Entry mode, corporate characteristics and profitability of foreign companies in Japan

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ABSTRACT

This paper examines the relationships between entry mode, corporate characteristics, and performance of foreign firms in Japan. The entry mode classified into wholly ownership subsidiaries and joint ventures (JVs) subsidiaries. The profitability determined by adjusted net profit ratio to measure the integrated profitability. By using financial data of 319 foreign corporations in Japan, we conclude that the profitability of joint venture ownership is better than wholly ownership for manufacturing companies while wholly ownership is better than joint venture ownership for non-manufacturing companies. In addition, the profitability of joint ventures with minority ownership is the best entry mode for manufacturing companies and equally ownership for non-manufacturing companies in Japan.

Introduction

In Japan, after adopting capital liberalization policy in July 1967, many amendments had introduced in terms of policies and regulations. Especially, to release the grip of insecurity after collapsing the bubble economy, and also to secure the hollowning industries and to face international competitiveness, there is an increasing need to maintain the environment of mergers and acquisitions (M&A). Companies have now started to recover and restructure them. Continuous improvement, innovation, and M&A are examples of the strategies that Japanese enterprises are using to enable them to cope with the challenges of being in global markets (Slater, Paliwoda & Slater, 2009; Morrison & Floyd, 2000). Mergers and acquisitions, and joint ventures have taken place in the industries such as telecommunication, insurance and finance, motor, and pharmaceutical. With that, foreign firms have started to appear in Japan.

Currently, the world is experiencing the worst recession in many decades. While many Multinational Enterprises (MNEs) are facing difficulties by losing jobs, markets, and financial resources, world’s leading industrial countries are getting together to reverse the current economic situation. Coordinating with the US and other countries, Japan plays a primary role in this effort. During the last eight years, the US-Japan investment initiative has facilitated active discussion and cooperation on ways to improve the climate for foreign direct investment (FDI) in Japan and in the US. Therefore, FDI stock in Japan has risen steadily in recent years (Japan External Trade Organization (JETRO), 2009).

Even though the background is as such, we have only a little knowledge and a few relevant empirical researches on foreign companies in Japan. Therefore, this research paper focuses on the relationship between the entry mode of the foreign companies and the profitability of foreign subsidiary in Japan. Additionally, we will analyze the relationship between the special characteristics and the profitability of those subsidiaries, the relationship of the existence of foreign employees in the subsidiary and subsidiary profitability from the perspectives of culture and human resource, which has never been explore in the previous research. Further, this research also examines the special characteristics of the foreign parent companies and the profitability of the subsidiaries in Japan. Following this procedure, we intend to make a useful contribution to the existing literature on management strategies of the foreign parent companies and their subsidiaries in Japan.

The remainder of this paper organized into five parts. The first part discusses the current situation of foreign companies in Japan. The second part reviews the relevant literature on FDI to develop the hypotheses. The third part details the data and the research methodology. The forth section discusses the results and the last section concludes with managerial implications and recommendations.

Current situation of foreign companies in Japan

Foreign Direct Investment (FDI) grew very rapidly throughout the early 1990s around the world, slowed somewhat in 1997, and picked up again in the late 1990s. Globalization of industries and the increasing number of mergers and acquisitions have been the major underlying forces for the growth in FDI flows. Theories such as international product life cycle, eclectic theory, market power, and market imperfections have attempted to explain why companies engage in FDI. Although the destinations of most FDI inflows are industrialized countries, they are attracting a declining share of the worldwide total FDI. The East Asia and Pacific region is luring a great deal of FDI (Wild, Wild and Han, 2000).
The problems in the financial and banking sector caused by the collapse of the “bubble economy” left Japanese banks with huge non-performing loans backed up by inadequate assets and the Japanese government had to injected billions of yen in order to rescue those banks. The collapses of banks have had dramatic impacts on Japanese companies. Some companies bankrupted and some fell behind their global competitors. Restructuring was imperative, and besides that, companies had to sell assets and shares. The internal cross shareholding system was breaking down and many shares have gone to foreign investors (Morrison and Floyd, 2000).

Subsequently, the flow of FDI into Japan has become faster than ever before. With regards to the direct investment in Japan, in 1989, foreign direct investment has been increased as 23.4 times of domestic investment. Ten years after 1999, domestic investment started to grow and came closer to foreign investment level. In year 2004, FDI in Japan achieve to 4,027 billion Yen while domestic investment was only 3,821 billion Yen. Moreover, inward FDI has increased up to 7,996 billion yen in year 2007 (JETRO, 2008).

A survey of foreign-affiliated firms in Japan conducted by JETRO in 2008 indicated that one in five of these companies in Japan considered Japan as a centre for research and development and a base for business activities in Asia. It claims that Japan offers abundant potential for businesses to increase their profit via enormous market potential, sophisticated customers with high purchasing power, promising markets and industries, being home for the world’s top companies, SMEs with unique technologies, innovation, being a gateway to the Asian market, expanding foreign companies, mature infrastructure, and secure, comfortable environment (JETRO, 2009).

Thus, the change occurred in the Japanese economy since 1997 financial crisis was behind the increased entry of foreign companies into Japan. Particularly the declined land prices made foreign companies easier to establish their business in Japan. In addition, it suggested that the failure of Japanese business and sharp decline of the stock prices made affordable once high-priced properties than ever before. In addition, there has been a radical increase of cross-border M&A because of the development of the liberalization of trade investments at the global level, deregulation and removal of restrictions on privatization in several countries, new product and technology development due to innovations in the field of telecommunication, and the global competition by firms for market possession.

**Literature Review and Hypotheses Development**

Entry mode is one of the most important strategic decisions made by a firm seeking to enter a foreign market. Parallel to its importance, it has been the third most researched field in International management. Entry mode studies include studies on the predictor’s of entry mode choice, Predictors of international equity ownership levels, and consequences of entry mode decisions (Werner, 2002). Furthermore, previous research by Cespedes and Hoshino (2001) found the direct effect of ownership and internalization advantages on business performance. However, it still lack of evident in terms of relation between entry mode and business performance.

Entry mode consists of wholly owned and joint ventures method. The main reason for selecting the joint ventures as the form of business is the anticipation of synergistic effect by combining the business resources of the two business organizations (McConnell & Nantell, 1985). Consequently, it is common to send some temporary staff in order to acquire some benefits for more profits, and to maintain those. It is an important vehicle for establishing and maintaining organizational control over international expansion activities. This can accomplish by assigning parent country nationals to foreign subsidiaries and manipulating the ratio of parent company nationals in the top management (Luo, 1999).

Especially, in foreign companies where it is said that personnel contribute largely to the competitive advantage, we believe that sending own staff from the parent company to the international joint company will become more important. Therefore, it is useful to focus on the number of foreign executives in the joint subsidiaries.

However, Juhn (2000) pointed out that when the number of staff sent form the parent company increases, the cultural conflicts also increase proportionately, and therefore it can be predict that troubles arise in the human resource integration process and in the management process in general. As Geringer and Frayne (1990) pointed out, regardless of the parent’s objectives successful operation of the IJV’s management team will depend heavily on the calibre of the selected individuals. Thus, unless the overseas venture is staff appropriately, the parents’ objectives are unlikely to realize. According to the research by Konopaske, Werner and Neupert (2002) on 3835 Japanese subsidiaries in 31 different countries, they found out that staffing approach moderates the relationship between the entry mode and profitability. Overall, they found a clear support for the relationship between the percent of Japanese employees deployed overseas and venture profitability.

In this research, attention paid to the number of foreign executives in the sample companies collected. This is because, since foreign executives have the right of speech about the business strategies, management, and point of view in human resource integration process, thus, they can have a substantial effect on the company’s profitability. For the analysis, joint venture subsidiaries that do not employ any foreign executives label as group I, firms that employed less than three foreign executives as group II, and firms with three or more executives as group III. It known that in order to guarantee or maintain the synergistic effect, a joint venture needs at least three executives; a production manager, a finance manager, and one more executive for other affairs. Hence, three groups of joint venture subsidiaries used in this research. Based on the above discussion, we suggested the following hypothesis.

**Hypothesis 1:** When of joint subsidiaries categorized as group I where there is no foreign executives, group II where there are less than three foreign executives, and group III where there are three or more foreign executives; we predict that group III will have the lowest profitability.

There are two types of analyses in previous research on the relationship between the type of entry mode of MNCs and subsidiary performance. One of the two is analyzing self-assessments as evaluated by the subsidiary managers on the financial performance of the local joint ventures as appeared in Woodcock, Beamish and Makino (1994), and Nitsch, Beamish and Makino (1996). The other option is to analyze the real financial data of the joint subsidiaries (Padmanabhan and Cho (1996); Siripaisalpipat and Hoshino (2000). In any case, when selecting the entry mode; whether going for wholly ownership or joint ownership; it is necessary to investigate the advantages and disadvantages of each mode. According to a trend analysis by Ministry of Economy, Trade and Industry (METI) on inward
FDI, during the five years period between 2002 and 2006, the percentage of new foreign companies entering Japan with wholly ownership was 61.5% and the percentage of newly entered joint venture firms was 28.8%.

According to Woodcock et al. (1994) and Nitsch et al. (1996); from the resource cost and control cost point of view, sole ownership is better than joint ownership. Conducting a research on a sample of 321 Japanese manufacturing firms established in North America, Woodcock et al. (1994) collected business managers’ self-assessments on firms’ financial performance in three stages of gain, break-even and loss, and concluded that subsidiaries with sole ownership have significantly better performed than joint ventures. Nitsch et al. (1996) also used the same technique as Woodcock et al. (1994) in analyzing 173 Japanese manufacturing subsidiaries in Western Europe and found that wholly owned subsidiaries performed better than joint ventures, even though they could not prove for significant difference between the two.

Siripaisalpipat and Hoshino (2000) conducted a research on the relationship between entry mode, firm-specific advantages, and performance of 105 Japanese firms in Thailand. According to their research in which they analyzed actual performance data, it revealed that when Japanese firms have higher firm-specific advantages they selected the sole ownership entry mode and claimed higher performance.

In Yoshihara’s (1994) research on foreign firms in Japan, he used five scale (highly successful, successful, doubtful, unsuccessful, highly unsuccessful) self-assessed questionnaires to compare the performance of sole ownership and joint ventures. The results revealed that joint venture had statistically significant results of higher performance than wholly ownership firms did. Hoshino and Takabayashi (1998) investigated on 182 foreign manufacturing firms in Japan between 1994 and 1995. They also found that joint ventures had significantly higher performance compared to wholly ownership firms in all aspects of majority-owned, equally owned and minority-owned joint ventures.

As discussed above, the research findings show that even though the wholly ownership subsidiaries have a tendency of greater success in performance than joint ventures of Japanese firms established in Europe, USA or in South East Asia, however, it is difficult to assume that wholly ownership firms would be more successful when multinational firms enter into Japan. Hoshino and Takabayashi (1998) pointed out that in relation to the Japanese market the advantages of selecting joint venture as the entry mode are far greater than the disadvantages.

There were several reasons may contribute to this condition. Firstly, it is probable to say that when a firm use joint venture as the entry mode it can enjoy the benefits of the technology and knowhow owned by the Japanese firm. In addition, this may happen because of ambiguous or vague market regulations. According to the results of a survey by JETRO (2000), when they inquired about the changed in the business environment during the past two to three years the number of companies assessed as “the business environment has been improved” were greater than the companies that assessed it as “deteriorated”. Some raised the related issues by the comments such as “we get different level of correspondence from the officer in-charge at the government office, hence, we need better information sharing” or, “we need direction with more transparency and better international relations” etc. Therefore, foreign businesses request further improvement in the areas such as application and procedure of law and regulations.

Apart from that, foreign firms confront with the problems related to peculiarity of Japanese marketing system. Therefore, when foreign firms enter into Japan with an intention of acquiring local knowledge from their Japanese partners, they may consider their entry mode predominantly considering that fact than aiming for wholly ownership. Followed by the above discussion, in selecting the entry mode of wholly ownership or joint venture when manufacturing MNCs enter into Japan, it can be hypothesized as,

Hypothesis 2: Profitability of joint venture foreign manufacturing firms will surpass the profitability of wholly ownership foreign manufacturing firms.

Foreign manufacturing firms enter into Japan for various reasons. As previous research findings revealed, when manufacturing firms pay attention to factors such as resources, Japanese technology or knowhow, information on market or techniques, skilled people, and growth and scope of Japanese market. The non-manufacturing firms attract to Japan because of high profitability, Japan’s position in Asia, and Japan’s importance in their global strategy etc. The empirical research by Hoshino and Takabayashi (1998) was limited only to the manufacturing firms. Moreover, (Ito & Fukao, 2001) in their research of the importance of FDI in Japan, found that the determinants of Japan’s inward FDI penetration are very different for the manufacturing sector and the service sector.

Therefore, in this research both manufacturing and non-manufacturing foreign subsidiaries will be included, but it is hard to predict that this will bring up practical advantage for all the industries in Japan. Especially in the case of foreign firms in the communication industry which enters into Japan with high percentage of investment may have superior technological advantage than Japan. Thus, with regards to the non-manufacturing foreign subsidiaries, it is hard to say that joint venture entry mode is better than wholly ownership for them. As per above discussion, with regards to the wholly ownership and joint venture entry modes when MNCs enter into Japan, in the case of non-manufacturing foreign subsidiaries, it can be hypothesized as,

Hypothesis 3: Profitability of non-manufacturing wholly ownership foreign subsidiaries will surpass the profitability of non-manufacturing joint venture foreign subsidiaries.

When MNCs penetrate into a foreign country, they aim for common business goals and the selection of wholly ownership of joint venture entry mode relies on contribution of funds, technology and other resources from the other parent company in the partnership. Therefore, the contribution of each subsidiary is influence by the percentage of investment. Moreover, since nomination of the directors from the shareholders is also normally dependant on the percentage of investment, it emphasizes the significance of the power of voting and decision making on the management of a subsidiary.

Depending on the degree of control a joint subsidiary acquires, Killing (1983) classified the types of joint ventures as majority-owned, equally-owned and minority-owned in his research on international joint subsidiaries in 37 developing countries. The results revealed that majority-owned joint subsidiaries performed better than the firms with equal ownership did. It also identified that when the gap between the percentages of ownership of the two parties get closer, the performance of the subsidiary get much worse. Larimo’s (2007)
longitudinal study over 700 established by more than 130 Finnish companies in over 60 foreign countries during the period of 1970-2001, confirms that the results about the impact of the ownership structure are mixed. His study indicated support to the view that equal ownership had increased probably of poorer performance, and limitedly supported that majority ownership increased probability of better performance in Western Europe and North America.

Furthermore, in the research by Lecraw (1984) on international joint subsidiaries in 5 Asian countries, he concluded that the subsidiaries in which both parent companies contribute towards near equal percentage of investment showed a tendency of low growth rate. In addition, Zhang and Li (2001) did a research on eight Japanese manufacturing firms in China and concluded that majority-owned joint subsidiaries were more successful than equally owned joint subsidiaries. According to a research by Kumarasinghe and Hoshino (2009) on Japanese subsidiaries in Australia and New Zealand, wholly owned subsidiaries displayed higher performance in both countries.

Hoshino and Takabayashi (1998) have used actual financial data in the research on 182 manufacturing foreign subsidiaries in Japan. According to the results, equal-ownership firms had succeeded than majority or minority owned firms, and the difference between the three types was statistically significant. The managers of the subsidiaries of two foreign companies, Ericsson and Kanthal, were interviewed for a research by Hyder and Ghauri (2000) and their results have proved that majority-ownership had a negative influence on the subsidiaries.

As discussed above, depending on the country the research is based on and the economic circumstances of that country there are possibilities for opposite results. In Japan, which this research is based on, there is a tendency toward equal ownership being more successful than majority or minority ownership. As Hoshino and Takabashi (1998) pointed out, the reason for that trend is the desirability of applying the technology and local knowledge of the Japanese collaborate firm through a corporate control system rather than having one side ruling the other. In minority holding companies, local partner holds the right of control, but when the ownership becomes larger than the equal ownership, the participation of the subsidiary management becomes proactive, so that it becomes the most efficient form to obtain the technology and local knowledge from the local partner.

Coincidently, with regards to the minority foreign subsidiaries, it is reasonable to assume that such firms will be influenced heavily by the management policy of the local partner. In the case of foreign minority subsidiaries within Japan, they may receive adverse effects that will reduce the performance, because Japanese firms have low performance internationally as claimed by the surveys by Kagono, Nonaka, Sakakibara and Okumura (1985) and Cabinet Office (2006). The trend in Japanese businesses is to prioritize long-term objective of market expansion over performance. Since Japanese businesses are highly influenced by such management policy, regardless of the claim that there is an advantage of acquiring technology and local knowledge, the profitability of minority-owned subsidiaries will be lower than the profitability of equally owned subsidiaries.

Based on the discussion above, when MNCs enter into Japan as partners of Japanese firms, with regards to the merits of the percentage of ownership it can be hypothesized as follows.

**Hypothesis 4:** In Japan, with regards to the profitability of foreign joint subsidiaries, profitability in equally-owned subsidiaries will be higher than others.

**Data and the Research Methodology**

Foreign companies in Japan are the companies with foreign invested capital. When categorized them in terms of their entry mode there are two types of subsidiaries, wholly ownership subsidiaries and joint ventures. Among joint venture firms there are three types of firms, majority-owned, equally owned and minority-owned, based on the proportion of capital investment. That categorization done by analyzing published financial data.

This research aimed at inquiring foreign companies in Japan and used Published statistical data from Foreign Company Survey 2006 (Gaishikei Kigyo Souran 2006). The period for the research is between 1999 and 2005. By the end of year 2004, the number of foreign companies in Japan was 2,230. Compared with the previous year, the number has been increase with 196 companies, and it has shown a continuous increment. Within this, the number of non-manufacturing companies is about 70 percent. Even though both manufacturing and non-manufacturing firms also showed a continuous increase, compared with 1999, there was a significant increase of non-manufacturing firms with 616 companies. Based on establishment and enterprises census analysis conducted by (Ito & Fukao, 2001), they found that determinants of Japan’s inward FDI penetration are very different for manufacturing sector and the service sector. Therefore, we divided the sample for this research into two categories knows as manufacturing and non manufacturing firms.

In this research, the analysis is carried on the foreign invested firms in Japan during a five-year period from 2001 to 2005, either established as wholly ownership firms or joint ventures, including manufacturing firms as well as non-manufacturing firms, but excluding finance and insurance firms. According to the research by Hoshino and Wang (2003), regardless of the entry mode, business instability is common among the newly established firms. Therefore, considering the effects on profitability, firms that not established for three years excluded from this research. As a result, the total sample size was 319 companies. With regards to the entry mode, firms with over 95% ownership were considered as wholly ownership subsidiaries and 20% to 94% owned firms were considered as joint subsidiaries. Within joint subsidiaries, 51% to 94% were sub-categorize as majority-owned joint subsidiaries, 50% as equally owned joint subsidiaries, and 20% to 49% as minority-owned joint subsidiaries. Kamei (1996) and Yamazaki and Takeda (1992) indicated that it is appropriate to consider 95% of ownership as wholly-ownership. Therefore, to distinguish wholly ownership and partnership 95% ownership has been used in this research too. According to a questionnaire survey by Gaishikei Kigyo Souran (2000) which is published by Toyo Keizai Inc, even though the limit of ownership percentage for all industries is 49%, with regards to the top level and main businesses they have considered firms with 20% or more foreign investment as foreign invested firms. Those statistics contain data related to the profitability in those firms.

The net profit sales ratio for the sample calculated as follows. First net profit sales ratio used as a proxy for profitability. Since the net profit sales ratio represent the profit earned during a certain period, it assumed that it would be a suitable gauge to measure the integrated profitability of that firm. From the published net profit and sales data of the sample
firms, net profit sales ratio was calculated. Then using the mean of industry net profit sales ratio published in the Nikkei Keiei Shihyou 2005 of Nihon Keizai Shimbunsha, the adjusted ratio was calculated as seen below.

**Adjusted net profit sales ratio =**

Net profit sales ratio of the sample – Industry average of net profit sales ratio

The sample consisted of diverted firms of both manufacturing and non-manufacturing firms. These groups of firms may have disparity between different industries and therefore by applying adjusted ratio is expected to remove the possible disparity.

Simultaneous analysis of several groups and Statistical Equation Model (SEM) using AMOS for Windows 18.0 software applied for the analysis in this research. Next, the sample firms divided into wholly ownership subsidiaries and joint ventures and compared for differences. The joint ventures were divided into three types of entry modes (majority-owned, equally-owned, and minority-owned) and tested for significant differences between the groups. Lastly, the relationship between the special characteristics of the subsidiaries and profitability assessed using SEM.

In SEM analysis, subsidiaries sales growth of the sample firms for year 2003-2005 was used as the dependent variable. Firm-specific characteristics of the same year used as independent variables.

**Results of the Analysis**

**Staffing and profitability**

Firstly, in relation to hypothesis 1, the results of simultaneous analysis of several groups for business groups I, II and III is as shown in the Table 1. The chi square value was 119.201 (p = 0.000) and thus a statistical significance of the difference between three groups was found at the level of 5%. Furthermore, Table 1 shows the results of simultaneous analysis comparisons of business groups I, II and III.

**Table 1. Simultaneous analysis of several groups results on the profitability of the foreign companies in Japan (grouped by no. of foreign executives)**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Adjusted Net Profit Estimate</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company group I</td>
<td>67</td>
<td>-2.428</td>
<td>***</td>
</tr>
<tr>
<td>Company group II</td>
<td>107</td>
<td>-2.555</td>
<td>***</td>
</tr>
<tr>
<td>Company group III</td>
<td>37</td>
<td>-2.891</td>
<td>***</td>
</tr>
<tr>
<td>Between groups</td>
<td>Chi-square df</td>
<td>sig</td>
<td>119.201 6.000</td>
</tr>
</tbody>
</table>

For the comparison between the three groups, mean rank shows that group I indicate a greater profitability compared to group II and group III and these differences were proved statistically significant at 5% level. Therefore, the results support hypothesis 1 that group III profitability results were inferior to that of other two groups. Where group I consisted of no foreign employees, group II have less than three residing foreign employees and group III with number of foreign employees equal or exceeding three.

**Manufacturing companies**

The results for the profitability of wholly ownership companies and joint venture companies were as shown in Table 2. A statistically significant difference between wholly ownership companies and joint ventures found between these two groups where the profitability of joint venture firms exceeded wholly ownership entry mode. Hence, the result supported the second hypothesis that stated profitability of joint venture foreign manufacturing firms will surpass the profitability of wholly ownership foreign manufacturing firms.

**Table 2. Simultaneous analysis of the profitability for manufacturing foreign companies**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Adjusted Net Profit Estimate</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholly ownership</td>
<td>84</td>
<td>-2.811</td>
<td>***</td>
</tr>
<tr>
<td>Joint venture</td>
<td>127</td>
<td>-2.338</td>
<td>***</td>
</tr>
<tr>
<td>Between Groups</td>
<td>Chi-square df</td>
<td>sig</td>
<td>62.893 3.000</td>
</tr>
</tbody>
</table>

**Non-Manufacturing companies**

Table 3 shows the simultaneous analysis between wholly ownership and joint venture on profitability for non-manufacturing companies. Wholly entry mode indicates the better mean with significant value less than 0.05. Thus, for non-manufacturing companies, wholly ownership was the best entry mode for highest profitability. Therefore, the third hypothesis that stated non-manufacturing wholly ownership foreign subsidiaries is better than the profitability of non-manufacturing joint venture foreign subsidiaries is supported. The next analysis focuses on the best of joint venture entry mode for profitability at manufacturing and non-manufacturing company.

**Table 3. Simultaneous analysis of the profitability for non-manufacturing foreign companies**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Adjusted Net Profit Estimate</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholly ownership</td>
<td>30</td>
<td>-2.586</td>
<td>***</td>
</tr>
<tr>
<td>Joint venture</td>
<td>69</td>
<td>-3.586</td>
<td>***</td>
</tr>
<tr>
<td>Between Groups</td>
<td>Chi-square df</td>
<td>sig</td>
<td>30.751 3.000</td>
</tr>
</tbody>
</table>

**Joint venture entry mode for manufacturing and non-manufacturing companies**

Table 4 provides the results for the possible difference in profitability between the three joint venture groups in manufacturing and non-manufacturing companies. The chi square was 76.885 and 35.844 for manufacturing and non-manufacturing companies respectively with both (p = 0.000). Thus, the result indicates that significant differences between the three groups exist.

The mean rank shows that the profitability of minority-owned joint venture subsidiaries was greater than equally owned subsidiaries for manufacturing companies and the difference was statistically significant at 5% level. It followed by profitability of equally owned subsidiaries was greater than majority-owned subsidiaries and statistically significant for manufacturing companies. However, for non-manufacturing, the result was contrary from manufacturing companies which equally owned joint venture subsidiaries indicate better profitability at significant level 5%.

Summarising all of the above results on the profitability of the three groups of the manufacturing joint ventures, profitability for the minority-owned subsidiary group was greater than equally and majority-owned groups and it was statistically significant.

In mean comparison for non-manufacturing companies shows that profitability for equally was greater than equally and majority group. As to summarise the relationships for the means between the three categories, it can be rank in the following order: minority-ownership> equally ownership> majority ownership. Moreover, for non-manufacturing companies, the relationships for the means between the three categories, the rank as the following order: equally-ownership> minority ownership> majority ownership.
**Table 4. Results on the profitability (grouped by ownership)**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Adjusted Net Profit Estimate</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority owned</td>
<td>32</td>
<td>-2.991</td>
<td>***</td>
</tr>
<tr>
<td>Equally owned</td>
<td>65</td>
<td>-2.160</td>
<td>***</td>
</tr>
<tr>
<td>Minority owned</td>
<td>30</td>
<td>-2.033</td>
<td>***</td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>Chi-Square</td>
<td>df</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76.885</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Adjusted Net Profit Estimate</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority owned</td>
<td>26</td>
<td>-4.281</td>
<td>***</td>
</tr>
<tr>
<td>Equally owned</td>
<td>22</td>
<td>-2.378</td>
<td>***</td>
</tr>
<tr>
<td>Minority owned</td>
<td>21</td>
<td>-3.990</td>
<td>***</td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>Chi-Square</td>
<td>df</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35.844</td>
<td>6</td>
</tr>
</tbody>
</table>

Multiple regression results for manufacturing and non-manufacturing foreign companies

Multiple linear regression models with one dependent Y variables:

\[ Y = i + Xb + e \]

Where \( Y \) = a vector containing observed scores on the dependent variable;

\[ i = \text{a vector 1} \]

\[ X = \text{a matrix of continuously distributed or categorical (dummy-coded) independent variables} \]

\[ b = \text{the vector of regression weights} \]

\[ e = \text{the vector of residual or error or leftover scoring unexplained by the model} \]

**Table 5. Multiple Regression for manufacturing and non-manufacturing companies**

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Regression weight</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Net Profit</td>
<td>0.000</td>
<td>0.401</td>
</tr>
<tr>
<td>Subsidiary capital</td>
<td>0.000</td>
<td>0.628</td>
</tr>
<tr>
<td>Subsidiary employees</td>
<td>0.007</td>
<td>0.495</td>
</tr>
<tr>
<td>Subsidiary age</td>
<td>0.000</td>
<td>0.572</td>
</tr>
<tr>
<td>Parent company net assets</td>
<td>0.000</td>
<td>***</td>
</tr>
<tr>
<td>Parent company sales</td>
<td>0.223</td>
<td>0.499</td>
</tr>
</tbody>
</table>

\[ R^2 \text{ for manufacturing companies} = 0.104 \]

\[ R^2 \text{ for non-manufacturing companies} = 0.083 \]

Chi-square = 509.959

\[ df = 12 \]

\[ P = 0.000 \]

**Significant level at 0.001**

Table 5 indicates the result from regression analysis that most of the independent variables were not significant towards subsidiaries profitability except the parent company sales variables. The positive values indicate that, the increase of every one unit in parent company sales growth will influence the subsidiaries profitability. Although the \( R^2 \) value for manufacturing and non-manufacturing companies were slightly low, but the minimum discrepancy (CMIN) or chi-square\( (X^2) \) for both companies are at 509.959 and significant with \( p \) value less than 0.05.

**Conclusion and Recommendations**

This paper investigated entry modes selected by the foreign companies when entering into Japan and the business success of those subsidiaries established on basis of the selected mode to provide any evidence on their relationship. 319 samples of subsidiary companies collected over the five years (2001 to 2005) were divided into manufacturing and non-manufacturing firms. Comparisons made between wholly ownership subsidiaries, joint ventures and comparative analysis of profitability conducted between the subsidiaries, categorized into three groups based on the number of foreign executives.

As for the method of analysis, the mean difference used in simultaneous analysis, and conducted multiple regression analysis to determine the factors that influenced the profitability. Prior to analysis, four hypotheses had generated, and evidence supporting all the four hypotheses assessed using each subsidiary company’s profitability data as explained earlier. For hypothesis 1, significant differences had seen in the results of simultaneous analysis. With regards to hypothesis 2 and hypothesis 3, significant differences were detected using the two significance tests. These results indicated that joint ventures have an advantage over wholly ownership firms for manufacturing companies that supports the second hypothesis and wholly ownership was the best entry mode for non-manufacturing companies that support the third hypotheses. We suggested that heterogeneity in technology-knowhow on Japanese market maybe the reason for the differences seen.

Furthermore, the results suggest that joint ventures have two dominating factors against wholly ownership subsidiaries. For a foreign subsidiary within Japan, the knowledge on Japanese technology know-how and possession of skilled people are important factor for their objective of moving abroad (Yoshihara, 1994). As for that, it signifies how exceptional Japanese companies are in terms of business resources utilization standards. The more outstanding the business resources of the Japanese company, the more partnering subsidiary can gain and hence greater benefits obtained compared to wholly ownership subsidiaries. Furthermore, the nature of Japanese market is related to local knowledge and intimacy. Foreign subsidiaries in Japan are confront in numerous problems such as suboptimal understanding of the new company on Japanese market, government regulations and administrative guidance, difficulty in understanding customer preferences, and keiretsu and other complex distribution channels (Yoshihara, 1994). These problems face by foreign firms in Japanese market may attributed to its different nature but at the same time, it also means that foreign subsidiaries in Japan encounter problems due to insufficient knowledge on the market related local knowledge. Consequently, joint ventures can efficiently acquire local knowledge from their local partner, and therefore, can achieve greater profitability outcome compared to wholly-ownership subsidiaries.

With regards to hypothesis 3, significance was attained from the AMOS tests. Although there was no significance evident in the regression analysis, however, it was found that the wholly-owned subsidiaries was in a better position compared to joint ventures based on the coefficients of the joint venture dummy variables, supporting the third hypothesis. As a reason for this Yoshihara (1994) pointed out that non-manufacturing firms entering into Japan look for a ‘location in Asia’ against ‘Japanese technology-knowhow’ or ‘fast moving technology’. Therefore, it calls for prompt decision-making. This reinforces the beneficial position of wholly ownership subsidiaries that is able to respond to these decision-making calls promptly compared to joint ventures.

Hypothesis 4 obtained a significant result for joint venture entry mode for manufacturing and non-manufacturing companies. The means estimate for minority-owned dummy and equally owned dummy is the best mode for manufacturing and non-manufacturing companies respectively. Therefore, we support the hypothesis 4, concerning the profitability of foreign joint subsidiaries; profitability in equally owned subsidiaries is the best entry mode for non-manufacturing companies. For the
foreign joint venture subsidiaries in Japan, multiparty control with foreign firm and the local firm gives better results than majority or one-sided control because of the different nature of Japanese market, its intensified competition and change. Moreover, it suggested that the profitability of minority-owned joint subsidiaries surpass not only the majority-owned firms but also equally owned firms, because of the low profit structure, the special characteristic in Japanese market.

In a survey by Business Week (1997) on world’s best 1000 firms, the after tax Return on Equity (ROE) of 182 Japanese firms was 6.6% while 447 American firms reported 21.5%. 95 firms from UK had 24.4%, and 42 German firms reported it as 13.6%. It proves that the profitability of Japanese firms is low internationally. A questionnaire survey on a comparison of business objectives of firms in Japan and America, Kagono et al. (1985) found that Return on Investment (ROI) was the most important business objective of the American firms while it was the market share expansion for the Japanese firms. This result proved the significance for differences.

In regression results for manufacturing and non-manufacturing firms, the results indicated that parent company sales had a positive impact on the profitability measure of mean subsidiaries adjusted profitability for year 2003-2005. In explaining these results, joint ventures between two big companies other than the influence from the business resources, the high performance business structure of the parent company may influence the subsidiary profitability.

Dhawan (2001) collected top level 935 company data (from 1970 to 1989) within America and analyzed the relationship between the scales of the business and profitability. The results from this study indicated that the scale of business economies increases as the profitability reduces. As frequently suggested, the Japanese firms should focus on long-term objectives such as sales had a positive impact on the profitability measure of mean subsidiaries adjusted profitability for year 2003-2005. In explaining these results, joint ventures between two big companies other than the influence from the business resources, the high performance business structure of the parent company may influence the subsidiary profitability.


Appendix

List of Foreign Companies in Japan

Glass
Shin-Nippon Thermal Ceramics. Corporation
Saint-Gobain TM K.K.

Rubber
Gates Unitta Asia Company
Nippon Giant Tire Co., Ltd.
DAIKYO SEIKO
Siebling (Japan) Ltd.

Service
Micronic Japan K.K.
Q.H.International Co., Ltd

IBM Global Services Japan Business Solution Co., Ltd.
National Semiconductor Japan Ltd
Nippon Calmic Ltd
Nagase Landauer, Ltd
Warner Mycal Corp.
AIM FACILITY SERVICES Co., Ltd.
Sanikleen Kyusyu Co., Ltd
R-Prometric K.K.
Right Management Japan Inc.
Mefos Ltd
SHL-Japan Ltd.
Trend Micro Inc
Dentsu, Sudler & Hennessey Inc.
Asatsu-DK Inc

Miscellaneous Transportation Machinery
Sumitomo NACCO Materials Handling Co., Ltd
Komatsu Forklift Co., Ltd.

Miscellaneous Wholesale
Chanel K. K
Gadelius K.K.
Baccarat Pacific K.K.
Giant Company Ltd
MacMillan Bloedel K.K.
Cargill Japan Ltd.
Terumo BSN K.K.
Rising Sun K.K.
Kanto Kouyu Energie K.K.
Shoseki Home Gas K.K.
China Stone Corp.
Richard-Ginori Japan Corp.
Imation Corp. Japan
Checkpoint Manufacturing Japan Co. Ltd.
Fuji Xerox Office Supply Co., Ltd.

Miscellaneous Manufacturing
Sola Optical Japan Ltd.
Jaleco Ltd.
Nihon Kab K.K.
Permelec Electrode, Ltd.
Yamagata 3M Ltd.
Nihon Mistr Co., Ltd
Hukura Japan,Inc.
Software
IBM Global Services Japan Seibu Solutions Co.
Dendrite Japan Corp.
RealNetworks K.K.
SAP Japan Co.,Ltd.
Exa Corp.
Nippon Information and Communication Corp.
Clis Co., Ltd
Internet Security Systems K.K.
Japan Systems Co.,Ltd.
Oracle CorpJapan
Nippon Office Systems Ltd.
Fuji Xerox Informations Systems Co., Ltd
SI Solutions Co. Ltd.
Nihon Unisys Solutions, Ltd.

Plastics
GE Plastics Japan Ltd.
Rogers Inoac Corp.

Publishing
Hachette Fuijgahou Co., Ltd
Nikkei Science,Inc.

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DAIKYO SEIKO
Siebling (Japan) Ltd.

Service
Micronic Japan K.K.
Q.H.International Co., Ltd
| NOVENCO Nippon Ltd. | Tonen Kagaku K.K. |
| Electric Equipment | Nitta Haas Inc. |
| IBM Japan,Ltd. | Lion Akzo Co., Ltd. |
| Molex Japan Co., Ltd. | Sud-Chemie Catalysts Japan,Inc. |
| SICK K.K. | Japan Gore-Tex Inc. |
| Agilent Technologies Japan, Ltd | Nivea-Kao Co., Ltd. |
| Kodak Digital Product Center, Japan Ltd. | Nivea-Kao Co., Ltd. |
| Hewlett-Packard Japan, Ltd. | Rhodia Nicca, Ltd. |
| Dot Hill Systems Japan Ltd. | Dow Corning Toray Co., Ltd |
| Texas Instruments Japan Ltd. | AstraZeneca K.K. |
| JAI Corp. | Sumitomo 3M Ltd. |
| ITT Cannon, Ltd. | Nippon Unicar Co., Ltd |
| Moeller Electric Ltd. | Asia Lithium Corp. |
| Japan Ajax magnethermic Co., Ltd. | Junkosha Inc. |
| Intel K.K. | Harima M.I.D., Inc. |
| Micron Japan, Ltd. | N.E.ChemcatCorp. |
| Digital Electronics Corp. | Nihon Oixrine Co., Ltd. |
| Cuisinart Sanyei Co., Ltd | Calgon Mitsubishi Chemical Corp |
| Bailey Japan Co., Ltd. | Polyplastics Co., Ltd. |
| Voith Fuji Hydro K.K. | Chemical Wholesale |
| Yuasa Ionics Co., Ltd | Albemarle Japan Corp. |
| Ranco Japan Ltd. | Sartomer Japan Inc. |
| LSI Logic K.K. | Buckman Laboratories, K.K. |
| Vicor Japan Co.,Ltd | Pacific Japan Co.,Ltd. |
| D&M HOLDINGS Inc. | Lonza Japan Ltd. |
| Suzuca Fuji Xerox Co., Ltd. | tesa tape K.K. |
| Toyo Carrier Engineering Co., Ltd. | Kurz Japan Ltd. |
| Soltec Japan, Ltd. | FISCHER INSTRUMENTS K.K |
| Nihon Balluff Co., Ltd. | Bristol-Myers Lion Ltd. |
| Fuji Xerox Co., Ltd. | Ube-C&A Co., Ltd |
| Nihon Unisys, Ltd. | Machinery |
| Lite-On Japan Ltd. | Kito Corp. |
| Electric Parts | Nippon Conlux |
| UMC Japan | Nippon Selas Co.,Ltd. |
| Maxim Japan Co.,Ltd. | National Machinery Asia Co.,Ltd. |
| Nonferrous Metals | MTS Japan Ltd. |
| Yokogawa Analytical Systems, Inc. | Cameca Instruments Japan K.K. |
| Daido- Special Metals Ltd. | FlexLink Systems K.K. |
| Hunter Douglas JapanLtd. | Bauer Compressors Co.,Ltd. |
| Chemicals | Sandvic K.K. |
| Wella JapanCo.,Ltd | Schindler Elevator K.K. |
| GraceJapanK.K. | Bosch Packaging Technology K.K. |
| Nippon MacDermid Co. Ltd. | Eaton Fluid Power Ltd. |
| ShellChemicalsJapanLtd. | Signode K.K. |
| NipponNSCLtd. | Nippon Mayer Ltd. |
| Bayer Ltd. | Parker Hannifin Japan,Ltd. |
| DuPont K.K. | SiemensK.K. |
| Nihon Cytec industries Inc. | DISA K.K. |
| Bayer CropSience K.K. | Dresser Japan,Ltd. |
| Merck Ltd. | Avnet Japan Co.,Ltd. |
| Avon Products Co., Ltd. | System 3R Japan Co., Ltd. |
| Air Liquide Japan,Ltd. | Flexibox Japan Ltd. |
| Clariant(Japan)K.K. | Grundfos Pumps K.K. |
| Chemipro Fine chemical Kaisha, Ltd. | Niigata Masoneclan Co., Ltd. |
| Toyo Morton Ltd. | Vogel Japan Ltd. |
| Nikki-Universal Co., Ltd | Gadelius K.K. |
| SunAllomer Ltd. | Niigata Worthington Co., Ltd. |
| Nichigo-Morton Co., Ltd | Toku Pneumatic Co., Ltd. |
| Japan Butyl Co., Ltd. | Central Japan Caterpillar MitsubishiConstruction |
| Du Pont-Toray Co., Ltd. | Equipment Sales, Ltd. |
| Nippon BEE Chemical Co., Ltd. | CAE Co., Ltd. |
| BASF INOAC Polyurethanes Ltd. | |
Hofmann Japan, Ltd.
Ulvac Cryogenics Inc.
Nippon Retarder System Co., Ltd.
Wagner-Hosokawa Micron Ltd.
Leybold Co., Ltd.
STS Corp.
DBS Co., Ltd.
John Crane Japan, Inc.
Stamp Pumps of Japan, Ltd.
Nippon Brunswick Cp., Ltd.
Shin Caterpillar Mitsubishi Ltd.
Sumitomo Eaton Nova Corp.
Nippon Flakt K.K.
Datacard Japan Ltd.
Nippon Otis Elevator Co.
Kuroda Precision Industries Ltd.
Tsukakimoto Emeison Co.

**Furniture**
Honka Japan Inc.
Armstrong (Japan) K.K.

**Construction**
Johnson Controls, Inc.
Shoshekki Engineering & Construction Co., Ltd.
Tonen Technology K.K.

**Metal Products**
Alcoa Closure Systems Japan Ltd.
Nippon Pop Rivets & Fasteners, Ltd.
Kennametal Hertel Japan Ltd.
Toyoda Van Moppes Ltd.

**Precision Machinery**
Endress + Hauser Japan Co., Ltd.
Sun Microsystems K.K.
Nihon Pall Ltd.
Seiko EG & G Co., Ltd.

**Precision Machinery Wholesales**
Salterius K.K.
Kistler Japan Co., Ltd.
Nippon Dionex K.K.
Quantum Design Japan, Inc.
Fuji Xerox Printing Systems Sales Co., Ltd.

**Information and Machinery**
Jupiter Telecommunications Co., Ltd.
VeriSign Japan K.K.
Kobelco Systems Corp.
NCR Japan Ltd.
Jupiter Telecommunications Co., Ltd.
Discory Japan Inc.
SGI Japan, Lyd.
Fuji Xerox System service Co., Ltd.
Morningstar Japan K.K.

**Petroleum**
ExxonMobil Yuen Kaisha
Kyokuto Petroleum Industries, Ltd.
Shoseki Kako Co.
Nippon Grease Co. Ltd.
Makoto Fuchs K.K.
Tonen General Sekiyu K.K.
Showa Shell Sekiyu K.K.
BP Castrol K.K.
Showa Yokkaichi Sekiyu Co., Ltd.

**Foods**
Campbell Japan Inc.

Nestle Japan Holding Ltd.
Meito Adams Co., Ltd.
Stange (Japan) K.K.
Nutritec Co., Ltd.
Haagen-Dazs Japan Inc.
Del Monte Fresh Fruits Co., Ltd.(Japan)
Yakult Honsha Co., Ktd.

**Food Wholesale**
Jinro Japan Inc.
Pernod Richard Japan K.K.
Maple Leaf Foods (Japan) Inc.
C Two-Network Co., Ltd.

**Steel**
Asahi Tec Corp.
Inc.TNC Ltd.

**Communication**
Vodafone K.K.
Yahoo Japan Corp.

**Food Service Industries**
AIM Services Co. Ltd.
B-R31 Ice Cream Co., Ltd.
Seiyo Food Systems Inc.
McDonald’s Co.(Japan), Ltd.
Starbucks Coffee Japan, Ltd.
Kentucky Fried Chicken Japan Ltd.

**Textile & Cloth**
Japan Vilene Co., Ltd.
Liberty Japan Co., Ltd.
Levi Strauss Japan K.K.

**Retail**
Amway (Japan) Ltd.
Toys”R”Us-Japan Ltd.
SEIYU, Ltd., (The)
Nissan Prince Osaka Sales Co., Ltd.

**Medical Machinery**
GE Yokogawa Medical Systems, Ltd.
Elekta K.K.
Radiometer K.K.
Medicon Inc.

**Medical Supplies**
Novo Nordisk Pharma Ltd.
Johnson & Johnson K.K.
SSP Co., Ltd.
ZLB Behring K.K.
Alcon Japan Ltd.
Banyu Pharmaceutical Co., Ltd.
Nippon Boehringer Ingelheim Co., Ltd.
Nihon Medi-Physics Co., Ltd.
Fujisawa Sanofi-Synthelabo Co., Ltd.
ABBOTT JAPAN Co., Ltd.
Wyeth K.K.

**Transportation**
Hapag-Lloyd (Japan) K.K.
EGL Eagle Global Logistics Japan, Inc.
Geologistics Ltd.
Showa Shell Senpaku K.K.
Schenker-Seino Logistics Co., Ltd.
Wan Hai Lines (Japan), Ltd.
Nippon Vopak Co., Ltd.

**Pulp & Paper**
Showa Products Co., Ltd.
Automobile
GKN Toyoda Driveshafts Ltd.
Calsonic Harrison Co., Ltd.
GKN Driveline Japan Ltd.
Rofin-Baasel Japan Corp.
Mazda Engineering & Technology Co., Ltd.
NOK Corp.
Mazda Motor Corp.
Nissan Motor Co., Ltd.
ICHKOH Industries, Ltd.
Rhythm Corp.
Tenneko Automotive Japan Ltd.
Webasto Japan Co., Ltd.
Mahle Tennex Corp.
BorgWarner Morse TEC Japan K.K.
Faurecia-NHK Kyushu Co., Ltd.
Mitsuba-Walbro, Inc.

Nippon Injector Corp.
Pabco Co., Ltd.
Mitsubishi Fuso Techno-Metal Co., Ltd.
Bosch K.K.
Jatco Ltd.
Japan Climate Systems Corp.
Harley-Davidson Japan K.K.
Federal-Mogul K.K.
Viscodrive Japan Ltd.
DaimlerChrysler Japan Cp., Ltd.

Overall Wholesale
Japan Euro Trading Co., Ltd.
Japan Orient Co., Ltd.
Cornes & Co., Ltd.
Dah Chong Hong (Japan) Ltd.