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Firm-specific Factors, Shareholding Structure and Corporate Performance of the Japanese Manufacturing Investments in Europe^{1),2)}

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What determines the performance of overseas operations of multinational enterprises has been an important topic of research. This study aims at providing further evidence on the influence of entry mode and firm specific factors on the performance of Japanese-affiliated manufacturing investments in Europe. The empirical results are based on a sample of 98 companies for the period between 1994 and 1997. The main hypothesis is that firms with high firm-specific advantages and entering through greenfield investment perform better. Taking into consideration the full sample over the four years combined, results suggest that the success of these companies depend on the size and number of employees of the investing company. As expected, the number of subsidiaries of the parent firm affects the performance of the subsidiary. Furthermore, entry mode and R & D intensity are shown to have a non-significant relationship with performance.

I. Introduction

Multinational enterprises (MNE) play a vital role in the economic welfare of nations and in the process of economic restructuring of the world economy (Dunning 1985). The growth in the importance of the MNE has resulted in a voluminous amount of empirical research being made to analyze and predict its behavior patterns.

Aiming at promoting further development of its economy, Japan has used Foreign Direct Investment (FDI) as a means to revitalize its economy, to the point where it has become one of the world top six countries in direct investment outflows.

In recent years, Japanese FDI has attracted widespread attention since they behave differently from other foreign firms because they have a different culture and institutional structure (Graham and Krugman 1995). The yen-dollar exchange rate, in which the yen appreciated until mid-1995,

stimulated foreign direct investment by manufacturing industry. Table 1 shows that Japanese FDI outflows on a dollar basis are successively increasing from 1994 to 1997, indicating the upward trend in that period.

Europe as a host of Japanese FDI

By 1992, Western Europe became the most important single market in the world, overtaken the USA and lies well ahead of Japan in terms of population and GDP.

An economic integration process started in the second half of the 1980s, gave an increase of importance in the eye of investors to Europe. Moreover, some events, such as the German reunification, the anticipated association of the EC with the EFTA countries and the gradual opening of East European nations, give the foreign companies more opportunities for investment.

Europe is among the major destinations for inward investment in the world. From 1994, at least two European countries are among the top five recipients of FDI. Japanese FDI in European manufacturing industry is of very recent origin. In the 1970s, the FDI from Japan marked a period of stagnation. The instances of investment were few and were concentrated in a small number of

1) An earlier version of this article was presented at the annual meeting of the Japanese Association of Administrative Science, Isehara, Japan, 25-26 November 2000.

2) The authors are grateful to the two anonymous referees for their helpful comments.

Table 1 FDI Outflow by Major Countries/Regions

(Unit: US\$ millions, %)

	1994	1995	1996	% change	1997	% change
NAFTA	90.000	110.971	105.582	- 4.8	132.011	25.0
EU	121.054	160.364	184.280	14.9	223.961	21.5
Japan	18,089	22,508	23,442	4.2	26,059	11.2
Asia	9.678	12.816	14.788	15.4	14.414	- 2.5
Latin America	6.255	7.510	7.202	- 4.1	15.598	116.6
Switzerland	10.793	12.210	16.152	32.3	18.005	11.5
Australia	2.472	3.842	5.851	52.3	6.220	6.3
World	284.915	358.573	379.872	5.9	475.125	25.1

Source: JETRO White Paper on FDI 2000

Table 2 Trends in Japan's FDI Outflow

	Value (Unit: US\$ million)				% change on a year earlier (%)			
	1994	1995	1996	1997	1994	1995	1996	1997
World	41,051	50,694	48,019	53,972	14.0	23.5	- 5.3	12.4
North America	17,823	22,761	23,021	21,389	16.6	27.7	1.1	- 7.1
United States	17,331	22,193	22,005	20,769	17.7	28.1	- 0.8	- 5.6
Europe	6,230	8,470	7,372	11,204	-21.5	36.0	-13.0	52.0
Asia	9,699	12,264	11,614	12,181	46.1	26.4	- 5.3	4.9
Latin America	5,231	3,877	4,446	6,336	55.2	-25.9	14.7	42.5
Middle East	290	148	238	471	33.9	-48.8	60.2	98.0
Africa	346	379	431	332	-35.7	9.3	13.8	-22.9
Oceania	1,432	2,795	897	2,058	-29.6	95.2	-67.9	129.4

Source: JETRO White Paper on FDI 2000

industrial sectors. Since the 1980s, a serious extension of Japanese manufacturing companies has begun in Europe. A surge of investment in much wider range of industries was registered. This was the consequences of the persistent high unemployment rates in Europe, the appreciation of the yen and improved employment opportunities brought about by FDI. They grew dramatically in the 1990s. Motivations behind the Japanese presence in Europe vary according to the industry, the host country, and the company's strategy. Within Europe, the UK has always been the preferred location for Japanese companies. It is also the leading employment market for Japanese manufacturing affiliates in Europe.

In 1997, Japanese FDI outflow in Europe amounted to US\$ 11.2 billion, up 52 percent from the previous year (Table 2). After recording a

small increase from 1994 (US\$ 6,230 million) to 1995 (US\$ 8,470 million), the Japanese Foreign Direct Investment (FDI) in Europe decreased in 1996 (US\$ 7,372 million).

According to JETRO, the number of Japanese-affiliated manufacturing companies in Europe, which counted 179 firms as of the end of 1983, reached 825 firms as of the end of 1997, including 16 firms newly established during the year. Out of the 825, 421 were found to have an average of 307 employees. A simple calculation makes the total number of jobs created by Japanese-affiliated manufacturing companies throughout Europe nearly 250,000.

In this study, we explore what affects the performance of the Japanese firms in Europe. Based upon the existing literature, we concentrate on the following factors:

i) mode of entry; ii) dimensional aspects; iii) technological opportunities; and iv) international experience.

The paper proceeds in the following way. Each of the next three sections includes a potential explanation of the theoretical approaches, the research design and data that examines it, and the statistical results. The last section summarizes and concludes the study.

II. Background and Literature Review

To compete with host country firms in their own markets, firms must possess superior assets and skills reflected by its size, multinational experience, managerial efficiency, etc. Efforts to identify variables associated with firm performance have been constrained by continued disagreements. This disagreement derives from the fact that performance can be evaluated in several ways. Geringer and Hebert (1991) argued that no consensus on the appropriate definition and measure of the concept of performance has yet emerged. Many researches have studied the relationship between performance and other variables. However, the corporate performance was measured in many different ways. We develop the firm's performance in foreign market explained by some key factors.

2.1. Entry Mode

Entry mode is one of the most important decisions faced by a MNE going abroad through FDI. They have the choice between a shared ownership (equity joint venture) and full ownership (greenfield investment), which can be considered as the modes involving higher resource commitment and higher control (Hill et al. 1990). Empirical literature on the relationship between entry mode and performance can be broadly explained by a comparison between the performances of the two types of ownership. Few empirical researches have explicitly produced consistent findings regarding the relationship between performance and the various international entry modes (Woodcock et al. 1994). Oswald and Jahera (1991) examined the relationship between ownership structure (measured by the percentage of stock held by

directors and officers) and financial performance (measured by excess stock returns) in the context of the agency theory. Their results support the hypothesis of a significant relationship between ownership and performance. The results showed higher excess returns for firms with higher levels of inside ownership. Chowdhury (1992), analyzing the foreign activity of the US manufacturing companies found that wholly owned subsidiaries are relatively more efficient than joint ventures in terms of certain specifics.

Woodcock et al. (1994) examined the relationship between entry modes and performance. They developed a theoretical relationship for international entry modes that is based on the contingency characteristics of resource requirements and organizational control factors. Their empirical test used a sample of 321 Japanese firms entering the North American market. They found that new venture mode outperforms the international joint venture mode. Nitsch et al. (1996) examined the links between entry mode and performance of Japanese FDI in Europe for the years 1992 and 1994. They found that greenfield mode tends to have the highest proportion of gains relative to losses, and joint ventures are not far behind.

Drawing on these findings of the earlier studies, we investigate the following hypothesis:

Hypothesis 1: Foreign firms entering through greenfield investments are more likely to perform better than those entering through joint ventures.

2.2 Dimensional Aspects

Evidently, a firm's performance is determined by many different factors. In addition to the mode of entry factor, we have to incorporate dimensional, technological, and experience factors. Studies have shown that the size of a firm has an important effect on business failure (Freeman et al. 1983). Smaller firms have a higher rate of failure than large firms. Isobe (1998) found that size of parent tend to have positive influence on subsidiary's performance. Siripaisalpipat and Hoshino (1999), in studying the factors influencing the performance of Japanese FDI in Thailand,

found that firm size is negatively associated with profitability.

Other issues of the dimensional aspects have been taken by other studies. For example, Murphy et al. (1996) found that the number of employees is positively correlated to most of the performance factors.

As a result, we hypothesize that larger firms will have higher performance than small firms:

Hypothesis 2: The larger the foreign firm, the more likely the subsidiary performs better.

2.3. Technological Opportunities

Firm-specific advantages can consist of superior organizational ability or technical expertise. R&D has been viewed as a key determinant and indicator of the technological progressiveness of firms. Many studies have used R&D expenditure as a measure of intangible assets at the firm level. It is perceived as an important stimulation for good results and it has been found in numerous empirical studies. Siripaisalpipat and Hoshino (1999) found that R&D intensity of the investor have a positive influence on the profitability of the subsidiary. Decarolis and Deeds (1999), in analyzing 225 companies in the biotechnology industry, found that R&D intensity is a highly significant predictor of firm performance. Makino and Delios (1996), studying Japanese joint ventures in Southeast and East Asia, found that the parent's R&D rate is positively associated with performance. Moreover, they found that, in the absence of a local partner, technical or ownership advantages and the degree of host country restrictions become important factors impacting performance.

We expect to find a similar relationship between R&D intensity and firm performance. The resulting hypothesis is:

Hypothesis 3: Technological capabilities of the investor firm are positively associated with the subsidiary performance.

2.4. International Experience

Experience is a strong factor that permits firms to gradually increase their commitment to geographical expansion (Johanson and Vahlne 1977).

The more multinational is the firm, the greater it can leverage strategic resources and diversify market risks, thus it can perform better (Kim et al. 1993). Li (1995), investigating the effects of strategic choices on performance of foreign subsidiaries in the U.S., found that the exit rate increases as the age of foreign subsidiary increases. Siripaisalpipat and Hoshino (2000) found that international experience, measured by the total number of overall manufacturing subsidiaries of the parent firm, interacted with entry mode has a positive relationship with performance. Ramaswamy (1993) found a positive relationship between the number of overseas plants and performance.

The following is therefore expected:

Hypothesis 4: The greater the international experience of the investor firm, the more likely the subsidiary will perform better.

In summary, in this study we sought to examine the correlation between firm's advantages and its subsidiary's performance. We expect that the more the firm's capabilities, the more likely the subsidiary would perform better.

III. Research Design

Scope of Study

This study examines the relationship between firm-specific factors and entry mode with the corporate performance of the Japanese manufacturing subsidiaries located in Europe. These countries are the United Kingdom, Germany, France, Netherlands, Belgium, Spain, Portugal, Italy, Sweden, Ireland, Greece, and Turkey.

This study is restricted on two mode of entry, namely international joint venture (IJV) and greenfield investment (GF).

Sample

The data used in this study was compiled from *Japanese Overseas Investment: Listing by Firms and Countries* (Toyo Keizai Inc.) from 1994 to 1997 which contains information on the Japanese firms listed on the Japanese stock exchanges (Tokyo, Osaka and Nagoya) as well as major unlisted Japanese firms. The data used here include only manufacturing subsidiaries in which the Japanese

Table 3 Sample Distribution by Country and Industry

Country	Number	Industry	Number
UK	34	IND 1 : Food, Textiles, Pulp, Wood and Paper	9
Germany	14	IND 2 : Chemical products, Rubbers and Plastics	29
France	11	IND 3 : Electrical and Electronics	33
Netherlands	12	IND 4 : Transportation	18
Belgium	7	IND 5 : Precision instruments and others	9
Spain	4		
Sweden	1		
Ireland	1		
Portugal	1		
Italy	7		
Greece	1		
Turkey	2		

parent's stake was at least ten percent. Besides the names of major shareholders and their corresponding percentages of share ownership of the Japanese firms abroad, this database reports the date of foundation of these companies, their capital, their sale volume, their activity, the number of local employees, the number of Japanese employees and their performance. The Nikkei Zaimu database and Nikkei Kaisha Nenkan were used to retrieve data about firm-specific advantages when unavailable from the former source. The company's performance is measured by asking the top Japanese manager in every subsidiary to evaluate the overall financial profitability according to three-point scale, representing "Loss", "Breakeven" and "Gain". Given the confidential nature of the Japanese subsidiaries, we could not get other information about their performance.

Following the study of Woodcock et al. (1994) who found that performance of subsidiaries tended to stabilize two years after entry, we have eliminated the subsidiaries which the age of establishment was less than two years.

The final sample includes 98 companies. The complete list of these subsidiaries is included in Appendix. Table 3 gives us an idea of the sample distribution by country and industry.

Dependent Variable

The dependent variable performance (collected from Toyo Keizai database) is a dichotomous

variable equal to 1 if it is "Gain" and 0 otherwise. With a binary dependent variable, a logistic regression model is utilized to estimate the effects of the independent variables. The model examines the effect of ownership structure and firm specific characteristics on the likelihood of positive performance (Gain) as opposed to negative performance (Loss or Breakeven). It models the probability of positive performance to that of negative performance as a function of the main effects and the interaction terms. The parameters are estimated using the logistic regression procedure of the SPSS 9.0 statistical package.

Independent Variables

Many studies have identified variables that may affect the performance of multinationals. Based on our discussion in the previous section, we have included the following variables to reflect the performance of Japanese firms in Europe:

Dimensional Aspects: The size of the Japanese parent is measured by the logarithm of the parent company's total assets (SIZE). Second issue related to the dimensional aspect is the total number of employees (EMPL) introduced in logarithmic form.

Technological Opportunities: The amount of know-how held by a Japanese firm is proxied by the parent's R&D expenditures (RND).

International Experience: We measured international experience by three indicators:

i) the number of years since the establishment of the subsidiary (AGE); ii) the number of foreign subsidiaries of the parent company already operating (SUBS); and iii) the ratio of exports to the total sales of the parent company (EXPRAT).

Entry Mode: Entry mode (MODE) is measured by a dummy variable which is equal to one if the parent MNE owned at least 95% of the subsidiary's equity and zero if less than 95%. This definition is the same as that used by previous studies on the topic (Stopford and Wells 1972; Anderson and Gatignon 1986; Gomes-Casseres 1989; Siripaisalpipat and Hoshino 1999).

It should be noted that another category of variables was included in the sample: IND_i . The IND_i are indicators denoting the firm's primary industry. These dummy variables are included to control the different structures of the various industries represented in the sample. Five industry dummies are added into the model: $IND1 = 1$ for

"Food, Textiles, Pulp, Wood and Paper"; $IND2 = 1$ for "Chemical products, Rubbers and Plastics"; $IND3 = 1$ for "Electrical and Electronics"; $IND4 = 1$ for "Transportation" and $IND5 = 1$ for "Precision instruments and others". We grouped the Food, Textiles, Pulp, Wood and Paper together in the same industry because the number of sample firms was very small.

IV. Results

We performed collinearity diagnostics by examining the bivariate correlation. Table 4 shows the correlation between the independent variables in the case of all years combined. Table 5 presents the results of the binomial logistic regression in which we first regressed firm performance on the entry mode and the different firm-specific factors. In the second stage, we entered the industry dummy variable to examine its effect with the other factors on the performance. At the foot of

Table 4 Correlation Matrix of Independent Variables in the Regression Model

	1	2	3	4	5	6	7
1. MODE	1						
2. SIZE	-0.041	1					
3. EMPL	-0.143	0.724	1				
4. RND	0.050	0.058	0.101	1			
5. EXPRAT	-0.026	0.212	0.235	0.270	1		
6. SUBS	-0.159	0.354	0.368	0.116	0.072	1	
7. AGE	0.035	0.024	0.085	0.031	0.058	0.097	1

Table 5 Logistic Regression Results Containing the Effects of Entry Mode and Firm-specific Advantages on Performance^a

	1994		1995		1996		1997	
Intercept	3.053	(0.449)	0.412	(0.019)	5.041	(1.450)	0.704	(0.039)
MODE	- 0.271	(0.145)	- 0.401	(0.491)	- 0.393	(0.432)	- 0.459	(0.659)
SIZE	2.479*	(3.390)	0.294	(0.163)	2.666*	(3.503)	0.425	(0.225)
EMPL	- 2.574*	(3.068)	- 0.436	(0.346)	- 2.819*	(3.969)	- 0.527	(0.266)
RND	- 2.808	(0.050)	-10.406	(0.953)	-24.165*	(2.941)	16.953	(1.910)
EXPRAT	0.949	(0.124)	- 0.871	(0.119)	3.388	(1.425)	- 3.587	(1.966)
SUBS	0.038	(0.631)	0.084**	(4.294)	0.069*	(3.154)	0.025	(0.757)
AGE	0.376***	(9.862)	0.137**	(4.855)	0.150**	(6.274)	0.101*	(3.247)
χ^2	30.127***		17.897**		23.912***		8.084	
N = 98								

^a Notes: Numbers in parentheses are *t*-values.

* significant at the 10 percent level; ** significant at the 5 percent level; *** significant at the 1 percent level.

each column, we report measures of explanatory power for the two models, as noted by the χ^2 statistics and Log Likelihood.

For the first test, presented in Table 5, several results are noteworthy. Hypothesis 1 was rejected. Contrary to expectation, the coefficient of MODE, the Japanese parent's entry mode structure, is negative but not significant. This result is contradictory to several past studies (Oswald and Jahera 1991; Woodcock et al. 1994; Nitsch et al. 1996). SIZE, the parent's total assets, has a positive sign and significant for the years 1994 and 1996. This provides support for the hypothesis 2. This result is consistent to the findings of Isobe (1998) and Freeman et al. (1983). Apparently the big size of the investor is a significant predictor of a good performance when other variables are taken into account. EMPL, the parent's total number of employees, is negative and significant in 1994 ($\beta = -2.574$, $t = 3.068$) and 1996 ($\beta = -2.819$, $t = 3.696$). The coefficient of RND, the Japanese parent R&D expenditures, is positive for 1997, and negative for the rest of the years. But it is significant only for 1996 ($\beta = -24.165$, $t = 2.941$). This result does not support our hypothesis 3. In previous studies (Decarolis and Deeds 1999; Makino

and Delios 1996), this coefficient is shown to be a strong determinant for a good performance. EXPRAT, the company's export ratio coefficient, is not significant for all the years. Our results also show that the degree of international expansion, as measured by SUBS, the number of foreign affiliates, has a positive and significant effect on performance in 1995 ($\beta = 0.084$, $t = 4.294$) and 1996 ($\beta = 0.069$, $t = 3.154$). This follows the configuration findings of Ramaswamy (1993). For the coefficient of AGE, the subsidiary's age, results are robust and consistent. It has the correct sign and strongly significant for all the years. This result suggests that age and performance are positively related. The overall model is significant for the years 1994-1996 (chi-square significant at $p = 0.01$).

We performed two additional sets of analyses. The first test involved reanalyzing our data using industries. An industry dummy (IND i) is included to account for possible performance differences attributable to specific industries. In these additional analyses, all of our study's original results were almost the same (Table 6). All the industry coefficients are not significant confirming that the type of industry is not a consistent factor of the

Table 6 Logistic Regression Results Containing the Effects of Entry Mode, Firm-specific Advantages and Industries on Performance^a

	1994	1995	1996	1997
Intercept	4.585 (0.897)	1.220 (0.126)	7.938 (2.213)	4.193 (0.937)
MODE	- 0.206 (0.086)	- 0.484 (0.664)	- 0.592 (0.852)	- 0.458 (0.558)
SIZE	3.369** (4.109)	0.527 (0.374)	3.315* (3.804)	1.361 (1.639)
EMPL	- 3.423* (3.756)	- 0.583 (0.449)	3.459** (3.880)	- 1.561 (1.695)
RND	0.629 (0.002)	-11.356 (0.925)	30.589* (3.661)	17.628 (1.886)
EXPRAT	- 0.667 (0.055)	- 0.999 (0.147)	4.301 (1.875)	- 4.439 (2.533)
SUBS	0.027 (0.872)	0.071* (2.862)	0.062 (2.282)	0.023 (0.572)
AGE	0.352*** (9.208)	0.134** (4.257)	0.153** (5.433)	0.147** (5.092)
IND 1	- 6.571 (0.036)	- 1.269 (0.706)	- 1.985 (1.363)	- 0.866 (0.358)
IND 2	- 0.466 (0.091)	- 0.899 (0.566)	- 1.337 (0.883)	- 2.069 (2.592)
IND 3	0.965 (0.422)	- 0.411 (0.131)	- 1.456 (1.055)	- 1.098 (0.920)
IND 4	0.806 (0.236)	- 0.908 (0.507)	- 1.406 (0.955)	- 0.440 (0.121)
χ^2	33.861***	19.125*	25.410***	12.360
N = 98				

^a Notes: Numbers in parentheses are t -values.

* significant at the 10 percent level; ** significant at the 5 percent level; *** significant at the 1 percent level.

good performance of the firm.

Second, we proceed to test the binomial logistic regression for all the years combined to focus specifically on the trend of the relationship between entry mode, firm-specific factors and industries with performance for all the period. The combined effect of entry mode and firm-specific factors was first examined. The result of the fitted model and corresponding statistical test is shown as model 1 in Table 7. SIZE, SUBS and AGE coefficients appear to have a positive and significant relationship with performance. This is consistent with our predictions and past researches. EMPL coefficient is negative and significant ($\beta = -1.018, t = 4.090$). Contrary to our expectation, RND and EXPRAT coefficients are negative and not significant. The second part of this analysis consists on adding the industry variable. The result of the model containing entry mode, firm-specific factors and industry effect is shown as model 2 in Table 7. Entry mode did not seem to have any impact either in the first model or when industries were added to the model. The rest of the variables present the same sign as the model 1 but

with little difference in the power of significance. Moreover, IND2 presents a significantly negative relationship with performance ($\beta = -1.070, t = 3.196$). In their study, Siripaisalpipat and Hoshino (1999) found that "Textiles, fabric and leather product" and "Metal products, engine, machinery and other" are significant. After adding the industry variable, χ^2 was improved from 60.049 to 66.666 reflecting higher explanatory power of the new model with industry adjustment.

V. Conclusions

In order to be successful in the foreign market, it is vital to companies to have enough resources and flexibility while deciding which mode of entry to use for penetrating the foreign market. The determinant of performance is an area of interest to researchers in the field of international business. Several studies have explored the impact of various factors on the success of MNE.

The European market offers enormous opportunities to foreign investors that are willing to commit their firm-specific factors, including their internationalization experience, dimensional abilities, technological power, etc. In practice, the Japanese firms are more likely to succeed their passage to the European market. Figure 1 shows that the firms in the sample represent more positive performance relative to negative performance.

Table 7 Logistic Regression Results Containing the Effects of Entry Mode, Firm-specific Advantages and Industries on Performance for All Years Combined^a

	Model 1		Model 2	
Intercept	0.953	(0.311)	2.139	(1.245)
MODE	- 0.335	(1.436)	- 0.371	(1.647)
SIZE	0.961**	(4.165)	1.392***	(6.815)
EMPL	- 1.018**	(4.090)	- 1.391***	(6.084)
RND	- 1.691	(0.099)	- 0.751	(0.018)
EXPRAT	- 0.132	(0.012)	- 0.610	(0.237)
SUBS	0.042**	(5.839)	0.032*	(3.474)
AGE	0.153***	(23.208)	0.161***	(24.288)
IND 1			- 1.197	(2.537)
IND 2			- 1.070*	(3.196)
IND 3			- 0.318	(0.323)
IND 4			- 0.486	(0.634)
χ^2	60.049***		66.666***	
N = 392				

^a Notes: Numbers in parentheses are t-values.
 * significant at the 10 percent level; ** significant at the 5 percent level; *** significant at the 1 percent level.

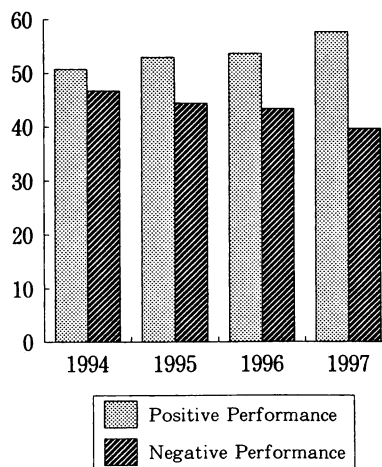


Figure 1 Business Results of Japanese Affiliates in Europe (%)

This study's objective was to examine the factors influencing the performance of Japanese FDI in Europe. Factors reflecting the entry mode and firm-specific advantages were constructed. Our study shed light on a crucial strategic decision by firms in their way to internationalization: what are the factors affecting their performance, and what is the preferred mode of entry that is more beneficial to them. Our study is based on a sample over a four-year time period. This allows us to observe how a major global market like Europe has changed over time and how the performance of foreign firms was affected. Our key concerning, the effect of entry mode on firm performance is found to be insignificant. We have provided evidence that entry mode is not related to firm performance. Thus, this research does not confirm previous research conclusions (Oswald and Jahera 1991; Chowdhury 1992; Woodcock et al. 1994; Nitsch et al. 1996) that entry mode has an impact on the performance. In addition, this research shows that the experience have a positive effect on the performance in line with (Ramaswamy 1993; Li 1995; and Siripaisalpipat and Hoshino 2000). Moreover, in this paper we have considered the effect of the dimensional aspect on performance. Total assets are found to be positively significant to the performance confirming the findings of Freeman et al. (1993) and Isobe (1998). Total employees are shown to have a negative effect on performance. This is in contradiction to the findings of Murphy et al. (1996) that found that the number of employees is positively correlated to performance. Besides, our results indicate that the technological factor measured by the R&D intensity has no impact on the performance. This variable is found in previous researches (Makino and Delios 1996; Decarolis and Deeds 1999; Siripaisalpipat and Hoshino 1999) to be positively associated with performance. So, if we take into consideration the full sample over the four years combined, hypotheses 1 and 3 are rejected, while hypotheses 2 and 4 are supported.

Yet, the present study could be constrained by some limitations. First, the data published by Toyo Keizai gives us the performance of every

Japanese firm based on the opinion of the top manager, and not based on the financial statements. This can represent a handicap since the opinion of a high or low performance may change from company to another. But, we cannot avoid this problem since this is the only source of data available in our possession. Second, due to the nature and size of the database, it is hard to construct the firm-specific factors such as marketing intensity, although such factor was used in a vast number of studies and probably will give us a better understanding of performance. Nevertheless, despite these limitations the study has clearly provided a theoretical and practical insight into the factors affecting the success of the Japanese companies in Europe. In conclusion, the findings can be better if the performance data was bigger enough. Future research should be also addressed to take into account other parent company variables.

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Appendix List of the 98 Japanese Subsidiaries Used in the Empirical Study

UK	Kurita Europe GmbH	Showa Europe S.A
Advanced Healthcare Ltd	Matsushita Communication Deutschland	Sweden
Adwest Bowden TSK Ltd.	Mitsubishi Paper GmbH	AB Press & Plat Industri
Amada UK Ltd.	Motoman Robotec GmbH	Ireland
Calsonic Automotive Products Ltd.	NTN Kugellagerfabrik GmbH	Sumicem Optp-Electronics Ltd.
Daiwa Sports Ltd	Rutgers Kureha Solvents GmbH	Portugal
Diaplastics UK Ltd	Simrax GmbH	Fisipe Fibras Sinteticas SAR
Dynic UK Ltd	SMC Pneumatik GmbH	Italy
Electronic Harnesses UK Ltd	France	Alcantara S.p.A.
Enplas UK Ltd	Alcan-Toyo Europe	Ballarini S.p.A.
Freudenberg Technical Products LP	Clarion France	Emblem Europe S.p.A.
Fuji Copian UK Ltd	Dunlop France	Fiam GS S.p.A.
Hashimoto Ltd	Komori-Chambon	Flat Hitachi Excavators S.p.A.
Hochiki Europe UK Ltd	Laboratoires Daiichi Sanofi	Roland Europe S.p.A.
Hosiden Besson Ltd	Sealed Air	SMC Italia S.p.A.
IBC Vehicles Ltd	Sharp manufacturing	Greece
IK Precision Co. Ltd	Societe des Fibres de C.	Tosoh Hellas A.I.C.
Ikeda Hoover Ltd	Stanley-IDESS	Turkey
Kyushu Matsushita Electric UK Co. Ltd.	Takasago Europe	Anadolu Isuzu Otomotiv Sanayi A.S.
Magna Kansei Ltd	Yokogawa Controle	TAT Tohumculuk A.S.
Matsushita Communication Industrial Ltd	Netherlands	
Minova Ltd	Calsonic Automotive Products B.V	
Mitsumi UK Ltd	Delamine B.V	
Nissan Motor Manufacturing UK Ltd.	Hitachi Construction Machinery B.V	
Nittan UK Ltd	Image Polymers Europe V.O.F	
OPTEC D.D. UK Ltd	Krehalon Industrie B.V	
Organo Europe Ltd	Metablen Co. B.V	
Royal Sovereign	MHI Equipment Europe B.V	
R-Tek Ltd	Sekisui Jushi B.V	
SMC Pneumatics UK Ltd	Shin-Etsu Polymer Europe B.V	
SMK UK Ltd	Sony Chemicals Europe B.V	
Takiron UK Ltd	Yamada Europe B.V	
Tenma UK Ltd.	Yokogawa Europe B.V	
Toray Textiles Europe Ltd	Belgium	
UK-NSI Co. Ltd	Amano Electronics Europe N.V	
Yuasa Automotive Batteries Europe Ltd	CMK Europe N.V	
Yuasa Battery UK Ltd	Hishi Plastics Europe S.A	
Zeon Chemicals Europe Ltd	Muto Europe N.V	
Germany	NGK-Europe S.A	
BLV. Licht-Und Vakuumtechnik GmbH	Nitto Europe N.V	
Faun GmbH	Vamo-Fuji Specialities N.V	
Goldwell GmbH	Spain	
Heidenreich & Harbeck Werkzeugmaschinen	Esteban Ikeda S.A	
Heinrich Wagner Sinto Maschinenfabrik	Kao Corp. S.A	
Konami Deutschland GmbH	Paceco Espana S.A	