

Japanese investment in liberalizing Latin American economies: current pattern and possible impacts of FTA initiatives

*Investimento japonês na liberalização
das economias latino-americanas: padrão atual
e possíveis impactos das iniciativas da TLC*

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RESUMO: Este texto analisa os investimentos japoneses na América Latina, especialmente no Chile, no México, na Argentina, na Venezuela e no Brasil. Além disso, discute os possíveis impactos que os acordos de livre comércio que estão sendo implantados na região teriam sobre esses investimentos.

PALAVRAS-CHAVE: Globalização; investimento; fluxos de capital; integração econômica.

ABSTRACT: This paper analyzes Japanese investments in Latin America, especially in Chile, Mexico, Argentina, Venezuela and Brazil. In addition, it discusses the possible impacts that the free trade agreements being implemented in the region would have on these investments.

KEYWORDS: Globalization; investment; capital flows; economic integration.

JEL Classification: F21; F61; F15.

1. INTRODUCTION

The purposes of this paper are to explore the basic pattern of Japanese investment in contemporary Latin America. The following section will discuss the latest change in the nature of Japanese overseas investment in Latin America in particular.

The third section will be devoted to the examination of Japanese investment in five Latin American countries: Chile, Mexico, Venezuela, Argentina and Brazil. This comparative inquiry into concrete cases will contribute to clarifying the variations observed in the behavior of Japanese investors in Latin America. In the face of the economic liberalization measures taken by Latin American governments, many Japanese investors have partially dismantled their manufacturing operations and turned into importers of finished products. This pattern is observed in all five

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countries but most typically in Chile. On the other hand, the prospect of regional free trade agreements gives a different type of impulse to Japanese investors, which is most typically observed in Mexico, the first Latin American country that started FTA negotiation with the United States.

2. CHANGING PATTERN OF JAPANESE FOREIGN DIRECT INVESTMENT IN LATIN AMERICA DURING THE 80'S.

The 80's

Many observers have noticed several drastic changes which occurred in the pattern of Japanese overseas investment during the 80's. For example, a research team commissioned by the Economic Planning Agency found out, among others: (i) the size of each investment project enlarged; (ii) the weight of the manufacturing and natural-resource development sectors declined while that of finance, insurance and real-estate business expanded; (iii) the share of investment in developing countries declined while the one in the advanced industrialized countries augmented due to the expansion of investment in commercial activities (sales networks), finance/insurance, real-estate business and in the manufacturing sectors suffering from trade frictions (EPA, 1990).

The shift of principal destination of Japanese investment from developed countries was in fact drastic. According to Table 1, Japanese investment in the developing areas (Latin America, Asia and Middle-East) sharply dropped from 50.5% to 27.4% between 1980 and 1990, while the one for North America and Europe together jumped up from 38.5% to 62.9% during the same period.

Now, the manufacturing investment also concentrates in these high-income regions. According to Table 2, which indicates sectorial distribution of Japanese manufacturing investment, the wood/pulp industry was the only major sector that attracted Japanese investors in the developed countries in 1971. In this year, most Japanese manufacturers invested in the textile, metal, and transportation-equipment industries of Latin America and in the textile and electric-machinery industries of Asia. During the 70's, investment of foodstuff and textile industries declined while the chemical and metal-fabricating industries in Latin America and Asia attracted more Japanese investment, a clear reflection of the difficulty faced by these pollution-prone industries in Japan at that time. It is, however, the machinery industries (including vehicles and electric/electronic equipment) of North America and Europe that attracted a major portion of Japanese manufacturing investment during the 80's. The light and "dirty" industries of Asia and Latin America lost their previous salience.

In short, the difference in sectorial and territorial distribution of overseas investment between Japanese and US firms is rapidly narrowing. The Japanese increasingly prefer investing in the leading sectors of high-income countries.

Young-Kwan Yoon (1990, pp. 4-5) interprets this change as signifying that

Japan started to experience deindustrialization and the loss of high productivity jobs, thus following the destiny of the two former hegemonic powers, Great Britain, and the United States. Ozawa (1991, pp. 44-5), in contrast, argues that, due to increasingly sophisticated consumer market and development of automated, flexible manufacturing techniques at home, foreign direct investment still functions in Japan to shed older industries and to upgrade domestic industries concentrating on higher value-added, more knowledge-intensive, and higher-income upscale products.

In spite of the difference of their views on the domestic consequence of Japanese foreign direct investment, both Yoon and Ozawa agree to the point that the initial motive of the Japanese machinery firm's decision to invest in the United States and Europe was to cope with the protectionist pressure from those regions. Yoon even says that the Japanese would probably not have shifted from an export strategy to one of foreign investment if there had not been for trade restrictions (Yoon, p. 14).¹

In fact, since the late 70's, the production techniques such as computer-guided automation, robotics, flexible manufacturing and just-in-time inventory have drawn attention as major sources of Japanese advantage. These production techniques contributed to sharply reducing the relative share of labor cost in total production cost. Furthermore, they are regarded as most effectively used within the production network connecting the management, labor and suppliers that has highly developed in Japan. Therefore, the Japanese firms with those techniques prefer producing in Japan and exporting their products from their Japanese base. They decided to invest abroad only when they were forced to do so by political pressure from the host governments. The Japanese investment in machinery industries in North America and Europe expanded during the 80's mainly for this reason. Still, the overseas production of Japanese firms accounted for only 6.4% of their total production in 1990 while the US firms produced 23.8% abroad in 1989 (MITI, 1992, p. 17).

The lowering of the relative importance of labor cost in the machinery industries means that the Japanese firms do not always need to locate their plants in low wage, developing countries. They will decide investment locations according to various factors including nearness to the targeted market, infrastructure, incentives offered by the host governments, technological level of host society, protectionist pressure and wage level. This explains why Japanese machinery firms wished to stay at home at the beginning and later decided to go mainly to the high wage countries like the US and Europe when they were forced to go abroad.

Latin America

As Kotaro Horisaka's work (1991, pp. 63-6) discusses, the first "boom" of Japanese investment in Latin America came during the latter half of the 50's. In this

¹ Ozawa is not as clear as Yoon. However, he admits that many Japanese regarded foreign direct investment as the "second-best" alternative at the beginning. The first best was export.

period, the Japanese manufacturers of textiles, steel, automobiles and so forth went to Latin America to cope with the host government's policy of import substitution. During the second investment boom which came in late 60's and lasted until the middle of the 70's, the objective to secure a stable supply of natural resources and foodstuff was added to the original purpose of securing market access as an important objective of Japanese investors in Latin America. During the 80's, however, the flow of Japanese direct investment sharply decreased except for the investment for banking and service sectors of Panama and the Caribbean "tax heavens".

Tables 1 and 2 support Horisaka's observation. In 1971, the manufacturing sector accounted for 47.1% of total Japanese investment in Latin America. The mining sector followed with 22.3%. In 1980, these two sectors still accounted for 65.9%. By 1990, however, the figure dropped to 19.2% while the finance/insurance and service sectors came to account for as much as 73.8% of all Japanese investment in Latin America. In fact, the investment in Panama, Bahamas, Bermuda, Antilles, and the Virgin Island together accounted for 73% of Japanese investment in Latin America in 1990. If this Caribbean investment is excluded, the Japanese investment in Latin America only amounted to US\$10.9 billions or 3.5% of all Japanese overseas investment in 1990.

In the manufacturing sector, the textile, metal, and transportation-equipment industries attracted most Japanese investors before 1971. During the 70's, however, foodstuff and wood/pulp were the only industries that increased the relative share of Japanese manufacturing investment in Latin America, again supporting Horisaka's point on the importance of resource development investment during the second Japanese investment "boom" in Latin America.

During the 80's, in contrast, all industrial sectors lost their relative share in the Japanese overseas investment (see Table 2). In this sense, Latin America fits the general pattern more clearly than Asia. The Asian countries also experienced a large decline of relative share of Japanese manufacturing investment during the last decade. However, the decline mainly occurred in the textile, metal, and chemical industries. The machinery industries, in contrast, kept their relative importance during the 80's. The electric and electronic industry even increased its relative share although the expansion was not so large as the one in North America and Europe.

In contrast, many Japanese manufacturers of machineries, faced with the severe recession and the rapid liberalization policy of the host governments, stopped their manufacturing operations and turned into importers of finished goods in many, if not all, Latin American countries. In fact, Toyota and Nissan stopped assembling in Chile and now runs only distribution and service operations.

The attitude of Japanese firms in Venezuela is more ambivalent. Since they are not fully sure of the future course of economic liberalization in the host country, they have dismantled their assembling operations only partially. For example, among the electric-appliance producers, Pioneer and Hitachi completely stopped the assembly operations. Sony and Panasonic, on the other hand, continue to assemble small-size TV sets but started a parallel operation of importing other products. Toyota, the largest Japanese car-assembler in Venezuela, in the face of the

TABLE 1
Accumulated value of Japanese foreign direct investment and its distribution by industry and by region

	Accumulated value (bn. \$)	Distribution by industry (%)										
		Total	Manufacturing	Commerce	Mining	Agriculture/Fishery	Finance/Insurance	Services ^a				
1971												
Total	4.5	100.0	28.0	12.2	30.2	2.4	8.8	17.5				
North America ^b		25.1	6.0	9.2	4.3	0.2	3.2	2.1				
Europe		16.0	1.3	1.0	0.1	0.0	1.5	12.0				
Latin America		15.7	7.4	0.5	3.5	0.4	1.8	1.6				
Asia		22.6	10.3	0.7	7.1	1.4	1.6	1.3				
Middle East		8.3	0.1	0.0	8.1	0.0	0.0	0.0				
1980												
Total	35.0	100.0	34.8	14.5	19.7	2.5	6.4	15.8				
North America ^b		26.4	6.7	9.4	1.4	0.7	2.4	3.8				
Europe		12.1	2.2	2.1	2.5	0.0	2.2	2.7				
Latin America		17.0	7.8	1.2	3.4	0.6	0.8	2.7				
Asia		27.3	12.7	1.1	8.5	0.8	0.7	3.0				
Middle East		6.2	3.0	0.0	0.1	0.0	0.1	0.2				
1990												
Total	310.8	100.0	26.3	10.1	5.3	0.7	21.0	33.9				
North America ^b		43.8	13.0	5.5	0.7	0.2	6.2	17.4				
Europe		59.3	4.0	2.2	0.5	0.0	8.1	3.6				
Latin America		40.5	2.0	0.7	0.5	0.1	4.7	4.9				
Asia		47.5	6.0	1.2	2.4	0.2	1.4	3.7				
Middle East		3.4	0.4	0.0	0.1	0.0	0.0	0.0				

Sources: Okurasho zaiser kinyu toukel geppo, n° 244 (June 1972), Ministry of Finance 1981 & 1991.

^a Include transportation and real-estate business.

^b Approximately 90% are for the United States of America.

TABLE 2
Japanese foreign direct investment in manufacturing industry: distribution by sector and by region(%)

	Total	Food	Textiles	Wood/Pulp	Chemicals	Metals	General machinery	Electrical machinery	Transport machinery	Others
1971										
Total	100.0	6.4	20.3	20.9	6.1	15.0	7.3	7.8	9.2	7.0
North America	21.5	0.7	0.6	16.6	0.9	0.1	0.8	0.3	1.2	0.3
Europe	4.6	0.5	0.1	0.0	1.4	0.7	1.1	0.1	0.3	0.2
Latin America	26.6	0.9	5.4	0.0	0.7	7.8	3.6	1.9	5.9	0.5
Asia	36.8	2.9	12.8	1.4	2.9	3.2	1.6	5.2	1.1	5.7
1980										
Total	100.0	4.7	13.0	6.1	21.1	20.9	7.2	12.2	7.6	7.2
North America	19.1	1.7	1.4	2.7	1.9	2.9	1.8	5.0	0.7	0.9
Europe	6.4	0.3	1.1	0.0	0.8	1.2	1.0	0.7	0.5	0.8
Latin America	22.3	1.1	2.9	1.5	4.1	5.9	2.0	1.7	2.5	0.6
Asia	36.5	1.2	7.3	1.1	5.7	8.2	2.2	4.4	2.2	4.2
1990										
Total	100.0	5.1	4.9	3.6	13.4	12.6	9.7	24.9	13.3	12.4
North America	49.4	2.2	0.9	2.5	5.9	5.1	4.9	13.6	6.2	8.0
Europe	15.4	0.6	1.1	0.0	1.7	0.7	2.2	5.3	2.3	1.4
Latin America	7.7	0.3	0.6	0.3	0.9	2.5	0.5	0.8	1.6	0.2
Asia	22.9	1.4	2.3	0.6	3.2	3.4	2.0	5.1	2.1	2.6

Sources: MITI 1973; Ministry of Finance 1981 & 1991.

TABLE 3
Sales and purchase by Japanese subsidiaries in Latin America

	Share in total sales (%)				Share in total purchase (%)				Ratio of export-to-Japan to import-from-Japan (import=100.0)
	All industries				Manufacturing industries				
	Local sales	Export to Japan	Export to North America	Export to all others	Local purchase	Import from Japan	Import from North America	Import from all others	
1975	78.6	8.5	12.8		55.5	32.4	12.1		n.a.
1977	60.5	12.2	27.3		34.9	31.2	33.9		n.a.
1980	53.8	26.0	3.5	9.3	37.5	31.1	8.7	22.6	117.3
1983	64.4	22.3	1.2	12.1	36.8	46.4	1.6	15.1	80.1
1986	61.5	20.0	4.4	12.1	36.7	24.9	5.2	33.1	203.2
1987	50.6	32.9	6.3	10.2	23.3	26.8	4.2	45.7	231.3
1988	53.1	29.3	4.8	12.9	30.1	30.3	16.5	23.0	146.5
1989	36.1	47.3	4.8	11.8	25.4	26.9	4.3	43.3	338.1
1990	56.2	24.8	6.6	12.4	37.4	29.7	11.2	21.7	121.2
Manufacturing industries									
1975	85.8	4.5	9.8		63.4	25.7	10.9		n.a.
1977	91.9	1.1	7.0		75.7	18.5	5.8		n.a.
1980	82.6	9.4	2.7	5.3	66.7	24.5	7.7	1.1	109.5
1983	87.3	7.7	2.2	2.8	28.5	68.7	0.6	2.2	20.6
1986	80.5	4.1	5.0	10.4	60.5	26.5	10.9	2.1	53.9
1987	75.4	7.7	8.0	8.9	59.1	31.8	5.4	3.8	59.3
1988	76.1	6.1	6.1	11.8	51.1	42.0	5.4	1.5	36.7
1989	69.9	10.9	9.0	10.2	66.7	13.4	5.5	14.4	282.7
1990	82.6	4.9	8.5	4.0	68.2	23.5	2.5	5.9	41.5

Sources: MITI 1977, 1979, 1983, 1986, 1989, 1990, 1991, & 1992.

government policy of liberalizing big-size passenger-car imports in the middle of 1991, decided to import Celica and Crown and only assemble Corolla and Land Cruiser in Venezuela. They maintain both assembling and importing operations to prepare for an uncertain future (interviews in Caracas, March 22/23, 1992).

In Argentina, the tariff reduction curtailed the merit of the operations at the Fuego free trade zone. The Japanese assemblers of electric appliances, which heavily invested during the 80's, started the import operations. In case of Sanyo, import operations have already surpassed the assembly operations (interview at Buenos Aires, March 25, 1992).

Even in Brazil, the largest host country for Japanese investors, JETRO reports that a shift from production to import is observed among Japanese automobile and electric-appliance makers (JETRO, 1992, p. 165).

Nissan in Mexico is great exception to this general trend. Since this company had invested heavily before a full-scale liberalization started in Mexico in the mid-eighties and since the liberalization of Mexican automotive trade was very limited, it decided to expand, instead of dismantle the production facilities at its Aguascalientes plant. While the Mexican domestic sales were stagnated, it could export parts and components to the Nissan plant in the United States and cars and pick-up trucks to some Latin American countries such as Chile and Central America.

Table 4: Trade of Japanese and US subsidiaries with their home country (Import from home country = 100.0)

Japanese subsidiaries ^a			US subsidiaries ^b		
Region	Expor!	Impor!	Region	Expor!	Impor!
1983			1982		
Ali regions	88.2	100.0	Ali regions	90.6	100.0
USA	78.9	100.0	Canada	109.7	100.0
Europe	27.2	100.0	Europe	33.8	100.0
Latin Ame rica	80.1	100.0	Latin America	102.2	100.0
ASEAN	69.5	100.0	Japan	156.4	100.0
OtherAsia	157.4	100.0	Asia	145.7	100.0
1989			1989		
Ali regions	78.9	100.0	Ali regions	91.8	100.0
USA	52.7	100.0	Canada	105.1	100.0
Europe	48.0	100.0	Europe	52.4	100.0
Latin America	338.1	100.0	Latin America	95.5	100.0
ASEAN	45.9	100.0	Japan	83.8	100.0
NIES	255.7	100.0	Asia ^c	153.2 ^d	100.0

Sources: MITI 1986 & 1991; US Department of Commerce 1985 & 1991.

a) Do not include financing/insurance, real estate and public utility business.

b) Non-bank subsidiaries of non-bank parents.

c) Does not include Thailand.

d) Estimate

The behavior of Nissan is congruent with Horisaka's observation that, faced with the severe recession in the host countries, the Japanese firms in Latin America (both existing and new) recently started to use their Latin American base for exporting to the third countries instead of producing for the stagnated local market.

Table 3 certainly shows that the local sales of the Japanese subsidiaries in Latin America shrank while their export to the third countries ("North America" and "all others") expanded during the latter half of the 80's. However, we also need to pay attention to the fact that their sales to Japan also shared high in 1987 through 1989. In 1990, the share of Japan-bound export declined. Still, it is much higher than the level attained during the 70's.

Although the Japanese investment abroad is generally associated with trade deficit of the host countries *vis-à-vis* Japan (refer to Table 4), the last column of Table 3 demonstrates that the Japanese investors in Latin America contributed to trade surplus of their host countries during the 80's. Since the same table shows that the Japanese manufacturing firms in Latin America recorded a huge trade deficit with Japan, the overall surplus should be attributed to the commercial sector. As will be revealed in the following section, a major part of Japan-bound exports is accounted for by semi-manufactured goods made of local natural resources such as wood, minerals and marine products.

3. VARIATIONS AMONG LATIN AMERICA HOST COUNTRIES

The Chilean pattern

As has been already suggested above, the attitude of Japanese investors in Latin America differs from one host country to another. Table 5 shows sectorial distribution of Japanese investment in five Latin American countries. If Panama and the Caribbean "tax heavens" are excluded, these five countries are among the largest receivers of Japanese direct investment in 1990, together representing 87.3% of all Japanese investment in this region. The five countries are also among the largest trade partners for Japan in the Latin American region. They accounted for 61.5% of all Japanese trade with Latin America in 1990. If the export of ships to Panama is excluded as a special case, this figure reaches as high as 69.7% (Japan Institute of System Development, 1992).

Among these countries, the Chilean case best fits the general pattern of Japanese investment described in the previous section. On the surface, the primary focus of Japanese investment in Chile seems to have shifted from pure extraction ("mining and petroleum") to "manufacturing" as seen in Table 5. The metal, textile and wood/pulp industries are especially salient. However, the degree of manufacturing is not high in these industries. For example, all Japanese firms in the wood/pulp sector are actually producing wood chips for the Japanese market. More than 80% of wood-product exports to Japan are accounted for by wood chips (Indicadores de Comércio Exterior, July 1991). The export of pulp and paper is virtually nil

although at least one of the Japanese firms have a plan to start production in these higher value-added sectors.

The Mexican pattern

Mexico represents another type of host country in Latin America for Japanese investors. The relative share of Japanese investment in Mexico's mining/petroleum sector has declined like in Chile. However, this decline was not accompanied by an increase of investment in the sectors semi-manufacturing local natural resources.² Instead, as seen in Table 5, a huge increase of Japanese investment occurred in the transportation equipment industry. Although other manufacturing industries did not increase their relative share so much as the automotive industry, they kept a constant share of approximately 18.5% of total Japanese investment during the 80's. The investment data in Table 5 do not include the maquiladora investment made by the US-based Japanese subsidiaries. If the investment in this sector is added, the Japanese investment in the Mexican machinery industries (especially electric/electronic and auto parts industries) will be much larger. In terms of the importance of Japanese investment in the machinery industries, the Mexican case looks similar to the Asian one.

However, the trade behavior of the investors in Mexico is largely different from the one in Asia. It is widely observed in Asia that the Japanese electric/electronic firms have established a division-of-labor network of finished products. In each of the subsectors such as audio instruments, refrigerators, air conditioners and electric ovens, matured and low value-added products are entrusted to the Asian countries while high-tech and high value-added products are kept in Japan. The intermediate products are supplied by NIEs. The products are not only exchanged among Asian countries including Japan herself, but also exported to the US and Europe (EPA, 1990, p. 83). The export of machinery parts from the NIEs to Japan is also noticeable. As a result, the Japanese firms in NIEs have had a large trade surplus vis-à-vis Japan (see Table 4).

In contrast, the Japanese machinery firms in Mexico export very little to Japan. In the automotive industry, the largest receiver of Japanese investment in Mexico, Nissan and a small number of its suppliers are the sole investors. The motor vehicles produced and marketed in Mexico by Nissan have a 70% to 80% local content while the cars exported to Puerto Rico have approximately 35% local content (interview at Mexico City, September 1987). Since a vast majority of Nissan vehicles are marketed within Mexico, a high local content of domestically sold vehicles

² The main export commodity of Mexico for Japan is crude oil, which is produced by PEMEX, a Mexican state enterprise. Foreign investment in the petroleum and petrochemical industries has been prohibited until recently. As a result, there are very few Japanese subsidiaries that produce semi-manufactured goods from crude oil. This is one of the reasons why, different from the Chilean case, the Japanese presence in Mexico contributes little to Mexican export to Japan. Among the five countries dealt with in this section, Mexico is the only country which had trade deficit with Japan in 1990.

Table 5
Distribution of cumulative Japanese direct investment in five Latin American countries by sectors (%)

	Chile			Mexico			Brazil			Venezuela			Argentina		
	1980	1985	1990	1980	1985	1990	1980	1985	1990	1980	1985	1990	1980	1985	1990
Mining & petroleum	63.0	43.4	27.1	60.5	37.8	26.8	5.2	3.9	3.8	0.0	0.0	0.6	0.0	0.0	0.0
Agriculture/forestry	0.0	0.0	6.1	0.2	0.2	0.2	3.4	2.7	2.2	0.5	0.5	0.5	0.0	0.1	0.1
Fishery	17.3	13.9	18.2	0.9	0.6	0.4	0.2	0.2	0.1	1.3	1.1	0.4	4.5	7.3	7.8
Manufacturing	3.9	3.1	18.4	34.4	52.6	61.4	65.0	68.3	62.0	84.6	84.6	66.3	40.4	37.5	24.9
Foodstuff	0.0	0.1	0.4	1.8	1.9	3.2	3.5	2.9	2.7	0.1	0.1	0.0	0.1	0.0	0.1
Textiles	0.0	0.0	2.9	0.4	0.4	0.4	10.0	7.6	5.7	2.3	2.0	0.8	17.1	5.9	2.2
Wood/pulp	0.4	0.3	2.8	0.0	0.0	0.0	6.2	4.1	2.9	0.0	0.0	0.0	1.4	0.4	0.1
Chemicals	0.0	0.0	0.7	4.6	3.3	3.2	2.8	3.4	4.9	0.2	0.5	0.2	2.7	0.7	0.3
Metals	0.0	0.0	8.5	5.7	8.1	6.8	20.4	31.5	26.6	76.3	67.9	50.0	0.0	0.0	0.0
General machinery	0.0	0.3	0.2	3.3	2.4	2.3	7.6	6.8	5.6	0.0	0.0	1.4	1.1	0.3	0.1
Electrics/electronics	0.3	0.2	0.5	2.0	2.0	2.1	5.8	5.2	6.8	1.6	1.4	4.9	14.3	10.9	14.4
Transportation equip.	3.2	2.2	1.3	15.9	34.0	42.9	6.3	5.6	5.1	3.8	10.5	8.6	1.6	9.3	3.9
Others	0.0	0.0	1.2	0.6	0.4	0.6	2.3	1.7	1.9	0.4	0.5	0.2	2.2	10.1	3.8
Trade & services	5.5	29.9	19.4	2.4	8.0	10.5	16.7	15.3	13.5	8.7	9.5	30.4	27.9	44.8	63.4
Banking/insurance	5.0	3.5	6.6	1.5	0.9	0.6	7.1	8.0	16.8	0.0	0.0	0.0	24.3	6.4	2.4
Total (millions of dis.)	124	180	311	827	1,330	1,874	2,908	4,587	6,560	115	132	341	42	160	431

Source: Ministry of Finance 1989 & 1991.

means a high amount of local procurement. However, different from Japanese contributions to exports in Chilean copper, wood-chips, and pisciculture industries, a high local procurement of Nissan is not connected with large exports from Mexico to Japan. The Japanese maquiladora firms' exports to Japan are also negligible.

In short, Nissan and other Japanese machinery firms import parts, components, and other materials from Japan but export back very little. This fact is reflected in the huge imbalance between Japanese exports and imports of "machinery and equipment" vis-à-vis Mexico.

Although concrete statistical data are not available, it is known that a major part of exports by Nissan and the Japanese maquiladora firms are directed to the US market. If these firms increase regional procurement of parts and organize a regional division of labor in North America as Nissan seems to aim at doing now, the Asian pattern will be realized in this part of Latin America.

There are several factors that explain why the Japanese machinery firms decided to stay in Mexico instead of dismantling their manufacturing operations.

The maquiladora sector is, from the beginning, deeply integrated into the division-of-labor network across the border with the United States. The recession and the economic liberalization in Mexico did not affect the sector.

As for the automotive industry, the first factor to be considered is the fact that this industry was excluded from the liberalization program of the Mexican government until quite recently. The status of a sole Japanese car maker shielded from the competition of other Japanese makers has offered a strong incentive for Nissan to stay in Mexico. Even before a talk concerning NAFTA surfaced, Nissan had decided to invest heavily in its Aguascalientes plants.

Once a large capital has been "sunk" in the host country, it is not an easy decision to withdraw even if a situation changes and a prospect of severer competition emerges. To avoid a costly waste, Nissan had to consider a strategy of somehow utilizing its Mexican plants. The Nissan Corporation apparently decided to integrate its Mexican subsidiary into its North American division-of-labor network.

The prospect of NAFTA gave to Nissan another incentive to stay in Mexico as an insider. The existing plants in Mexico, together with the sister plants in the United States, may be used as the bases on which to augment regional contents of parts and vehicles in the North American market.

Brazil, Venezuela, and Argentina

Brazil shares several important features with Mexico concerning the pattern of Japanese investment. Many Japanese manufacturing firms had invested heavily before economic liberalization and the formation of regional free trade zones emerged in Brazilian agenda. In addition, the economic liberalization has been least progressed in Brazil among the five countries. It is, therefore, natural that the Japanese adjustment to the new reality of Latin America is slowest there. As demonstrated in Table 5, the sectorial distribution of Japanese investment has experienced the smallest change in Brazil during the 80's.

Another resemblance between Brazil and Mexico is a huge imbalance of machinery trade. Brazil imports a large amount of “machinery and equipment” from Japan but exports back little of the same category.

On the other hand, like Nissan of Mexico, some of Japanese machinery firms in Brazil started to consider increasing exports to the third countries. For example, NEC recently decided to launch a joint business with local investors to assemble personal computers in Brazil. It is reported that a major part of the necessary parts and components will be imported from NEC’s US plant and the products will be marketed in Latin American countries (*Asahi Shimbun*, May 14, 1992).

In spite of the above-mentioned similarities between Brazil and Mexico, the former differs from the latter in one important aspect. In Brazil, like in Chile, the Japanese investors in natural-resource processing sectors largely contributes to Brazil’s exports to Japan. The largest Japanese investment in Brazil is directed to the metal fabricating sector. Partially due to this investment, Brazil’s export of iron ores sharply declined while the export of iron/steel and non-ferrous metal (aluminum) expanded during the 80’s.

The Venezuelan case can be located in between the Chilean and Mexican cases although it is much closer to Chile than to Mexico.

The major Japanese investment in Venezuela is directed to metal-producing, electric/electronic and transportation-equipment industries as well as the trade and service sectors. The investment in metal-producing industry, is symbolized by a joint venture with CVG, a Venezuelan state company which produces aluminum using local bauxite resource. This kind of investment contributed to a sharp increase in the export of non-ferrous metal to Japan. In this respect, Venezuela shows the Chilean pattern of Japanese investment in Latin America.

However, a relatively large share of Japanese investment in the electric/electronic and transportation-equipment industries suggests that the Japanese machinery firms in Venezuela, different from their Chilean counterparts, maintain assembly operations. The increase of Japanese investment in the Venezuelan trade and service sectors, however, indicates that the Japanese firms are getting more active in the commercial activities including the import of finished machineries from Japan. As mentioned previously, the Japanese subsidiaries in the electric-appliance and automobile industries are partially shifting their operations from assembly to import. The Venezuelan import of automobiles from Japan account for 28.4% of all Japanese export to this country, a level sufficiently high but lower than in Chile.

On the other hand, machinery exports from Venezuela to Japan are virtually nil. In short, the Venezuelan case shows many of the features common to Chile although incompleteness of economic liberalization impedes a total dismantling of the Japanese existing assembling plants.

The Argentine case is similar to the Venezuelan one. On the one hand, the Japanese electric and electronic firms increased their investment during the 80’s as shown in Table 5. Many of them took advantage of the Patagonian free trade zone.

However, due to the liberalization policy of the Menem government, many of these firms recently decided to reduce local production and turned to the import

of finished goods. The Japanese machinery firms in Argentina, as those in Venezuela, are not fully sure if the liberalization measures last long. Therefore, they opted for keeping both manufacturing and importing operations. They still remain as “manufacturing” firms in the statistics.

On the other hand, the largest Argentine export to Japan is accounted for by metals, both ferrous and non-ferrous. Curiously, there is no Japanese investors in this sector. This means that Japan imports metals (especially iron/steel and aluminum) produced by non-Japanese companies.³ The same situation exists in the agricultural sector. However, the fishing industry has seen a simultaneous increase of Japanese investment and exports to Japan. Here is again seen a mixed situation of Chilean and Mexican patterns although, as in Venezuela, Argentine trade balance with Japan is positive.

Table 6 summarizes the different patterns of Japanese investment in the five Latin American countries. As seen in the Table, Chile and Mexico represent two extreme cases.

In Chile, Japanese machinery firms stopped producing locally and turned into importers of finished products. The Japanese investment is increasingly concentrated in the sectors which process local natural resources and export semi-processed products to Japan.

In Mexico, in contrast, Japanese firms keep their manufacturing operations but are virtually absent in the petroleum industry, the most important natural-resource sector of Mexico. Although the Japanese machinery firms export their products to the US and to some Latin American countries, the lack of exports by Japanese investors in the natural-resource processing sectors has led to a trade deficit of Mexico vis-à-vis Japan.

Table 6: Patterns of Japanese investment in five Latin American countries

	Change from manufacturing to importing	Presence in resource processing sector
Chile	High	High
Venezuela	Medium	High
Argentina	Medium	Medium
Brazil	Low	High
Mexico	Low	Low

The other three countries can be located in the intermediate position between Chile and Mexico. Venezuela and Argentina are closer to Chile while Brazil to Mexico.

³ It is said that subsidized electricity rates contribute to making Argentine metals competitive internationally.

4. POSSIBLE IMPACTS OF REGIONAL FREE TRADE INITIATIVES

The picture is quite different when a FTA has US participation. Under with US participation FTA regime, US firms, which can expect free imports from the home country, will be able to improve their competitive position *vis-à-vis* imports from Japan. It is natural that AmCham (American Chamber of Commerce in Chile) is one of the most ardent advocates of a free trade agreement with the United States in Chile where Japanese vehicles and electric/electronic products pose serious competition with American products.⁴

Furthermore, by formally imposing obligatory: regional contents (rules of origin), regional free trade agreements with US participation will also make difficult indirect exports to the United States through Latin America or to Latin America through the United States. In order to cope with the new kind of trade barriers, the Japanese firms will be forced to increase their direct investment in the Western Hemisphere. The real problem is in which sectors and where in the Western Hemisphere they most likely invest.

Judging from the fact that the vast majority of Japanese exports to both the United States and Latin America is accounted for by automobiles and other machineries, Japanese direct investment is expected to increase in the machinery industries under regional free trade regimes.

The location decision of Japanese investors depends on many factors. As discussed previously, wage level is only a part of the factors in contemporary machinery industries. Nearness to the targeted market, fiscal and other incentives of the host government (both national and local), political consideration stemming from trade friction, industrial infrastructure, technological matureness of host society, living conditions for the Japanese managers are, among others, important factors for Japanese investors.

Table 7 demonstrates the distribution of initial investment motives of the Japanese subsidiaries abroad. In all three machinery industries, the local market-related factors (“expansion of local market” and “gathering of information”) constitute the most important considerations for Japanese investors in Latin America, followed by “policy of host government” in the transport-equipment and general-machinery sectors. Only in the electric and electronic industry, “utilization of local labor” appears as the second most relevant factor for investment decision. It is not fortuitous that most of the Japanese maquiladora plants in Mexico are from the electric and electronic sector. However, it is interesting to note that the labor factor plays much more important role among Japanese subsidiaries in Asia.

On the other hand, the US-based Japanese firms also give the highest importance to market-related factors. Trade friction constitutes the second most important factor.

⁴ Own observation in Chile in March-April, 1992.

TABLE 7
Initial motives of investment of Japanese firms by industry and by region, 1989^a

Motives	Industry		All manufacturing		Electric/electronics		Transport equipment		General machinery			
	Host Country		USA	LA Asia	USA	LA Asia	USA	LA Asia	USA	LA Asia		
Access to raw materials	5.1	14.7	5.6	4.0	4.5	2.9	2.3	0.0	1.3	1.5	0.0	1.9
Abundance of local resources	8.5	14.1	6.5	3.2	4.5	1.5	4.6	0.0	0.7	4.5	0.0	1.0
Utilization of local labor	14.6	48.0	64.3	19.2	68.2	74.2	13.8	4.5	51.1	13.6	35.3	63.1
Policy of host government	8.7	37.9	32.8	3.2	59.1	30.2	18.4	27.3	57.6	10.6	76.5	31.1
Expansion of local market	81.6	62.1	61.2	81.6	72.7	62.2	88.5	77.3	76.3	80.3	82.4	69.9
Third-country market	12.3	13.0	25.3	13.6	9.1	27.0	9.2	9.1	12.9	18.2	23.5	36.9
Japanese market	9.8	6.2	18.2	9.6	2.3	19.9	11.5	0.0	8.6	4.5	0.0	21.4
Gathering of information	27.3	5.6	6.7	27.2	0.0	5.6	23.0	4.5	2.9	30.3	17.6	14.6
Receipt of dividends and others	9.9	11.9	9.8	4.0	0.0	4.7	3.4	0.0	4.3	6.1	11.8	12.6
Avoidance of exchange risk	13.9	3.4	4.4	5.6	4.5	7.6	24.1	0.0	2.2	19.7	11.8	3.9
Trade friction	17.4	0.6	1.8	21.6	2.3	4.1	29.9	0.0	0.7	18.2	0.0	0.0
Other reasons	19.0	15.8	9.4	20.8	6.8	9.4	13.8	27.3	8.6	18.2	0.0	4.9

Source: MITI 1991.

^a Each company interviewed was allowed to pick up more than one answer.

Table 8: Trade with the United States by Japanese and US subsidiaries in Latin America

	Ratio of export-to-North America to import-from-North America ^a by Japanese subsidiaries (Import=100.0)			Ratio of export-to-US to import-from-US by US subsidiaries ^b (Import=100.0)		
	All sectors	Manufacturing		AH sectors	Manufacturing	Automotive
1980	75.1	100.8	1977	131.7	41.5	n.a.
83	138.5	1069.9	82	102.2	58.7	36.2
86	217.2	160.3	89	95.5	98.4	n.a.
87	195.2	365.9				
88	37.6	309.2				
89	121.4	296.8				
90	68.2	658.4				

Sources: MITI 1983, 1986, 1989, 1990, 1991, & 1992; US Department of Commerce, 1980, 1986, 1991. a) A vast majority of Japanese subsidiaries' trade with North America is with the United States. b) US subsidiaries are non-bank affiliates of non-bank parents.

This last factor is worth special attention. Table 8 shows Japanese and US subsidiaries' trade with the United States. The US subsidiaries in all sectors have reduced their trade surplus with the United States (trade deficit for US) while the manufacturing subsidiaries have increased their trade surplus. Still, US subsidiaries' exports and imports with the home country were more or less balanced in 1989.

In contrast, Japanese manufacturing subsidiaries in Latin America have had a huge trade surplus with the United States (trade deficit for the United States). It is true that, due to the trade activities of commercial firms, Japanese subsidiaries as a whole have recently reduced trade surplus with the United States and even created trade surplus for the United States.

However, considering the fact that protectionist movements in the United States have always emerged from the manufacturing sector, one can expect that any serious increase of Japanese manufacturing exports from Latin America to the United States will only strengthen the protectionist tendency in the United States. As long as the US market constitutes the largest one for Japanese firms, it is inconceivable for them to risk another US protectionism by strengthening export-oriented manufacturing investment in Latin America.

Rather, they will choose to invest in the United States as much as possible and use their US plants as the export base for Latin American markets. When they actually decide to invest in Latin American countries, they will make a parallel investment in the United States to balance the trade among subsidiaries. The Japanese concept of just-in-time inventory, however, will function against excessive dispersion of production plants in the Western Hemisphere.

In Mexico and Brazil where some of the Japanese firms have heavily invested and cannot easily withdraw, they may try to use the existing production facilities as much as possible to increase regional contents of their products. However, how

much they invest in new facilities depends on their calculation of the risk contained in each project of each sector with regard to US protectionism. Furthermore, as mentioned above, even if they decide to expand investment in Mexico and Brazil, they will have to direct as much investment to the United States in order to avoid increasing US trade deficits. The new investments by Nissan, NEC and Fujitsu in Mexico apparently follow this consideration.

In short, the lion's share of increased Japanese investment under FTA regimes will be most probably, taken by the United States.⁵ If the lowering of tariffs under FTA's leads to an expansion of Japanese exports from the United States to Latin America, the latter's trade balance with the United States, which is currently positive for many Latin American countries, may turn negative.

5. CONCLUSION

The major findings of this paper can be summarized as follows.

(i) The characteristics of Japanese investment in Latin America have been more or less congruous with the general pattern of Japanese overseas investment. It was mainly directed to the manufacturing and resource-exploitation sectors in the developing countries until the decade of 70's. In Latin America, as Kotaro Horisaka puts out, the manufacturing firms of textile, metal and other industries decided to invest in this region during the first Japanese investment "boom" of the 50's in order to cope with the import substitution policy of the host governments. During the second investment "boom" of the 70's, the investment in natural-resource exploitation sectors such as wood/pulp and foodstuff industries increased their share.

Japanese investment in Latin America also fitted Ozawa's argument concerning the importance of macroeconomic factors as stimuli for Japanese overseas investment. During the 70's, Japanese investment in the Latin American chemical industry expanded due to domestic pressure against the pollution-prone industries. During the 80's, Japanese investment came to be directed mainly to the finance and service sectors worldwide and to the manufacturing sector, especially machinery industries, of the developed countries. The drastic increase of Japanese investment in Panamanian and Caribbean finance and service sectors is congruent with this general pattern. Also following the general pattern, the relative share of Japanese investment in Latin American manufacturing industries declined sharply during the 80's. Faced with economic recession and trade liberalization in Latin American countries, many Japanese manufacturing subsidiaries totally, or partially withdrew from the manufacturing activities and turned into importers of finished good.

On the other hand, the Japanese firms in the natural-resource processing sec-

⁵ Writing on the possible impact of NAFTA on Japanese investment, Carlos Moneta (1992, p. 39) also points out: "If the agreement seriously affect access to the US market through Mexico, then there will probably be a greater concentration of direct investment in US territory".

tors remain relatively active. They have increased their use of local resources, thus decreasing imports. At the same time, they export a major part of their products to Japan. As a result, the trade balance of Japanese subsidiaries turned positive, thus contributing to improving the trade balance of the host countries.

(ii) The pattern of Japanese investment in Latin America, however, varies from one host country to another. The Chilean case represents one of the two most typical patterns. Due to the economic liberalization, Japanese manufacturing subsidiaries, especially auto assemblers, stopped manufacturing and started to import finished goods mainly from Japan. On the other hand, the Japanese firms became highly active in the resource-processing sectors and increased the export of wood chips, metals, salmon, processed fruit, etc.

Mexico represents another type of host countries for Japanese investors in Latin America. In spite of the liberalization process after the mid-eighties, no major dismantling of manufacturing operations occurred among the Japanese firms. On the contrary, Nissan and its suppliers have expanded their production capacity in Mexico. Japanese maquiladora investment also went up sharply.

The expansion of Nissan's operations is partially due to the fact that liberalization measures have not been fully enforced in Mexico's automobile industry. Moreover, it is physically difficult for Nissan to dismantle its plants after having invested so heavily. Nissan opted to survive by increasing exports to the US and to other Latin American countries and by making best use of NAFTA.

Due to these operations of Japanese machinery firms, the import of intermediate goods from Japan remains high in Mexico. On the other hand, there are no major Japanese ventures in the natural-resource processing sectors of Mexico. As a result, Mexico's trade balance with Japan has turned negative.

Brazil shares with Mexico a relatively well-developed manufacturing base and relatively heavy manufacturing investment by Japanese companies. Some of the Japanese subsidiaries, as in Mexico, started to consider increasing exports to the third parties. On the other hand, a tendency of a shift from manufacturing to importing has also been observed in recent years. Brazil is also different from Mexico in the sense that there is major Japanese participation in the resource processing sectors, especially in iron/steel and aluminum production. Venezuela and Argentina share with Brazil and Chile the existence of Japanese investors/exporters in the natural-resource processing sectors. They are also experiencing a dismantling of Japanese manufacturing operations although the degree of dismantling has not yet reached the level as high as in Chile.

(iii) Impacts of FTAs among Latin American countries will be positive for both Latin America and Japan. Enlarged regional markets will make investment in the machinery industries economically more feasible for Japanese firms.

In contrast, FTAs with US participation will bring about discriminations against Japanese firms by improving competitiveness of tariff-free US firms and by making indirect trade by Japanese firms difficult. Japanese firms, especially the machinery ones, will be forced to increase direct investment in order to cope with the discriminations. Against Latin American expectation, however, a vast majority

of the Japanese investment will be most probably directed to the United States. This is due to the increasing importance of non-wage factors in location decisions by Japanese machinery firms and to their fear that export-oriented Japanese investment in Latin America worsens US protectionism.

Still, the countries like Mexico and Brazil where the Japanese have heavily invested in machinery industries have a chance of receiving more, if not substantial, Japanese investment in those industries. For other Latin American countries, where Japanese firms have only a limited manufacturing base, FTAs with US participation will bring about little increase of Japanese investment in the machinery industries. Japanese investment in those countries will continue to concentrate in resource-processing industries. New Japanese investment in “niches” other than machinery industries can also be expected. However, the lion’s share of increased Japanese investment in the manufacturing industries will most probably go to the United States. Once established in the US, Japanese firms will be able to increase exports to Latin American markets thanks to the FTAs. This could worsen the trade balance of Latin American countries.

REFERENCES

- COMITÉ DE INVERSIONES EXTRANJERAS (1990) *Informe Inversión Extranjera*. Santiago, Ministerio de Relaciones Exteriores, December 1990.
- COMITÉ DE INVERSIONES EXTRANJERAS (1991) *Informe Inversión Extranjera*. Santiago, Ministerio de Relaciones Exteriores, July 1991.
- ECONOMIC PLANNING AGENCY (1990) *Foreign Direct Investment which Changes Japan and the World*. Tokyo, EPA.
- HORISAKA, K. (1991) “Economic relationship as the core: prospect and tasks ahead”. In: Stallings, B., Székely, G. & Horisaka, K. *Co-existence with Latin America*. Tokyo, Dobunkan.
- INFORMATION CENTER FOR OVERSEAS ECONOMIES, JETRO (1991) *Industrial Policy and Company Groups in Chile*. Tokyo, JETRO.
- JAPAN INSTITUTE OF SYSTEM DEVELOPMENT (1992) *Annual Statistics on Japan’s Trade Individual Foreign Countries 1992*. Tokyo.
- JETRO, v.y.^b *Foreign Direct Investment of Japan and of the World*. Tokyo, JETRO.
- KNICKERBOCKER, F. T. (1973) *Oligopolistic Reaction and Multinational Enterprise*. Boston, Division of Research, Graduate School of Business Administration, Harvard University.
- KOHAMA, H. ed. (1992) *Direct Investment and Industrialization. Japan, NIEs & ASEAN*, Tokyo, JETRO.
- KOIDO, A. (1991) “The collar television industry: Japanese-US competition and Mexico’s maquiladoras”. In: Székely, G. *Manufacturing across the Borders and Oceans: Japan, the United States and Mexico*. LaJolla, CA Center for US-Mexican Studies, University of California.
- KOJIMA, K. (1971) “Japan’s foreign direct investment”. *Hitotsubashi Journal of Economics*, Tokyo.
- MINISTRY OF FINANCE, v.y.^b, *Annual Report of the International Financial Bureau*. Ministry of Finance, Tokyo.
- MITI, v.y.^b *Overseas Operations of the Japanese Companies*. Tokyo, MITI.
- MITI (1983) *The First Overseas Business Activities Basic Survey: Overseas Investment Statistics*. Tokyo, MITI.
- MITI (1986) *The Second Overseas Business Activities Basic Survey: Overseas Investment Statistics*. Tokyo, MITI.

- MITI (1989) *The Third Overseas Business Activities Basic Survey: Overseas Investment Statistics*. Tokyo, MITI.
- MITI (1991) *The Fourth Overseas Business Activities Basic Survey: Overseas Investment Statistics*. Tokyo, MITI.
- MONETA, C. (1992) "Japan and the North American free trade agreement". Paper presented at the Woodrow Wilson Center's *Japan and World Conference*, January 17-28.
- NAFINSA (1990) *La Economía Mexicana en Cifras 1990*. Mexico, NAFINSA.
- NAFINSA (1991) *La Economía Mexicana en Cifras 1991*. Mexico, NAFINSA.
- OZAWA, T. (1979) *Multinationalism, Japanese Style: the Political Economy of Outward Dependency*. Princeton, Princeton University Press.
- OZAWA, T. (1991) "Japan's in a new phase of multinationalism and industrial upgrading: functional integration of trade, growth and FDI". *Journal of World Trade* 25(1).
- SAAVEDRA-RIVANO, N. (1991) "Chile: strengthening relationship through trade diversification". In: Stallings, B., Székely G. and Horisaka K. *Co-existence with Latin America*. Tokyo, Dobunkan.
- SZÉKELY Y, G. (1991) "In search of globalization: Japanese manufacturing in Mexico and the United States". In: Székely, G. *Manufacturing across the Borders and Oceans: Japan, the United States and Mexico*. LaJolla, CA Center for US-Mexican Studies, University of California.
- TANIURA, T. et al. (1992) *Intra-industry and Intra-firm Trade Between Mexico and the United States: the Autoparts, Electronics and Secondary Petrochemical Industries*. Joint Research Programme Series n° 97. Tokyo, Institute of Developing Economies.
- TOYO K., ed. (1992) *General Survey of Enterprises Investing Overseas 1992*. Tokyo, Toyo Keizai Shinposha.
- US. DEPARTMENT OF COMMERCE (1981) *US Direct Investment Abroad 1977*.
- US. DEPARTMENT OF COMMERCE (1985) *US Direct Investment Abroad 1982*, Benchmark survey data.
- US. DEPARTMENT OF COMMERCE (1991) 1989 Benchmark survey data, preliminary results.
- WILKINS, M. (1974) *The Maturing of Multinational Enterprise: American Business Abroad from 1914 to 1970*. Cambridge, MA, Harvard University Press.
- YOON, Y. K. (1991) "The political economy of transition: Japanese foreign direct investments in the 1980s". *World Politics* 43(1).
- YOSHINO, M.Y. (1976) *Japan 's Multinational Enterprises*. Cambridge, MA, Harvard University Press.

