

FACTORS AFFECTING THE LOCATION STRATEGY OF GLOBAL COMPANIES

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Abstract: As Japanese companies shift to foreign land primarily to reduce cost on their production operations, logistics processes have been globalized. In the field of international and business economics, international shifts are extensively studied, and many of these are mainly based on cost minimization and market expansion. However, logistics concepts are rarely present in these studies. Logistics process includes procurement, production, distribution and sales. Thus, it is not enough to minimize the production costs in logistics, even though one of the primary objectives of the international shifts is production costs minimization. This study analyzes changes in international shifts of Japanese companies in Europe, North America and Asia (subdivided in NIES, ASEAN and China). Factors for an effective international location strategy (not only shift but also withdrawal) of companies are also analyzed based on market, cost, risk and infrastructure factors.

Key Words: Logistics, Location Strategy, Global Company

1. INTRODUCTION

1.1 Background

Since the late 1980s, the number of Japanese foreign affiliates, such as company branches or factories, has risen steadily because many Japanese companies have shifted their sites of operations in overseas areas. Recently, the number of Japanese companies transferring to other countries, withdrawing from recipient countries, or coming back to Japan, is increasing. Several studies have considered “market” and “product cost” as the main factors of the international shifts. Although these are important factors for the shifts, they are, however, not sufficient justification to produce profit to the company. This is because there is also the distribution process that links production and sales. An important component is logistics, which includes all the processes from procurement to sales (i.e. procurement, production, distribution and sales). However, logistics concept is rarely present in these studies.

Although there are some studies by Syamwil and Tanimura (2000) and Buurman and Rietveld (1999) that discussed infrastructure effects in location planning, these studies were limited in scope and only considered inter-city location within a country. Therefore, it is necessary from the perspective of logistics to consider additional factors for international location that include both shifts and withdrawals. Factors which have not been considered when the companies have planned to shift could be factors for withdrawals.

Locational changes cause changes in international distribution such as in the volume of exports and imports. To accommodate these changes, it is essential to build an adequate logistics infrastructure that will form an efficient international distribution network. The development of ports as nodes for international transportation and improvement of roads as links for domestic and international transportation should be actively encouraged. Infrastructure can affect not only transportation costs but also lead time. Customs clearance and operations for international distribution should also be considered. Furthermore, logistics technologies such as unit load system and intermodal transportation systems could bring about an efficient international distribution. Therefore, this study presumes that infrastructure affects international location together with other factors.

1.2 Objectives and Framework

This paper aims at examining the factors affecting the location strategies of global companies. Four objectives are thus identified:

- To clarify concepts in global logistics as a result of international relocation of companies.
- To examine the current situation of international location of Japanese companies by area: Europe, North America (except Mexico) and Asia (subdivided in NIES, ASEAN and China).
- To identify the factors of international location from the perspective of logistics.
- To identify which factor has more significance in international relocation.

Based on the above objectives, this paper is organized as follows:

- Section 2 defines the terminologies used in this paper and explains the global logistics process as a result of international relocation of companies.
- Section 3 reviews the trends of companies locating abroad (shifts), transferring to another country or coming back to Japan (withdrawals), and explains statistical data of Japanese foreign affiliates.
- Section 4 identifies the factors of international location from the perspective of logistics.
- Section 5 analyzes which factors have more weight in international relocation, and identifies the significant factors for the location of Japanese companies.
- Section 6 gives the conclusion and presents additional issues concerning infrastructure impacts on international location.

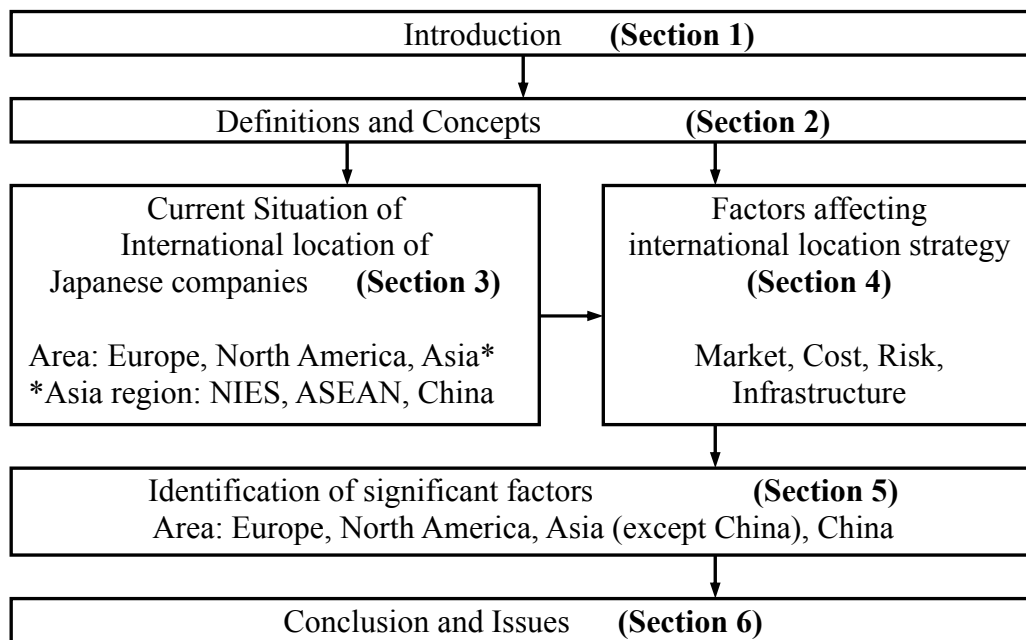


Figure 1. Flowchart of this paper

2. DEFINITIONS AND CONCEPTS

2.1 Definitions

(1) Logistics

The Council of Logistics Management (CLM) defines logistics as:

“Logistics is that part of the Supply Chain that plans, implements, and controls the efficient and effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements.”

In this study, logistics is defined as a chain of processes on a company from procurement to sales; i.e. procurement, production, distribution and sales. Distribution has both concept of trade and physical distribution. Commercial trade belongs to trade while transportation, storage, loading/unloading, assembling, packaging, and information activities are included under physical distribution. Logistics includes all the processes (Figure 2).

(2) Shift and Withdrawal

In this study, *shift* means the transfer of production and/or sales sites or the transfer of the company itself to a foreign country (recipient) through Foreign Direct Investment (FDI). Thus, it includes the transfer from a foreign country to another foreign country. The company consequently operates its business particularly production or sales at the recipient countries.

Withdrawal means the removal of investment from the foreign company and elimination of branches or firms from the recipients. The company consequently stops its operations at the recipients.

Normally, FDI is discussed from the perspective of international capital flow. However, in this study, shift and withdrawal are discussed from the viewpoint of international location of companies.

(3) International Relocation

International relocation is defined as the transfer of a company's operations from one country to another through *shift* and *withdrawal*. A company shifts its site of operations from its home country to a foreign country, and can withdraw back or withdraw to another country (Figure 3).

(4) Foreign Affiliate

A foreign affiliate is defined as a foreign-located company that has Japanese capital investment, in the form of branches or firms. In this study, a foreign affiliate refers to a company which has more than 10% of investment portfolio.

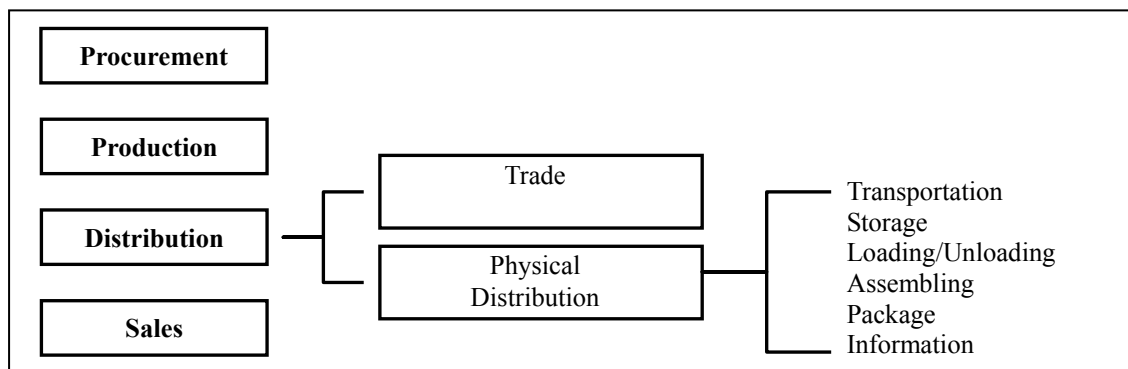


Figure 2. Concept of logistics

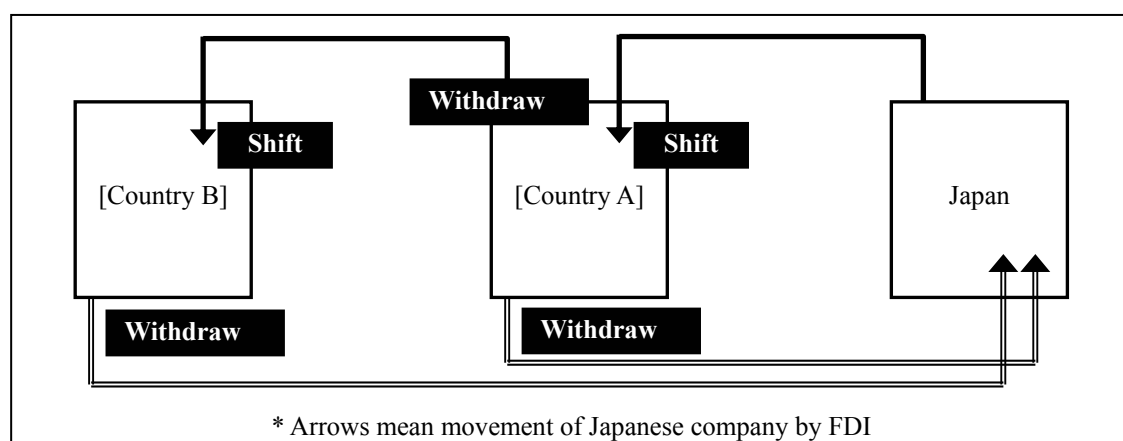


Figure 3. International location (Shift and Withdrawal)

2.2 Change of Logistics Caused by Location Strategy

(1) Global Logistics

As indicated in Figure 4, a company's location strategy to locate its operational sites causes a change in its current logistics process. For example, consider a Japanese manufacturer that has its logistics processes within Japan, i.e. procurement, production and sales. The three processes are linked by domestic distribution. The company then exports its product to overseas countries to supply international demand. If this manufacturer decides to *shift* its production operation to a foreign country to supply its export market, as a matter of course, logistics processes have to be globalized. In this example, new demands for international procurement, production and sales emerge, and not only international distribution linking procurement and production becomes apparent but also international distribution linking production and sales. In case of a product demand in the home country, then the manufacturer exports the commodity to Japan. The manufacturer with a strategy to withdraw from a recipient and come back to Japan has to re-establish its logistics processes in Japan again. On the other hand, in the case of a manufacturer transferring to another country after *withdrawing* from the first recipient, there is no change in the global logistics process itself but change in logistics direction.

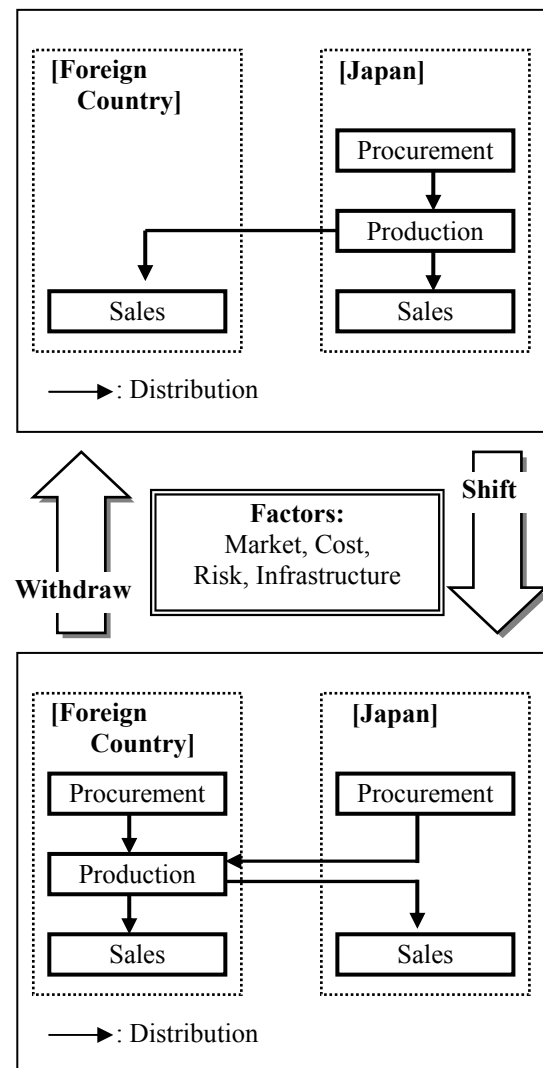


Figure 4. Global Logistics

(2) Logistics Infrastructure on Global Logistics

If a company shifts its production or sales site to a foreign country, logistics has to globalize its processes. It is thus essential to understand the relationship between logistics infrastructure and global logistics processes, particularly international distribution. For this reason, a company planning to *shift* its business operations needs to consider the availability of infrastructure in the foreign country before making any decision. For instance, the presence of ports (facility infrastructure), custom clearance systems (institutional infrastructure) and loading/unloading systems (technological infrastructure) affects transportation cost. Thus, a company needs to consider the availability of infrastructure, even if it plans to shift with the primary objective of reducing production cost.

3. CURRENT SITUATION OF INTERNATIONAL RELOCATION OF JAPANESE COMPANIES

3.1 Methodology

To examine the current situation of international relocation of Japanese companies, the numerical trend of Japanese foreign affiliates are examined. International relocation refers to *shift* and *withdrawal*, as mentioned previously. The *change in the number of foreign affiliates* is the numerical difference between *shifts* and *withdrawals* as expressed by Equation (1).

$$\Delta Na = Na_{(t)} - Na_{(t-1)} = Ns_{(t)} - Nw_{(t)} \quad (1)$$

where

ΔNa : change in number of foreign affiliates
 Na : number of foreign affiliates
 Ns : number of shifts
 Nw : number of withdrawals
 (t) : year

Table 1. Example of Change in the number of Foreign Affiliates

	$t - 1$	t	$t + 1$
Number of foreign affiliates (end of year)	50	60	60
Number of shifts	-	20	10
Number of withdrawals	-	10	10

Table 1 shows an example indicating the change in the number of foreign affiliates as a result of the annual numerical difference between shifts and withdrawals. In year ' t ', 60 foreign affiliates are counted, while 50 affiliates are counted a year before that ($t-1$). Hence, there was a change in the number of foreign affiliates, which could be verified from the difference between 20 shifts and 10 withdrawals. Furthermore, in year ' $t+1$ ', 60 foreign affiliates are obtained as the number of shifts equal the number of withdrawals, i.e. 10 shifts and 10 withdrawals. There is no change in the number of affiliates at year ' $t+1$ ' as the number of withdrawals is the same as the number of shifts.

This paper first examined the trend of shifts and withdrawals, after which the changes in the total number of affiliates are investigated using data from the 'Overseas Expansion Companies Conspectus' of Toyo Keizai Inc. The order of examination is as follows:

1. Trend of shifts in three areas: Europe, North America (except Mexico) and Asia
2. Trend of withdrawals from these three areas
3. Number of Japanese foreign affiliates by area
4. Perform above methodology focusing on the Asian area: NIES, ASEAN and China

3.2 Trend of Shifts

There were three significant rises in the number of shifts of Japanese companies. The first was from year 1987 to 1991, the second from 1994 to 1997 and the last from 2001 to 2002. By area, shifts to Europe and North America grew steadily from the 1980s but has been declining since the 1990s. On the other hand, shifts to Asia have corresponded with the total shifts. Asia has contributed significantly to the total number of shifts. There is still a significant number of Japanese companies shifting to Asia until now. Asia's share in total shifts of Japanese companies has been increasing, while the share of Europe and North America has been decreasing.

These results clarify that Japanese companies have shifted their sites of operations favorably to Asia since the 1990s.

3.3 Trend of Withdrawals

Figure 6 shows the trend of withdrawals of Japanese companies from the recipients. The number of withdrawals had been increasing until 1999. About 900 foreign affiliates withdrew from the recipients in 1999. This number dropped down sharply in 2000. Increased number of withdrawals, however, can be observed again in 2001 and 2002.

By area, the number of withdrawals from North America was the highest for each year until 1997. However, withdrawal from Asia were highest starting 1998. It can thus be inferred that the Asian Monetary Crisis that occurred in 1997 may have an impact on this trend.

In general, the trend of withdrawals follows a similar pattern for all areas. The number of withdrawals had been increasing since the 1990s, then dropped down sharply in 2000. The number of withdrawals from each area went up again after 2000.

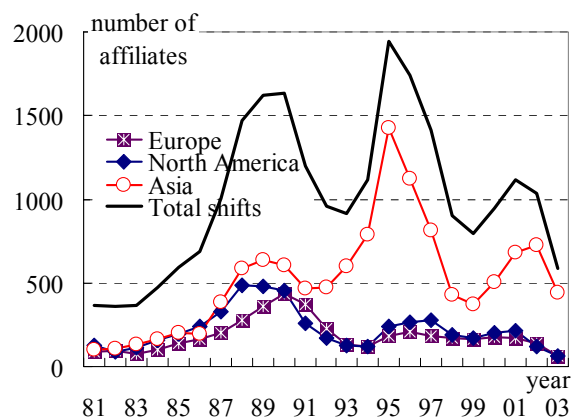


Figure 5. Trend of Shifts of Japanese Companies by Area

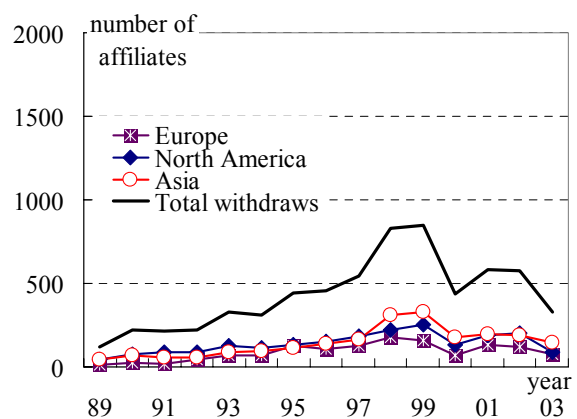


Figure 6. Trend of Withdrawals of Japanese Companies by Area

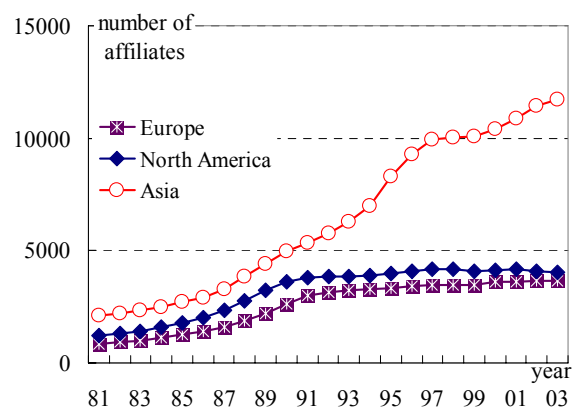


Figure 7. Japanese Foreign Affiliates by Area

3.4 Current Situation of Japanese Foreign Affiliates

With shifts and withdrawals, the number of foreign affiliates of Japanese companies has steadily increased. This means that, on the average, the number of shifts is more than the number of withdrawals every year. By areas, the number of Japanese foreign affiliates in Europe and North America has only slightly changed. This signifies that the number of shifts in these two areas is almost the same as the number of withdrawals. In Asia, however, there is a continuing increase of foreign affiliates every year due to the number of shifts greater than the number of withdrawals. Comparatively, the number of Japanese foreign affiliates in Asia is almost three times the total in Europe or North America (e.g. 3,636 in Europe, 4,053 in North America, and 11,726 in Asia, for year 2003).

3.5 Asian Relocation of Japanese Companies in the 1990s

(1) Regions in Asia and Methodology

To understand the situation in the Asian area during the 1990s when the Japanese companies had significantly shifted their operations, the previous methodology is used. Here, the Asian area is subdivided into three regions: NIES (South Korea, Hong Kong, Taiwan and Singapore), ASEAN (Thailand, Indonesia, Philippines and Malaysia) and China. The trend of shifts and withdrawals in these regions are examined first, and the trend in the number of Japanese foreign affiliates is observed.

(2) Trend of Shifting to the Three Regions of Asia

In the first half of the 1990s, there was a dramatic increase in the shifts of Japanese companies particularly in China. For the same period, a significant increase after a moderate decrease is observed in NIES and ASEAN regions.

In the second half, a decreasing trend is generally observed from 1996 until 1999, but the shifts to ASEAN slightly increased in 1996. A slight rise was experienced in all the regions in 2000. Shifts to China which had the highest total shifts of Japanese companies from 1993 to 1995 had decreased considerably after 1996.

In general, Japanese companies have shifted their sites of operations mostly to China from 1993 to 1995, to ASEAN from 1996 to 1997 and to NIES from 1998 to 2000 (Fig. 8). Thus, it can be said that the shift of Japanese companies to the Asian regions differed periodically.

(3) Trend of Withdrawals from the Three Regions of Asia

Figure 9 shows that even though the number of withdrawals is relatively less than the number of shifts in the 1990s, withdrawals from Asia has moderately increased until 1999.

The three Asian groups of NIES, ASEAN and China have basically the same trend of withdrawals. The most number of withdrawals are observed in NIES, followed by ASEAN. For China, whose shifts occurred later than that of NIES or ASEAN, withdrawals should also not be overlooked as they have increased late in the 1990s.

(4) Japanese Foreign Affiliates in the Three Regions of Asia

The number of Japanese affiliates in the three Asian regions has steadily increased during the 1990s. NIES have the largest share of Japanese affiliates and ASEAN came in second. However, the rate of increase behaved quite differently. The rate of increase is highest in China, followed by ASEAN and last by NIES. Eventually, these numerical differences have become less significant and the rate of increase has become lesser towards the end of the 1990s (Fig. 10).

3.6 Situation of International Location Strategy of Japanese Companies

The previous discussions have tried to examine the current situation of Japanese foreign affiliates. Results showed that Japanese companies have shifted their sites of operations to Asia since the early 1990s. This finding clarifies that Asia needs to improve its logistics efficiency as a result of the Japanese companies' strategy to be located internationally.

Focusing on the Asian region during the 1990s, NIES have the most number of Japanese foreign affiliates. However, its rate of increase is the lowest compared with the other two regions of ASEAN and China. During the first half of the 1990s, China became more associated with logistics processes of Japanese companies. Based on these facts, it could be observed that the recipient differ by time. It could also be inferred that one of the reasons for the diversity of recipients could be the difference in the purpose of international location strategy of companies.

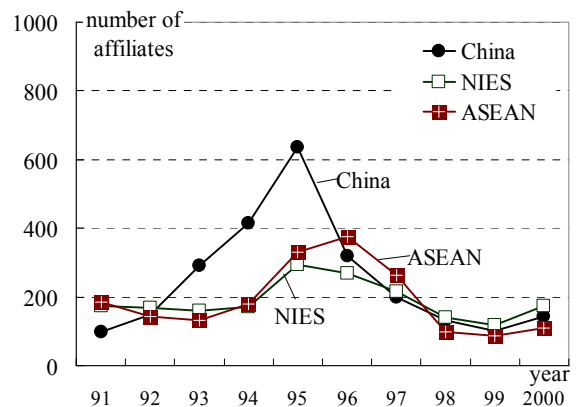


Figure 8. Trend of Shifts to Asia of Japanese Companies

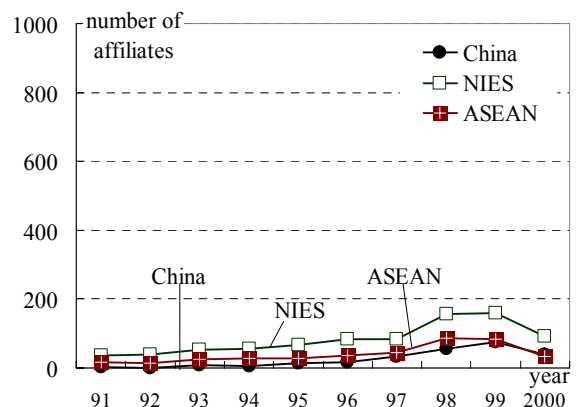


Figure 9. Trend of Withdrawals from Asia of Japanese Companies

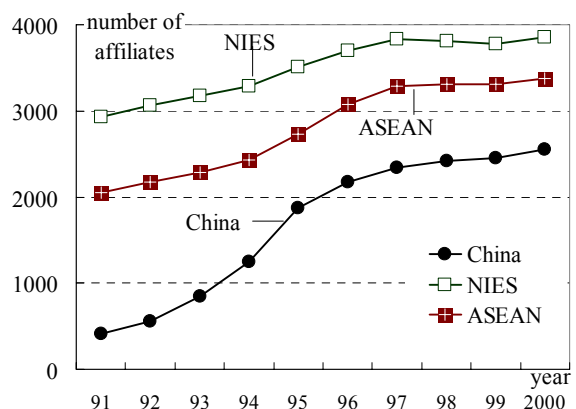


Figure 10. Japanese Foreign Affiliates by Region of Asia

4. FACTORS FOR INTERNATIONAL LOCATION STRATEGY

4.1 Hypothesis in the Selection of Factors

This section discusses the factors and proposes some hypothesis affecting international location strategy. Several studies in the past have considered market and production cost as only the main factors concerning shifts of companies. Although these factors are very important, they are not sufficient guarantees to bring benefits to the company that will shift. There are some cases that companies failed to survive in a foreign country and have to withdraw due to several unconsidered reasons. For instance, after the shift, their distribution costs are higher than the assumed costs, and that this additional amount is more than the amount saved for the reduced production cost. In worst cases, domestic conflicts such as war or violence make the companies withdraw. It is therefore necessary to discuss the factors that affect withdrawals as well as the factors of shifts. This study tries to incorporate risk and infrastructure as additional factors for international location strategy. It proposes four factors, namely: market, cost, risk and infrastructure factors (Fig. 11).

Companies often aim of the benefits to be gained by being outside Japan. This is the reason why they directly consider market and cost factors when planning an international location strategy. However, it must be stressed that existing conditions in the foreign country should always be considered. Risk and the infrastructure factors should be included as well.

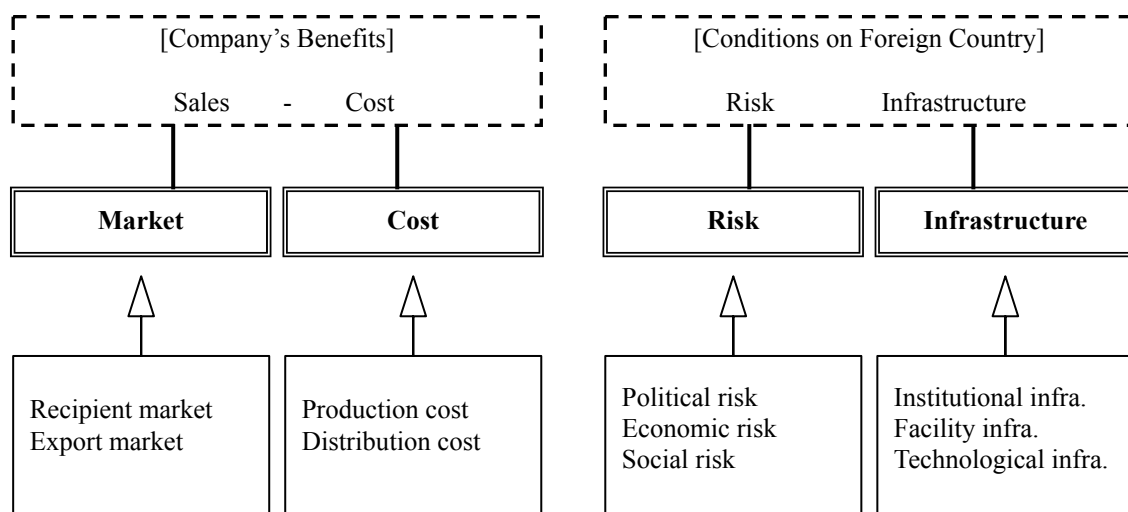


Figure 11. Factors of international location strategy

4.2 Market Factor

Market, as one of the factors of international location strategy, can be classified into two: *recipient market* and *export market* related to the recipient. Recipient market means that the demand of products and services is within domestic or local areas where the Japanese company shifts to. The export market means that the demand of products and services are outside of recipient country but including Japan.

When companies shift their sites of production or sales to a foreign country to expand their sales, they mostly consider market factors. If in case their sales are less than they expected, they may decide to withdraw and they could either come back to Japan or transfer to another country.

4.3 Cost

Cost factors can be divided into *production cost* and *distribution cost*. Production costs refer to expenses for materials, labor and operations. Distribution costs refer to expenses incurred for transportation, storage, loading/unloading, package, and other distribution activities. To reduce costs, companies shift their production sites to foreign countries where labor and raw material costs are cheaper than in Japan. However, they could also withdraw owing to increased costs. Reducing production costs is one of the objectives for shifting to a foreign country. However, companies should not overlook the distribution costs, especially transportation cost.

For example, consider a Japanese company supplying demand commodities in Japan. This company shifted its production site to a foreign country with the primary objective of reducing production costs. However, if the distribution costs such as transportation costs from the foreign country to Japan are significantly high, then the company may not get benefits in this shift. It is therefore necessary to consider both production costs and distribution costs.

4.4 Risk

Risk factor in this study is classified into *political risk*, *economic risk* and *social risk*. Political risk includes the probability of war or labor strikes that occur due to political reasons. Economic risk includes the probability of changes in the economic conditions, such as exchange rate fluctuation and disruption of financial investments. Social risk includes the probability of societal problems, such as crimes, disease, accidents and natural disasters.

Generally, a company will not shift to a foreign country with high probability of risks happening, such as war or violence. A company could withdraw if unbearable risk occurs in the recipient country. Companies could shift to a foreign country to diversify their economic risk. In this case, companies should consider the probability of economic risk such as exchange fluctuation in the foreign country.

4.5 Infrastructure

Infrastructure factor in this study refers to software and hardware that supports the industry. There are three kinds of infrastructure: *institutional*, *facility* and *technological* infrastructure. First, institutional infrastructure refers to the rules and regulations of the country, such as legal system and policy. Taxation system, contract law, business procedures and pricing systems are included under the legal system. For policy, several may be mentioned such as foreign funding promotion, import substitution, export promotion and domestic production policy. Second, facility infrastructure refers to the transportation system made up of nodes, modes and links as hardware infrastructure, and operation and control as software infrastructure. And third, technological infrastructure refers to the level of handling skill or automation that includes human, logistics and information technologies. Logistics technologies, such as unit-load system and multi-modal transportation system directly affect transportation cost.

There is rarely a case of shifts with the infrastructure objective. However, it is essential to consider the availability of infrastructure when companies shift to a foreign country. There are several cases when Japanese companies withdrew from the recipients because of the unbearable difference between the infrastructure of Japan and the foreign country.

Companies preparing to establish international distribution centers have to take into consideration the available infrastructure in the foreign country in detail. This is because international distribution centers are required to maintain networks with other countries. For this reason, international distribution centers are mainly located in countries where good accessibility to other countries and good information platform are present.

5. ANALYSIS OF SIGNIFICANT FACTORS

5.1 Purpose of Analysis

In general, when companies shift to a foreign country in order to reduce costs, they compare the estimated cost levels of predetermined countries to select for a relocation site. Normally, companies eventually decide to shift to a country that has the lowest level of cost. Companies have shifted their production or sales sites to foreign country based purely on the objectives of cost reduction and market expansion. However, as previously discussed, these objectives are not enough to justify and explain the international location strategy of these companies. For this reason, the study analyzes which factor has more weight in international location strategy by area.

5.2 Data and Methodology

The data for this analysis comes from the survey made by 'Toyo Keizai Inc.' and the 'Japan Ministry of Economy, Trade and Industry'. These databooks give some details on the objectives of shifts and reasons of withdrawals, respectively. The analysis considers four areas: Europe, North America, Asia (excluding China) and China.

The analysis assumes that a company considers only one primary factor, which is selected from the four factors of market, cost, risk and infrastructure factors, for international location strategy due to the unavailability of data on competing factors by country. The analysis will be done using the following processes.

1. Classify the objectives of shifts and the reasons of withdrawals on the survey into four factors
2. Sum up the number of responses for each factor by area
3. Calculate the percentage of each factor by area

The factor that has a higher percentage is chosen as a contributory factor. Supposing the companies equally considered the four factors, the rate for each factor is set to 25%.

5.3 Classifying the Objectives of Shifts and the Reasons of Withdrawals into Four Factors

(1) Concept for Classification

Factors that could be considered by companies as objectives of shift, and factors that could cause withdrawals are first identified. Table 2 presents a classification table of the objectives

for shifts and reasons of withdrawals divided into four factors. After careful consideration of the number of responses in the databook, the objectives of shifts were taken from the 1997 data while reasons for withdrawals were taken from the 2002 data.

Table 2. Classifying the objectives of shifts and reasons of withdrawals

	Market Recipient market, Export market	Cost Production cost, Distribution cost	Risk Political risk, Economic risk, Social risk	Infrastructure Institutional infra., Facility infra., Technological infra.
Objectives of Shift	<ul style="list-style-type: none"> • expand market and business • explore opportunities in the area of partner company that has shifted 	<ul style="list-style-type: none"> • availability of cheap labor • availability of materials and resources • export to Japan 	<ul style="list-style-type: none"> • overcome trade frictions • avoiding high foreign exchange risks 	<ul style="list-style-type: none"> • preferential treatment in foreign country • research and gather information data • establishment of international distribution center
Reasons of Withdrawal	<ul style="list-style-type: none"> • stagnant sales 	<ul style="list-style-type: none"> • increased cost (labor, material) 	<ul style="list-style-type: none"> • foreign exchange fluctuation • financial difficulties 	<ul style="list-style-type: none"> • change in taxation system • streamlining international distribution center

(2) Shift and Withdrawal by Market Factor

When companies try to shift to a foreign country to “expand their market or business”, they primarily consider market opportunities in that country. As a matter of course, a foreign country that has potential market power would be a likely recipient of foreign business investments. Another objective of shifting relates to a company’s decision to “explore opportunities in the area of an existing partner company that has shifted overseas”. For example, a parts supplier in Japan may relocate to follow his partner manufacturing company that has shifted to a foreign country for the purpose of not only supplying its partner but also of expanding its business in the area.

If company sales, on the other hand, have been undergoing continuous decline or have been experiencing “stagnant sales”, then they might withdraw from the recipients.

(3) Shift and Withdrawal by Cost Factor

If companies plan to shift due to “availability of cheap labor, materials and resources”, they will consider these prices, and thus cost factors, more important. Also, Japanese companies exporting their commodity to Japan (i.e. “export to Japan”) basically shifts for the purpose of reducing production cost.

However, companies might withdraw if they experience difficulty in reducing cost due to “increased costs”.

(4) Shift and Withdrawal by Risk Factor

A company may decide to shift to a country that has raised issues and complaints regarding trade barriers in order to “overcome trade frictions”. For example, it is common knowledge that Japanese automakers have shifted to the United States to overcome problems on trade friction. Trade friction is considered as one of the political risks. Also, companies may shift to a foreign country with the objective of “avoiding high foreign exchange risks”. Conversely, companies might withdraw their affiliates due to high economic risks involved, such as “foreign exchange fluctuation” and “financial difficulties” in the recipients.

(5) Shift and Withdrawal by Infrastructure Factor

In some cases, companies shift to a foreign country to take advantage of the following:

- receive “preferential treatment in the foreign country”, which is one of the institutional infrastructure relating to foreign funding promotion policy
- “research or gather information data” in the foreign country
- “establish their international distribution center” in the foreign country

It is assumed that companies have considered the availability of institutional, facility and technological infrastructure in the foreign country.

However, they might withdraw from that country due to “changes in institutional infrastructure such as new taxation schemes”. Also, when trying to restructure the network of their international distribution centers, they might withdraw their affiliates located in a country which lacks infrastructure.

5.4 Significant Factors

(1) Significant Factors of Shifts

To analyze the most contributory factor in international location strategy, the number of responses in each survey (showed in Table 2) is summed up for each factor, and the percentage for each is calculated.

Table 3 presents the results of the analysis on the significant factors related to the shifting of Japanese companies by area. In general, market factors (about 39%) and infrastructure factors (about 40%) are identified to be the most significant factors. This implies that Japanese companies have shifted their sites of operations to foreign countries by primarily considering the market and infrastructure factors. The same trend can be observed for Europe, North America and Asia. However, the case in China is a little different. The most significant factor is identified to be cost (about 36%) followed by infrastructure factor (about 34%). Thus, it can be said that Japanese companies primarily shift to China to reduce cost. However, the impact of market should not be overlooked since the percentage is quite high as well (about 30%).

(2) Significant Factors of Withdrawals

Overall, the significant factors of withdrawals are market factor (about 38%) and infrastructure factor (about 55%). The same result can be observed for all the areas. However, in Europe, North America and Asia, the infrastructure factor is identified as the most significant, while the market factor is identified as the most significant in China (Table 4).

Table 3. Significant factors of shifts by area (number of responses)

	Market	Cost	Risk	Infrastructure	Total in area
Europe	1,812	260	264	1,766	4,102
	(44.17%)	(6.34%)	(6.44%)	(43.05%)	(100%)
North America	2,092	580	284	2,506	5,462
	(38.30%)	(10.62%)	(5.20%)	(45.88%)	(100%)
Asia	4,321	2,437	197	4,145	11,100
	(38.93%)	(21.95%)	(1.77%)	(37.34%)	(100%)
China	863	1,036	15	978	2,892
	(29.84%)	(35.82%)	(0.52%)	(33.82%)	(100%)
Total of factor	9,088	4,313	760	9,395	23,556
	(38.58%)	(18.31%)	(3.23%)	(39.88%)	(100%)

* Source: Toyo Keizai Inc. (1997) Survey on the objectives of shifts.

* Figures in parentheses refer to the number of responses for each factor in the total number of responses by area.

Table 4. Significant factors of withdrawals by area (number of responses)

	Market	Cost	Risk	Infrastructure	Total in area
Europe	36	10	3	77	126
	(28.57%)	(7.94%)	(2.38%)	(61.11%)	(100%)
North America	63	1	4	100	168
	(37.50%)	(0.60%)	(2.38%)	(59.52%)	(100%)
Asia	75	7	9	96	187
	(40.11%)	(3.74%)	(4.81%)	(51.34%)	(100%)
China	20	2	2	9	33
	(60.61%)	(6.06%)	(6.06%)	(27.27%)	(100%)
Total of factor	194	20	18	282	514
	(37.74%)	(3.89%)	(3.50%)	(54.86%)	(100%)

* Source: Japan Ministry of Economy, Trade and Industry (2002) Survey on the reasons of withdrawals.

* Figures in parentheses refer to the number of responses for each factor in the total number of responses by area.

(3) Significant Factors

Market factors and infrastructure factors are the two most significant factors that affect international location strategy, both for shift and withdrawal of Japanese companies. It can be said that Japanese companies' objectives for shifting to foreign countries mainly consider market and infrastructure factors. In addition, the reasons of Japanese companies for withdrawing from the recipients mainly consider market and infrastructure factors. Related to

Table 2, Japanese companies have shifted to foreign countries with the objective of expanding market or business opportunities. On the other hand, they have withdrawn probably because their sales in the recipient markets have been stagnant and performing less than they expected. Shifts are also made to take advantage of the preferential treatments afforded by the foreign country, and to establish international distribution centers considering infrastructure factors in the foreign country. On the other hand, if there will be changes in the infrastructure or plans to restructure the company's international distribution base, then they will be forced to withdraw their affiliates from the foreign countries.

6. CONCLUSIONS AND ISSUES

This paper first examined the current situation of international location strategy of Japanese companies, particularly shifts to and withdrawals from foreign countries. Based on a methodology proposed to calculate trends concerning shifting and withdrawal of Japanese companies during the past two decades or so, it was clarified that Asia plays a major role in the global logistics chain of Japanese companies.

The paper also clarified the most significant factors affecting international location strategy. Market and infrastructure factors were identified as the most significant and contributory factors for the relocation of Japanese companies in the major regions of Europe, North America, Asia and China. Based on these findings, it can be said that the availability of infrastructure could greatly affect the location strategy of global companies, which in turn could impact changes in the international distribution process particularly transportation.

The current situation of global logistics based on international location of Japanese companies shows the consolidation of the Asian area. Therefore, it is necessary to focus efforts on the improvement of the infrastructure in Asia, specifically in the coordination and harmonization of institutional infrastructure, enhancement of facility infrastructure and standardization of technological infrastructure. Thus, additional analysis on these three components of infrastructure factor should be studied.

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