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Effect of Corporate Governance Structure on Change in Corporate Strategies

——An Analysis of Diversification Strategy——

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1. INTRODUCTION

Japanese companies have experienced extremely dynamic transformations in terms of both corporate strategy and corporate governance since the 1990s. In terms of corporate strategy, while increased diversification and globalization have made business portfolio more complex, the aggressive use of spin-offs and mergers and acquisitions (M&A) increased the number of consolidated subsidiaries, which in turn greatly expanded the size of group organizations. Subsequently, "choose and focus", the motto for promoting business portfolio restructuring, started to trend after the 1997 Asian financial crisis. Meanwhile, in terms of corporate governance, the presence of "activist" foreign shareholders and institutional investors increased while the presence of "reserved" cross-shareholders declined. In addition, reforms of the board of directors such as the introduction of the executive officer system and outside directors made significant progress. These changes in corporate governance structure result in increased pressure from capital markets and reinforced strategic decision-making and supervisory functions of the board of directors by separating management functions from operations and by including outsiders' viewpoints.

If so, how does the structure of corporate governance affect strategic decision-makings of corporate managers? In this paper, I will focus on the diversification strategy, a corporate strategy that mirrors strategic decision-makings of managers and is also related to "choose and focus." I do so because selecting the area of business is a company-wide issue dealing with determination of corporate domain, and the making or breaking of this decision is one of the most consequential issues for the entire company. In other words, it is a typical decision made by top management. The purpose of this paper is to clarify the mechanism of strategic change and the effect of corporate governance structure on this mechanism. Specifically, the following questions will be answered: Would a decline in corporate performance prompt a strategy review? How would the structure of corporate governance affect strategic change? Would a stable shareholder base, due to cross-shareholdings, mitigate the pressure to change strategy at the time of performance decline? Conversely, would "activist" shareholders such as foreign shareholders and institutional investors further increase the pressure to change the strategy at the time of performance decline? How about a large board of directors? Would their decision-making function become impaired and delay appropriate strategic change? Would top management reforms such as the introduction of the executive officer system and outside directors improve the strategic decision-making functions of the board of directors and help in

making appropriate strategic change?

This paper is organized as follows: Section 2 will describe the characteristics of this study while introducing relevant previous studies. Section 3 will present hypotheses on the effects of performance and governance factors on strategic change and explain the estimation model and variables to test those hypotheses. Section 4 will analyze determinants for companies to change their corporate strategies. Section 5 will specifically focus on the circumstances of poor corporate performance and re-examine the results of analysis from Section 4. The final section provides a summary.

2. RELEVANT STUDIES AND THE CHARACTERISTICS OF THIS STUDY

According to Rajagopalan and Spreitzer (1997), strategic change is defined as corporate changes over time in terms of the form, characteristics, and state of coordination with external environments. Therefore, the strategy inevitably changes when the states of the organization and external environments change. Situational changes such as the emergence of opportunities or threats in the external environment require the organization to re-adapt to the external environment. Likewise, when the organizational performance – which is determined by the degree of the organizational adaptation to the external environment – declines, it should drive exploration for a new environmental adaptation. However, as Rajagopalan and Spreitzer (1997) point out, the state of organization and changes in the external environment are not necessarily objective; they are understood subjectively based on managerial perception. Therefore, some organizations change their strategies while others do not see the need to do so, even in the face of the same environmental change. This paper also assumes that behind strategic change, there is a factor that can be described as "the current state as understood by decision-makers." In other words, the extent to which the management feels the need for strategic change during downturns in business depends on their perception. This paper, therefore, will consider a model in which the structure of corporate governance affects this financial pressure.

One piece of information worth noting is that Ginsberg (1988) regards changes in the line of business as strategic change. Empirical studies such as Boeker (1997), Sakano and Lewin (1999), and Yamanoi (2006) define strategic change as changes in the level of diversification – specifically, as changes in the entropy index, which is a representative diversification indicator. Hence, I will define strategic change as changes in the level of diversification in this paper as well. However, whereas previous studies have compared the level of diversification between two points in time, this study calculates the entropy index for all non-financial corporations listed on the first section of the Tokyo Stock Exchange over a period of 16 years from FY 1990 to FY 2005, and captures the change in the degree of diversification for each company, for each year.

With regards to diversification, the relationship between diversification pattern and performance of the organization has been analyzed since the time Rumelt (1974) and Yoshihara et al. (1981) conducted their pioneering studies. In more recent years, there have been many studies, such as Lins and Servaes (1999), Hiramoto (2002), and Hoechle et al. (2012) that demonstrated a firm value discount due to diversification, i.e., the fact that the firm value of diversified companies is lower than that of specialized companies engaged in one business(1). However, there are also studies such as Funaoka (2003) and Miyajima and Inagaki (2003) demonstrating that diversification spreads the risk and contributes to stabilize firm performance(2). Therefore, to determine whether diversification is good or bad depends on the situation, and it is difficult to make a normative judgment. This paper, which intends to examine the effect of corporate governance structures on strategic decisions made by the management, will focus on the changes in diversification, rather than the relationship between

diversification and performance. In other words, this paper will question whether an appropriate re-evaluation of the diversification strategy is taking place at the time of performance decline, rather than questioning the level, pattern, and purpose of diversification.

Studies such as Morikawa (1998) and Kikutani, Ito, and Hayashida (2005) analyzed restructuring of business portfolios from the perspective of withdrawal from existing businesses and expansion to new businesses(3). However, management decisions such as cutting down on resources allocated to unprofitable businesses or redirecting resources to promising businesses should normally precede the withdrawal or expansion. If so, how can we capture such a change in the weight of business resource allocation? In this paper, I will draw attention to the fact that changes in the weight of business resource allocation are reflected primarily in the sales of each business area and then in the change in entropy index based on calculations of the sales ratio in each business area. In other words, the mechanism of diversification strategy change is analyzed using continuous quantitative changes in the entropy index rather than the qualitative data of expansion or withdrawal.

The effects that the structures of corporate governance have on aspects such as investment behavior and employment policy have been analyzed in recent years(4). However, this study is characterized by the fact that it explicitly deals with the effect that the structure of corporate governance has on corporate strategy in particular (i.e., the mechanism in which diversification strategy is changed) among all management behaviors.

3. METHODS

3-1. Hypotheses

3-1-1. Effect of performance factors on strategic change

Whether the mechanism to prompt an appropriate strategic change is functioning when organizational performance declines is an important factor in determining the effectiveness of the disciplinary mechanism of corporate governance. Previous studies have also deemed that the disciplinary mechanism of corporate governance works effectively if the probability to send in outside directors or replace the top management increases systematically as firm performance declines. For example, Kaplan and Minton (1994) demonstrated that a decline in firm performance increases the probability to send in outside directors and then increases the probability to replace the top management afterwards. Kang and Shivdasani (1995) also demonstrated that a decline in firm performance increases the probability of forced turnover of the management(5). In a study that focused on where new presidents come from, Miyajima (1998) showed that a decline in firm performance increased the probability that the president was replaced by someone from outside the company, demonstrating the existence of disciplining by external parties or "contingent governance"(6). In addition, Miyajima and Aoki (2002) demonstrated that replacement by an insider in response to performance decline began occurring after the 1990s, and they also discussed the possibility of autonomous corporate governance. As described, firm performance is a central factor in previous studies as well, and it appears that organizational inefficiency increases certain kinds of pressure for reform(7).

Hypothesis 1: The extent of strategic change increases as firm performance declines.

3-1-2. Effect of governance factors on strategic change

Top management, which is the principal decision-making entity of a company, naturally has a

major impact on strategic change. Based on negative views regarding the traditional Japanese-style board of directors, such as "a large board of directors is slow to make decisions because it takes time to coordinate everyone's interests" and "it is becoming a mere façade since no substantial discussion takes place", the size of the board of directors is expected to have a negative effect on strategic change. In fact, previous studies such as Yermack (1996) and Saito (2002) that have examined the relationship between the number of directors and firm performance have reported that firm performance declines as the number of directors increases. However, there has been significant progress since the late 1990s in introducing outside directors as well as streamlining the boards of directors based on introduction of the executive officer system. These top management reforms were intended to address issues with traditional Japanese-style boards of directors, such as their large size, insiders holding certain advantages, and the non-separation of management and operations. In other words, it aimed to enhance the functions for strategic decision-making and monitoring.

Hypothesis 2: The degree of strategic change at the time of performance decline increases as the board of directors becomes smaller, the executive officer system is adopted, and the percentage of outside directors rises.

The major changes in the ownership structure of Japanese companies after the 1990s include a decline in the percentage of cross-shareholders and an increased presence of institutional investors, including foreign shareholders. The implication of cross-shareholdings on corporate strategy is that it allowed the formulation of long-term strategies by preventing a hostile takeover and relieving the pressure from capital markets. Meanwhile, it has been considered that the disciplining pressure that cross-shareholders exert on management is weak, even when firm performance is sluggish, because cross-shareholders are stable shareholders who do not voice their demand or exit by selling the shares. On the other hand, the implication of activist shareholders on corporate strategy is that they increase the pressure to improve the firm value and performance. These are shareholders who speak up for the sake of maximizing return on investment and are actively engaging in corporate management through means such as exercising their voting rights(8). In fact, many studies have demonstrated that the presence of foreign shareholders positively affects firm performance, such as Tobin's q and total factor productivity (TFP)(9). In addition, Miyajima and Nitta (2011) demonstrated that foreign shareholders have the effect of improving firm performance even when the causal relationship characterized by the statement that "foreign shareholders deliberately chose high-performing companies as their investment" is taken into consideration.

Hypothesis 3: The degree of strategic change at times of low performance declines as the percentage of cross-shareholders increases. On the other hand, the degree of strategic change at the time of low performance increases as the percentage of foreign shareholders and institutional investors increases.

3-2. Sample, Estimation Model and Variables

In order to test these hypotheses, this study uses unbalanced panel data (consolidated basis) on the sample population of non-financial companies listed in the first section of the Tokyo Stock Exchange from FY 1990 to FY 2005. Since changes in diversification are treated as strategic change, delisted companies were included in the sample while they were listed. This is because delisting is closely related to strategic decisions, such as the withdrawal and sale of businesses, and excluding delisted companies from the sample could underestimate strategic change toward specialization(10).

In order to examine the effects that performance factors and governance factors have on strategic

change, the following models are estimated using the panel data:

$$SC_{it} = f\left[Pef_{it}, CV_{it}\right] \tag{1}$$

$$SC_{it} = f\left[Pef_{it}, Gov_{it}, Pef_{it} * Gov_{it}, CV_{it}\right] \tag{2}$$

The subscripts i and t in the estimation equations represent the company and the fiscal year, respectively. The dependent variable *SC*, which represents the degree of strategic change, uses the absolute value of the difference in the entropy indices between FY t and FY $t+1$[(11)]. It is necessary to specify the line of business in order to calculate the entropy index. However, since the line of business under the segment information is categorized at the discretion of the company, it must be redefined based on objective criteria. Therefore, I have identified each company's line of business based on the Japan Standard Industrial Classification's three- and two-digit codes. Furthermore, I have consolidated and summed up the sales by the divisions under the same code, and I have prepared the entropy index. When the difference in the entropy indices is positive, it signifies diversification. When the difference is negative, it signifies specialization. However, it is difficult to judge beforehand which is better because companies react differently when performance declines. For example, some companies move toward specialization, such as scaling down the unprofitable division or withdrawing from the existing business, while other companies move toward diversification by expanding to a new business in search of a new revenue source. Therefore, in this paper, I have used the absolute value of the difference between entropy indices to capture the degree of strategic change. It must be noted that the degree of related diversification was defined by the entropy index based on the three-digit Japan Standard Industrial Classification, while the degree of unrelated diversification is defined by the two-digit Japan Standard Industrial Classification, as done by Hiramoto (2002).

The independent variable *Pef* represents firm performance. Specifically, I have used return on assets (ROA), which represents asset efficiency and the growth rate of the core business. As a note, outliers for ROA were eliminated using the cut-off of ± 3 standard deviation per fiscal year. It was then further standardized by taking the industry average (based on the two-digit Japan Standard Industrial Classification for each fiscal year) in order to verify the effect of performance on strategic change when compared to other companies in the same business. The growth rate of core business refers to the rate of change in the division with the highest sales based on the two-digit Japan Standard Industrial Classification from FY $t-1$ to FY t. When there was a change in the core business, the rate of change was calculated by capturing the FY $t-1$ sales of the division that had the highest sales in FY t. *Gov* is the corporate governance variable. As internal governance factors, the number of directors, a dummy variable indicating the introduction of the executive officer system, and the proportion of outside directors were used. As for external governance factors, the percentages of foreign shareholders, institutional investors[(12)], and cross-shareholders were used. *Pef* Gov* is an interaction term between firm performance and corporate governance variables that will confirm the moderating effect of the governance factor.

CV is the control variable. First of all, the tenure of the president was included in order to control the characteristics of who is the ultimate decision-maker when it comes to strategic change. Tenure can be considered as a proxy variable for strength of power and leadership. For example, the president might be aggressive in making strategic change immediately after taking over the position in order to show off his boldness. Conversely, there is a possibility that a drastic strategy change cannot be made unless the president has been in the position for a long time, since strong leadership is necessary to change this particular strategy. In any case, the attributes of the president will be

controlled, since they could have some kind of effect on strategic change[13]. In addition, since the complexity of the business structure and bloated group organization could impact strategic change, the degree of diversification, the number of consolidated subsidiaries, and the natural log of consolidated assets were also used as control variables. Furthermore, in order to control the effect of macro-economic shock during each fiscal year, a fiscal year dummy was included. Thus, the above models explain strategic change from the period t to the following period $t + 1$ by using the level of performance and corporate governance characteristics in the period t while controlling for the following characteristics: characteristics of the president, the prior levels of diversification and grouping, company size, and the economic impact during each fiscal year, ensuring temporal consistency when estimating the causal relationship.

The segment data necessary for preparing the diversification index, financial data necessary for preparing the performance variables, and data such as ownership structure necessary for preparing the governance variables were obtained from Nikkei NEEDS. Data on cross-shareholdings and data on the board of directors were obtained from NLI Research Institute's *Kabushiki Mochiai Jōkyō Chōsa Kiso Dēta (Basic Survey Data on the State of Cross-Shareholdings)* and Toyo Keizai's *Yakuin Shikiho (The Corporate Executive Handbook)*, respectively.

From the viewpoint of corporate strategy, business portfolio restructuring under the motto "choose and focus" activated since the 1997 Asian financial crisis. In terms of corporate governance, the presence of foreign shareholders increased while cross-shareholdings were further eliminated and the board of directors' reforms, such as the introduction of the executive officer system and outside directors, made progress. These facts imply that the explained event (strategic change) and explanatory event (corporate governance structure) have each changed considerably since 1997. Therefore, I will estimate the aforementioned models by dividing the period into the first half (FY 1990 to FY 1997), which includes the recession after the collapse of the bubble economy, and the second half (FY 1998 to FY 2005), which includes the recession after the Asian financial crisis and checks the changes in the determinants of strategic change. In fact, Table 1, which summarizes the basic statistics, shows that there are significant differences in the means of each variable between the first and second halves.

Table 1 Basic Statistics

	1990-1997					1998-2005					Mean difference	
	N	Mean	SD	Min.	Max.	N	Mean	SD	Min.	Max.	t-value	
Degree of change in related diversification strategy	6,194	0.047	0.115	0.000	2.052	6,897	0.051	0.099	0.000	1.670	2.015	**
Degree of change in unrelated diversification strategy	6,192	0.041	0.095	0.000	1.495	6,897	0.047	0.095	0.000	1.256	3.425	***
ROA	9,102	0.035	0.039	-0.122	0.208	12,135	0.046	0.045	-0.124	0.209	19.051	***
Standardized ROA	9,102	0.000	0.036	-0.166	0.166	12,135	0.000	0.042	-0.182	0.180	0.000	
Core business growth rate	5,387	0.041	0.347	-0.806	11.072	7,809	0.054	0.443	-0.873	19.273	1.829	*
Tenure of the president	7,752	6.097	7.819	0.000	53.000	11,270	5.990	7.998	0.000	52.000	-0.918	
Degree of related diversification	6,346	0.659	0.388	0.000	2.096	8,149	0.670	0.410	0.000	2.151	1.697	*
Degree of unrelated diversification	6,345	0.544	0.375	0.000	1.809	8,149	0.563	0.392	0.000	1.864	2.889	***
Number of consolidated subsidiaries	9,159	19.530	55.812	1.000	1,142.000	12,331	26.642	63.285	1.000	1,112.000	8.562	***
Consolidated assets (log)	9,159	11.785	1.383	7.125	16.532	12,334	11.588	1.442	5.690	17.174	-10.101	***
Consolidated assets (millions)	9,159	422,788	1,113,555	1,243	15,100,000	12,334	391,254	1,212,836	296	28,700,000	-1.951	*
Number of directors	7,758	17.210	7.597	2.000	53.000	11,178	11.770	5.995	2.000	54.000	-54.969	***
Proportion of outside directors	6,346	0.186	0.200	0.000	1.000	10,254	0.168	0.213	0.000	1.000	-5.488	***
Introduction of the executive officer system (dummy)	6,346	-	-	-	-	8,149	0.228	0.420	0.000	1.000	-	
% of foreign shareholders	6,346	5.812	7.548	0.000	77.800	8,149	8.757	10.538	0.000	87.930	18.820	***
% of institutional investors	6,346	10.041	8.491	0.000	52.720	8,149	15.758	14.489	0.000	83.470	27.919	***
% of cross-shareholders	6,877	15.804	8.933	0.000	61.300	10,378	11.023	8.933	0.000	61.300	-34.422	***

Note: The degree of change in the related diversification strategy is the absolute value of the difference in the entropy index (the degree of related diversification) based on the three-digit Japan Standard Industrial Classification between the given year and the following year. The degree of change in the unrelated diversification strategy is the absolute value of the difference in the entropy index (the degree of unrelated diversification) based on the two-digit Japan Standard Industrial Classification between the given year and the following year. Outliers for ROA and standardized ROA have been eliminated. The standardization is based on the difference between the actual value for each company and the industry average. "Core business" in the core business growth rate refers to the division with the largest sales based on the two-digit Japan Standard Industrial Classification. ***, **, and * denote significance at the 1%, 5%, and 10% significance level, respectively.

4. DETERMINANTS OF STRATEGIC CHANGE

4-1. Effect of Performance Factors on Strategic Change

Table 2 shows the estimation results of equation (1). While the coefficient of ROA was not statistically significant in the first half of the period, the coefficient of the core business growth rate was negative and statistically significant at the 1% level for changes in both related and unrelated diversification strategies to confirm that "the lower the core business growth rate, the greater the degree of strategic change." In other words, although asset efficiency does not trigger strategic change, a slowdown in the core business growth rate was a trigger for a strategic change.

As for the late 1990s and onward, first, the coefficient of ROA is negative and statistically significant at the 1% level for changes in both related and unrelated diversification strategies, confirming that "the lower the ROA compared to other companies in the same business, the greater the degree of strategic change." Therefore, the following relationship became apparent after the 1997 Asian financial crisis: a decrease in asset efficiency prompts changes in diversification strategy—or a decline in firm performance increases the pressure on management to review their strategy. Second, the core business growth rate showed a statistically significant, negative sensitivity at the 5% level for change in unrelated diversification strategy. Therefore, a slowdown in core business growth rate promotes change in unrelated diversification strategy.

Based on the examination of the effect of firm performance factors on strategic change as described above, the following two facts were found. First, since the 1997 Asian financial crisis, the relationship where a decline in asset efficiency prompts a modification of the diversification strategy by "choose and focus" became apparent. This conclusion was made because I was able to confirm that a decline in asset efficiency prompted a change in related and unrelated diversification strategies in the late 1990s, although it did not trigger strategic change in the first half of the 1990s. Second, a slowdown in core business growth rate increases the incentive to stabilize the management foundation through diversification. This is because a decline in core business growth prompted changes in related and unrelated diversification strategies during the first half of the period, and prompted changes in unrelated diversification strategy during the second half of the period, showing a consistent relationship.

Table 2 Effect of Performance Factors on Changes in Diversification Strategy

Period	1990-1997				1998-2005			
Diversification Strategy Type	Related Diversification		Unrelated Diversification		Related Diversification		Unrelated Diversification	
Model	1	2	3	4	5	6	7	8
ROA	0.034		0.011		-0.193***		-0.246***	
	(0.433)		(0.160)		(-3.349)		(-4.508)	
Core business growth rate		-0.013***		-0.012***		-0.005		-0.009**
		(-3.359)		(-3.606)		(-1.296)		(-2.279)
Tenure of the president	0.000	0.000	0.000	0.000	-0.001*	-0.001*	-0.000	-0.000
	(0.711)	(0.386)	(0.190)	(0.274)	(-1.869)	(-1.663)	(-0.392)	(-0.092)
Degree of diversification	0.367***	0.010	0.236***	0.001	-0.251***	-0.233***	-0.240***	-0.224***
	(33.088)	(0.814)	(21.31)	(0.097)	(-23.774)	(-21.861)	(-22.384)	(-20.608)
Number of consolidated subsidiaries	-0.000**	0.000	0.000	0.000	-0.000*	-0.000**	-0.000***	-0.000***
	(-2.216)	(0.754)	(-0.290)	(1.531)	(-1.786)	(-2.138)	(-3.213)	(-3.587)
Consolidated assets (log)	-0.022*	0.003	-0.009	0.006	-0.020**	-0.013	-0.023***	-0.016*
	(-1.800)	(0.256)	(-0.880)	(0.609)	(-2.355)	(-1.570)	(-2.815)	(-1.915)
Fiscal year dummy	YES	YES	YES	YES	YES	YES	YES	YES
Observations	5,641	4,901	5,641	4,901	6,496	6,383	6,496	6,383
R-squared	0.214	0.010	0.114	0.016	0.109	0.096	0.102	0.089
Number of firms	853	832	853	832	1,095	1,085	1,095	1,085
Model choice	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect

Note: The figures in parentheses are t-values. ***, **, and * denote significance at the 1%, 5%, and 10% significance level, respectively. The degree of diversification for the models 1, 2, 5, and 6 is the entropy index based on the three-digit Japan Standard Industrial Classification. It is the entropy index based on the two-digit Japan Standard Industrial Classification for the models 3, 4, 7, and 8. The fiscal year dummy was omitted from the table. The model choice was determined based on whether the random effect model can be rejected at the 10% significance level by the result of the Hausman specification test after estimating both the fixed effect and random effect models.

4-2. Effect of Corporate Governance Factors on Strategic Change

Next, I will focus on the analysis of the situation since the 1997 Asian financial crisis, after which it became clear that a strategic change occurs in response to a decline in asset efficiency. Thereafter, I will examine the effect of corporate governance structure.

Table 3 shows the estimation results of equation (2). First, let us look at Panel A to see the effect of corporate governance factors on the change in related diversification strategy. We can see that a decline in asset efficiency prompts a strategic change, since the coefficient of ROA is negative and statistically significant at the 1% or 5% level in all estimation equations. As for the effect of corporate governance factors, the interaction term between ROA and the size of boards of directors was positive and statistically significant at the 5% level. This result implies that the relationship characterized by the fact that "the lower the ROA compared to other companies in the same business, the greater the degree of strategic change" is significantly mitigated at companies with a large board of directors.

Next, let us look at Panel B to see the effect of corporate governance factors on change in unrelated diversification strategy. First, we can see that a decline in asset efficiency prompts a strategic change since the coefficient of ROA is negative and statistically significant at the 1% level in all estimation equations. As for the effect of corporate governance factors, the interaction term between ROA and the size of board of directors and the interaction term between ROA and the percentage of cross-shareholders were both positive and statistically significant at the 10% level. These results imply that the relationship characterized by the statement that "the lower the ROA, the greater the degree of strategic change" is mitigated significantly at companies with a large board of directors or a high percentage of cross-shareholders. As a note, the function of stable shareholders to maintain the existing strategy is evident in the change in unrelated diversification strategy, since the effect of cross-shareholders is only statistically significant for change in the unrelated diversification strategy. In other words, it is highly likely that companies under a strong influence of stable shareholders would be slow to scale down businesses that are not closely related to the core business, or to strategically withdraw from unprofitable businesses when the asset efficiency declines.

Table 3 Effect of Corporate Governance Factors on Change in Diversification Strategy: 1998-2005

Panel A Dependent variable = Degree of change in related diversification strategy

Governance variables	Number of directors		Executive officer system		Proportion of outside directors		Foreign shareholders		Institutional investors		Cross-shareholders	
Model	1	2	3	4	5	6	7	8	9	10	11	12
ROA	-0.192***	-0.441***	-0.193***	-0.184***	-0.176***	-0.178***	-0.200***	-0.186**	-0.189***	-0.162**	-0.155**	-0.239***
	(-3.339)	(-3.836)	(-3.346)	(-3.036)	(-3.020)	(-2.826)	(-3.433)	(-2.562)	(-3.217)	(-2.042)	(-2.510)	(-2.836)
Governance variables	0.000	0.000	0.004	0.004	0.000	0.000	0.000	0.000	-0.000	-0.000	-0.001	-0.001
	(0.387)	(0.781)	(0.982)	(0.971)	(1.468)	(1.467)	(0.837)	(0.852)	(-0.328)	(-0.264)	(-1.614)	(-1.485)
Performance*governance		0.022**		-0.043		0.015		-0.001		-0.002		0.010
		(2.498)		(-0.450)		(0.076)		(-0.306)		(-0.519)		(1.464)
Observations	6,496	6,496	6,496	6,496	6,416	6,416	6,496	6,496	6,496	6,496	5,863	5,863
R-squared	0.109	0.110	0.109	0.109	0.113	0.113	0.109	0.109	0.109	0.109	0.115	0.115
Number of firms	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	962	962
Model choice	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect

Panel B Dependent variable = Degree of change in unrelated diversification strategy

Governance variables	Number of directors		Executive officer system		Proportion of outside directors		Foreign shareholders		Institutional investors		Cross-shareholders	
Model	1	2	3	4	5	6	7	8	9	10	11	12
ROA	-0.246***	-0.424***	-0.246***	-0.250***	-0.230***	-0.222***	-0.256***	-0.223***	-0.255***	-0.248***	-0.198***	-0.287***
	(-4.500)	(-3.888)	(-4.506)	(-4.337)	(-4.160)	(-3.725)	(-4.639)	(-3.238)	(-4.585)	(-3.310)	(-3.451)	(-3.671)
Governance variables	0.000	0.000	0.001	0.001	0.000*	0.000*	0.000	0.000	0.000	0.000	-0.001*	-0.001
	(0.282)	(0.577)	(0.354)	(0.358)	(1.711)	(1.715)	(1.257)	(1.298)	(0.839)	(0.850)	(-1.664)	(-1.518)
Performance*governance		0.016*		0.017		-0.062		-0.003		-0.000		0.010*
		(1.886)		(0.184)		(-0.340)		(-0.789)		(-0.141)		(1.677)
Observations	6,496	6,496	6,496	6,496	6,416	6,416	6,496	6,496	6,496	6,496	5,863	5,863
R-squared	0.102	0.102	0.102	0.102	0.104	0.104	0.102	0.102	0.102	0.102	0.117	0.117
Number of firms	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095	962	962
Model choice	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect

Note: The figures in parentheses are t-values. ***, **, and * denote significance at the 1%, 5%, and 10% significance level, respectively. Control variables (tenure of the president (years), degree of diversification, number of consolidated subsidiaries, consolidated assets (log), and fiscal year dummy) were omitted.
The model choice was determined based on whether the random effect model can be rejected at the 10% significance level by the result of the Hausman specification test after estimating both the fixed effect and random effect models.
Only the estimation results for the case where ROA, which had a statistically significant effect changes in related and unrelated diversification strategies in the samples of the late 1990s and later, was set as the performance variable.

Based on the examination of the effect of corporate governance factors on strategic change as described above, the following two facts were found. The first is the fact that a large board of directors interferes with strategic change at the time of performance decline. I was able to verify this effect on change in both related and unrelated diversification strategies. This result suggests the possibility

that a bloated board of directors inhibits quick decision-making. It also suggests possible manifestation of the adverse effect, in which formulating a strategy from a company-wide perspective becomes difficult because the cost for coordinating within the board of directors increases as each director prioritizes the interests of their own divisions. Therefore, this result can logically explain the fact that Japanese companies were rational because they have been working toward streamlining their boards of directors in order to improve strategic decision-making ability. The second fact is that the presence of stable shareholders through cross-shareholdings interferes with the strategic change at the time of performance decline. This result suggests that the presence of the cross-shareholders relieves capital market pressure on the management and helps preserve the existing strategy.

5. STRATEGY REEVALUATION IN TIMES OF LOW PERFORMANCE

So far, I have proceeded with the discussion based on the assumption that the strategy should be changed as the firm performance declines. However, what becomes the issue here is the relationship between firm performance and the degree of need for strategic change. In general, the need for strategy review should increase as the performance declines. However, they might not be in a simple linear relationship. Here, it is easy to understand that the need for strategic change increases in response to the downturn in business when the performance is lower than a certain level. The problem is seen in cases of businesses that perform above a certain level. When the performance is strong or maintained at a certain satisfactory level, what would be the degree of need for strategic change? The desire to maintain the current state because performance is high, or because the risk would be exacerbated if the strategy were to change, is undoubtedly persuasive. However, can we definitively say that the need for strategic change is low when the performance is high? We might be able to say categorically that the strategy should be reevaluated when the business performance is poor. However, can we say the opposite, i.e., the strategy should not be changed when the business is performing well? It is quite reasonable to lay out a new strategy for the future when the business performance is strong. Therefore, what is considered here is the possibility that although the degree of need for strategy reevaluation increases in response to the downturn in business when the firm performance does not meet a certain level, the firm performance and the degree of need for strategy reevaluation are not related when the performance exceeds a certain threshold. What becomes a problem in the context of verifying the disciplining effect of corporate governance is the situation in which strategic change is objectively considered necessary, which is the case when the performance does not meet a certain level.

Thus, in this section, I will focus on the inefficient situation in which strategic change is objectively considered necessary and reexamine the determinants for strategic change. Specifically, I will use the cases of companies with an ROA that is less than the industry average as sample and attempt the same estimation as I did in the previous section. Cases in which the asset efficiency is inferior to other companies in the same line of business reflect situations in which the responsibility of management is brought under questioning. Therefore, the corporate governance factors to prompt strategic change can be recognized as having a disciplining effect on the management.

5-1. Effect of Performance Factors on Strategic Change at the Time of Low Performance

Table 4 shows the re-estimation results of equation (1). For the first half of the 1990s, we can see first that the degree of strategic change increases as the asset efficiency declines, since the coefficient of ROA is negative and statistically significant at the 5% level for change in both related and unrelated diversification strategies. Second, we can also see that the degree of strategic change

increases as the core business growth rate declines, since the coefficient of core business growth rate is also negative and statistically significant at the 5% level for change in both related and unrelated diversification strategies. Therefore, in addition to verifying the same results as the overall sample that a slowdown in the core business growth rate triggers a strategic change, I was able to verify a new relationship during the first half of the 1990s that suggests a decline in asset efficiency also prompts a strategic change.

For the late 1990s and onward, we can first see that the degree of strategic change increases as the asset efficiency declines, since the coefficient of ROA is negative and statistically significant at the 5% level and 1% level for strategic change in related diversification and unrelated diversification, respectively. Second, we can see that the degree of strategic change in unrelated diversification increases as the core business growth rate declines since the coefficient of core business growth rate is negative and statistically significant at the 10% level for change in unrelated diversification strategy. Therefore, the same results as the overall sample were verified again: a decline in asset efficiency prompts a change in related and unrelated diversification strategies, and a slowdown in core business growth rate prompts a change in unrelated diversification strategy.

Table 4 Effect of Performance Factors on Changes in Diversification Strategy: Low Performance

Period	1990-1997				1998-2005			
Diversification strategy type	Related diversification		Unrelated diversification		Related diversification		Unrelated diversification	
Model	1	2	3	4	5	6	7	8
ROA	-0.320**		-0.284**		-0.228**		-0.465***	
	(-1.991)		(-2.107)		(-2.099)		(-4.385)	
Core business growth rate		-0.011**		-0.011**		-0.004		-0.009*
		(-2.069)		(-2.323)		(-0.712)		(-1.692)
Tenure of the president	-0.000	-0.001	-0.000	-0.000	-0.001	-0.001	-0.000	-0.000
	(-0.616)	(-0.994)	(-0.769)	(-0.688)	(-1.114)	(-1.008)	(-0.256)	(-0.072)
Degree of diversification	0.367***	-0.062***	0.247***	-0.072***	-0.271***	-0.266***	-0.250***	-0.246***
	(22.698)	(-3.300)	(15.333)	(-4.036)	(-18.079)	(-17.406)	(-16.174)	(-15.525)
Number of consolidated subsidiaries	-0.000	0.000	0.000	0.000**	-0.000**	-0.000**	-0.000***	-0.000***
	(-1.105)	(1.377)	(0.477)	(2.281)	(-1.962)	(-2.042)	(-3.641)	(-3.773)
Consolidated assets (log)	-0.037**	0.012	-0.016	0.013	-0.028**	-0.031**	-0.038***	-0.041***
	(-1.998)	(0.659)	(-0.994)	(0.866)	(-2.189)	(-2.367)	(-3.089)	(-3.177)
Fiscal year dummy	YES	YES	YES	YES	YES	YES	YES	YES
Observations	3,138	2,713	3,138	2,713	3,686	3,588	3,686	3,588
R-squared	0.200	0.013	0.114	0.024	0.121	0.117	0.110	0.102
Number of firms	651	624	651	624	879	866	879	866
Model choice	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect

Note: The samples are the cases with an ROA that is less than the industry average. The figures in parentheses are t-values. ***, **, and * denote significance at the 1%, 5%, and 10% significance level, respectively. The degree of diversification for the models 1, 2, 5, and 6 is the entropy index based on the three-digit Japan Standard Industrial Classification. It is the entropy index based on the two-digit Japan Standard Industrial Classification for the models 3, 4, 7, and 8. The fiscal year dummy was omitted on the table.
The model choice was determined based on whether the random effect model can be rejected at the 10% significance level by the result of the Hausman specification test after estimating both the fixed effect and random effect models.

5-2. Effect of Governance Factors on Strategic Change at the Time of Low Performance

Table 5 shows the re-estimation results of equation (2) based on the low-performance samples in the late 1990s and onward. When the degree of change in related diversification strategy was set as the dependent variable (Panel A), the coefficient of ROA was negative and statistically significant at the 5% level and the interaction term between ROA and the size of the board of directors was positive and statistically significant at the 5% level. Therefore, the relationship characterized by the notion that "the degree of strategic change increases as the asset efficiency declines" is mitigated as the size of the board of directors increases.

Next, when the degree of change in unrelated diversification strategy was set as the dependent variable (Panel B), the coefficient of proportion of outside directors was positive and statistically significant at the 5% level. This result implies that the degree of strategic change increases as the proportion of outside directors increases. Therefore, we can say that outside directors have a disciplining effect on the management in the sense that they urge to correct unrelated diversification at the time of low performance. As for the moderating effect of corporate governance factors, first, the coefficient of ROA was negative and statistically significant at the 1% level, while the interaction

term between ROA and the percentage of foreign shareholders and the interaction term between ROA and the percentage of institutional investors were both negative and statistically significant at the 5% and 1% levels, respectively. Therefore, the relationship "the degree of strategic change increases as asset efficiency declines" is exaggerated as the percentages of foreign shareholders and institutional investors increase. In other words, we can say that foreign shareholders and institutional investors acted to fulfill the disciplinary function toward the management in the sense that they promoted changes in the unrelated diversification strategy in response to the performance decline. Second, while the coefficient of ROA is negative and statistically significant at the 1% level, the interaction term between ROA and the percentage of cross-shareholders was positive and statistically significant at the 10% level. Therefore, the relationship "the degree of strategic change increases as asset efficiency declines" is mitigated as the percentage of cross-shareholders increases. Put another way, cross-shareholders inhibit changes in the unrelated diversification strategy in response to the performance decline.

Table 5 Effect of Corporate Governance Factors on Changes in Diversification Strategy: 1998-2005, Low Performance

Panel A Dependent variable = Degree of change in related diversification strategy; performance = ROA

Governance variables	Number of directors		Executive officer system		Proportion of outside directors		Foreign shareholders		Institutional investors		Cross-shareholders	
Model	1	2	3	4	5	6	7	8	9	10	11	12
ROA	-0.229**	-0.711***	-0.230**	-0.246**	-0.205*	-0.199*	-0.232**	-0.185	-0.229**	-0.104	-0.182	-0.254
	(-2.107)	(-3.160)	(-2.118)	(-2.104)	(-1.893)	(-1.677)	(-2.134)	(-1.407)	(-2.104)	(-0.728)	(-1.558)	(-1.444)
Governance variables	-0.000	0.001	0.005	0.007	0.000	0.000	0.000	0.000	0.000	-0.000	-0.001	-0.000
	(-0.748)	(0.864)	(0.824)	(0.866)	(1.413)	(1.411)	(0.752)	(0.284)	(0.159)	(-0.566)	(-1.230)	(-0.750)
Performance*governance		0.043**		0.080		-0.045		-0.006		-0.010		0.007
		(2.446)		(0.368)		(-0.140)		(-0.630)		(-1.353)		(0.550)
Observations	3,686	3,686	3,686	3,686	3,660	3,660	3,686	3,686	3,686	3,686	3,315	3,315
R-squared	0.122	0.123	0.122	0.122	0.130	0.130	0.122	0.122	0.121	0.122	0.140	0.140
Number of firms	879	879	879	879	877	877	879	879	879	879	770	770
Model choice	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect

Panel B Dependent variable = Degree of change in unrelated diversification strategy; performance = ROA

Governance variables	Number of directors		Executive officer system		Proportion of outside directors		Foreign shareholders		Institutional investors		Cross-shareholders	
Model	1	2	3	4	5	6	7	8	9	10	11	12
ROA	-0.465***	-0.701***	-0.465***	-0.496***	-0.428***	-0.451***	-0.470***	-0.299**	-0.472***	-0.221	-0.377***	-0.614***
	(-4.391)	(-3.185)	(-4.385)	(-4.353)	(-5.190)	(-4.830)	(-4.431)	(-2.333)	(-4.437)	(-1.586)	(-3.396)	(-3.670)
Governance variables	-0.000	0.000	0.001	0.004	0.024**	0.026**	0.000	-0.000	0.000	-0.000	-0.000	0.000
	(-0.558)	(0.280)	(0.113)	(0.572)	(-2.460)	(-2.450)	(1.020)	(-0.439)	(0.772)	(-0.783)	(-0.662)	(0.447)
Performance*governance		0.021		0.159		0.151		-0.021**		-0.020***		0.023*
		(1.221)		(0.751)		(0.520)		(-2.361)		(-2.780)		(1.895)
Observations	3,686	3,686	3,686	3,686	3,660	3,660	3,686	3,686	3,686	3,686	3,315	3,315
R-squared	0.110	0.111	0.110	0.110	0.016	0.016	0.111	0.112	0.110	0.113	0.136	0.137
Number of firms	879	879	879	879	877	877	879	879	879	879	770	770
Model choice	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Random effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect	Fixed effect

Note: The samples are the cases with an ROA that is less than the industry average. The figures in parentheses are t-values. ***, **, and * denote significance at the 1%, 5%, and 10% significance level, respectively. Control variables (years of service as the president, degree of diversification, number of consolidated subsidiaries, consolidated assets (log), and fiscal year dummy) were omitted.
The model choice was determined based on whether the random effect model can be rejected at the 10% significance level by the result of the Hausman specification test after estimating both the fixed effect and random effect models.
Only the estimation results for the case where ROA, which had a statistically significant effect changes in related and unrelated diversification strategies in the samples of the late 1990s and later, was set as the performance variable.

6. CONCLUSION

This study examined the effect of corporate governance characteristics on the change in corporate strategy. As corporate strategy, this study focused on diversification strategy and conducted analyses on changes made in both directions: specialization, such as withdrawal from unprofitable businesses, and diversification, such as expansion to new businesses in search of new revenue sources. Whether a downturn in business becomes an opportunity to change corporate strategy, and how the structure of corporate governance affects strategic change were the focal points of the analyses. This is because whether they would pressure the management to correct the organizational inefficiency or not is an important criterion for judging the effectiveness of disciplinary mechanism. Accordingly, there are three major conclusions identified in this study:

First, strategy changes systematically in response to the decline in firm performance. In other words, a downturn in firm performance prompts the management—the ultimate strategic decision-makers—to reevaluate the corporate strategy by increasing the pressure to reform. This mechanism for strategic change was also more apparent during the period when "choose and focus" became vigorous after the 1997 Asian financial crisis, or when the corporate performance does not meet a certain level.

Second, the traditional Japanese-style corporate governance characterized by large boards of directors and cross-shareholdings stands in the way of changing strategies in response to firm performance and encourages the existing strategy of remaining entrenched in one's position. This result clearly mirrors the fact that traditional Japanese-style corporate governance has become dysfunctional under the current situation, in which business environments rapidly change through the IT revolution and globalization, and quick strategic decision-making is required. It suggested that bloated boards of directors could impair the strategic decision-making function by inhibiting substantive discussions and quick decision-making, thereby increasing the cost of coordination, and making it difficult to formulate strategies based on a company-wide perspective because each director prioritizes his/her very own division for which he/she is responsible. Moreover, this result is consistent with studies, such as Yermack (1996), which demonstrated that firm value declines as the size of the board of directors increases, and explains why Japanese companies have been striving to improve the strategic decision-making function by introducing the executive officer system and by streamlining the board of directors. On the other hand, stable shareholders based on cross-shareholdings promoted the preservation of the existing strategy by relieving the pressure from the capital markets and by blunting management's sense of the current situation. In particular, since cross-shareholders reduce the sensitivity to changing the unrelated diversification strategy in accordance with the performance, it is highly likely that the correction of unrelated diversification important for "choose and focus" will be delayed.

Third, when the corporate performance does not meet a certain level, we can confirm the disciplinary mechanism of corporate governance. This result is important because the function of corporate governance in optimizing strategic decision-making is actually questioned at the time of firm performance decline. The keys for that were the pressure from the capital markets and the top management reforms, such as streamlining the board of directors and hiring outside directors due to the following relationship: "the degree of change in unrelated diversification strategy increases as the asset efficiency declines." This relationship was exaggerated at companies that had a strong presence of foreign shareholders and institutional investors and were under strong pressure from capital markets. In addition, outside directors were prompting changes in unrelated diversification strategy. Therefore, we can say that "activist" shareholders and outside directors play an important role in corporate disciplinary mechanisms in the sense that they promote reevaluation of unrelated diversification—or prompt the restructuring of business portfolios by "choose and focus"—at a time of downturn in business when the need for strategic change is seen as dire. Going forward, it is necessary to analyze strategic change from more direct points of view, such as resource allocation among business divisions, and to analyze the effect of strategic change on their subsequent performance.

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(1) The existence of diversification discount among Japanese firms was confirmed in a cross-section analysis by Lins and Servaes (1999) in 1992 and 1994 and by Hiramoto (2002) in 1995. Hoechle et al. (2012) looked at US companies and demonstrated that there is diversification discount, even when the endogeneity problem is taken into consideration.

(2) In terms of spreading the risk, Funaoka (2003) reported that diversification to non-manufacturing businesses lowers the variance coefficient of operating profit, especially with large companies. Miyajima and Inagaki

(2003) reported that diversification reduces the standard deviation of ROA.

(3) Morikawa (1998) found that factors such as the core business growth rate, company size, research and development (R&D), average wage, flexibility in employee relocation, presence or absence of a parent company, and the initial scale of business expansion affect the expansion and withdrawal of business. Kikutani, Ito, and Hayashida (2005) found that many companies go through both expansion and withdrawal, and undertaking expansion and withdrawal simultaneously results in positive effects on business performance.

(4) See Miyajima (ed.) (2011), Part III, etc.

(5) "Forced" turnover refers to cases in which the retiring president is not appointed as a chairman and does not remain as a member of the board of directors.

(6) See Aoki (1995), etc., regarding contingent governance.

(7) However, it is extremely difficult to categorically determine the impact of firm performance on strategic change. This is because when poor business performance prompts strategic change, one can view the disciplining function to increase the pressure to reform positively or one can view the strategic change after the business performance declined negatively as "too late" and "too passive." Conversely, when the strategy is changed more frequently as the firm performance improves, one can view the foresight and risk-taking attitude positively or view the situation negatively when strategies become inflexible as the firm performance declines.

(8) Shinoda (2010) used *Kabunushi Sōkai Hakusho (White Paper on General Meeting of Shareholders)* edited by the Japan Institute of Business Law (2000-2008), and summarized the present state of reality with the exercise of voting rights by parties such as foreign institutional investors, and showed that over 1,000 companies have met rejections for their proposals after 2004.

(9) Sasaki and Yonezawa (2000) looked at 278 manufacturing companies included in the Nikko 500 index (in the 1990s) and demonstrated that the foreign ownership ratio has a positive effect on Tobin's q. Miyajima et al. (2004) looked at 1,385 companies listed on the first section of the Tokyo Stock Exchange (1992-2000) and demonstrated that foreign shareholders have a positive effect on the TFP growth rate.

(10) As a note, cases of merger between listed companies are included in the sample while each company was listed.

(11) The entropy index is derived from $\sum_{i=1}^{n} p_i * \ln \frac{1}{p_i}$ where P_i. denotes the proportion of sales accounted by the i-th business of the company with businesses 1 through n.

(12) This is calculated by adding up foreigners, excluding the ones identified as foreign corporations, trust accounts, and life insurance special accounts.

(13) Grimm and Smith (1991) studied 855 senior managers at 27 railway companies and found that younger and less-experienced senior managers are more likely to change strategy.

[References]

Aoki, M. 1995. ***Keizai Shisutemu no Shinka to Tagen-sei: Hikaku Seido Bunseki Josetsu (The Evolution and Multiplicity of the Economic System: Introduction to Comparative Institutional Analysis)***. Toyo Keizai.

Boeker, W. 1997. Strategic Change: The influence of managerial characteristics and organizational growth. ***Academy of Management Journal***, 40: 152-170.

Funaoka, F. 2003. Kigyou-koudou no Takakuka no Jittai to sono Seika: Jigyousho, Kigyou, Kigyou-gurūpu ni tsuite no Jisshou-bunseki ("The Reality and Outcome of Diversified Corporate Behavior: An Empirical Analysis of Business Establishments, Corporations, and Corporate Groups") in Matsuda, Y., Shimizu, M. and Funaoka F. (ed.). ***Kouza Mikuro Toukei-bunseki Dai 4-kan Kigyou-koudou no Henyou: Mikuro-dēta ni yoru Sekkin (Micro Statistical Analysis Seminar Vol. 4, Changes in Corporate Behavior: Zero-in Using Micro Data)***, 213-259. Nippon Hyoron Sha.

Ginsberg, A. 1988. Measuring and modeling changes in strategy: Theoretical foundations and empirical directions. ***Strategic Management Journal***, 9: 559-575.

Grimm, C. M. & Smith, K. G. 1991. Management and organizational change: A note on the railroad industry. ***Strategic Management Journal***, 12: 557-562.

Hiramoto, T. 2002. Jigyou no Takakuka to Kigyou-kachi (Diversification of Business and the Value of the Firm). ***Gendai Fainansu (Modern Finance)***, 12: 31-55.

Hoechle, D., Schmid, M., Walter, I. & Yermack, D. 2012. How much of the diversification discount can be explained

by poor corporate governance? ***Journal of Financial Economics***, 103: 41-60.

Kang, J. K. & Shivdasani, A. 1995. Firm performance, corporate governance, and top executive turnover in Japan. ***Journal of Financial Economics***, 38: 29-58.

Kaplan, S. N. & Minton, B. A. 1994. Appointments of outsiders to Japanese boards determinants and implications for managers. ***Journal of Financial Economics***, 36: 225-258.

Kikutani, T., Ito, H. & Hayashida, O. 2005. Jigyou-shinshutsu to Tettai: 1990-nendai Nihon Kigyou no Jigyou-saihen (Expansion and Withdrawal Business: Business Restructuring among Japanese Firms in the 1990s) in Itami, H. and The Hitotsubashi University Center for Japanese Business Studies (ed.), ***Nihon Kigyou Kenkyu no Furontia (Frontier of Japanese Firm Studies)***, 1: 81-100. Yuhikaku Publishing.

Lins, K. & Servaes, H. 1999. International evidence on the value of corporate diversification. ***Journal of Finance***, 45: 31-48.

Miyajima, H. 1998. Sengo Nihon Kigyou ni okeru Joutai-Izon Gabanansu no Shinka to Henyou (The evolution and change of contingent governance in the J-firm after the Second World War: An approach from presidential turnover analysis using lotig model). ***Keizai Kenkyu (The Economic Review)***, 49-2: 97-112.

———, ed. 2011. ***Nihon no Kigyou Touchi: Sono Sai-Sekkei to Kyousou-ryoku no Kaifuku ni Mukete (Corporate governance in Japan: Toward its redesign and the recovery of competitiveness)***. Toyo Keizai.

——— & Aoki, H. 2002. Nihon Kigyou ni okeru Jiritsu-teki Gabanansu no Kanousei: Keieisha Sennin no Bunseki (The potential for autonomous governance in Japanese companies) in Ito, H. (ed.). ***Nihon Kigyou Henkaku-ki no Sentaku (The Japanese Firm in Transition)***, 71-106. Toyo Keizai.

——— & Inagaki, K. 2003. ***Nihon Kigyou no Tayou-ka to Kigyou Touchi: Jigyou Senryaku, Gurupu Keiei, Bunken-ka Soshiki no Bunseki (The diversification of Japanese companies and corporate governance: An analysis of business strategy, group management, and decentralized organization)***. Ministry of Finance, Policy Research Institute.

——— & Nitta, K. 2011. Kabushiki Shoyuu Kouzou no Tayou-ka to sono Kiketsu: Kabushiki Mochiai no Kaishou, 'Fukkatsu' to Kaigai Toushi-ka no Yakuwari (Diversification of stock ownership and its consequences: Elimination and "recovery" of cross holding, and the role of foreign investors). in Miyajima, H. (ed.). ***Nihon no Kigyou Touchi: Sono Sai-Sekkei to Kyousou-ryoku no Kaifuku ni Mukete (Corporate governance in Japan: Toward its redesign and the recovery of competitiveness)***, 105-149. Toyo Keizai.

———, Nitta, K., Saito, T. & Omi, Y. 2004. Kigyou Touchi to Keiei Kouritsu: Kigyou Touchi no Kouka to Keiro, oyobi Kigyou Tokusei no Eikyou (Corporate governance and management efficiency: The effect and pathway of corporate governance and the impact of firm characteristics). ***Shohou (NLI Research Institute Report)***, 33: 52-98.

Morikawa, M. 1998. ***Shinki Jigyou eno Shinshutsu to Kizon Jigyou kara no Tettai: Nihon Kigyou no Jisshou Bunseki (Expansion to new businesses and withdrawal from existing businesses: An empirical analysis of Japanese companies)***. Discussion paper, #98-DOJ-87. Research Institute of International Trade and Industry, Ministry of International Trade and Industry.

Rajagopalan, N. & Spreitzer, G. M. 1997. Toward a theory of strategic change: A multi-lens perspective and integrative framework. ***Academy of Management Review***, 22: 48-79.

Rumelt, R. P. 1974. ***Strategy, structure, and economic performance***. Harvard University Press (Toba, K., Yamada, M., Kawabe, N. & Kumazawa, T. (trans.) 1977. ***Takaku-ka Senryaku to Keizai Seika***. Toyo Keizai).

Saito, T. 2002. Torishimariyakukai no Kibo to Kigyou Hyouka: Gurupu Kigyou no Gabanansu (The size of the board of directors and firm value: Governance of group companies). ***Nihon Keizai Kenkyu (The Japan Center for Economic Research Bulletin)***, 45: 86-111.

Sakano, T. & Lewin, A. Y. 1999. Impact of CEO succession in Japanese companies: A coevolutionary perspective. ***Organization Science***, 10-5: 654-671.

Sasaki, T. & Yonezawa, Y. 2000. Koporeito Gabanansu to Kabunushi Kachi (Corporate governance and shareholder value). ***Syouken Anarisuto Janaru (Securities Analysts Journal)***, 38-9: 28-46.

Shinoda, A. 2010. Waga Kuni Kigyou ni okeru Keiei no Kiritsu-zuke ni kansuru Kentou: Gaikokujin Toushika wo Chushin ni shita Bunseki (An examination on the management discipline among Japanese companies: An analysis centered on foreign investors). ***Ritsumeikan Keieigaku (Ritsumeikan Business Administration)***, 48-5: 79-97.

Yamanoi, J. 2006. Chushoukigou ni okeru Keiei-sha Koutai to Senryaku Henkou no Kankei: Koukei-sha no Soshiki-shakai-ka no Eikyou (The relationship between managerial turnover and strategic change at small and medium-sized companies: The impact of the organizational socialization of the successor). ***Nihon Keiei Gakkai-shi (Journal of Japan Academy of Business Administration)***, 16: 43-55.

Yermack, D. 1996. Higher market valuation of companies with a smaller board of directors. ***Journal of Financial Economics***, 40: 185-211.

Yoshihara, H., Sakuma, A., Itami, H. & Kagono, T. 1981. ***Nihon Kigyou no Takakuka Senryaku: Keiei Shigen Apurouchi (The Diversification Strategy of Japanese Companies: The Management Resources Approach)***. Nikkei, Inc.