# Stock Returns and Management Performance of Bidder : An Investigation of the Divestment in Japanese\*

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#### Abstract

We investigate the performance of the bidder of the asset to be divested in 2000~2003. The acquisitions increased rapidly following the changing in the dealings payment means under the Commercial Code Revision after the 1990's. bidder does not have statistically significant CAR. However, when classified by the dealing characteristics, dealing with the acquisitions of allied businesses is a significant and positive 0.82%, but the acquisitions of non-allied businesses is -0.56%. It can be concluded that only dealings of a allied business that brings the cooperation between businesses and effective use of resources on business increase stockholder's value more than diversification that brings only an increase in manager's private benefits. On the other hand, we can not find any difference of the post-acquisition performance by dealing type, and even worse than before doing. Furthermore, the banks are the creditors and also the shareholders may also have a lot of information about their customer firms, are expected to have some discipline on events such a large acquisition, but the results did not support. It suggests that monitoring function by the bank have become weak.

Keywords : Divestment, bidder, stock prices, management performance

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# I. Introduction

There are a lot of studies on the divestment<sup>1</sup>), but almost of these focus the motive which does partial sell and influence to a stockholder. Therefore, it is not clarified whether the stockholder value of the bidder who acquirer the divested assets is increased or the following management performance is improved. It has been reported that divestment brings a significant plus returns to a seller according to the previous studies about value of the seller stockholder. The effect of the plus of this seller has been brought from the concentration on the core industry<sup>2</sup>). From the perspective of the bidder, if they acquire the asset managed in inefficiency, the management performance is raised, and if they get the synergy by purchasing the allied industries, market should be plus response. However, the result of bidder is not constant on previous studies<sup>3</sup>).

It can be considered as motive for acquiring that the saving of the time needed by an expansion of an existing business and diversification and new capital investment of the business etc. It is expected that these synergy effects increase the firm value, and increase the stockholder value. However, agency theory suggests that the manager of the bidder carry out the acquisitions for its own benefit even if that may be at the expense of shareholder value. If manager acquire the asset with a little relativity and try to obtain private benefits to for herself from shareholder wealth, market will not show a positive response. Berger and Ofek (1995) show that the stock price of firms which are diversified rate relatively lower than that of firms which are focused, because there is inefficiency in the allocation of management resources. And Jensen (1986) also show the reason why diversification is done is that maximization of the size might improve manager's effect even if it decrease corporate value. If the external monitoring system is working to bidder, do not select the acquisitions result in negative NPV, but it has done. It can be a cause that stockholder composition of the listed firm is distributed, and the monitor function to management by the stockholder has decreased.

The studies work which analyzed a factor of the stock price effect on external monitoring of Japanese firms has Kang, Shivdasani, and Yamada (2000) and Yeh and Hoshino (2001). Kang *et al.*(2000) show that the ratio of debt, particularly the main bank borrowing ratio, has a positive

<sup>1)</sup> The divestment is reduction of some kind of asset or sale of an existing business or subsidiaries.

<sup>2)</sup> Refer to Hite, Owers, and Rogers (1987), John and Ofek (1995), Lang, Poulsen, and the and Stulz (1995), etc.

<sup>3)</sup> Refer to Andrade, Mitchell, and Stafford(2001).

impact on stock prices, and it is associated with a significant relationship with the main bank. In contrast, Yeh and Hoshino (2001) use data for the period 1981-1998, show that the effect of stock prices is negative with a high stock holdings of the bank. It has been claimed to be the result of monitoring by banks in the 1990s weakened. On the other hand, Kruse, Park, Park, and Suzuki (2007) analyze the long-term effect of post-merger firm. They show that the operational efficiency is improved after the merger, and the merger of non-related industries, that is, diversification leads to economies of scope rather than focused, had better performance. This result is contrast to previous american studies presence that diversification brings inefficiency. However, the period of Kruse *et al.* (2007) is 1969-1997, does not reflect changes in the environment, such as various revise the system of Commercial Code. So, it can be changed after that.

It has been though that monitor of the bank gives stock prices the effect of the plus in Japan, but it has weakened lately, and the M&A boom waked up right after the season has been pointed out that management performance falling down. Particularly, M&A is common following the government's decision to permit share swap transactions on October 1999. In that sense, it is important s verify the relationship between external monitoring and the impact on stock prices from M&A announcement since 2000. Banks that focus on long-term relationship as a financial institution, toy not take the discipline for the firm unless caught in the insolvent. Therefore, the acquisitions of diversified did not lead s synergies are recognized that manager try to seek personal benefit, would have a negative effect. Also, if the acquisitions are intended for long-term management efficiency, it is important analyze the effects of long-term than short-term performance.

This paper focuses on the performance of the bidder of the assets to be divestment. first, we examines the announcement effects using a market model. We analyze whether bank monitoring is to reduce the agency problem. In addition, we verify empirically the long-term performance following acquisition.

According to the analysis, seller is obtained a significant positive cumulative excess return of 0.93% during -1 to  $0^{4}$ ). But bidder is roughly break-even. However, the separating the sample, whereas the acquisitions of allied industries are obtained significantly positive 0.82%, the acquisitions of non-allied industries are significantly negative -0.56%, and the difference is

<sup>4)</sup> CAR result of the seller is not reported to save space. but, if you want to see, I will send it with pleasure.

statistically significant. It is considered that market discipline the bidder which diversifies. On the other hand, we can't find any difference of the post-acquisition performance, the results indicate that even worse than before doing. This result is contract to Kruse *et al.*(2007), We can conclude that most acquisitions of Japanese firms did not bring benefits regardless of the dealing characteristics. It is also suggests that business environment of Japanese firms have changed since 2000.

This paper is organized as follows. Section 2 mentions the hypothesis and determinants variables of the return of the bidder. Section 3 analyzes the differences of the dealing characteristics by the event study. Section 4 verifies the long-term management performance following acquisition. Section 5 provides our conclusions.

# II. Determinants of the bidder's return

It is thought that the acquisitions lead to the increase of the stockholder value if it is a deal to improve efficiency. However, manager has an incentive to acquire for private benefit at the expense of shareholder value, then the acquisitions will not necessarily lead to efficiency<sup>5</sup>). It depends on the characteristics of the sample firms and the difference between the investigation period and the method which effect for is strong. Moreover, it is conceivable that the motive for acquisition is not one but a mixture of various speculations. We analyzed how the dealing purpose and bidder's characteristics affect the stock prices of the bidder.

# 2.1. Characteristics of the bidder

The success of acquisition is considered to be related to ownership structure and the bidder characteristics. One of the goals of the bidder is efficiency improvement through economies of scale. However, because hostile takeover is not put easily from the market by large the scale and manager can get a private benefits on the scale, managers are willing to pay more premium for the acquisitions, which may destroy the value of existing shareholders. Moeller, Schlingemann, and Stulz (2004) show that size of the bidder is not related to the means of payment and the characteristics and the acquisition announcement has a negative effect on stock

<sup>5)</sup> Refer to Jensen (1986) and Comment and Jarrell (1995), etc.

prices. It seems that management performance is improved when the bidder with high efficiency of management acquires an inefficiency asset. If Tobin's q is assumed to be an index that shows the efficiency of management, managerial efficiency of the firm with high-Tobin's q will be high and the acquisition of high-Tobin's q is responded highly from the market. However, previous studies of America have a mix of both positive and negative. Servaes (1991) shows that high return is obtained when the bidder with high Tobin's q acquire the firm with low Tobin's q. On the other hand, Lang and Stluz (1994) show that relations between diversification of the bidder and Tobin's q are negative in the 1980's.

The acquisition is a big event of the firm, and requires the permission of the major shareholders. If monitoring is carried out effectively from the outside, the acquisition is sure to bring a value increase of the stockholder. There has been a view that the main bank, it is a stockholder and also is a creditor has a lot of information, carried out the monitor function to the manager, but the study of opposite has gone out recently in japan. The stockholder composition in the firm is changing after the cross-shareholdings cancel out. The numbers of foreign investor increases as the stable shareholders who have a lot of stocks by cross-shareholdings are decreased. The foreign investors are sensitive to profit, dividends, and stockholder's rights, foreign investors would do with the discipline to management. Because the manager might lose the job if management deteriorates payment of the interest of the debt or the debt cannot be repaid when the debt ratio of the firm is high, it seems that the manager always makes an effort to the improvement of the interest, and can decrease manager's discretion.

# 2.2. Classification by dealing characteristics

#### 2.2.1. Dealing purposes

It is classified into the relief type which is goal to make the synergy and non-relief type which is goal to improve management effectiveness. We consider the relief type dealing according to Kang, Shivdasani, and Yamada (2000), Yeh and Hoshino (2001), that the purpose of dealing is reported to be relief in newspaper. And dealings whose interest cover ratio of the seller is less than 80% are classified with the relief type too. Kang *et al.* (2000) show that the bidder's stock price effect is significantly negative in the relief type, and significantly lower than

the non-relief type. On the other hand, it is reported that Yeh and Hoshino (2001) are not able to confirm a significant stock prices effect difference between the two. 102 dealings are classified with the non-relief type and 13 dealings are classified with the relief type by a similar method to Kang *et al.*(2000).

#### 2.2.2. Business relativity

The difference will be in the synergy and the managerial efficiency on the business as forms of bidder which is just as it is or diversifies after the acquisition. In this section, we refer to as horizontal dealing with allied firms, non-horizontal dealing with non-allied firms. In general, since there is much room for efficiency it is possible to use resources, horizontal type is expected to be greater synergy in the business. But, if it is dealing of the manager who aims at private benefits by the maximization of the scale, the market will show a negative. Kang et al.(2000) show that significant difference do not exist in the effect of stock prices between the horizontal type and the non-horizontal type though the effect of stock prices of a significant plus only in the horizontal type. In the acquisitions of the relative business, it is thought that decrease of management expertise and influence of the negative by the decentralization of resources on business which is the disadvantage of diversification are little, and effect of the positive of cooperation between businesses and effective use of resources on business which is the advantage of diversification are large. In contrast, it is considered that influence of the negative of a decrease management expertise and decentralization of resources on business are strengthens though effect of decrease of the operating risk is expected in diversification to non-allied business. Diversification to allied business is effective of the positive for the firm value, and that is, diversification to non-allied businesses have negative effects, which is hypothesis.

The business relativity is classified based on the new type of business classification (33 types of business). we classified 77 dealings as horizontal type, we modify 4 dealing as non-horizontal type, because dealings are actually in a vertical relationship even in the same industry based on the firm's business and business(products and services) are significant differences. In addition, we modify 4 dealing as horizontal type, because business is actually same by the change of counter's business though it is different in the type of business classification.

# **III.** Short-term stock prices

#### 3.1. Sample selection

In this section, we select the sample firms that acquire the asset to be divested in which are listed on the Tokyo Stock Exchange in 2000-2003. Information on divestment is obtained from monthly M&A magazine "MARR". The daily stock prices data of the sample firms collected from "Stock prices CD-ROM 2007" of the Toyo Keizai newspaper. To estimate the necessary parameters to calculate abnormal returns, we collect the stock price data over the 120 trading-day prior to the day when divestment is announced. Financial data of the firm is collected from "Nikkei NEEDS CD-ROM". Finally, we excluded the firm where the stock price is not provided and the ratio of debt to assets exceeds 1. As a result, the sample firm provided is 115 firms.

# 3.2. Event Study

Table 1 describes the statistics of financial indicators. Size of the firm is a total of the equity capital and liabilities. Tobin's q is the market value to book value. Cash flow is current income deduces common stock dividend and an officer bonus from current income, and adds the depreciation expense. Debt ratio is calculated by interest-bearing debt to total assets. The denominator of each holdings ratio is a number of total stocks. Moreover, loan ratio is a value in which the loan (long term and short-term loans) is divided in the interest-bearing debt.

First, we measure the Cumulative Abnormal Return of stock prices to the acquisition announcement using a market model. Table 2 shows the Cumulative Abnormal Return. We consider a possibility that information on an announcement is transmitted to a market before an announcement day, so we confirm the two-day (-1 to 0) Cumulative Abnormal Return. But, statistically significant results are not obtained. In addition, A significant result isn't also obtained statistically in the three-day (-1 to +1) Cumulative Abnormal Return. Only the previous period when the acquisition announcement is performed

#### <Table 1> Descriptive Statistics

	Mean	Median	Minimum	Maximum	Standard dev.
Total assets(million)	947,051	299,131	1,313	14,174,834	1,715,385
Tobin's q	1.41	1.15	0.44	4.88	0.74
Debt ratio	0.27	0.28	0.00	0.74	0.19
cash flow	0.04	0.04	-0.04	0.22	0.04
Directors holdings ratio	0.03	0.00	0.00	0.56	0.08
Financial institution	0.40	0.43	0.01	0.66	0.15
holdings ratio					
Other corporate holdings	0.18	0.14	0.04	0.78	0.14
ratio					
Foreigner holdings ratio	0.11	0.09	0.00	0.45	0.10
Individual holdings ratio	0.30	0.27	0.09	0.86	0.15
borrowing ratio	0.15	0.10	0.00	0.65	0.16

Descriptive Statistics for the sample of 115 firms. Total assets are totals of the equity capital plus liabilities. Tobin's q is the market value to book value. Cash flow are defined as current income minus common stock dividend and the officer bonus plus depreciation. Debt ratio divides the interest-bearing debt in total assets. The denominator of each holdings ratio is a number of total stocks. Borrowing ratio is the loan (long-term and short-term loans) divide the interest-bearing debt.

<table2< th=""><th>2&gt; Cumulative Abnormal Ret</th><th>um (CAR)</th><th></th></table2<>	2> Cumulative Abnormal Ret	um (CAR)	
Period	CAR	t - statistics	
CAR(-10 to -2)	1.17%	1.72	*
CAR(-1 to 0)	0.36%	1.24	
CAR(-1 to 1)	0.14%	0.35	
CAR(-3 to 3)	0.03%	0.06	
CAR(2 to 10)	0.57%	0.73	
CAR(-10 to 10)	1.87%	1.64	

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\*, \*\* and \*\*\* indicate statistical significance at the 10%, 5%, 1% levels, respectively.

(-10 to -2) is 1.17% in a significantly positive result<sup>6</sup>). This result shows that the acquisitions

6) Shleifer and Vishny (2003) is pointed out that they have incentive to buy the relatively cheap enterprise by the means of payment using overvalued stocks when stocks are overestimated.

don't increase the value of stockholders in Japan.

# 3.3. Single variable analysis

In this section, using a two-day (-1 to 0) Cumulative Abnormal Return, we analyze the differences by characteristics and dealing purposes. The sample is divided whether the dealings purpose is a relief or not, and whether it is the horizontal type or not. A classification criterion is described in 2.2. The classification of other financial variables used an industrial average. The result is described in Table 3.

Cumulative Abnormal Return of the horizontal type dealings is 0.82%, but excess return of the non-horizontal type is -0.56%. The difference between the horizontal type and the non-horizontal type is also statistically significant. Therefore, the effect of stock prices of the horizontal type might be higher than that of the non-horizontal type. Contrast to Kang *et al.*(2000) and the difference is statistically significant, we consider that horizontal type which can use the management resources efficiently more increase the value of stockholders than non-horizontal type. On the contrary, though the excess return of the dealing in which it aimed at the relief that attempted the effect of the management improvement positively looked higher than the excess return of non-relief type, but the difference is not significant. This result is consistent with Kang *et al.*(2000).

	Sample	CAR (-1,0)	t - statistics	
Horizontal type	77	0.82%	2.25	**
non-horizontal type	38	-0.56%		
relief type,	13	1.33%	1.17	
non-relief type,	102	0.24%		
Low total assets	31	1.25%	1.86	
High total assets	84	0.04%		
Low cash flow	45	0.39%	0.08	
High cash flow	70	0.35%		
Low Directors holdings	102	0.20%	-1.59	
High Directors holdings	13	1.66%		
Low financial institution holdings	19	1.44%	1.64	
High financial institution holdings	96	0.15%		
Low foreigner holdings	36	0.67%	0.70	
High foreigner holdings	79	0.23%		
Low individual holdings	95	0.15%	-1.57	
High individual holdings	20	1.36%		
Low borrowing ratio	79	0.26%	-0.55	
High borrowing ratio	36	0.60%		
Low debt ratio	56	-0.19%	-1.86	*
High debt ratio	59	0.89%		

<table 3=""> Analyze</table>	the	differences	bv	characteristics	and	dealing	purposes.
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The classification of the financial variable used an industrial average. The explanation of the variable is omitted respectively because it is reported in the text. \*, \*\* and \*\*\* indicate statistical significance at the 10%, 5%, 1% levels, respectively.

The difference in the cash flow doesn't also make influence to the excess return. Jensen (1986) is pointed out that the manager of the firm with a lot of cash flow invested excessively for private benefits, and the stockholder value might be ruined, but the difference is not seen in

a short-term. As for the distinction with the ownership structure of the firm, a significant difference is not either. The difference is not significant though Cumulative Abnormal Return of the firm whose director hold ths ratio is higher looks relatively high. Given that many of the directors promoted from the inside in Japan, which indicates a stable shareholder. Although not statistically significant, Cumulative Abnormal Return of the bidder whose financial institution hold ths ratio is lower is high. This can be interpreted for the stockholder such as the financial institutions not to confer a benefit to the bidder. Moreover, it seems that foreign stockholders monitor the firm in place of the financial institution, but it is not supported. we can conclude that discipline to management of foreign shareholders is not clear yet.

Cumulative Abnormal Return of firms with high debt ratio has a positive 0.89%, the difference with the bidder with a low debt ratio is also statistically significant. The fact that they have a lot of debts, it can be interpreted that market believe that manager has confidence in cash flow of the future. Also, the debt ratio is a result of supporting Jensen (1986) that works as a discipline that decreases the cash flow that manager can freely use.

These results show that Cumulative Abnormal Return is positive in that firm with high debt ratio and the horizontal type dealings, but it is not so much influenced in the ownership structure etc.

#### 3.4. cross-section analysis

In this section, we verify whether the excess return to the acquisition announcement depends on the dealings purpose, the financial condition, and the management performance. The regression analysis of which the explained variable is the two-day (-1 to 0) Cumulative Abnormal Return. The log of total assets and Tobin's q, relief dummy, horizontal dummy, and cash flow are considered as an explanatory variable. In order to analyze the impact on stock prices effects of the external monitoring capabilities, the debt ratio and the ratio of stockholders are added to the explanatory variable.

Table 4 shows the results of the regression analysis. The effect of stock prices of the

	<table 4=""> Regression analysis</table>											
	Model1	t-stat	Model2	t-stat	Model3	t-stat	Model4	t-stat	Mode5	t-stat	_	
Constant	0.036	1.60	0.037	1.65	0.017	0.50	0.011	0.32	0.190	0.48	_	
Log(total assets)	-0.010	-2.40 **	-0.010	-2.41 **	-0.011	-1.69 *	• -0.010	-1.48	-0.013	-1.95	*	
Relief dummy	0.013	1.44	0.013	1.45	0.011	1.22	0.011	1.22	0.013	1.39		
Horizontal dummy	0.012	1.90 *	0.012	1.95 *	0.011	1.83	¢ 0.012	1.89 *	0.011	1.79	*	
Tobin's q	0.005	1.17	0.006	1.38	0.002	0.45	0.005	0.82	0.003	0.61		
Debt ratio	0.030	1.72 *	0.029	1.62	0.037	1.93 *	¢ 0.034	1.74 *	0.035	1.82	*	
Cash flow			-0.062	-0.76			-0.087	-1.01				
Directors holdings					0.070	1.29	0.078	1.43				
ratio Individual									-0.149	-0.37		
holdings ratio Financial institution					0.024	0.7	0.025	0.72	-0.151	-0.37		
holdings ratio Other corporate					0.036	1.13	0.040	1.26	-0.131	-0.33		
holdings ratio Foreigner holdings					0.050	0.96	0.042	0.81	-0.107	-0.27		
ratio R-squared	10.89		11.37		13.03		13.88		11.77			

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The relief dummy is 1 if the dealings purpose is a relief, and 0 otherwise. The horizontal dummy is 1 if the dealings is horizontal type, and 0 otherwise. The explanation of the variable is omitted respectively because it is reported in the text. \*, \*\* and \*\*\* indicate statistical significance at the10%, 5%, 1% levels, respectively.

size and the announcement is negative and statistically significant in most Model. It suggests that market regard dealings as it is for manager to obtain private benefits worrying about a decrease speciality of the manager and the decentralization of resources on business, etc.. As in the previous section, horizontal type is significantly positive, but the coefficient of the relief type is not significant.

This result also supports the hypothesis that the cooperation between businesses and the effective use of resources on business which are the advantage of diversification gives profits to stockholder. The debt ratio coefficient shows a significantly positive effect. It can be interpreted that the debt ratio reduces manager's discretion, and makes management efficiency. Stockholdings of management is likely to be effective to reduce the agency costs caused by a decision-making that deviate from utility maximization of shareholders (Jensen and Meckling, 1976). On the other

hand, there is a study that clarifies that manager's control power will intercept the external control power when the stockholdings ratio of managers rises, then the firm value fall down oppositely, too. (Stulz, 1988) However, the results are not significantly different from zero.

The firm's stock ownership structure is not significant, too. In particular, banks are the creditors and also the shareholders may also have a lot of information that the customer firms, and has some discipline on events that affect such a large acquisition, but the results did not support. Yeh and Hoshino (2001) show that the effect of stock prices is a minus to the firm with a high equity stake of the bank, and it caused that monitor by the bank having become weak in the 1990's. It is not easy to think that the industrial corporation take pressure to manager as external stockholder. The industrial corporation can interpret that the discipline is relatively weak, because they are still stable shareholders even though cross-shareholdings was canceled. It have seemed that foreign shareholder take pressure to manager through capital market because they originally value returns on investment, but the result is not significant.

From the above analysis, we can conclude that the effect of the management improvement of the relief type is relatively weak, but when the synergy effect on the business by the horizontal type influences the firm value relatively strong. Also, though the monitor function by outside stockholders is not able to be confirmed to the acquisition announcements, high debt ratio will reduce the free cash flow for the payment of interests, can be interpreted as a discipline on managers.

	Expenses per	Sales growth	Sales growth			ROE		
	capita	Rate	Rate					
Raw	performance							
-1	9.71	***	-0.51		3.81	***	9.52	***
	8.82	**	0.57	**	2.81	**	7.51	**
1	10.84	***	0.99		3.94	***	8.79	**:
	9.57	***	0.29	***	2.97	**	6.99	**
2	11.98	***	3.92	*	3.82	***	8.34	**:
	9.74	***	2.90	***	3.40		7.23	
Industry-adj	usted performance							
-1	1.37	***	-1.29		0.04		-0.06	
	0.93		-1.52		-0.56		-0.94	
1	1.49	***	-3.72	***	-0.32		-0.73	
	1.02	*	-2.92		-0.83	*	-2.30	
2	1.53	***	-1.26		-0.70	**	-1.68	**
	0.85		-1.22	***	-0.79		-2.15	
Changes	of performance							
-1 to 1	1.07	*	1.22		0.09		-0.81	
	0.42	***	0.78	**	-0.07	**	-1.02	
-1 to 2	2.28		4.49	*	0.00		-1.18	**
	0.43	***	4.13	***	0.11		-0.79	

<Table5> Changes of performance

Expenses per capita is calculated by dividing the number of employees to labor expenses. Sales growth rate is divided by the change in sales revenue last year. ROA is the ratio of operating profit and total assets. ROE is the ratio of operating profit and equity. Industry-adjusted performance is computed for each firm and year as the difference between the sample firm value in that year and median value for other firms in the same industry. \*, \*\* and \*\*\* indicate statistical significance at the 10%, 5%, 1% levels, respectively.

# IV. Post-acquisition long-term management performance

# 4.1. Changes of the management performance

In the previous section, we analyzed the effect of short-term stock prices. Assuming that information of the firm is reflected immediately in the market, the event study will have benefits

and can be directly evaluated the impact on firm value, but it cannot be confirmed whether the performance that the market had expected at the announcement is actually achieved. Therefore, we examine changes of post-acquisition performance in this section. First, management performance is measured pre- and post-acquisition. The result is reported in Table 5. Expenses per capita is calculated by dividing the number of employees to labor expenses. Sales growth rate is divided by the change in sales revenue last year. ROA is the ratio of operating profit and total assets. ROE is the ratio of operating profit and equity. We calculate the raw and the adjusted performance by an industrial median to control for any concomitant trends. ROE and ROA is 9.52 % and 3.81% each in the pre-acquisition. But, ROE have decreased post-acquisition. The difference of ROE pre- and post-acquisition is significant and it has fallen substantially. In addition, the adjusted ROA and ROE considering industry effects, is -0.70% and -1.68% after 2-year, which is significantly negative. It shows that long-term management performance has decreased following acquisition.

### 4.2. Determinants of post-acquisition management performance

In this section, we analyze whether post-acquisition management performance is affected by the dealing characteristics. Specifically, the post-acquisition performance is estimated by using the following models.

$$Y_{t+2} - Y_{t-1} = \alpha + \beta_1 size_{t-1} + \beta_2 kyusai_{t-1} + \beta_3 suihei_{t-1} + \beta_4 debt_{t-1} + \varepsilon_{t-1}$$
(1)

Y is a measure of firm performance. Specifically, ROA, the expenses per capita, the sales growth rate, ROE are used. t represents fiscal year. It seems that it takes several years at least until the effect of performance by the acquisitions appears. Consider this, compared to the previous year's performance, we verify whether performance of the bidder improved or not after two years. We use dependable variables that relief dummy, horizontal dummy, and log of total assets which is the characteristics of acquisition. And, debt ratio is used as an additional variable to control the characteristic of the bidder.

	Expenses per capita			Sales g	Sales growth rate		ROA			ROE		
-		t -stat			t -stat		t -stat			t -stat		
Constant	4.22	2.60	**	14.18	0.67	0.77	0.42		5.29	1.04		
Log(total	-0.53	-1.75	*	-2.03	-0.52	-0.24	-0.69		-1.14	-1.19		
assets) Relief	0.25	0.39		-4.27	-0.51	0.07	0.09		0.46	0.23		
dummy Horizontal	-1.46	-3.30	***	-0.37	-0.06	-0.17	-0.33		-0.51	-0.37		
dummy Debt ratio	1.47	1.22		7.62	0.49	2.37	1.76	*	-0.03	-0.01		
R-squared	10.84			0.58		2.8			1.68			

<Table 6> Regression of long-term management performance

Relief dummy is 1 if the dealings purpose is a relief, and 0 otherwise. Horizontal dummy is 1 if the dealings is horizontal type, and 0 otherwise. Explanation of the variable is omitted respectively because it is reported in the text. \*, \*\* and \*\*\* indicate statistical significance at the 10%, 5%, 1% levels, respectively.

		Expenses		Sales gr-				
	Ν	per capita	Ν	owth rate	Ν	ROA	Ν	ROE
Relief type	13	1.01	13	0.54	13	0.12	13	-1.00
Non-Relief type	98	0.73	100	4.93	101	0.02	100	-1.28
t-statics		0.42		-0.53		0.14		0.14
Horizontal type	74	0.31	76	4.51	76	0.01	76	-1.38
Non-Horizontal	37	1.66	37	4.25	38	0.07	37	-0.97
type t-statics		-2.38	**	0.04		-0.12		-0.30

<Table 7> Test of management performance by dealing characteristics:(t+2)-(t-1)

\*, \*\* and \*\*\* indicate statistical significance at the 10%, 5%, 1% levels, respectively. N represents count of the sample firms.

Table 6 represents the result. Most coefficients are not significant. In the long-term, horizontal type has seen no significant improvement. Horizontal dummy is significantly negative only in expenses per capita. This suggests that horizontal type improve the labor cost.

Looking at the analysis in Table 7 is estimated to management performance by dealing characteristics, horizontal type is 0.31% and non-horizontal type is 1.66% in expenses per capita, the difference is also significant. It shows that non-horizontal dealing has increased the expenses per capita relatively. In others, the management performance difference between the dealing characteristics is not identified.

# V. Conclusion

The acquisitions increase rapidly following the Commercial Code Revision after in the latter half of the 1990's in Japan. However, studies on the acquisitions are a little after 2000. Furthermore, Relationship between firms and banks may have changed significantly since canceling cross-sharing. Therefore, not only the effect of stock prices on the acquisition announcement in the 2000's but also it seems that the subsequent analysis of management performance is important. We investigate the performance of the bidder who acquire the assets to be divested in 2000~2003. First, we examines the announcement effects using a market model. In addition, we verify empirically the long-term performance following acquisition.

The result of the analysis is as follows. Seller is obtained significant positive CAR of 0.93% during -1 to 0, but bidder does not have statistically significant CAR. However, when it is classified by the dealing characteristics, dealing with the acquisitions of allied businesses is a significant and positive 0.82%, but the acquisitions of non-allied businesses is -0.56%, the difference is also significant. It can be concluded that only dealings of allied business that brings the cooperation between businesses and effective use of resources on business increase stockholder's value more than diversification that brings only an increase in manager's private benefits.

However, looking at the outcomes of post-acquisition management performance, the difference of the result by the dealings characteristics is no longer, even worse than before it has done. In these results, relief purpose and synergy effect purpose are not achieved the performance improvement. Furthermore, banks are the creditors and also the shareholders may also have a lot of information about their customer firms, are expected to have some managerial discipline on events such a large acquisition, but the results did not support. It suggests that monitoring function by the bank have become weak.

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# 매수기업의 장·단기 경영성과 분석 - 일본기업의 다이베스트먼트 연구 -

이상래\*

# 요 약

본 연구는 2000~2003년도에 다이베스트먼트 되는 자산을 매수한 일본기업을 대상으로, 단기의 주가효과와 장기의 경영성과를 분석했다. 90년대 이후 경제침체와 이에 따른 상법개정 등으로 인 하여 M&A는 급증하였다. 또한, 은행과 기업간의 상호주식보유 해지로 그동안 기업을 감시해온 은행의 역할에 대한 분석도 중요하다고 할 수 있다.

분석결과에 의하면, 매수 기업의 단기주가효과는 나타나지 않았고(break even), 은행과 같은 외부주주의 감시효과도 볼 수 없었다. 하지만, 거래형태로 구분하여 보면, 관련 산업의 매수에 의 해 시너지 효과가 기대되는 수평형 거래에서는 주주가치증가를 얻을 수 있었다. 한편, 매수후의 경영성과분석에서는, 거래형태에 의한 차이는 존재하지 않고, 오히려 매수를 하기 전에 비해 경 영성과가 나빠져 있다는 결과가 나타났다. 따라서 일본기업의 부분매수는 거래형태와 관계없이 기업에 이점을 가져오지 않는다고 결론지을 수 있다. 이 결과는, 90년대를 분석대상으로 하여, 매 수가 주주의 이익증대를 가져왔다고 보고한 Kruse, Park, Park, and Suzuki (2007)와 상반되는 결과로, 2000년 이후 일본기업의 경영환경이 변화되었음을 시사하고 있다.

## 핵심주제어 : 다이베스트먼트, 매수기업, 장·단기 경영성과

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