese).
- Bank of Japan. 2004. Financial and economic statistics (21 March 2004).
- Baysinger B, Kosnik R, Turk TA. 1991. Effect of board and ownership structure on corporate R&D strategy. *Academy of Management Journal* **34**: 205–214.
- Bethel JE, Liebeskind J. 1993. The effect of ownership structure on corporate restructuring. *Strategic Management Journal*, Summer Special Issue **14**: 15–31.
- Bhojraj S, Sengupta P. 2003. Effect of corporate governance on bond ratings and yields: the role of institutional investors and outside directors. *Journal of Business* **76**: 455–475.
- Brennan MJ, Tamarowski C. 2000. Investor relations, liquidity, and stock prices. *Journal of Applied Corporate Finance* **12**(4): 26–37.
- Bushee B. 1998. The influence of institutional investors on myopic R&D investment behavior. *Accounting Review* **73**: 305–333.
- Charkham J. 1994. *Keeping Good Companies: A Study of Corporate Governance in Five Countries*. Oxford University Press: Oxford.
- Chung KH, Pruitt SW. 1994. A simple approximation of Tobin's Q. *Financial Management* **23**(3): 70–74.
- David P, Hitt MA, Gimeno J. 2001. The influence of activism by institutional investors on R&D. *Academy of Management Journal* **44**: 144–157.
- Davis EP, Steil B. 2001. *Institutional Investments*. MIT Press: Cambridge, MA.
- Dow J, Gorton G. 1997. Stock market efficiency and economic efficiency: is there a connection? *Journal of Finance* **52**(3): 1087–1129.
- Dvorak P, Guth RA, Singer J, Zaun T. 2001. Loose ends: frayed by recession, Japan's corporate ties are coming unraveled. *Wall Street Journal*, Eastern edn A1.
- Economic and Social Research Institute. 2002. <http://www.esri.cao.go.jp/jp/sna/toukei.html> [24 October 2003].
- Fazzari S, Hubbard RG, Peterson BC. 1988. Financing constraints and corporate investments: comments and discussion. *Brookings Papers on Economic Activity* **1**: 141–206.
- Froot KA, Scharfstein DS, Stein JC. 1992. Herd on the street: informational inefficiencies in a market with short-term speculation. *Journal of Finance* **47**: 1461–1485.
- Graves SB. 1988. Institutional ownership and corporate R-and-D in the computer industry. *Academy of Management Journal* **31**(2): 417–428.
- Grossman SJ. 1995. Dynamic asset allocation and the informational efficiency of markets. *Journal of Finance* **50**: 773–789.
- Hayek FA. 1945. The use of knowledge in society. *American Economic Review* **35**: 519–530.
- Henderson J, Cool K. 2003. Corporate governance, investment bandwagons and overcapacity: an analysis of the worldwide petrochemical industry, 1975–95. *Strategic Management Journal* **24**(4): 349–373.
- Henry PB. 2000. Stock market liberalization, economic reform, and emerging market equity prices. *Journal of Finance* **55**: 529–564.
- Hoshi T, Kashyap A. 2001. *Corporate Financing and Governance in Japan*. MIT Press: Cambridge, MA.
- Hoskisson RE, Hitt MA, Johnson RA, Grossman W. 2002. Conflicting voices: the effects of institutional ownership heterogeneity and internal governance on corporate innovation strategies. *Academy of Management Journal* **45**: 697–716.
- Hundley G, Jacobson CK, Park SH. 1996. Effects of profitability and liquidity on R&D intensity: Japanese and U.S. companies compared. *Academy of Management Journal* **6**: 1659–1674.
- Kamesaka A, Nofsinger JR, Kawakita H. 2002. Investment patterns and performance of investor groups in Japan. *Pacific-Basin Finance Journal* **11**: 1–22.
- Kaplan SN. 1994. Top executive rewards and firm performance: a comparison of Japan and the United States. *Journal of Political Economy* **102**: 510–546.
- Kester WC. 1991. *Japanese Takeovers: The Global Contest for Corporate Control*. Harvard Business School Press: Boston, MA.
- Kochhar R, David P. 1995. Institutional investors and firm innovation: a test of competing hypotheses. *Strategic Management Journal* **17**(1): 73–84.
- Lang L, Ofek E, Stulz RM. 1996. Leverage, investment, and firm growth. *Journal of Financial Economics* **40**: 3–29.
- Lazonick W. 2002. The Japanese economy and corporate reform: what path to sustainable prosperity? In *Corporate Governance and Sustainable Prosperity*, Lazonick W, O'Sullivan M (eds). Palgrave: New York; 226–254.
- Lee PM, O'Neill HM. 2003. Ownership structures and R&D investments of U.S. and Japanese firms: agency and stewardship perspectives. *Academy of Management Journal* **46**: 212–225.
- Levine R. 1997. Financial development and economic growth: views and agenda. *Journal of Economic Literature* **35**: 688–726.
- Lu JW, Beamish PW. 2004. International diversification and firm performance: the S-curve hypothesis. *Academy of Management Journal* **47**: 598–609.
- Nitta K. 2000. Cross shareholdings and business management: an empirical analysis. *Security Analysts Journal* **38**(2): 72–93.
- Parrino R, Sias RW, Stark LT. 2003. Voting with their feet: institutional ownership changes around forced CEO turnover. *Journal of Financial Economics* **68**: 3–46.
- Porter ME. 1992. Capital disadvantage, America's failing capital investment system. *Harvard Business Review* **70**(5): 65–82.
- Poterba JM, Summers L. 1995. A CEO survey of companies' time horizons and hurdle rates. *Sloan Management Review* **37**(1): 43–53.

- Shleifer A, Vishny RW. 1997. A survey of corporate governance. *Journal of Finance* **52**: 737–783.
- Stein JC. 1989. Efficient capital markets, inefficient firms: a model of myopic corporate behavior. *Quarterly Journal of Economics* **104**: 655–670.
- Tesar LL, Werner IM. 1992. Home bias and the globalization of security markets. NBER Working Paper 4218; 1–52.
- Thomas LG, Waring G. 1999. Competing capitalism: capital investment in American, German, and Japanese firms. *Strategic Management Journal* **20**(8): 729–748.
- Tobin J. 1969. A general equilibrium approach to monetary theory. *Journal of Money, Credit and Banking* **1**: 15–29.
- Tokyo Stock Exchange. 2002. *Fact Book 2002*. Tokyo Stock Exchange: Tokyo.
- Useem M. 1998. Corporate leadership in a globalizing equity market. *Academy of Management Executive* **12**(4): 43–59.
- Wahal S, McConnell JJ. 2000. Do institutional investors exacerbate managerial myopia? *Journal of Corporate Finance* **6**: 307–329.
- Yoshikawa T, Gedajlovic ER. 2002. The impact of global capital market exposure and stable ownership on investor relations practices and performance of Japanese firms. *Asia Pacific Journal of Management* **19**: 525–540.
- Yoshikawa T, Phan PH. 2003. The performance implications of ownership driven governance reform. *European Management Journal* **21**: 698–706.
- Yoshikawa T, Phan PH, David P. 2005. The impact of ownership structure on wage intensity in Japanese corporations. *Journal of Management* **31**: 278–300.
- Zahra SA. 1996. Governance, ownership, and corporate entrepreneurship: the moderating impact of industry technological opportunities. *Academy of Management Journal* **39**: 1713–1735.