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Japanese Foreign Direct Investment

Recent Trends, Determinants, and Prospects

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The apparent shift of Japan's foreign direct investment from higher-income host countries (such as the United States) toward Asian developing countries (such as China) may create opportunities for sustained growth in these lower income economies. This shift seems to be part of a strategic reorientation that will gradually reduce Japanese dependence on the United States while Japan explores intra-Asian opportunities.



Summary findings

In the late 1980s, Japan became the biggest source of foreign direct investment (FDI) in the world. The main beneficiaries of the rapid increase in investment flows were industrial countries, but the developing world (especially East Asia and Latin America) also received substantial inflows.

In East Asia, the newly industrial economies (NIEs) of Hong Kong, Republic of Korea, Singapore, and Taiwan (China) were, at first, production bases for Japanese manufacturing in the 1970s and early 1980s. But in the late 1980s, these countries became new, expanding consumer markets, attracting huge Japanese investments in the tertiary (service) sector, while investments in manufacturing shrank rapidly because of rising labor costs. The Association of Southeast Nations (ASEAN) and China became Japan's new production base.

In Latin America (mostly small Caribbean countries) Japan's focus is almost exclusively on tax havens. Globally, Japan's investments in the secondary (manufacturing) and service sectors of the major Latin American nations are only marginal.

Japanese investment flows declined drastically after 1989, mostly because of the depressed global and

domestic economy, after rapid asset price deflation in Japan. Hardest hit by the decline were the United States and Europe. Japanese FDI flows to developing countries also declined, but less. The biggest losers were the NIEs and the Caribbean tax havens. Japanese investments continued to grow in other Latin American countries and, even more, in the ASEAN and China.

Japanese investors sharply reduced tertiary sector investments, primarily geared to maintaining or expanding markets. Investments in the secondary sector, making use of low-cost production, continued to expand.

This trend is expected to continue in the near future, with FDI flows declining further, albeit more slowly. Low-wage production countries such as China and Indonesia will attract an increasing share. Investments to expand markets in the industrial countries and the NIEs are likely to decline.

But medium-term prospects for Japanese FDI in developing countries are brighter, as economic recovery and continuing current account surpluses in Japan will lead to a resumption of active foreign investment by Japanese multinational corporations.

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JAPANESE FOREIGN DIRECT INVESTMENT:
RECENT TRENDS, DETERMINANTS, AND PROSPECTS

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This work is part of IECDI's growing program of research on FDI. This paper draws from a comprehensive report (available upon request) prepared by Professor Haruo Horaguchi, Hosei University and Dr. Hyuntai Kwak, Mitsui Marine Research Institute, both in Tokyo, Japan. Detailed data are also available on diskette. This project has been carried out jointly by IEC and the Japan Center for International Finance (JCIF). The authors wish to thank the JCIF and Mr. Satoru Madono, Chief Economist and Director, for generous support and helpful suggestions. A follow-up study with an indepth quantitative analysis of the determinants of Japanes FDI is under preparation.

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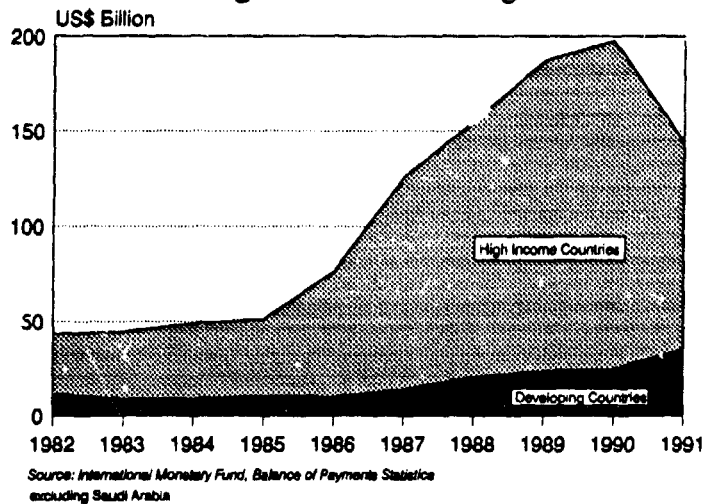
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I. Introduction

In 1982-91, Japanese outflows of foreign direct investment (FDI) were more than \$200 billion--about 17 percent of global outflows. Because of its sheer size, Japanese FDI has important consequences for the economies of the host countries, as well as international trade flows. Capital inflows from direct investments immediately improve the host's balance of payments, in general, and provide scarce foreign exchange at least in the short run. FDI in export industries can also improve the balance of payments in the long run. Moreover, FDI can help in the transfer of technology and skills not available in the host country economy, which can enhance the competitiveness and profitability of local industries.

Global FDI increased rapidly in the second half of the 1980s, reaching a peak of almost \$200 billion in 1990. Much of that was due to a rapid increase of FDI among industrial countries, from \$31 billion in 1982 to \$173 billion in 1990, although these flows dropped sharply in 1991, to \$109 billion. For developing countries, FDI grew from \$10 billion in 1986 to almost \$36 billion in 1991. FDI is one of the main sources of foreign exchange for developing countries currently accounting for about a third of all aggregate net resource flows.

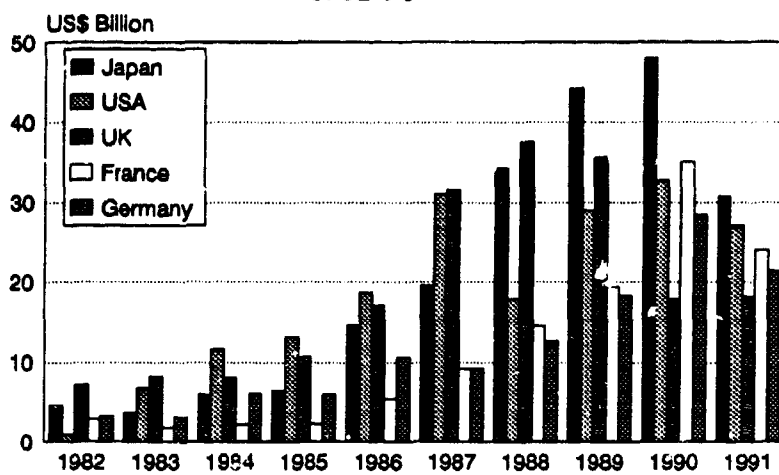
Figure 1 Global Foreign Direct Investment, 1982-91



The main source of these flows to the developing world were the G-5 countries--Japan, the U.S., the U.K., France, and Germany--which accounted for more than three quarters of global FDI in 1991. In the early 1980s, the U.S. and the U.K. were the traditional leaders in foreign investment, but, by 1989, Japan became the dominant source of FDI. Nominal growth in FDI each year has amounted to 50 percent since the rapid appreciation of the yen in September 1985. But still, relative to economic size, Japan's FDI outflows are quite small compared to other industrial countries. Even in the peak year of 1989, Japan's ratio of FDI

to GNP did only reach 2.4 percent, compared to a current 4.4 percent in the U.S. and 6.3 percent in Germany (6.3 percent). Countries, with strong multinational corporations show far higher ratios--the Netherlands invest 23.1 percent of their GNP abroad and the U.K. 22.4 percent.

Figure 2 Foreign Direct Investment Outflows from G-5 Countries, 1982-91



Source: International Monetary Fund, Balance of Payments Statistics Yearbook 1992.

Japanese FDI data have many sources (see Appendix). Since 1951, Japanese investors have had to notify the Ministry of Finance (MoF) of planned FDI transactions under the Foreign Exchange Control Law. These data provide details for every recipient country, including a sectoral breakdown. The Bank of Japan compiles FDI information within its balance-of-payments statistics (BoP), based on capital receipt/payment reports submitted by authorized foreign exchange banks. While these statistics are available monthly, they do not identify the recipient country or the particular industrial sector involved. MoF and BoJ data are closely correlated at the aggregate level, with the former generally leading the latter in trend.

In addition, six major annual surveys on Japanese foreign investment are done by the Ministry of International Trade and Industry (MITI), the Toyo Keizai Shinposha, the Economic Survey Association, and the Export-Import Bank of Japan. Most of these, however, are not primarily directed at tracking FDI flows, but at statistically evaluating the business of domestic companies operating overseas.

This study is almost exclusively based on the information provided by the MoF, given the length of the time series as well as greater detail.

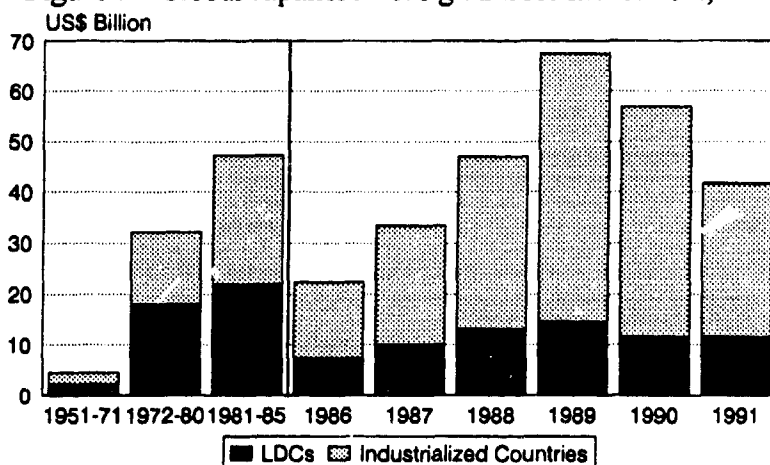
II. Trends in Japanese Foreign Direct Investment

II.1 Japanese Foreign Direct Investment Worldwide

After World War II, the Japanese government overhauled the Foreign Exchange Law. Since 1951, Japanese companies have been allowed to make direct investments overseas. However, because of severe restrictions imposed by balance-of-payments deficits, FDI, in numbers and value, were negligible until the 1960s. After 1965, government restrictions on FDI were gradually loosened in line with increasing balance-of-payment surpluses.

It was not until the early 1970s, however, that foreign investments expanded substantially. The Japanese economy grew rapidly in the late 1960s and early 1970s, with an average annual increase in wages of about 10 percent. The exchange rate, which was fixed at 360 ¥/US\$ since the end of World War II, appreciated quickly to reach 272 ¥/US\$ by the end of 1973. This translated into much lower manufacturing costs in neighboring countries, making them more attractive for Japanese investors. Japanese FDI really took off in 1972 (dubbed the "first year of overseas investments"). In 1972 and 1973, Japanese FDI was greater than in the preceding 20 years. This was a turning point and henceforth, Japanese companies began to consider overseas investment as an integral part of their overall strategy in light of Japan's growing current account surpluses, rapid appreciation of the yen, and increasing real labor costs at home.

Figure 3 Global Japanese Foreign Direct Investment, 1951-91

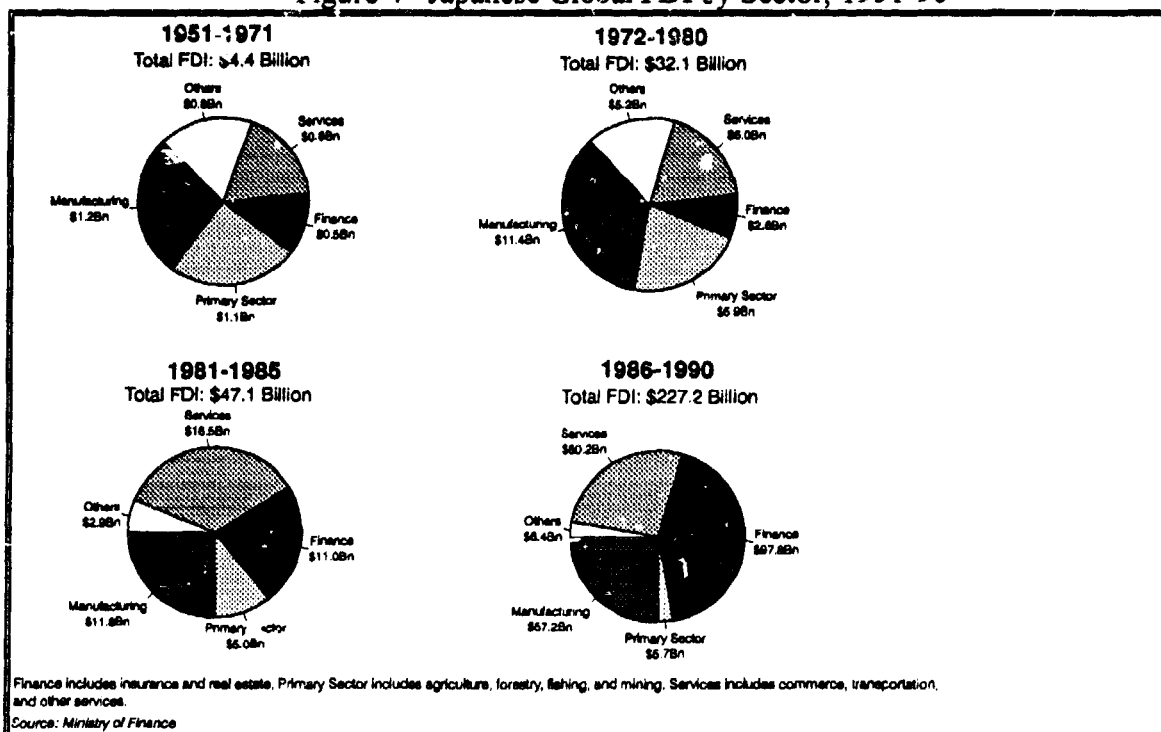


The FDI boom of the 1970s was primarily driven by the manufacturing sector, which accounted for over 35 percent of the total (see Figure 4). Particularly active was the chemical industry, in response to the oil crisis, as well as the iron and steel industry which stepped up efforts to establish overseas bases. Even so, foreign investments by Japanese companies was still restricted, given that investors were generally required to obtain

official approval for each planned FL project until the relaxation of foreign exchange controls in 1981.

Liberalization of foreign-exchange controls and financial regulations in the early 1980s motivated Japan's finance and insurance industry to expand overseas. At the same time, the shifting export composition of Japanese manufactured goods (to such high technology, high value-added products as electronics and automobiles) prompted rapid FDI increases in related industries. On the other hand, investments in the primary sector, which had accounted for a quarter of all FDI previously, declined significantly.

Figure 4 Japanese Global FDI by Sector, 1951-90



In 1985-88 the yen's appreciation surged from 239 ¥/US\$ to 128 ¥/US\$, raising its purchasing power by about 86 percent. This (and intensifying trade frictions with the U.S. and Europe) fuelled the rapid expansion in Japanese FDI starting in 1986. Japanese manufacturers sought to establish local production bases in prime export markets, the U.S. and Europe, to counter potential trade restrictions and to offset trade disadvantages resulting from the strong yen. Manufacturers also increased direct investments in developing nations, primarily ASEAN countries, to reduce production costs. At the same time, Japan's strengthening economy and booming stock market made financing more available at better terms. As a result, there was increased direct investment in developed countries by such industries as finance and insurance, real estate and services. In the second half of the 1980s, investments in the tertiary sector (finance and services) reached 70 percent, having accounted for only 30 percent during 1951-71 (see Appendix, Table A-1).

With the collapse of the Japanese 'bubble' economy from 1990 onwards, FDI fell drastically. Investments in the primary and the secondary sector stagnated, in the tertiary sector they fell by more than 20 percent in 1990 alone. By 1991, Japanese foreign investments had fallen to \$42 billion, almost 40 percent below the 1989 peak of \$68 billion.

II.2 Japan's Foreign Direct Investment in Industrial Countries

Industrial countries in North America, Europe, and Oceania witnessed a massive jump in Japanese investments in the second half of the 1980s (Table 1). While Japanese FDI to these countries had steadily increased since 1951, its growth was not extraordinary. Since 1988, however, the nominal amount of FDI each year was larger than FDI for the whole of 1981-85. Between 1986 and 1989, FDI to industrial countries increased by almost 260 percent, topping \$53 billion in 1989. Since then, it has plunged down to \$31 billion in 1991.

Table 1 Japanese Foreign Direct Investment, 1951-91

YEAR	World	High Income Countries		Developing Countries	
	US\$ Million	US\$ Million	%	US\$ Million	%
1951-71	4,438	2,213	49.9	2,225	50.1
1972-80	32,061	14,115	44.0	17,946	56.0
1981-85	47,152	25,246	53.5	21,906	46.5
1986-91	268,741	201,083	74.8	67,658	25.2
1985	22,320	14,872	66.6	7,448	33.4
1987	33,364	23,260	69.7	10,104	30.3
1988	47,022	33,957	72.2	13,065	27.8
1989	67,540	52,601	78.5	14,539	21.5
1990	56,911	45,288	79.6	11,623	20.4
1991	4,584	30,705	73.8	10,879	26.2
SUM('51-91)	352,392	242,657	68.9	109,735	31.1

Source: Ministry of Finance

Because of the boom in tertiary sector investments, the share of industrial countries in total Japanese FDI rose from 54 percent in 1981-85 to a peak of 80 percent in 1989. By 1991, the share had fallen back to 74 percent, with the U.S. as the biggest loser with a 45 percent decline during 1989-91. Even so, with about \$18 billion in 1991, the U.S. is still the by far largest recipient of Japanese FDI, accounting for 43 percent of the total. Europe received another 23 percent with the U.K., the Netherlands, and Germany as the largest individual recipients. Industrial countries were affected more by the general decline than developing countries. In 1989-91, Japanese FDI to high income countries fell by almost 44 percent, while developing countries saw a reduction of only about 11 percent.

In 1951-88, only 9.2 percent of total Japanese FDI went to primary industries, mostly outside North America and Europe (see Table 2). By far the largest percentage (64.1 percent) went into the tertiary sector. These included trading companies that

established affiliates, and banks and other financial institutions which set up foreign subsidiaries, branches, and agencies to carry out trade finance. The largest components in Japanese FDI now are Japanese financial firms which made direct overseas investments to help service their domestic industrial clients who were making big portfolio investments in overseas economies, especially the U.S. and in Europe.

Table 2 Sectoral Distribution of Japanese FDI in North America and Europe:
1951-88

Sector	North America		Europe		World Total	
	No. of Firms	US\$ mil.	No. of Firms	\$ mil.	No. of Firms	\$ mil.
Agriculture & Forestry	210	354	9	7	1,101	1,054
Fishery	94	156	9	7	705	632
Mining	318	1,674	21	1,103	1,106	13,949
Construction	264	697	26	59	948	1,443
SUBTOTAL	886	2,854	65	1,176	3,860	17,078
(Percentage of all industry)	4.7	3.8	1.2	3.9	7.6	9.2
Food	546	934	68	171	1,489	1,965
Textile	166	493	188	303	1,460	2,669
Lumber and Pulp	135	1,377	7	5	663	2,099
Chemicals	372	2,311	144	594	1,690	6,040
Metal(Ferrous and Nonferrous)	295	2,533	343	328	1,694	7,671
Machinery	630	2,610	240	626	1,943	4,716
Electrical Machinery	761	5,952	220	1,261	2,622	10,196
Transport Equipment	275	3,030	56	913	833	6,956
Other Manufacturing	726	4,634	215	656	2,779	7,031
SUBTOTAL	3,906	23,944	1,481	4,857	15,173	49,843
(Percentage of all industry)	20.6	31.9	23.7	16.1	29.9	26.7
Commerce and Trade	6,568	11,693	2,269	3,955	12,848	20,011
Finance and Insurance	383	12,370	608	14,853	1,838	41,876
Service	1,572	4,859	327	1,570	3,584	12,759
Transport	225	239	65	101	3,498	12,342
Real Estate	2,086	15,782	115	1,386	2,994	20,599
Other	954	2,152	234	1,056	3,132	7,334
Branch	366	714	209	1,171	1,318	3,919
Foreign Property	2,005	485	180	38	2,538	595
SUBTOTAL	14,159	48,294	4,007	24,130	31,750	119,435
(Percentage of all industry)	74.7	64.3	72.1	80.0	62.5	64.1
TOTAL	18,951	75,091	5,553	30,164	50,783	186,356
(Percentage of world total)	37.3	40.3	10.9	16.2	100.0	100.0

Note: The category 'Foreign Property' has not neither been approved nor counted since 1980, because of its liberalization.

Source: Bank of Japan, Okurasho Kokusai Kinyukyoku Nenpo (Yearbook of Ministry of Finance; International Finance Division), Tokyo, Bank of Japan, 1989, *ibid.* 1990.

In Europe, the sectoral distribution of Japanese FDI differs greatly different from investments in North America. The share of approved investments of Japanese firms in European manufacturing is only 16.1 percent, whereas North America averaged 26.7 percent. In Europe, 'finance and insurance' absorbed a large amount of Japanese funds--\$14.9 billion compared to \$12.4 billion in North America.

In North America, real estate has the single highest share, accounting for over 20 percent of all FDI in 1951-88. Whether these investments are primarily directed at trade-supportive activities by supplying offices to Japanese affiliates, or whether they simply are speculative is a matter of controversy. But speculative or not, U.S. real estate was severely affected by the drastic decline in Japanese FDI.

In manufacturing, the U.S. and Canada received almost \$24 billion or about 32 percent of total FDI, while such investments amounted to no more than \$5 billion or about 16 percent in European countries. Japanese manufacturers focussed on the U.S. economy to expand global production, while European countries were largely still supplied from manufacturing enterprises within Japan. This reflects the by now well-known strategy of Japanese companies to invest in important markets, where trade restrictions are expected.

With the rapid expansion of Japanese textile exports in the 1950s, the U.S. government initially negotiated voluntary export restraints in 1957-61, followed by the Short-Term Cotton Textile Arrangement (1961), and, finally, the Multi-Fiber Arrangement in 1974.¹ Starting in the late 1960s, some Japanese textile producers set up production in the U.S. to circumvent these restrictions. Similar tactics were used in the steel industry in 1984, and 1985 after the voluntary export restraint on steel was introduced.² Investments by the major Japanese automobile manufacturers came in the mid to late 1980s, again in response to voluntary export restraint agreements.³ Since 1985, Japanese exports to North America have dropped from 44 percent of total exports to 35 percent. Parallel to that decline, there has been a big jump in the dollar volume of manufacturing FDI to North America.

¹ see Yamazawa. (1983).

² see Komiya. (1990).

³ see Komiya, Okuno, and Suzumura. (1988).

Table 3 Japanese FDI and Exports to the Industrial Countries

Country	Total of FDI Flow 1951-89		Manufacturing FDI 1951-89		Japanese Exports 1989
	Number	US\$ million	Number	US\$ million	US\$ million
Canada	1,124	4,592	287	2,173	6,806
United States	20,675	104,400	4,192	31,355	93,188
Australia	2,353	12,393	282	1,549	7,804
New Zealand	325	694	141	306	1,346
(Europe total)	6,181	44,202	1,670	7,631	54,821
Austria	63	126	23	94	1,326
Belgium	297	1,355	65	471	3,504
Luxembourg	143	5,383	2	21	n.a.
France	1,157	2,899	427	848	5,298
Germany	1,053	3,447	214	997	15,920
Ireland	90	564	54	193	786
Italy	255	683	88	242	2,783
Netherlands	642	10,071	100	1,509	5,112
Norway	52	510	9	5	601
Spain	277	1,546	137	948	1,941
Switzerland	288	1,828	33	23	2,664
United Kingdom	1,864	15,792	518	2,280	10,740

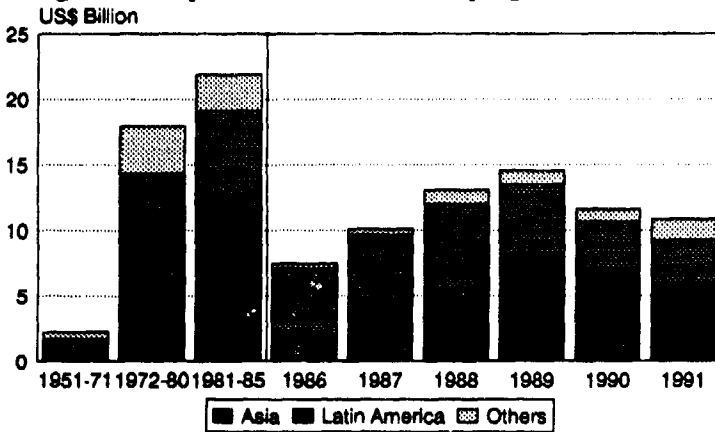
Source: Ministry of Finance, Okurasho KokusaiKinyukyoku Nenpo, (Yearbook of International Finance Department of Ministry of Finance, Japan), Tokyo, Kinyu Zaisei Jijo Kenkyukai. Ministry of International Trade and Industry, Tsushohakusho(International Trade WhitePaper), MITI

It is clear that many Japanese companies use FDI in industrial countries to improve marketing and sales and there appears to be a striking link between export earnings and FDI that Japanese companies are willing to commit (Table 3). Countries that represent the largest export markets (such as the U.S., the U.K., Australia, and Germany) generally receive most FDI. Countries such as the Netherlands or Luxembourg are exceptions, explained by their importance as centers for multinationals and financial and commercial enterprises; their share in manufacturing FDI is correspondingly small.

III. Japan's Foreign Direct Investment in Developing Countries

Until 1980, developing countries as a whole received about half of all Japanese FDI. Since then, their share fell rapidly, reaching a low of about 20 percent in 1990 (see Table 1). This, however, does not represent a declining interest in the developing world, but rather reflects Japan's rapidly rising overall FDI and increasing concentration on industrial countries. Indeed, in 1986-89, FDI in developing countries grew at an average annual 25 percent, reaching almost \$15 billion in 1989. In the following two years, however, these inflows declined, reaching less than \$11 billion in 1991. Overall, the average annual growth in 1986-91 was about 8 percent, compared to 13 percent for high-income countries. The trend may be reversing now, and the outlook is for the rise (at least, relatively) in Japanese FDI flows to developing countries, especially those in Asia.

Figure 5 Japanese FDI to Developing Countries, 1951-91

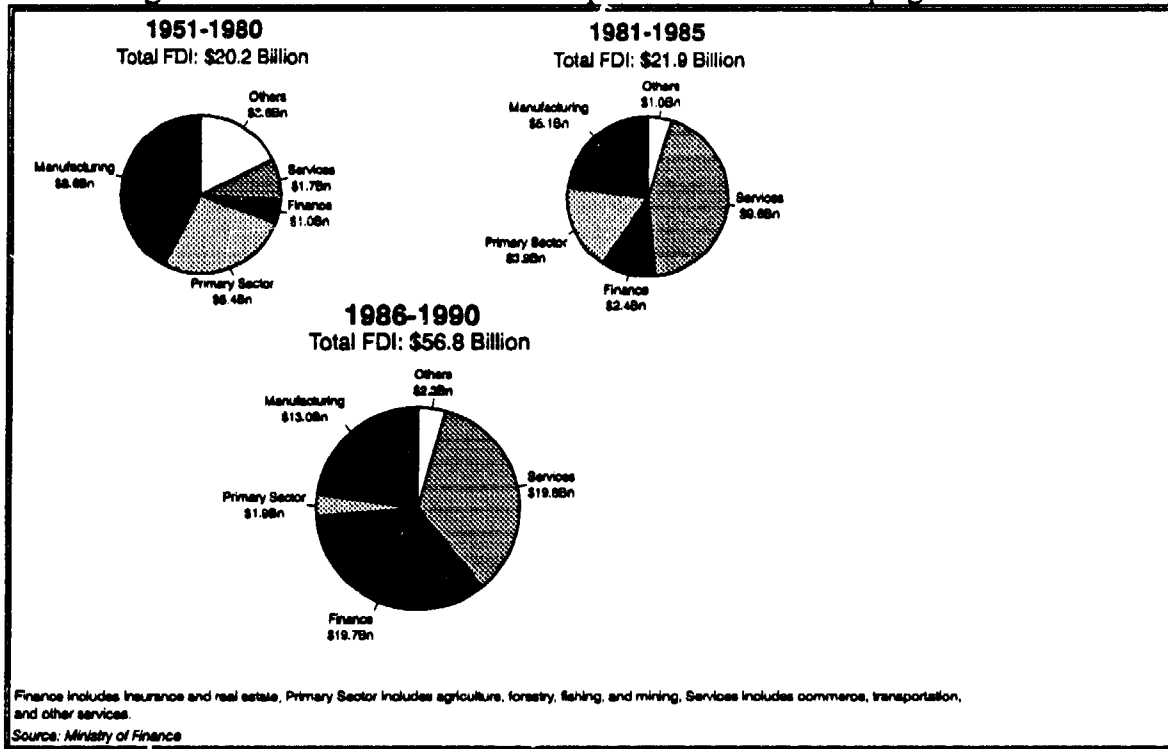


Source: Ministry of Finance

Asia was the preferred area of investment, having received about 50 percent of all Japanese FDI to developing countries, compared to slightly over 40 percent for Latin America. During most of the 1980s, both regions received more or less equal shares, but starting in 1989, a large influx of FDI to the Asian economies reduced the Latin American share to 30 percent in 1991. Among other developing countries, there was also a substantial increase to about \$1.6 billion in 1991. This was due particularly to substantial increases in investments to Hungary and several island economies in the South Pacific.

The sectoral distribution of Japanese FDI flows to developing countries has changed dramatically over time. In 1951-80, about 43 percent went into manufacturing and another 27 percent into the primary sector. In 1986-90, however, the tertiary sector received almost 75 percent, compared to only about one third during 1951-80. Within the tertiary sector, investments in financial institutions saw the strongest growth, increasing more than eight-fold between 1981-85 and 1986-90. The primary sector by now has only marginal importance, accounting for no more than 3 percent of all developing country FDI (see Appendix, Table A-2).

Figure 6 Sectoral Distribution of Japanese FDI to Developing Countries



III.1 Asia

Historically, Asia receives most Japanese FDI in developing countries. It drew almost half of the total in 1951-91. Japanese investors rapidly stepped up activities in neighbor countries in the 1970s, when rising labor costs within Japan threatened global competitiveness in manufacturing. After a slowdown in the early 1980s, Japanese investments in Asia picked up rapidly during the second half of the decade, reaching a peak of \$8.2 billion in 1989. The share in total FDI to developing countries rose correspondingly, climbing up to over 60 percent in 1990 (see Table 4).

Table 4 Japanese FDI to Developing Countries in Asia, 1951-91

YEAR	Total Asia		Newly Industrial Countries		ASEAN-4 Countries		China		Others	
	US\$ Million	US\$	%	US\$	%	US\$	%	US\$	%	
1951-71	987	274	27.8	598	60.6	0	0.0	115	11.7	
1972-80	8,844	3,263	36.9	5,486	62.0	26	0.3	69	0.8	
1981-85	9,632	4,117	42.7	7,115	53.1	261	2.7	139	1.4	
1986-91	33,992	17,834	52.5	12,653	37.2	3,114	9.2	391	1.2	
1986	2,327	1,531	65.8	555	23.9	226	9.7	15	0.6	
1987	4,868	2,581	53.0	1,031	21.2	1,226	25.2	30	0.6	
1988	5,569	3,264	58.6	1,966	35.3	296	5.3	43	0.8	
1989	8,238	4,901	59.5	2,782	33.8	438	5.3	117	1.4	
1990	7,054	3,354	47.5	3,236	45.9	349	4.9	115	1.6	
1991	5,936	2,203	37.1	3,083	51.9	579	9.8	71	1.2	
SUM('51-91)	53,455	25,488	47.7	23,852	44.6	3,401	6.4	714	1.3	

NIEs: Hong Kong, Korea, Singapore, Taiwan.

ASEAN: Indonesia, Malaysia, Philippines, Thailand.

Source: Ministry of Finance

Hong Kong, Korea, Singapore, and Taiwan (the so-called Newly Industrial Countries of NIEs), saw their share in Japanese FDI to Asia expand rapidly in the 1970s and early 1980s. It reached 66 percent in 1986 and was concentrated in labor-intensive industries, such as textiles, toys, and footwear. The main export market for these products was the United States, whose General System of Preferences (GSP) offered preferential export privileges to products from developing countries. Rising labor costs and trade frictions, however, reduced the profitability of these manufacturing bases in the 1980s. Then, in January 1989, the eligibility of Asian NIEs to the GSP was suspended. As a result, there was a sharp decline in the share of FDI flowing to NIEs--by 55 percent in 1989-91. Worst hit were Korea and Singapore, where FDI fell by almost 60 percent and 70 percent respectively in 1989-91. For Hong Kong, the fall was about 50 percent, but it is still a major recipient of FDI because of its ties to China.

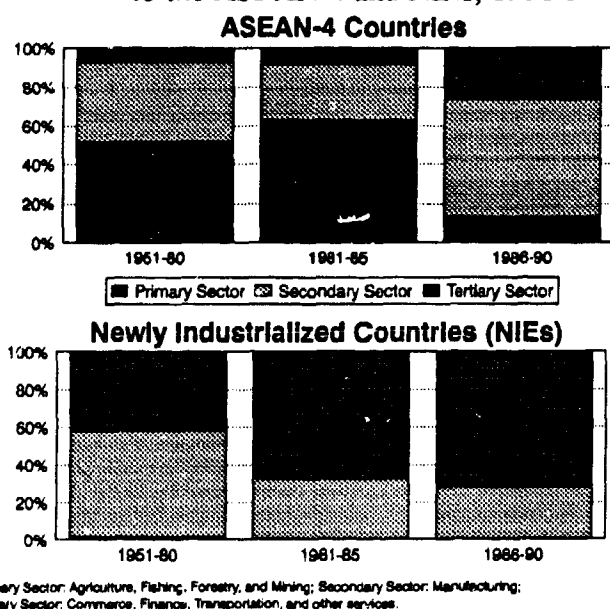
For NIEs, there has also been a steady decline of the share of manufacturing in total FDI--from 56 percent in 1951-80 to only 28 percent during 1980-90. With the primary sector now playing a negligible role, the tertiary sector saw a significant increase, rising to \$11 billion or over 70 percent of total FDI in the second half of the 1980s (see Appendix, Table A-5). In general, the NIEs have become increasingly important as markets, rather than production bases, attracting growing FDI in commerce, finance, real estate, and general services. As a result, the distribution of Japanese FDI by industry in the NIEs is virtually identical to the composition in industrial countries.

The ASEAN-4 countries--Indonesia, Malaysia, the Philippines, and Thailand--also saw a decline in investment inflows in the late 1980s but not as marked as for the NIEs and, as a share of total FDI to the region, there has been a significant increase since 1989, reaching 52 percent in 1991. Lower manufacturing costs attracted many Japanese investors to relocate subsidiaries from NIEs to the ASEAN-4. Indonesia recorded a 90 percent

increase in Japanese FDI in 1989-91 and represented the largest recipient in Asia in 1991 with \$1.2 billion. Malaysia, the only other showing an increase in Japanese FDI (with \$880 million in 1991) overtook Thailand as the second most important ASEAN country for Japanese investors. Bottom of the league was the Philippines with about \$200 million in 1991.

There were changes too, in the sectoral distribution of FDI in ASEAN-4 countries. Until 1985, these countries show a big share of primary sector FDI, reaching almost 63 percent of the total in 1981-85. Almost all investments were in the mining sector, reflecting the need for raw materials to maintain domestic production in natural-resource poor Japan. In the second half of the 1980s, however, the importance of the primary sector declined, while the share of manufacturing increased from \$1.5 billion (or 30 percent of the total) in 1981-85 to \$5.8 billion (or 61 percent) in 1986-90. Investments in the tertiary sector also increased substantially, reaching about 25 percent (see Appendix, Table A-4).

Figure 7 Sectoral Distribution of Japanese FDI to the ASEAN-4 and NIEs, 1951-90



The most dramatic increase in Japanese FDI was in China, with a jump from \$260 million in 1981-85 to \$3.1 billion in 1986-90. This was partially due to a large marine petroleum co-development project in 1987, boosting China's share in total Japanese FDI to Asia to over 25 percent. But even excluding this extraordinary investment, China had attracted a substantial share (around 5 percent) of total FDI to Asia in the late 1980s, with only a slight drop in 1990 after the Tiananmen Square incident in 1989. In 1991, Japanese investments again increased sharply as China's economic performance and prospects improved dramatically, bringing China's share up to 10 percent for all of Asia.

On top of FDI in China, Japanese investments have also been pouring into Hong Kong. China uses Hong Kong as a trading partner to the outside through its so-called "special economic development zones" to manufacture export goods in Shenzhen and Guangzhou. As a result, manufacturers, subcontracting for Hong Kong companies, have been developing quickly in these regions. Japanese FDI to both Hong Kong and China together increased steadily from 3 percent of the total for Asia in 1951-71 to over 25 percent in 1991.

All other Asian countries in Asia received little Japanese FDI. Included are all South Asian economies, none of which managed to attract much Japanese investments, implying that the focus for the region is on neighboring East Asia, at least up until now.

III.2 Latin America

The second most important region for Japanese investors is Latin America. In 1986-91, Japanese FDI into the region grew rapidly, reaching over \$28 billion or about 65 percent of Japanese FDI for the whole of 1951-91. In 1951-91, it received an average 40 percent of all FDI by Japan to all developing countries. From its peak of 64 percent in 1986, Latin America's share has fallen to only 29 percent in 1991.

Latin America, however, is not a significant production base for Japanese manufacturers. Manufacturing FDI by Japanese investors for all of Latin America accounts for no more than 13 percent of Japanese FDI to this sector in the developing world. In fact, excluding tax havens, Latin America appears not to be a fundamental attraction for Japanese investors. The 10 largest recipients of Japanese FDI in 1951-70 were Panama (\$17.8 billion), the Cayman Islands (\$7.5 billion), Brazil (\$6.7 billion), the Bahamas (\$3.6 billion), Mexico (\$2.1 billion), Bermuda (\$1.8 billion), the Virgin Islands (\$900 million), the Antilles (\$800 million), Peru (\$700 million), and Argentina (\$500 million).

Three quarters of all Japanese FDI to Latin America and the Caribbean went to five small Caribbean nations and Panama, all famous as tax havens and as "flag-of-convenience" countries for ship registration. These so-called Caribbean-6 countries increased their share of Japanese FDI to the region from only 22 percent in 1951-80 to 86 percent in 1986-90, with a peak of almost 94 percent in 1987. In line with the general decline in Japanese FDI, investments in these six countries dropped by over 43 percent in 1989-91. Other Latin American nations reached a peak in 1990, with about \$1.2 billion or 33 percent of total Japanese FDI to the region, and their Japanese inflows grew by 26.5 percent in 1989-91.

Table 5 Japanese FDI to Latin America and the Caribbean,

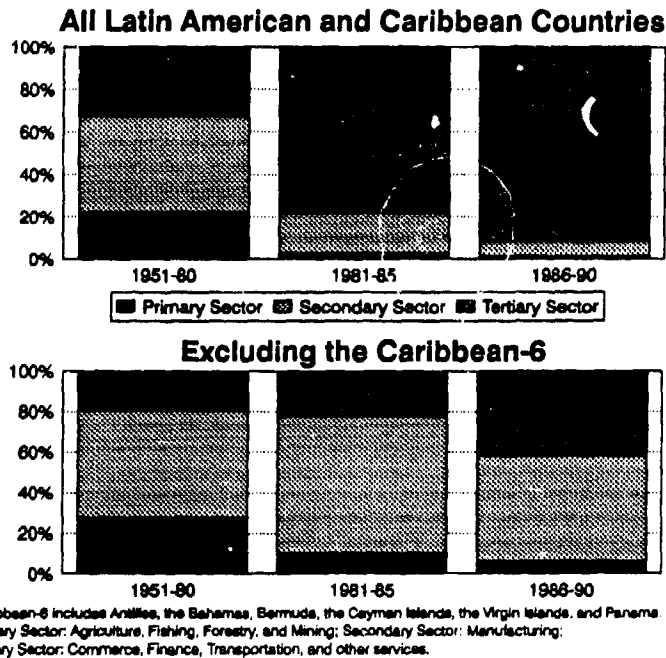
YEAR	Total	Caribbean-6		Others	
	US\$ Million	US\$	%	US\$	%
1951-80	6,168	1,371	22.2	4,797	77.8
1981-85	9,468	6,784	71.7	2,684	28.3
1986-91	28,184	24,221	85.9	3,963	14.1
1986	4,737	4,206	88.8	531	11.2
1987	4,816	4,511	93.7	305	6.3
1988	6,428	5,700	88.7	728	11.3
1989	5,238	4,706	89.8	532	10.2
1990	3,628	2,435	67.1	1,193	32.9
1991	3,337	2,664	79.8	673	20.2
SUM('51-91)	43,820	32,376	73.9	11,444	26.1

Caribbean-6 includes the Antilles, the Bahamas, Bermuda, the Cayman Islands, the Virgin Islands, and Panama.

This focus on the Caribbean-6 is clearly reflected in the sectoral distribution of Japanese FDI to Latin America. In 1951-80, the distribution was similar to the developing world as a whole, with manufacturing accounting for 45 percent, followed by the tertiary sector (33 percent) and the primary sector (22 percent). During this time, investments in the Caribbean-6 accounted for only about one-fifth of the total but still showed substantial FDI in the primary and secondary sector. In the following decade, however, the Caribbean gained in importance, and with it grew the share of tertiary sector FDI, reaching 92 percent in 1986-90. Finance and insurance accounted for 52 percent and transportation for another 31 percent--almost \$20 billion in total.

Excluding the Caribbean-6, a less skewed picture emerges similar to other developing countries. FDI in the tertiary sector increased over time, while the importance of the primary sector declined steadily. In 1986-90, the manufacturing sector still took the lion's share with 52 percent, followed by the tertiary sector with 42 percent, leaving only 6 percent for primary sector investments. But excluding the Caribbean-6 also reduces substantially the amount of Japanese FDI involved. Other Latin American countries received only about \$4 billion or 14 percent of total Japanese FDI invested in 1986-91. Excluding the Caribbean-6, the share of Japanese FDI to developing countries received by Latin America drops substantially, amounting to only 6 percent during 1986-91.

Figure 8 Sectoral Distribution of Japanese FDI to Latin America, 1951-90



Despite this rapid decline in tax haven investments, however, the largest recipients of Japanese FDI in 1991 were still Panama with \$1.6 billion, accounting for almost half of total Japanese FDI to the region, followed by the Virgin Islands with \$614 million and Bermuda with \$232 million. Among the large nations, Mexico plays the dominant role with \$193 million in Japanese investments during 1991. The maquiladora area, in particular, is very attractive to Japanese manufacturers, enabling them to make use of low labor costs, while still producing for the U.S. market. In 1991, Nissan Motors established its second plant in Mexico with a production capacity of 100,000 automobiles per year. The supplier network often follows, expanding production capacity in line with the car manufacturer. Thus, San-oh Kogyo, a manufacturer of tube products, as well as Nihon Hatsujo, assembling springs for small-sized trucks, also constructed additional production facilities.

Other big countries in the region have not been very successful in attracting Japanese investors and Brazil, once the most important South American country for Japanese investors, saw a rapid deterioration in inflows, probably due to its unstable economic and political environment. It was still the largest South American recipient of Japanese investments in 1991 with \$158 million, but this is a fraction of the \$1.7 billion received in 1989. Some, such as Venezuela and Chile, showed a substantial increase in inflows in 1991, possibly building the foundation for sustained future investments.

III.3 Other Countries

Outside Asia and Latin America, Japanese FDI has not been especially large. In 1991, these other developing countries received in the aggregate only about \$1.5 billion or 13 percent of the total.

For the **Middle East**, 350 Japanese investment transactions were recorded by the MoF in 1951-91, 109 of which were in the Iran for about \$1 billion. In the 1970s, Iranian investments were strong, mainly in the production and refining of crude oil. The 1979 revolution and the war with Iraq, which began in 1980, disrupted most of the projects, and Japanese investment has been marginal ever since.

Africa has taken a sizable share of Japanese investments in other developing countries. In 1951-91, a total of 1,534 cases of Japanese investments, amounting to \$6.6 billion, were reported to the MoF. As in the case of Latin America, however, these aggregate data are misleading. Liberia alone accounts for 988 projects worth \$5.5 billion, of which 498 (for \$3.2 billion) were in the transportation sector, while only two were in manufacturing. As with Panama, Japanese investors use Liberia as a "flag-of-convenience" country for their shipping. In recent years, the share of Liberia in total Japanese FDI to Africa continued to increase, reaching 95 percent in 1991. Other African countries receiving significant FDI in 1951-91 were Zaire (with \$282 million in 56 projects), Nigeria (\$159 million), and Zambia (17 projects worth \$142 million). In recent years, however, none of these received any substantial inflows from Japanese sources.

In **Oceania**, places such as the Marianas, Papua New Guinea, Fiji, and Polynesia, received large Japanese investments, in relation to the size of their economies. In 1991, they received almost \$500 million, 85 percent up on 1990. Like East Asia, Oceania is increasingly used as a production base for Japanese manufacturers. In the near future, these island economies may become the next center of production for Japanese industry, should the ASEAN-4 follow the NIEs with increasing production costs resulting from rapid growth.

Some former socialist economies in **Eastern Europe** witnessed a big increase in Japanese investments in the past few years, especially Hungary, which received \$181 million in 1991. The former Soviet Union (FSU) also showed strong growth--in relative terms--in Japanese investment; in 1989-91, inflows grew by an average 35 percent a year, reaching \$51 million in 1991.

IV. Determinants of Japanese FDI and Future Prospects

IV.1 Factors Affecting Japanese Outward FDI⁴

A vast literature on FDI determinants exists, analyzing a wide range of determining factors empirically as well as theoretically. Among the important factors are firm-specific attributes that reflect the competitive advantages of transnational corporations such as their ability to gain from internalizing market relationships or the benefits resulting from operating within or close to the sales market. Locational factors, in particular, prove to be quite relevant in most foreign investment decisions. The size of the market, prospects for sales expansion, the local cost of production including wages and tariffs, the availability of an adequate infrastructure, and the general incentive system established by the host as well as the home country play a crucial role in the allocation of foreign investment finance. But besides these firm-specific and locational factors, the general macroeconomic conditions in the host country prove to be an important element in the decision-making process. Economic and political stability with a reliable price and exchange rate level are generally attractive to foreign investors by reducing the uncertainty regarding the future profitability of their planned investment project.

Recent experience suggests that specific motives of Japanese investors to venture abroad are diverse and differ substantially depending on the host region and often individual host countries. Important factors affecting the foreign direct investment decision by Japanese firms can be grouped into two major types: macro and micro factors.

At the macro-level, strong *growth and export* expansion have been closely related with the rapid increase in Japanese FDI in the 1980s. Deterioration in the overall economic environment in the aftermath of rapid asset price deflation appears to have resulted in a sharp reduction in Japanese foreign investment over the last few years.

Japanese experience also indicates the importance of *source regulatory regime* in facilitating FDI outflows. As indicated by Horaguchi and Kwak [1993] and Froot [1990], deregulation measures implemented in the mid-1980s provided a crucial impetus for Japanese firms to invest abroad.

Currency appreciation appears to have played a role in foreign investment. Many Japanese manufacturing firms increasingly relocated their production bases abroad, and financial institutions (including institutional investors such as insurance companies) expanded their investment portfolios outside Japan, most notably the U.S. However, the latest round of yen appreciation has not yet translated into any resumption of Japanese FDI.

⁴ A follow-up study with a more quantitative analysis of the determinants of Japanese FDI is under preparation.

In addition to the economic slowdown in Japan (as well as in other major industrial countries), weak *performance in the financial sector* in Japan, coupled with the sharp correction in the stock market and real estate prices in the early 1990s, is attributable to the contraction in FDI outflows. It is generally observed that Japanese commercial bank flows often facilitate direct investment activities by Japanese multinational firms. The stock market collapse has also resulted in rapidly rising costs of new equity funds for Japanese corporations.

Besides these general and macroeconomic factors that help explain the changes in Japanese investments abroad, several micro or firm-specific variables appear to have affected foreign investment decisions by Japanese corporations. First and foremost, one would expect to find *profitability* as the defining element in the investment decision. MITI attempted to measure the profitability of overseas Japanese investments by industry, as well as geographic region, for 1961-90. The average after-tax profit-to-sales ratio for Japanese subsidiaries was slightly above one percent, but varied greatly among regions and industries. Excluding the Middle East (where Japanese FDI is small), Asia, Oceania, and Latin America were the most profitable, while the industrial countries of Europe and North America were comparatively unprofitable. Excluding the tertiary sector, Oceania and Asia were most profitable, North America the least.

Table 6 After-Tax Profit-to-Sales Ratio of Japanese Overseas Subsidiaries by Sector and Region (Average of 1961-90, percentage)

	North America	Latin America	Asia	Middle East	Europe	Oceania	Africa	Total
Mining	-31.50	11.55	-0.01	4.41	-1.97	4.55	0.26	5.41
Agriculture, Forestry and Fishery	-12.65	-17.72	1.72		-0.79	-2.03	1.19	-0.92
Food	0.17	1.91	2.43		-11.43	4.51	-5.37	3.56
Lumber & Pulp	2.05	12.05	-2.27		-0.91	4.37		5.03
Textile	-2.29	6.57	2.34	-12.43	0.40	0.97	0.34	1.47
Ferrous Metal	-0.16	-13.32	11.79	-4.71	2.71	0.82	1.91	-0.46
Nonferrous	1.17	6.53	2.31		4.53	3.02	4.39	5.76
Chemicals	-0.15	5.10	3.08	8.55	2.42	3.94	-11.77	3.71
Electrical Machinery	0.67	2.00	3.39	-10.56	-0.11	1.09	0.91	2.03
Transport Equipment	-8.36	1.06	0.57	2.88	0.85	0.70	1.31	0.47
Miscellaneous Machinery	0.43	-5.54	1.00	0.23	-0.81	1.43	-0.64	-0.27
Precision Machinery	-0.79	2.75	3.13		-1.20	3.01		2.47
Other Manufacturing	-2.41	3.70	4.23	7.53	2.95	2.71	3.42	4.98
SUBTOTAL	0.95	1.77	2.87	7.41	1.61	2.93	1.44	2.49
Commerce & Trade	0.37	0.65	0.89	0.47	0.62	0.62	-0.94	0.47
Others	-2.85	-5.89	17.83	1.93	8.85	1.84	-2.47	3.99
TOTAL	0.69	1.33	1.87	4.25	0.73	1.53	0.23	1.03

Source: MITI, Regional Bureaus of International Trade and Industry, International Corporations Section, 'A Basic Survey of Foreign Activity, 1', (Toyo Hoki Syuppan, 1983), 'A Basic Survey of Foreign Activity, 2,3', (Keibun Syuppan, 1986,1988) MITI, Regional Bureaus of International Trade and Industry, International Corporations Section, 'Overseas Operations of Japanese Industries', various issues.

In its 1993 "Survey on Japanese Business Activities Abroad", MITI finds that the profitability in overseas investments continues to decline in the industrial countries in 1991, while it remained unchanged in the Asian economies. Given that manufacturing subsidiaries in industrial countries have fared far worse than those in the developing world, it is not surprising that in the recent decline in Japanese FDI, the industrial world was affected more with a 44 percent fall in 1989-91, compared to only 11 percent for all developing countries. But, on the other hand, the U.S. and Europe also were the two regions that witnessed the most dramatic and sustained increase in Japanese FDI during the 1980s, despite the fact that profits were depressed. This indicates that profitability of Japanese investments abroad is not the only factor influencing their investment decision.

One crucial driving force underlying the allocation Japanese foreign investment finance is the *geographic location* of the project. More than any other industrial country, Japanese investors show a strong bias towards *proximity to the home country*. The vast majority of developing country investments went into neighboring Asian economies, while flows to other regions, even including South Asia are only minor. Besides various cultural, historical, and political reasons, this might be explained by the general structure of the Japanese production process. While large European and North American companies typically internalize a substantial share of the intermediate production, Japanese manufacturers rely heavily on a wide supplier network. In many developing countries, however, Japanese companies have great difficulties in finding satisfactory local suppliers. Thus, the ties with domestic suppliers are maintained, requiring the companies to stay close to home base.

Furthermore, in their globalization strategy during the 1980s, Japanese companies emphasized the *proximity to the sales market*. With respect to industrial countries this proximity argument was of particular importance in response to increasing *trade frictions*. In an attempt to circumvent voluntary export constraints and potential future trade barriers, Japanese manufacturers decided to move production directly into the destination market. Thus, in the 1980s, manufacturing subsidiaries and commerce and trade agencies were established in the most important markets (the U.S. and Europe) at a rapidly growing rate to avoid a potential loss in market share. Future trade frictions also arise with groups of countries through the creation of common markets such as the planned European unification which, when announced in the late 1980s, attracted substantial investments from Japan. Similarly, the creation of NAFTA (North Atlantic Free Trade Agreement) is also expected to generate more Japanese investments, especially for Mexico, but also in the U.S. and Canada.

Proximity to the market was not limited to investments in industrial countries, but extends to developing countries as well. According to a survey by MITI in 1991, the two dominating reasons for Japanese investment in Asian economies were the *availability of low-wage labor* and the potential for *increased local sales* (see Table 7). Apart from the support of host governments, the next most important reasons is the potential for increased sales to other countries, including Japan. Low production costs were less of a

reason for some capital-intensive industries, such as chemicals or transportation, but even in those cases, it still ranks among the top three motives for investments.

The importance of these factors in Japanese FDI decisions is well reflected in the changing distribution of FDI flows to the Asian economies over time. The NIEs received an increasing share of tertiary investments, while their role as a production base declined substantially. In the 1970s and 1980s, these economies showed remarkable growth. Approaching full employment, wage rates increased dramatically, eroding the initial reason for Japanese investments. With rising production costs, their comparative advantage in labor-intensive mass production declined. But economic growth also resulted in an expanding domestic market for Japanese products. Thus, the NIEs increasingly received investments geared towards sales, while manufacturing investments are typically undertaken only to maintain the existing market share. As new production bases, Japanese investors now focus on neighboring countries, where cost of production are still low. Hence, the ASEAN-4 countries changed from primarily providers of raw materials and natural resources to the new manufacturers in the region. The most important reason for investments in the ASEAN-4 as well as China is to produce at low cost primarily for the markets of Japan and other countries in order to maintain and expand their market share in the old as well as the newly emerging consumer markets.

Thus, the dual motive of expanding local sales and having access to low-wage labor results in very country-specific investment allocation in the developing world. Rapidly growing countries, holding the promise of strongly expanding sales in the near future become increasingly important in terms of marketing and sales. The poorer countries, on the other hand, which as of yet have not witnessed rapid economic expansion and corresponding increases in factor prices, were increasingly selected as new manufacturing sites.

Table 7 Advancement Motives of Japanese Manufacturing Subsidiaries in Asia (percentage)

Motive	Manufacturing					
	All	Textiles	Chemicals	Machinery	Electrics	Transportation
1	5.6	2.4	10.7	1.9	2.9	0.0
2	6.5	14.3	9.5	1.0	1.5	0.7
3	64.3	84.5	41.4	63.1	74.2	51.1
4	32.8	31.0	29.6	31.1	30.2	57.6
5	61.2	40.5	68.6	69.9	62.2	76.3
6	25.3	23.8	22.5	36.9	27.0	12.9
7	18.2	25.0	10.1	21.4	19.9	8.6
8	6.7	2.4	6.5	14.6	5.6	2.9
9	9.8	17.9	17.2	12.6	4.7	4.3

Notes: 1. The values in the table are the proportions of applicable companies out of all companies participating in the survey. As multiple answers are permitted, the sum of figures for individual industries may exceed 100%.

2. Advancement motives

- 1) Acquisition of raw materials & resources
- 2) Abundant local resources and ease of production
- 3) Usage of local labor for reduced labor cost
- 4) Host government's industry promotion/protection policies benefit local production by subsidiaries
- 5) Increased local sales
- 6) Increased sales to other countries
- 7) Export to Japan
- 8) Information gathering
- 9) Collection of revenues such as dividends

Source: MITI, Basic Survey on Overseas Investments, 1991.

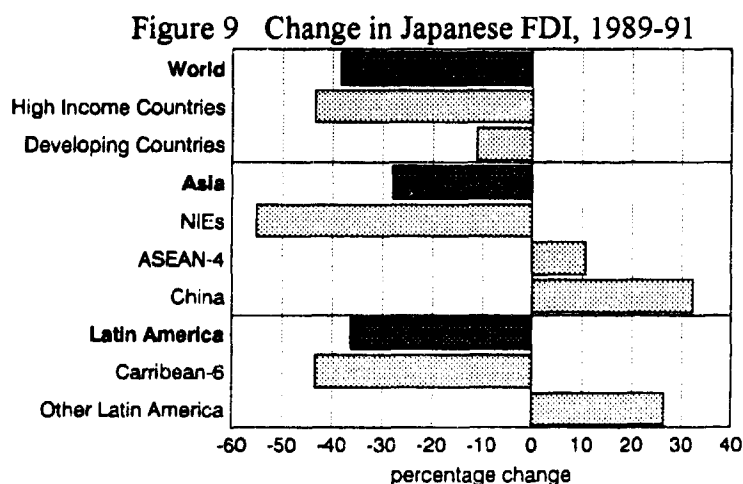
According to a questionnaire survey conducted by the Japanese External Trade Organization (JETRO) in the fall of 1992⁵, Thailand and Malaysia were perceived by Japanese investors as particular problem cases in terms of labor conflicts and wage rises. An *inadequate infrastructure*, in particular with respect to power supply, was mentioned as another difficulties. In some extreme cases such as Indonesia and the Philippines, the Japanese investors were even forced to install in-plant power-generation equipment in order to circumvent power outages and supply limitations. A further significant problem for investors in these countries is *fund-raising*. Highly restrictive capital markets in most developing countries result in relatively high cost of financial intermediation which makes medium- and long-term borrowing for foreign investors quite difficult. Given that Japanese investors currently have substantial difficulties raising funds at home, this problem might become quite important in impeding further investment inflows.

⁵ Discussed in Japanese Institute for Overseas Investment (May 1993).

IV.2 Short- and Medium-Term Prospects

With respect to future trends in Japanese investments abroad, recent surveys generally indicate that Japanese FDI will continue to decline in the upcoming years, but the speed of decline is expected to slow down. This is due to a generally more conservative attitude of Japanese investors, a shakier financial performance of parent companies, and a relatively tight monetary environment at home, making it more difficult to generate financial resources for such ventures. However, over the long-run Japanese companies intend to maintain their strategy of globalisation, indicating that Japanese investment flows will return to an upward trend as soon as the domestic economy recovers.⁶

The expected decline during the upcoming years will, however, not be uniform among all countries and regions. In fact, the decline in FDI during the period 1989-91 differed quite substantially among country groups.

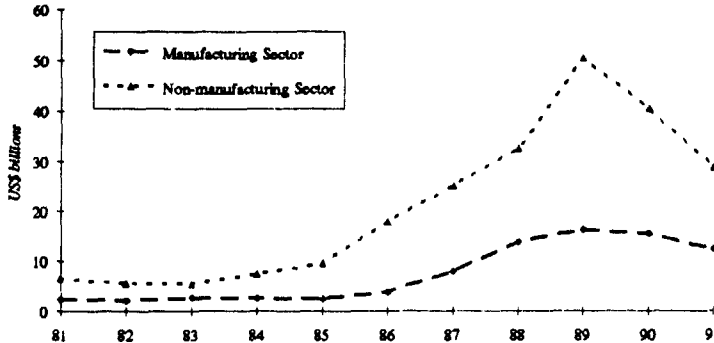


The industrial countries, in particular the U.S. and Europe, were clearly hit much harder by the retrenchment of Japanese investors with a reduction in Japanese FDI of 44 percent compared to the developing world in the aggregate which was subject to a decline of only about 11 percent. But among developing countries, differences in the trend during this period are particularly striking. In the two main regions Asia and Latin America, Japanese FDI flows declined substantially, by 28 percent and 36 percent respectively. However, within Asia the NIEs, which increasingly received investments in the tertiary sector, suffered a decline of 55 percent, making it the country group hit hardest by the withdrawal of Japanese investors. On the other hand, those countries which primarily received manufacturing investments--China and the ASEAN-4--showed sizable increases of 32 percent and 11 percent respectively. A similar phenomenon can be observed in Latin America. In the Caribbean-6, which received almost all of its FDI in finance and transportation, inflows fell by more than 43 percent, while other countries saw an increase of almost 27 percent. Thus, the biggest decline in Japanese FDI was in investments in the

⁶ see Tejima (1993)

tertiary sector, while manufacturing investments based on low-wage production continued to grow. This seems to imply a stronger commitment to low-cost production, while financial investments, often directed at expanding existing markets, are more likely to be cut. In fact, tertiary investments seem to depend on the strength of the Japanese economy to a greater extent than manufacturing investments. With Japan's "bubble economy" of the late 1980s, non-manufacturing investments grew rapidly. But as soon as economic conditions worsened, these investments fell immediately and manufacturing investments declined at a far slower rate (see Figure 10). This is supported by the 1992 MITI survey in which Japanese companies gave the main reasons for the absence of overseas investment plans. Existing investments were deemed sufficient to meet future business opportunities, while no further market expansion was expected, given the generally uncertain economic conditions.⁷

Figure 10 Recent Trends in Japanese FDI by Sector



Thus, in the currently depressed economic environment with difficulties domestically and only slow growth in the developed world as a whole, Japanese investors tend to focus more on profit maximization in production, rather than investing in market expansion as during the 1980s. Reduced tertiary sector investments in the destination markets combined with increasing manufacturing investments in low-wage countries can therefore be expected to continue.

In terms of geographic regions, East Asia will remain the most favored one for overseas investments, with China attracting most attention, followed by Indonesia. The ASEAN-4 countries can be expected to continue to attract Japanese investors. Of the 158 companies questioned in the 1992 MITI survey, 104 responded that they had investment projects in the ASEAN-4 group, and 60 companies planned to "increase or largely increase" investments. NIE countries, on the other hand, continue to rank not particularly high among the popular destinations. The number of companies that intend to take advantage of low-wage labor in NIEs decreased from 11 percent in the 1990 MITI survey to only 2.5 percent in the 1992 survey. With continuing difficulties in the Japanese economy, a further decline in tertiary sector investments can also be expected. In Latin America, the recent wave of privatizations and rising foreign investment activity will certainly also

⁷ S. Tejima (1993), Table 5 (Based on MITI, "Survey on Japanese Business Activities Abroad", 1992).

attract some Japanese attention. Mexico, in particular, which already receives a significant share of Japanese FDI is expected to see more Japanese investment activity with the expected NAFTA agreement.

Over the medium term, this declining trend in Japanese FDI can be expected to come to a halt. Despite a currently stagnating domestic economy, Japanese FDI relative to its economic size is unusually low in two respects: compared to previous years as well as compared to other industrial countries. According to MITI, the ratio of FDI to GNP dropped from a high point of 2.4 percent in 1989 to only 1.2 percent in 1991, which is below the average level of the 1980s. Other industrial countries generally show comparable ratios far above the Japanese level: for example in the Netherlands (23.1 percent) and the United Kingdom (22.4 percent).

Given that the strategy of globalization of Japanese companies did not really take off before the 1980s, and that Japanese multinationals indicate in current surveys that they intend to expand their overseas activities over the next five years, a resumption of active Japanese investments abroad can be expected to increase again parallel with a recovery of the Japanese economy itself and the increasing pressure to recycle mounting current account surpluses.

It is also envisaged that the shift of Japan's FDI from higher-income countries (especially the U.S.) to developing countries in Asia (especially China) gradually takes place, creating greater opportunities for sustained growth in these lower-income economies. Furthermore, this FDI shift can be viewed as part of a gradual strategic re-orientation that will lessen Japan's dependence on the U.S., while expanding its opportunities with developing economies in Asia.

V. Conclusion

Japanese investments overseas grew rapidly in the 1980s, especially for the second half. The increased economic strength and rising current-account surpluses, combined with currency appreciations, made Japan the biggest source of FDI flows. The main recipients were the industrial countries, where Japanese manufacturers quickly established subsidiaries to circumvent trade restrictions and keep open their most important markets. Moreover, driven by the speculative bubble in Japan in the second half of the 1980s, financial investments in other industrial countries, especially the U.S., grew at an unprecedented rate. But developing countries also witnessed a substantial increase in inflows. The East Asian economies were used as low-wage production bases, with a shift in the 1980s away from the NIEs towards the ASEAN-4 and, most recently, China. Due to increasing labor costs, the NIEs lost their advantage as production bases (used often for exports to third world countries) but still attracted Japanese investors trying to establish a foothold in these new expanding consumer markets. Among other regions, only Latin America and the Caribbean were significant recipients of Japanese FDI. Most of these flows, however, were not directed at the economies of Argentina, Brazil, Chile, Mexico,

or Venezuela, but instead were in financial investments in the tax havens of the Caribbean. Indeed, in manufacturing, Latin America plays only a marginal role in Japanese investments in the developing world.

Since the peak in 1989, economic slowdown and sluggish corporate performance in Japan resulted in steadily declining Japanese investments overseas. Primarily affected were all those regions that had received substantial amounts of FDI in the tertiary sector, and finance and real estate in particular. Since 1989, all industrial countries, the Asian NIEs, and the Caribbean-6 have seen a dramatic decline in investment inflows from Japanese sources. Countries which were primarily used as production bases, on the other hand, did better. In fact, the ASEAN-4 and China, as well as all Latin American countries without a tax-haven status, recorded significant increases in inflows.

Besides macroeconomic factors such as the trade balance, yen appreciations, and domestic deregulations on FDI flows, Japanese investments abroad were determined by a number of firm-specific and microeconomic factors. While investments in other industrial countries are predominantly driven by the intention to avoid or ameliorate trade frictions, investments in developing countries are primarily affected by the availability of skilled labor and the potential of local sales. Especially FDI to the neighboring Asian economies is geared at establishing low-cost production facilities in the less developed economies of the region, while the rapidly growing NIEs increasingly are of interest to Japanese investors because of their future growth potential and corresponding increases in local sales. But other factors such as local investment incentives, host country regulations, and the availability of a reliable physical infrastructure are important factors affecting the allocation of investment finance.

The latest surveys by MITI suggest that these trends are likely to continue. Global Japanese FDI will further decline, even if at a slower rate, before it recovers. The tertiary sector will lose further, while manufacturing industries will do considerably better. For developing countries, flows to the NIEs will decline further, while the low-wage countries of the region, in particular China, are expected to record a marked increase in Japanese investment. Over the medium term, a resumption of these FDI flows can be expected. With a recovery of the domestic economy and an improved performance of Japanese multinationals and financial institutions, investments abroad will play an important role in recycling the country's huge current account surpluses. Relative to its economic size, Japan is still lagging behind other industrial countries in terms of FDI outflows. This gap will decline over time with Japanese investors continuing to pursue their strategy of global expansion.

APPENDIX

Japanese FDI Statistics

There are essentially two kinds of statistics on Japanese FDI published regularly--officially (government) compiled and those derived from sampling, such as questionnaires to Japanese companies. There are two categories of official statistics. One is compiled by the Ministry of Finance based on data submitted by Japanese investors as required by the Foreign Exchange Control Law; the other is actual capital transfer statistics compiled from invisible receipt and payment reports submitted by authorized foreign exchange banks to the Bank of Japan (Balance-of-payment data).

Statistics compiled through questionnaires and similar activities include the Ministry of International Trade and Industry's (MITI) 'Basic Survey on Overseas Investments' and 'Survey on Japanese Business Activities Abroad'. There are also non-government statistical surveys, such as 'Japan Overseas Investment: Firms by Country' and 'Japan Overseas Investment by Firm' by Toyo Keizai Shinposha, 'Japanese Overseas Investments on Company Basis' by the Economic Survey Association and 'Survey on Global Management and Overseas Direct Investment', compiled by Japan's Export-Import Bank.⁸ There are, however, some restrictions and caveats applicable to all data.

I. Tabulated Statistics

A. Based on MoF data

These statistics are produced by the International Finance Bureau of the Ministry of Finance, using data reported by Japanese companies in cases of FDI exceeding 30 million yen as required by the Foreign Exchange Control Law. These statistics were first generated in 1951 and have been continued annually. Since 1987, they have also been available semiannually. Prior to the modification of the Foreign Exchange Control Law in 1980, Japanese companies had to obtain permits for FDI, unlike the present system of merely informing the government in advance. Therefore, these statistics were based on officially permitted overseas investments up until 1980, after which they relied on notified investment data. These statistics are broken down by country, industry (nine manufacturing and ten non-manufacturing categories) and type of investment (acquisition of securities, cash loans and establishment/expansion of branches). For each of these categories, the number of cases and cash amounts are reported.

⁸ All these surveys are in Japanese.

For MoF statistics, FDI is defined in the following ways:

- a) Cases in which residents (or similar parties) acquire 10 percent or more of all issued stocks or equity of a foreign company through the purchase of foreign securities issued by the foreign company (stocks and bonds).
- b) Cases in which residents (or similar parties) acquire additional foreign securities issued by, or make cash loans running longer than a year to, a foreign company where the residents already own 10 percent or more of stock issued by the foreign company, etc.
- c) Cases in which Japanese companies acquire foreign securities issued by, or make cash loans running longer than a year to, a foreign company with whom the Japanese company maintains long-lasting ties, such as board representation, long-term supply of raw materials or product sales, provision of key production technology and so on.
- d) The funds required for establishing a branch, factory or other business base in a foreign country. (This includes operating funds needed during the first three months following start-up.)
- e) The funds required for expanding an existing overseas business base that would entail increased capital assets and/or deferred charges.

The acquisition of real estate overseas was removed from FDI in 1980, when the Foreign Exchange Control Law was overhauled.

The main features of these statistics are:

- a) As they are based on reported rather than actual data, there could be considerable time lags between the data submittal dates and the execution of FDI. Furthermore, the FDI amounts could be overstated as some may have been reported but not executed due to, say, a break-down of talks with foreign parties.
- b) The numbers of FDI cases may be overstated. For example, if the capital was sent overseas in several lots, even when they were intended for a single project, all cases are counted individually.
- c) The internal reserves of overseas subsidiaries are not included.
- d) Loan repayments, redemption of securities and withdrawal of capital are not included.
- e) The statistics include mineral acquisition financing, which consists of loans to foreign companies without Japanese capital involvement under the auspices of the Ministry of International Trade and Industry (MITI). (Mineral acquisition financing is a program of providing overseas mining companies with cash loans and/or goods supplies that are to be repaid by future exporting of minerals, oils, gas, etc., to Japan.)

B. Based on Actual Capital Transfers

These are compiled and produced by the Bank of Japan. They are tabulated based on capital receipt/payment reports (balance-of-payment data) involving transfers of 5 million yen or more, submitted by authorized foreign exchange banks. Although these statistics are announced monthly, they do not identify the foreign countries, industries or the number of cases.

These statistics define FDI essentially in the same way as MoF data. The establishment of business bases overseas by Japanese companies, provision of capital to overseas subsidiaries and affiliates in which more than 10 percent of capital is owned, and long-term loans to overseas companies are included. However, as the cash equivalent increases,

combined with a reported decline in FDI, withdrawals of capital are subtracted from the overall FDI amount unlike notification-based statistics.

These statistics have the following features.

- a) Although the withdrawal of capital is subtracted, the earnings retained by overseas subsidiaries and affiliates are not included. As some foreign countries, such as the United States, include retained earnings, care must be taken in comparing Japanese statistics with those of other countries.
- b) On transfers of capital to overseas business bases, these statistics include not only funds required for establishment or expansion, but also initial expenses, additional operating funds and liquidation funds tied to closing or scaling down overseas bases.
- c) Real estate purchases for business purposes are included.
- d) Mineral acquisition financing is not included as FDI. Instead, it is calculated as loans provided by the private sector in the long-term capital account of the balance of payments.

II. Survey Statistics

A. *'Basic Survey on Overseas Investments' and 'Survey on Japanese Business Activities Abroad'*

These are statistical reports by the Ministry of International Trade and Industry (MITI). They are based on questionnaires to Japanese companies operating overseas subsidiaries or affiliates. (Companies from finance, insurance and real estate industries are excluded.) Every year since 1971, MITI has published the 'Survey on Japanese Business Activity Abroad', which contains information on Japanese head office companies and their overseas subsidiaries and affiliates in which the Japanese companies hold at least 10 percent of the capital. Information on the Japanese head office (parent) companies are broken by industry (18 classes) and size of business. Also include investment and loan balances, equity balances, sales, product outputs, import and export volumes, profits and the numbers of overseas business bases. Information on the overseas subsidiaries and affiliates are broken down by industry and country and includes equity ratios, capital, sales, customers, raw material suppliers, equipment investments, profits, internal withholdings, dividends, numbers of employees, numbers of Japanese workers, PR activities for the local communities and local content ratios.

In 1989, 50.2 percent, or 1,771 of the 3,525 Japanese companies approached, responded. However, more than 90 percent of major corporations responded and 7,544 out of 9,576 overseas subsidiaries and affiliates (78.8 percent) also took part. So the coverage of MITI's survey is considered relatively accurate and far-reaching.

In 1981, MITI began its 'Basic Survey on Overseas Investments' to obtain more in-depth trade data and has been conducted every three years since. The 'Survey on Japanese Business Activities Abroad' is not conducted in the years that 'Basic Surveys' are undertaken. In 'Basic Survey', information on Japanese head office companies are broken down by industries and business sizes. The head office data includes cumulative amounts of FDIs, research and development expenditures, received overseas earnings and numbers of technical licensing agreements. Overseas subsidiaries and affiliates are also classified by industry and country. Information on these includes relationships with head office

companies, local operation styles, establishment periods, rationales for establishment, local partners, financing statuses, payroll, training systems, legal battles and labor relations (unions). This survey further explores second-generation subsidiaries and affiliates established by the overseas subsidiaries and affiliates of Japanese parent companies. (In this case, the first generation subsidiary or affiliate must be 50 percent or more owned by the Japanese parent company. Furthermore, it must have 50 percent or more of the equity in the second generation subsidiary or affiliate.) Information on second generation subsidiaries and affiliates is also broken down by industry and region and includes capital, sales, local content ratios, equipment investments, financing, profits, and the numbers of local and Japanese workers.

In 1990, MITI sent out 'Basic Survey' questionnaires to 3,331 Japanese companies out of which 1,562 (46.9 percent) responded. Likewise, the questionnaires were sent out to 8,804 overseas subsidiaries and affiliates; 6,362 companies (72.3 percent) responded.

The most notable characteristic of this statistical report is that its aim is not so much to track FDIs, but rather to statistically determine the actual business activities of companies operating overseas.

B. 'Japan Overseas Investment: Firms by Countries' and 'Japan Overseas Investment by Firm'

Since 1972, Toyo Keizai Shinposha annually conducts questionnaire surveys. From these, information on overseas subsidiaries whose total Japanese capital participation was at least 10 percent is extracted and reported in 'Japan Overseas Investment: Firms by Countries'. With a country-by-country focus, information includes names of overseas subsidiaries and affiliates, local establishment dates, capital, numbers of workers, sales, profits, business descriptions, Japanese parent companies, equity ratios and corporate partners (if any). The report also includes information on overseas branches and representative offices--the names of the branches/representative offices, numbers of workers, establishment dates and identities of Japanese parent companies. For the 1991 questionnaire survey, Toyo approached roughly 5,300 Japanese companies including all 2,399 publicly quoted companies; of these, 3,284 operated overseas subsidiaries and/or affiliates. Of the internationalized companies, 1,232 were listed on the stock exchange, the other 2,052 were not. The survey also identified that there were 12,522 overseas subsidiaries and affiliates.

Starting in 1988, Toyo Keizai Shinposha began publishing 'Japan Overseas Investment by Firm'⁹ based on its findings. This focuses on Japanese companies operating two or more overseas subsidiaries with a 20 percent (or greater) equity stake. It classifies the Japanese parents according to industry and provides detailed data on the parent firms together with their subsidiaries. In all other aspects, the data on overseas subsidiaries is essentially the same as in 'Japan Overseas Investment: Firms by Countries'. In the 1991 edition, 1,900 Japanese parent companies were listed together with roughly 12,000

⁹ This is the new name adopted from the 1991 edition. Until the 1990 edition, this report had been entitled 'Japan Overseas Investment by Industry'. It also had been covering only those Japanese companies operating three or more overseas subsidiaries with a stake of at least 20% equity.

overseas subsidiaries and affiliates. Around 5,000 overseas branches and representative offices were also listed.

As this set of statistics identifies the names and business activities of Japanese parent companies and their overseas subsidiaries, the actual flows of FDI theoretically should be calculable on an individual company basis. However, responses to questionnaires are frequently incomplete, making it difficult in practice to compile such data. Therefore, this document is useful only for obtaining such data as the numbers of overseas subsidiaries by region and by industry, investment objectives, and the numbers of branches and representative offices overseas.

C. 'Japanese Overseas Investments on Company Basis'

This is based on a survey, conducted annually since 1972 by the Economic Survey Association. It contains data on overseas companies in which major Japanese companies have invested. The data is presented on the basis of individual Japanese parent companies, classified by industry. Data on the parent include the names of their overseas subsidiaries and affiliates, countries, starting dates of overseas bases, proportions of shares held, par values of shares, acquisition prices of shares, equity ratios, capital and descriptions of business. In 1991, 3,049 Japanese parent companies were included in the survey. Of these, 1,006 were listed on the stock exchange, the remaining 2,043 were not. This report has several drawbacks. First, no statistical processing is applied to the number of cases and the moneys involved. Furthermore, the scope of the survey is much narrower in company coverage and issues analyzed than the 'Japan Overseas Investment by Firm'. Therefore, this report is merely a source of supplementary data.

D. 'Survey on Global Management and Overseas Direct Investment'

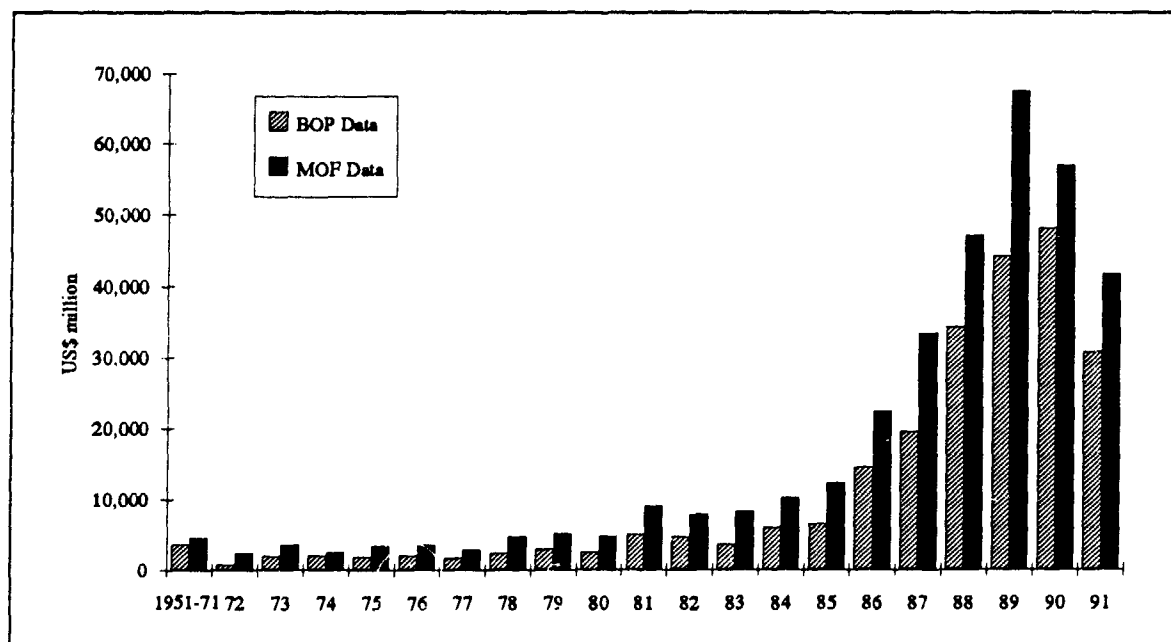
This document is based on an annual survey by the Export-Import Bank of Japan. Its scope is limited strictly to manufacturing industries. Moreover, only those companies operating at least three overseas subsidiaries or affiliates, including production bases, are included. The survey contents primarily focus on the Japanese parent companies providing information, such as their FDI records and three-year plans by industry and by region. Other data include descriptions and objectives of regional investments, individual financing statuses, export ratios and overseas production ratios by industry, and regional profitability. In 1992, of the 614 companies selected, 314 replied.

This report provides valuable information for determining the present FDI trends and future projections. However, because of the relatively small sample size of responding companies and the absence of more detailed basic data charts, these data have significant restrictions.

MoF and BoP Compared

YEAR	Ministry of Finance data			Balance of Payment data
	No. of Cases (a)	Value (b)	Average Value of FDI (b/a)	Value
1951-71	4,637	4,438	1.0	3,610
1972-80	19,312	32,061	1.7	17,692
1981-85	12,977	47,152	3.6	25,463
1986-90	26,309	227,157	8.6	160,363
1986	3,196	22,220	7.0	14,480
1987	4,584	33,364	7.3	19,519
1988	6,077	47,022	7.7	34,210
1989	6,589	67,540	10.3	44,130
1990	5,863	56,911	9.7	48,024
1991	4,564	41,584	9.1	30,726
SUM(51-91)	67,799	352,392	5.2	237,854

Note: MOF data is based on fiscal year starting April, and BOP data on calendar year.



Source: Horaguchi and Kwak, March 1993.

Japanese FDI Statistics, 1951-90
(Ministry of Finance, on notification base)

Table A-1 World Total
(US\$ million)

	1951-71	1972-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM(51-90)
Food	69	516	505	2,995	127	328	419	1,300	821	4,085
Textiles	254	1,384	445	1,915	63	206	317	533	796	3,998
Lumber & Pulp	260	498	362	1,847	57	317	604	555	314	2,967
Chemicals	69	2,560	1,356	6,958	355	910	1,292	2,109	2,292	10,943
Iron, steel, nonferr. metals	187	2,433	2,571	5,119	328	786	1,367	1,591	1,047	10,310
Machinery	91	804	1,077	5,961	626	687	1,432	1,762	1,454	7,933
Electric, Electronics	104	1,477	2,166	16,613	987	2,421	3,041	4,480	5,684	20,360
Transport equipment	99	879	2,395	7,507	828	1,473	1,281	2,053	1,872	10,880
Others	85	808	947	8,297	435	703	4,051	1,901	1,207	10,137
Manufacturing	1,218	11,359	11,824	57,212	3,806	7,831	13,804	16,284	15,487	81,613
Agriculture & Forestry	65	543	171	578	15	97	162	151	153	1,357
Fisheries	38	264	141	296	32	44	94	47	59	739
Mining	995	6,078	4,683	4,783	669	511	1,013	1,262	1,328	16,539
Construction	38	357	401	1,592	250	87	309	646	300	2,388
Commerce	530	4,879	7,269	18,638	1,861	2,269	3,204	5,148	6,156	31,316
Finance & Insurance	373	2,056	8,433	54,459	7,240	10,673	13,104	15,395	8,047	65,321
Services	280	1,114	3,293	29,980	1,560	2,780	3,732	10,616	11,292	34,667
Transportation	0	0	5,900	11,538	1,925	2,145	2,372	2,927	2,169	17,438
Real estate	0	0	2,533	43,316	3,997	5,428	8,641	14,143	11,107	45,849
Others	709	3,965	1,491	1,617	379	1,047	3	180	8	7,782
Non-manufacturing	3,028	19,256	34,315	166,797	17,948	25,081	32,634	50,515	40,619	223,396
Branch	35	894	1,009	3,147	566	452	584	739	806	5,085
Acquiring real estate	155	555	0	0	0	0	0	0	0	710
TOTAL	4,436	32,064	47,148	227,156	22,320	33,364	47,022	67,538	56,912	310,804

(Percentage Share)

	1951-71	1972-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM(51-90)
Food	1.6	1.6	1.1	1.3	0.6	1.0	0.9	1.9	1.4	1.3
Textiles	5.7	4.3	0.9	0.8	0.3	0.6	0.7	0.8	1.4	1.3
Lumber & Pulp	5.9	1.6	0.8	0.8	0.3	1.0	1.3	0.8	0.6	1.0
Chemicals	1.6	8.0	2.9	3.1	1.6	2.7	2.7	3.1	4.0	3.5
Iron, steel, nonferr. metals	4.2	7.6	5.5	2.3	1.5	2.4	2.9	2.4	1.8	3.3
Machinery	2.1	2.5	2.3	2.6	2.8	2.1	3.0	2.6	2.6	2.6
Electric, Electronics	2.3	4.6	4.6	7.3	4.4	7.3	6.5	6.6	10.0	6.6
Transport equipment	2.2	2.7	5.1	3.3	3.7	4.4	2.7	3.0	3.3	3.5
Others	1.9	2.5	2.0	3.7	1.9	2.1	8.6	2.8	2.1	3.3
Manufacturing	27.5	35.4	25.1	25.2	17.1	23.5	29.4	24.1	27.2	26.3
Agriculture & Forestry	1.5	1.7	0.4	0.3	0.1	0.3	0.3	0.2	0.3	0.4
Fisheries	0.9	0.8	0.3	0.1	0.2	0.1	0.2	0.1	0.1	0.2
Mining	22.4	19.0	9.9	2.1	3.0	1.5	2.2	1.9	2.3	5.3
Construction	0.9	1.1	0.9	0.7	1.1	0.3	0.7	1.0	0.5	0.8
Commerce	11.9	15.2	15.4	8.2	8.3	6.8	6.8	7.6	10.8	10.1
Finance & Insurance	8.4	6.4	17.9	24.0	32.4	32.0	27.9	22.8	14.1	21.0
Services	6.3	3.5	7.0	13.2	7.0	8.3	7.9	15.7	19.8	11.2
Transportation	0.0	0.0	12.5	5.1	8.6	6.4	5.0	4.3	3.8	5.6
Real estate	0.0	0.0	5.4	19.1	17.9	16.3	18.4	20.9	19.5	14.8
Others	16.0	12.4	3.2	0.7	1.7	3.1	0.0	0.3	0.0	2.5
Non-manufacturing	68.3	60.1	72.8	73.4	80.4	75.2	69.4	74.8	71.4	71.9
Branch	0.8	2.8	2.1	1.4	2.5	1.4	1.2	1.1	1.4	1.6
Acquiring real estate	3.5	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

Table A-2 Japanese FDI by Industry (North America: Canada, USA)
(US\$ thousand)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	209,640	297,986	1,323,321	66,412	150,180	209,750	550,616	346,363	1,830,947
Textiles	180,931	62,732	514,829	21,760	131,825	95,570	158,251	107,423	758,492
Lumber & Pulp	333,624	272,756	1,454,500	44,980	301,165	424,342	470,615	213,398	2,060,880
Chemicals	242,577	426,614	4,155,277	293,967	535,359	812,365	1,269,657	1,243,929	4,824,468
Iron, nonfer. metals	371,527	666,176	3,145,214	223,041	389,564	902,832	1,102,927	526,850	4,182,917
Machinery	219,982	554,709	3,198,100	460,342	480,920	894,207	666,547	696,084	3,972,791
Electric, Electronics	661,813	1,493,212	8,944,280	576,817	1,719,210	1,501,368	2,733,611	2,413,274	11,099,305
Transport equipment	89,496	1,126,967	3,813,380	289,965	714,631	808,457	1,423,677	576,650	5,029,843
Others	118,880	377,182	6,066,918	221,453	424,721	3,541,927	1,209,803	669,014	6,562,980
Manufacturing	2,428,470	5,278,334	32,615,819	2,198,737	4,847,575	9,190,818	9,585,704	6,792,985	40,322,623
Agriculture, etc.	184,926	63,377	199,855	1,750	9,499	94,585	75,972	18,049	448,158
Fisheries	69,018	50,814	66,406	16,383	2,516	17,634	1,611	28,262	186,238
Mining	578,241	561,842	948,740	117,651	181,904	206,951	241,916	200,318	2,088,823
Construction	129,288	124,319	922,674	203,015	53,614	186,491	318,179	161,375	1,176,281
Commerce	3,493,139	3,926,960	9,562,414	1,047,052	1,260,237	1,965,576	2,452,933	2,836,616	16,982,513
Finance & Insurance	950,988	3,242,591	15,199,056	2,057,328	2,898,134	3,220,626	4,625,939	239,7029	19,392,635
Services	469,506	617,463	19,654,512	504,971	1,572,362	1,694,882	7,179,193	8,703,104	20,741,481
Transportation	0	70,277	440,212	27,062	90,177	51,002	171,992	99,979	510,489
Real estate	0	2,075,468	28,473,733	3,679,740	4,375,196	5,652,085	8,854,739	591,1973	30,549,201
Others	932,117	884,284	398,926	298,304	36,140	1,019	63,463	0	2,215,327
Non-manufacturing	6,807,223	11,617,395	75,866,528	7,953,256	10,479,779	13,090,831	23,985,937	20,356,705	94,291,146
Branch	77,782	271,309	737,208	288,841	29,511	46,122	330,502	42,232	1,086,299
Acquiring real estate	484,815	0	0	0	0	0	0	0	484,815
TOTAL	9,798,290	17,167,038	109,219,555	10,440,834	15,356,865	22,327,791	33,902,143	27,191,922	136,184,883

Note: These 16 countries account for more than 99% of Japanese FDI for Europe, and the list is as follows:
Austria, Belgium, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Switzerland, Turkey, U.K., USSR.

(Percentage Share)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	2.1	1.7	1.2	0.6	1.0	0.9	1.6	1.3	1.3
Textiles	1.8	0.4	0.5	0.2	0.9	0.4	0.5	0.4	0.6
Lumber & Pulp	3.4	1.6	1.3	0.4	2.0	1.9	1.4	0.8	1.5
Chemicals	2.5	2.5	0.6	2.8	3.5	3.6	3.7	4.6	3.5
Iron, nonfer. metals	3.8	3.9	0.5	2.1	2.5	4.0	3.3	1.9	3.1
Machinery	2.2	3.2	1.4	4.4	3.1	4.0	2.0	2.6	2.9
Electric, Electronics	6.8	8.7	1.0	5.5	11.2	6.7	8.1	8.9	8.2
Transport equipment	0.9	6.6	0.3	2.8	4.7	3.6	4.2	2.1	3.7
Others	1.2	2.2	5.6	2.1	2.8	15.9	3.6	2.5	4.8
Manufacturing	24.8	30.7	29.9	21.1	31.6	41.2	3.6	2.5	29.6
Agriculture, etc.	1.9	0.4	0.2	0.0	0.1	0.4	0.2	0.1	0.3
Fisheries	0.7	0.3	0.1	0.2	2.1	0.7	0.0	0.1	0.1
Mining	5.9	3.3	0.9	1.1	0.3	0.9	0.7	0.7	1.5
Construction	1.3	0.7	0.8	1.9	8.2	0.8	0.9	0.6	0.9
Commerce	35.7	22.9	8.8	10.0	8.2	8.8	7.2	10.4	12.5
Finance & Insurance	9.7	18.9	13.9	19.7	18.9	14.4	13.6	17.0	14.2
Services	4.8	3.6	18.0	4.8	10.2	7.6	21.2	32.0	15.2
Transportation	0.0	0.4	0.4	0.3	0.6	0.2	0.5	0.4	0.4
Real estate	0.0	12.1	1.9	27.2	24.0	19.6	16.7	32.6	22.4
Others	9.5	5.2	0.4	2.9	0.2	0.0	0.2	0.0	1.6
Non-manufacturing	69.5	67.7	69.5	76.2	68.2	58.6	70.8	74.9	69.2
Branch	0.8	1.6	0.7	2.8	0.2	0.2	1.0	0.2	0.8
Acquiring real estate	4.9	0.0	0.0	0.3	0.3	1.5	0.1	0.0	0.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

Table A-3 Japanese FDI by Industry (Europe 16 countries)

(US\$ thousand)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	33,789	29,981	444,691	20,448	18,718	59,378	139,291	206,856	508,461
Textiles	138,120	52,728	672,539	17,394	34,695	58,757	185,355	376,538	863,387
Lumber & Pulp	18	70	16,398	1,430	794	2,548	8,715	2,911	16,486
Chemicals	104,712	110,829	1,194,752	10,613	116,885	246,678	515,642	304,934	1,410,293
Iron, nonferr. metals	156,237	99,534	337,200	1,298	13,304	51,828	67,547	203,223	592,971
Machinery	119,199	91,709	1,575,229	63,457	87,184	260,813	710,148	453,627	1,786,137
Electric, Electronics	123,240	272,748	3,900,725	125,458	178,544	557,132	737,098	2,302,493	4,296,713
Transport equipment	58,953	360,466	1,479,218	78,403	298,963	116,008	439,459	546,385	1,898,637
Others	95,197	214,487	786,540	51,606	96,363	194,447	260,735	183,389	1,096,224
Manufacturing	829,465	1,232,552	10,407,292	370,107	845,450	1,547,589	3,063,990	4,580,156	12,469,309
Agriculture, etc.	447	100	15,486	230	4,576	1,416	1,469	7,795	16,033
Fisheries	2,385	39	16,746	0	0	4,702	10,934	1,110	19,170
Mining	858,593	4,658	695,677	26,631	306	213,167	312,727	142,846	1,558,928
Construction	12,074	31,626	72,895	12,273	959	2,135	25,263	32,265	116,595
Commerce	803,480	1,648,850	4,181,659	384,861	492,597	573,796	1,439,775	1,290,630	6,633,989
Finance & Insurance	816,996	2,873,126	21,425,052	2,281,435	4,531,763	4,344,552	6,404,857	3,862,445	25,115,174
Services	94,811	153,996	2,978,975	96,247	192,136	1,028,522	912,793	749,277	3,227,782
Transportation	0	17,898	167,292	2,507	52,098	7,834	47,049	57,804	185,190
Real estate	0	56,500	6,540,065	87,259	124,000	1,118,530	2,282,200	2,928,076	6,594,565
Others	887,784	136,138	29,205	29,205	0	0	0	0	1,053,127
Non-manufacturing	3,476,570	4,922,931	36,123,052	2,920,648	5,398,435	7,294,654	11,437,067	9,072,248	44,522,553
Branch	88,358	332,194	1,577,744	167,198	317,310	165,371	259,299	568,566	1,998,296
Acquiring real estate	37,740	0	0	0	0	0	0	0	37,740
TOTAL	4,432,133	6,487,677	48,108,088	3,457,953	6,561,195	9,007,614	14,760,356	14,220,970	59,027,898

Note: These 16 countries account for more than 99% of Japanese FDI for Europe, and the list is as follows:
Austria, Belgium, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Switzerland, Turkey, U.K., USSR.

(Percentage Share)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	0.8	0.5	0.9	0.6	0.3	0.7	0.9	1.5	0.9
Textiles	3.1	0.8	1.4	0.5	0.5	0.7	1.3	2.6	1.5
Lumber & Pulp	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Chemicals	2.4	1.7	0.2	0.3	1.8	2.7	3.5	2.1	2.4
Iron, nonferr. metals	3.5	1.5	0.2	0.0	0.2	0.6	0.5	1.4	1.0
Machinery	2.7	1.4	0.6	1.8	1.3	2.9	4.8	3.2	3.0
Electric, Electronics	2.8	4.2	0.7	3.6	2.7	6.2	5.0	16.2	7.3
Transport equipment	1.3	5.6	0.4	2.3	4.6	1.3	3.0	3.8	3.2
Others	2.1	3.3	1.6	1.5	1.5	2.2	1.8	1.3	1.9
Manufacturing	18.7	19.0	21.6	10.7	12.9	17.2	1.8	1.3	21.1
Agriculture, etc.	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Fisheries	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Mining	19.4	0.1	1.4	0.8	0.0	2.4	2.1	1.0	2.6
Construction	0.3	0.5	0.2	0.4	0.0	0.0	0.2	0.2	0.2
Commerce	18.1	25.4	8.7	11.1	7.5	6.4	9.8	9.1	11.2
Finance & Insurance	18.4	44.3	44.5	66.0	59.1	48.2	43.4	45.0	42.5
Services	2.1	2.4	6.2	2.8	2.9	11.4	6.2	5.3	5.5
Transportation	0.0	0.3	0.3	0.1	0.8	0.1	0.3	0.4	0.3
Real estate	0.0	0.9	13.6	2.5	1.9	12.4	15.5	20.6	11.2
Others	20.0	2.1	0.1	0.8	0.0	0.0	0.0	0.0	1.8
Non-manufacturing	78.4	75.9	75.1	84.5	82.3	81.0	77.5	63.8	75.4
Branch	2.0	5.1	3.3	4.8	4.8	1.8	1.8	4.0	3.4
Acquiring real estate	0.9	0.0	0.0	9.2	2.5	2.9	3.9	0.0	0.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

Table A-4. Japanese FDI by Industries (LDCs)

(US\$ thousand)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	310	162	998	40	151	107	547	153	1,470
Textiles	1,314	329	722	24	37	161	189	311	2,365
Lumber & Pulp	369	62	353	11	16	178	69	79	784
Chemicals	2,183	813	1,581	49	252	231	311	738	4,577
Iron, steel, nonferr. metals	1,840	1,696	1,551	102	383	382	387	297	5,087
Machinery	533	416	1,145	98	107	276	370	294	2,094
Electric, Electronics	775	388	3,697	279	509	979	999	931	4,860
Transport equipment	609	881	1,514	332	221	210	163	588	3,004
Others	649	307	1,401	153	173	306	419	350	2,357
Manufacturing	8,582	5,054	12,962	1,088	1,849	2,830	3,454	3,741	26,598
Agriculture & Forestry	402	100	157	9	24	24	48	52	659
Fisheries	208	85	216	33	39	75	41	28	509
Mining	4,774	3,682	1,546	332	272	437	220	285	10,002
Construction	249	228	558	27	19	107	300	105	1,035
Commerce	869	1,367	3,911	346	385	553	954	1,673	6,147
Finance & Insurance	792	2,040	16,426	2,809	3,035	5,176	3,819	1,587	19,258
Services	796	2,419	5,093	700	895	753	1,509	1,236	8,308
Transportation	0	5,805	10,826	1,845	1,997	2,284	2,707	1,993	16,631
Real estate	0	330	3,313	101	488	588	1,341	795	3,643
Others	2,560	390	1,060	47	995	2	9	7	4,010
Non-manufacturing	10,650	16,446	43,106	6,249	8,149	9,999	10,948	7,761	70,202
Branch	757	402	707	110	104	236	135	122	1,866
Acquiring real estate	182	0	0	0	0	0	0	0	182
TOTAL	20,171	21,902	56,775	7,447	10,102	13,065	14,537	11,624	98,848

(Percentage Share)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	1.5	0.7	1.8	0.5	1.5	0.8	3.8	1.3	1.5
Textiles	6.5	1.5	1.3	0.3	0.4	1.2	1.3	2.7	2.4
Lumber & Pulp	1.8	0.3	0.6	0.1	0.2	1.4	0.5	0.7	0.8
Chemicals	10.8	3.7	2.8	0.7	2.5	1.8	2.1	6.3	4.6
Iron, steel, nonferr. metals	9.1	7.7	2.7	1.4	3.8	2.9	2.7	2.6	5.1
Machinery	2.6	1.9	2.0	1.3	1.1	2.1	2.5	2.5	2.1
Electric, Electronics	3.8	1.8	6.5	3.7	5.0	7.5	6.9	8.0	4.9
Transport equipment	3.0	4.0	2.7	4.5	2.2	1.6	1.1	5.1	3.0
Others	3.2	1.4	2.5	2.1	1.7	2.3	2.9	3.0	2.4
Manufacturing	42.5	23.1	22.8	14.6	18.3	21.7	23.8	32.2	26.9
Agriculture & Forestry	2.0	0.5	0.3	0.1	0.2	0.2	0.3	0.4	0.7
Fisheries	1.0	0.4	0.4	0.4	0.4	0.6	0.3	0.2	0.5
Mining	23.7	16.8	2.7	4.5	2.7	3.3	1.5	2.5	10.1
Construction	1.2	1.0	1.0	0.4	0.2	0.8	2.1	0.9	1.0
Commerce	4.3	6.2	6.9	4.6	3.8	4.2	6.6	14.4	6.2
Finance & Insurance	3.9	9.3	28.9	37.7	30.0	39.6	26.3	13.7	19.5
Services	3.9	11.0	9.0	9.4	8.9	5.8	10.4	10.6	8.4
Transportation	0.0	26.5	19.1	24.8	19.8	17.5	18.6	17.1	16.8
Real estate	0.0	1.5	5.8	1.4	4.8	4.5	9.2	6.8	3.7
Others	12.7	1.8	1.9	0.6	9.8	0.0	0.1	0.1	4.1
Non-manufacturing	52.8	75.1	75.9	83.9	80.7	76.5	75.3	66.8	71.0
Branch	3.8	1.8	1.2	1.5	1.0	1.8	0.9	1.0	1.9
Acquiring real estate	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

Table A-5. Japanese FDI by Industry (Asia 12 countries)

(US\$ thousand)

	1951-50	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	143,133	106,844	911,610	28,348	142,232	89,645	533,713	117,672	1,161,587
Textiles	917,533	260,724	671,243	17,953	26,592	145,319	184,389	296,990	1,849,500
Lumber & Pulp	141,443	47,928	332,579	9,208	12,537	176,476	59,818	74,540	521,950
Chemicals	720,744	570,822	1,320,381	46,974	245,520	199,698	293,338	534,851	2,611,947
Iron, nonferr. metals	1,030,905	664,118	1,104,952	60,667	301,528	204,512	309,102	225,143	2,799,975
Machinery	272,073	306,612	1,065,110	95,232	102,466	254,817	350,578	262,017	1,643,795
Electric, Electronics	540,326	288,774	3,342,046	261,960	467,376	852,383	934,101	826,226	4,171,146
Transport equipment	266,185	424,608	1,005,912	130,230	205,994	154,627	141,946	373,115	1,696,705
Others	517,584	251,558	1,307,479	149,488	168,939	281,798	397,786	309,468	2,076,621
Manufacturing	4,549,926	2,921,988	11,061,312	800,060	1,677,184	2,359,275	3,204,771	3,020,022	18,533,226
Agriculture, etc.	214,784	27,105	86,372	3,500	14,995	14,444	19,746	33,687	328,261
Fisheries	65,440	31,238	91,025	4,478	20,753	24,515	22,542	18,737	187,703
Mining	3,017,201	3,178,109	1,156,906	238,037	239,570	234,852	211,297	233,150	7,352,216
Construction	75,622	148,887	514,678	13,550	15,659	100,075	288,902	96,492	739,187
Commerce	396,093	644,945	2,635,716	198,420	192,497	366,943	660,863	1,216,993	3,676,754
Finance & Insurance	269,442	526,100	3,536,132	298,704	396,974	1,118,291	1,079,165	642,998	4,331,674
Services	624,380	1,209,612	3,772,764	587,833	671,375	540,875	1,103,726	868,955	5,606,756
Transportation	2,770	252,166	854,262	5,216	151,150	187,936	397,740	112,220	1,110,198
Real estate	0	309,077	2,615,302	96,263	374,771	383,275	1,120,627	640,366	2,924,379
Others	453,564	161,260	1,094,231	9,275	1,062,449	7,474	8,818	6,215	1,709,055
Non-manufacturing	5,119,296	6,489,499	16,357,388	1,455,276	3,140,193	2,978,680	4,913,426	3,869,813	27,366,183
Branch	84,963	136,829	526,813	66,077	47,371	214,927	103,279	95,159	748,545
Acquiring real estate	36,221	0	0	0	0	0	0	0	36,221
TOTAL	9,790,346	9,548,316	27,945,513	2,321,413	4,864,748	5,552,882	8,221,476	6,984,994	47,284,173

Note: These 12 countries account for more than 99% of Japanese FDI for Asia (excluding MiddleEast), and the list is as follows: Brunei, China, Hong Kong, India, Indonesia, Korea, Malaysia, Pakistan, Philippines, Singapore, Taiwan, Thailand.

(Percentage Share)

	1951-50	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	1.5	1.1	3.3	1.2	2.9	1.6	6.5	1.7	2.5
Textiles	9.4	2.7	2.4	0.8	0.5	2.6	2.2	4.3	3.9
Lumber & Pulp	1.4	0.5	1.2	0.4	0.3	3.2	0.7	1.1	1.1
Chemicals	7.4	6.0	4.7	2.0	5.0	3.6	3.6	7.7	5.5
Iron, nonferr. metals	10.5	7.0	4.0	2.6	6.3	3.7	3.8	3.2	5.9
Machinery	2.8	3.2	3.8	4.1	2.1	4.6	4.3	3.8	3.5
Electric, Electronics	5.5	3.0	12.0	11.3	9.6	15.4	11.4	11.8	8.8
Transport equipment	2.7	4.4	3.6	5.6	4.2	2.8	1.7	5.3	3.6
Others	5.3	2.6	4.7	6.4	3.5	5.1	4.8	4.4	4.4
Manufacturing	46.5	30.6	39.6	34.5	34.5	42.5	39.0	43.2	39.2
Agriculture, etc.	2.2	0.3	0.3	0.2	0.3	0.3	0.2	0.5	0.7
Fisheries	0.7	0.3	0.3	0.2	0.4	0.4	0.3	0.3	0.4
Mining	30.8	33.3	4.1	10.3	4.9	4.2	2.6	3.3	15.5
Construction	0.8	1.6	1.8	0.6	0.3	1.8	3.5	1.4	1.6
Commerce	4.0	6.8	9.4	8.5	4.0	6.6	8.0	17.4	7.8
Finance & Insurance	2.8	5.5	12.7	12.9	8.2	20.1	13.1	9.2	9.2
Services	6.4	12.7	13.5	25.3	13.8	9.7	13.4	12.4	11.9
Transportation	0.0	2.7	3.1	0.2	3.1	3.4	4.8	1.6	2.3
Real estate	0.0	3.2	9.4	4.1	7.7	6.9	13.6	9.2	6.2
Others	4.6	1.7	3.9	0.4	21.8	0.1	0.1	0.1	3.6
Non-manufacturing	52.3	68.0	58.5	62.7	64.5	53.6	59.8	55.4	59.1
Branch	0.9	1.4	1.9	2.8	1.0	3.9	1.3	1.4	1.6
Acquiring real estate	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

Table A-6. Japanese FDI by Industry (ASEAN)

(US\$ thousand)

	1981-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('81-90)
Food	107,396	44,756	215,099	12,945	65	37,329	33,901	65,478	367,251
Textiles	596,909	222,322	339,946	6,639	12,375	104,384	59,862	156,686	1,159,177
Lumber & Pulp	114,077	41,732	277,730	6,339	8,676	164,422	49,958	48,335	433,539
Chemicals	334,897	95,118	682,793	6,869	46,773	88,324	140,231	400,596	1,112,808
Iron, steel, nonfer. metals	876,172	599,411	727,348	19,528	232,267	136,752	207,980	136,821	2,202,931
Machinery	39,583	54,536	592,034	38,437	15,363	182,985	211,939	143,310	686,163
Electric, Electronics	104,342	84,960	1,838,987	55,022	135,859	480,071	586,415	581,620	2,028,289
Transport Equipment	125,460	243,534	570,125	23,522	109,643	59,845	59,589	317,526	939,119
Others	211,370	116,730	587,238	23,843	77,819	105,600	203,212	176,764	915,338
Manufacturing	2,510,216	1,503,099	5,831,300	193,144	74,221	1,359,712	1,553,087	221,136	9,844,615
Agriculture & Forestry	164,466	24,796	75,212	3,074	12,558	11,115	19,467	28,998	264,474
Fisheries	63,486	25,744	42,691	3,230	4,470	9,042	12,585	13,364	131,921
Mining	2,923,212	3,157,017	1,125,113	236,836	239,570	233,602	206,946	208,159	7,205,342
Construction	42,770	52,889	206,124	13,222	5,014	19,251	123,342	45,295	301,783
Commerce	70,165	193,456	265,500	39,998	15,498	31,957	87,679	90,368	529,121
Finance & Insurance	98,550	34,142	539,730	43,328	6,972	69,924	264,229	155,277	672,422
Services	78,350	87,058	773,778	14,691	23,256	94,756	241,711	399,364	939,186
Transportation	0	11,371	76,301	182	1,070	16,202	28,991	29,856	87,672
Real Estate	0	11,013	491,714	5,717	1,276	59,253	219,545	205,523	502,727
others	109,449	2,633	14,231	840	906	0	7,301	5,184	126,313
Non-manufacturing	3,550,448	3,600,119	3,610,394	361,118	310,590	545,102	1,212,196	1,181,388	10,760,961
Branch	12,014	11,624	127,548	849	16,268	61,164	16,289	32,978	151,186
Acquiring real estate	12,607	0	0	0	0	0	0	0	12,607
TOTAL	6,085,285	5,114,842	9,569,242	555,111	1,031,079	1,965,978	2,781,572	3,235,502	20,769,369

(Percentage Share)

	1981-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('81-90)
Food	1.8	0.9	2.2	2.3	6.3	1.9	1.2	2.0	1.8
Textiles	9.8	4.3	3.6	1.2	1.2	5.3	2.2	4.8	5.6
Lumber & Pulp	1.9	0.8	2.9	1.1	0.8	8.4	1.8	1.5	2.1
Chemicals	5.5	1.9	7.1	1.2	4.5	4.5	5.0	12.4	5.4
Iron, steel, nonfer. metals	14.4	11.7	7.6	3.5	22.5	7.0	7.5	4.0	10.6
Machinery	0.7	1.1	6.2	6.9	1.5	9.3	7.6	4.4	3.3
Electric, Electronics	1.7	1.7	19.2	9.9	13.2	24.4	21.1	18.0	9.8
Transport equipment	2.1	4.8	6.0	4.2	10.6	3.0	2.1	9.8	4.5
others	3.5	2.3	6.1	4.3	7.5	5.4	7.3	5.5	4.4
Manufacturing	41.3	29.4	60.9	34.8	68.3	69.2	55.8	62.5	47.4
Agriculture & Forestry	2.7	0.5	0.8	0.6	1.2	0.6	0.7	0.9	1.3
Fisheries	1.0	0.5	0.4	0.6	0.4	0.5	0.5	0.4	0.6
Mining	48.0	61.7	11.8	42.7	23.2	11.9	7.4	6.4	34.7
Construction	0.7	1.0	2.2	2.4	0.5	1.0	4.4	1.4	1.5
Commerce	1.2	3.8	2.8	7.2	1.5	1.6	3.2	2.8	2.5
Finance & Insurance	1.6	0.7	5.6	7.8	0.7	3.6	9.5	48.0	3.2
Services	1.3	1.7	8.1	2.6	2.3	4.8	8.7	12.3	4.5
Transportation	0.0	0.2	0.8	0.0	0.1	0.8	1.0	0.9	0.4
Real estate	0.0	0.2	5.1	1.0	0.1	3.0	7.9	6.4	2.4
others	1.8	0.1	0.1	0.2	0.1	0.0	0.3	2.0	0.6
Non-manufacturing	58.3	70.4	37.7	65.1	30.1	27.7	43.6	36.5	51.8
Branch	0.2	0.2	1.3	0.2	1.6	3.1	0.6	1.0	0.7
Acquiring real estate	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

Table A-7. Japanese FDI by Industry (NIEs)

(US\$ thousand)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	35,148	43,024	649,971	11,459	72,930	35,793	487	42,854	728,143
Textiles	319,838	35,542	194,720	10,437	9,862	24,926	31,896	117,599	550,100
Lumber & Pulp	25,086	3,477	46,775	2,057	3,259	8,179	8,416	24,864	75,338
Chemicals	380,493	473,659	583,097	31,829	191,996	102,174	137,193	119,905	1,437,249
Iron, nonfer. metals	131,973	60,186	337,771	38,375	65,648	57,611	95,078	80,459	529,930
Machinery	230,920	248,538	355,746	54,293	84,789	59,685	95,931	61,048	835,204
Electric, Electronics	430,504	197,609	1,216,700	201,412	277,684	269,398	260,680	207,526	1,844,813
Transport equipment	139,952	145,088	387,729	101,364	87,337	70,915	79,931	48,182	672,769
others	301,777	125,000	604,604	121,136	84,777	145,972	150,564	102,155	1,031,381
Manufacturing	1,995,691	1,332,123	4,377,113	572,962	878,282	774,653	1,346,624	804,592	7,704,927
Agriculture & Forestry	43,719	1,490	4,371	80	562	494	0	3,235	49,580
Fisheries	1,544	2,086	4,733	0	126	0	4,241	366	8,363
Mining	8,489	4,427	6,085	0	0	1,250	0	4,835	19,001
Construction	32,389	89,500	296,978	328	10,165	80,574	161,714	44,197	418,867
Commerce	324,688	439,503	2,323,563	137,016	172,199	327,580	563,146	1,123,622	3,087,754
Finance & Insurance	169,584	487,803	2,984,306	256,976	390,002	1,048,351	804,696	484,281	3,641,693
Services	543,190	952,706	2,439,863	470,812	567,965	381,082	687,544	332,460	3,935,759
Transportation	2,770	235,257	761,195	4,030	150,080	171,630	353,749	81,706	999,222
Real estate	0	288,481	2,029,092	76,426	312,643	322,337	892,245	425,441	2,317,573
others	330,417	158,627	78,188	0	68,166	7,474	1,517	1,031	567,232
Non-manufacturing	1,456,790	2,659,880	10,928,374	945,668	1,671,908	2,340,772	3,468,852	2,501,174	15,045,044
Branch	71,555	124,593	325,418	11,884	30,924	148,702	85,178	48,730	521,566
Acquiring real estate	13,719	0	0	0	0	0	0	0	13,719
TOTAL	3,537,755	4,116,596	15,630,905	1,530,514	2,581,114	3,264,127	4,900,654	3,354,496	23,285,256

(Percentage Share)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	1.0	1.0	4.2	0.7	2.8	1.1	9.9	1.3	3.1
Textiles	9.0	0.9	1.2	0.7	0.4	0.8	0.7	3.5	2.4
Lumber & Pulp	0.7	0.1	0.3	0.1	0.1	0.3	0.2	0.7	0.3
Chemicals	10.8	11.5	3.7	2.1	7.4	3.1	2.8	3.6	5.2
Iron, nonfer. metals	3.7	1.5	2.2	2.5	2.5	1.8	1.9	2.4	2.3
Machinery	6.5	6.0	2.3	3.5	3.3	1.8	2.0	1.8	3.6
Electric, Electronics	12.2	4.8	7.8	13.2	10.8	8.3	5.3	6.2	7.9
Transport equipment	4.0	3.5	2.5	6.6	3.4	2.2	1.6	1.4	2.9
others	8.5	3.0	39.0	7.9	3.3	4.5	3.1	3.0	4.4
Manufacturing	56.4	32.4	28.0	37.4	34.0	23.7	27.5	24.0	33.1
Agriculture & Forestry	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
Fisheries	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Mining	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Construction	0.9	2.2	1.9	0.0	0.4	2.5	3.3	1.3	1.8
Commerce	9.2	10.7	14.9	9.0	6.7	10.0	11.5	33.5	13.3
Finance & Insurance	4.8	11.8	19.1	16.8	15.1	32.1	16.4	144.0	15.6
Services	15.4	23.1	15.6	30.8	22.0	11.7	14.0	99.0	16.9
Transportation	0.1	5.7	4.9	0.3	5.8	5.3	7.2	24.0	4.3
Real Estate	0.0	7.0	13.0	5.0	12.1	9.9	18.2	12.7	10.0
others	9.3	3.9	0.0	0.0	2.6	0.2	0.0	0.0	2.4
Non-manufacturing	41.2	64.6	69.9	61.8	64.8	71.7	70.8	74.6	64.6
Branch	2.0	3.0	2.1	0.8	1.2	4.6	1.7	1.5	2.2
Acquiring real estate	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

Table A-8. Japanese FDI by Industry (Latin American 14 countries)

(US\$ thousand)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM(51-90)
Food	128,478	54,719	77,765	10,341	8,261	15,767	11,255	32,141	260,962
Textiles	305,809	62,912	34	261	8,728	11,632	576	12,488	402,406
Lumber & Pulp	182,775	8,349	8,284	0	2,714	200	2,300	3,070	199,408
Chemicals	490,635	55,521	217,846	2,174	3,000	27,998	11,554	173,120	764,002
Iron, nonfer. metals	731,228	917,271	421,060	34,442	76,330	169,048	77,402	63,838	2,069,559
Machinery	248,546	105,590	70,204	1,789	4,915	16,930	15,704	30,866	424,340
Electric, Electronics	208,349	93,256	329,168	17,366	40,945	125,383	44,389	101,085	630,773
Transport equipment	332,804	444,417	501,578	201,702	13,063	54,192	18,550	214,071	1,278,799
Others	75,907	28,271	53,874	2,510	1,834	20,544	11,127	17,859	158,052
Manufacturing	2,704,531	1,770,306	1,713,464	270,585	159,790	441,694	192,857	648,538	6,188,301
Agriculture & Forestry	108,486	26,145	37,394	2,881	6,056	2,664	13,769	1,224	172
Fisheries	54,859	18,569	56,832	9,307	700	41,566	193	5,066	130,260
Mining	1,182,136	243,248	169,440	92,428	24,927	7,829	0	44,256	1,595
Construction	135,286	50,437	36,039	13,037	2,850	5,567	10,725	3,860	221,762
Commerce	420,039	643,074	1,074,391	130,426	164,616	1,109,655	248,028	420,356	2,137,504
Finance & Insurance	291,731	1,458,668	12,894,835	2,518,896	2,638,336	4,076,645	2,725,465	935,493	14,645,234
Services	108,168	475,494	900,919	97,277	144,653	105,057	339,898	214,034	1,484,581
Transportation	0	4,507,913	7,681,032	1,546,697	1,631,858	1,544,450	1,634,031	1,323,996	12,188,945
Real estate	0	14,301	194,448	4,445	34,570	87,347	57,713	10,373	208,749
Others	960,682	188,965	38,184	37,351	300	0	533	0	1,187,831
Non-manufacturing	3,261,387	7,626,814	23,083,514	4,452,745	4,648,866	5,982,090	5,030,355	2,969,458	33,971,715
Branch	22,430	17,173	4,542	1,483	2,306	42	151	560	44,145
Acquiring real estate	19,645	0	0	0	0	0	0	0	19,645
TOTAL	6,007,993	9,414,293	24,801,520	4,724,813	4,810,962	6,423,826	5,223,363	3,618,556	40,223,806

Note: These 14 countries account for more than 99% of Japanese FDI to Latin America, and the list is as follows: the Antilles, the Bahamas, Bermuda, the Cayman Islands, Panama, Virgin Islands, Argentina, Brazil, Chile, Colombia, Mexico, Peru, Puerto Rico, and Venezuela.

(Percentage Share)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM(51-90)
Food	2.1	0.6	0.3	0.2	0.2	0.2	0.2	0.9	0.6
Textiles	5.1	0.7	0.1	0.0	0.2	0.2	0.0	0.3	1.0
Lumber & Pulp	3.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.5
Chemicals	8.2	0.6	0.9	0.0	0.1	0.4	0.2	4.8	1.9
Iron, nonfer. metals	12.2	9.7	1.7	0.7	1.6	2.6	1.5	1.8	5.1
Machinery	4.1	1.1	0.3	0.0	0.1	0.3	0.3	0.9	1.1
Electric, Electronics	3.5	1.0	1.3	0.4	0.9	2.0	0.8	2.8	1.6
Transport equipment	5.5	4.7	2.0	4.3	0.3	0.8	0.4	5.9	3.2
Others	1.3	0.3	0.2	0.1	0.0	0.3	0.2	0.5	0.4
Manufacturing	45.0	18.8	6.9	5.7	3.3	6.9	3.7	17.9	15.4
Agriculture & Forestry	1.8	0.3	0.2	0.1	0.1	0.0	0.3	0.3	0.4
Fisheries	0.9	0.2	0.2	0.2	0.0	0.6	0.0	0.1	0.3
Mining	19.7	2.6	0.7	2.0	0.5	0.1	0.0	1.2	4.0
Construction	2.3	0.5	0.1	0.3	0.1	0.1	0.2	0.1	0.6
Commerce	7.0	6.8	4.3	2.8	3.4	1.7	4.7	11.6	5.3
Finance & Insurance	4.9	15.5	52.0	53.3	54.8	63.5	52.2	25.9	36.4
Services	1.8	5.1	3.6	2.1	3.0	1.6	6.5	5.9	3.7
Transportation	0.0	47.9	31.0	32.7	33.9	24.0	31.3	36.6	30.3
Real Estate	0.0	0.2	0.8	0.1	0.7	1.4	1.1	0.3	0.5
Others	16.0	2.0	0.2	0.8	0.0	0.0	0.0	0.0	3.0
Non-manufacturing	54.3	81.0	93.1	94.2	96.6	93.1	96.3	82.1	84.5
Branch	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Acquiring real estate	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	1,000.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

Table A-9. Japanese FDI by Industry (Latin American 6 countries)

(US\$ thousand)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	1,587	0	0	0	0	0	0	0	1,587
Textiles	862	0	1,468	0	442	600	0	426	2,330
Lumber & Pulp	45	75	0	0	0	0	0	0	120
Chemicals	281,160	0	7,797	0	0	0	5,000	2,797	288,957
Iron, nonfer. metals	257	0	0	0	0	0	0	0	257
Machinery	0	1,300	0	0	0	0	0	0	1,300
Electric, Electronics	25	1,590	21,428	0	0	449	0	20,979	23,043
Transport equipment	0	0	0	0	0	0	0	0	0
Others	40	0	0	0	0	0	0	0	40
Manufacturing	283,976	2,965	30,693	0	442	1,049	5,000	24,202	317,634
Agriculture & Forestry	5,000	0	0	0	0	0	0	0	5,000
Fisheries	495	767	2,500	0	0	2,500	0	0	3,762
Mining	44,240	20,580	75,431	60,100	8,792	0	0	6,539	140,251
Construction	35,610	37,053	11,730	10,730	0	1,000	0	0	84,393
Commerce	143,860	383,647	870,742	121,517	151,179	96,347	139,258	362,491	1,398,299
Finance & Insurance	52,344	1,297,008	12,149,481	2,374,594	2,579,989	3,907,050	2,578,123	709,725	13,498,833
Services	75,387	396,965	751,729	71,682	132,242	63,111	304,174	180,520	1,224,081
Transportation	0	4,500,747	7,493,608	1,543,697	1,631,858	1,542,050	1,633,531	1,142,472	11,994,355
Real estate	0	900	151,733	4,255	6,000	86,632	45,860	8,986	152,633
Others	722,727	141,368	18,858	18,858	0	0	0	0	882,953
Non-manufacturing	1,079,663	6,779,035	21,525,862	4,205,433	4,510,060	5,698,690	4,700,946	2,410,733	29,384,560
Branch	7,636	2,176	398	100	105	42	151	0	10,210
Acquiring real estate	0	0	0	0	0	0	0	0	0
TOTAL	1,371,275	6,784,176	21,556,953	4,205,533	4,510,607	5,699,781	4,706,097	2,434,935	29,712,404

Note: These 6 countries are the Antilles, the Bahamas, Bermuda, the Cayman Islands, Panama, Virgin Islands.

(Percentage Share)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Textiles	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lumber & Pulp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chemicals	20.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.0
Iron, nonfer. metals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Machinery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric, Electronics	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.9	0.1
Transport equipment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	20.7	0.0	0.1	0.0	0.0	0.0	0.1	1.0	1.1
Agriculture & Forestry	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fisheries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining	3.2	0.3	0.3	1.4	0.2	0.0	0.0	0.3	0.5
Construction	2.6	0.5	0.1	0.3	0.0	0.0	0.0	0.0	0.3
Commerce	10.5	5.7	4.0	2.9	3.4	1.7	3.0	14.9	4.7
Finance & Insurance	3.8	19.1	56.4	56.5	57.2	68.5	54.8	29.1	45.4
Services	5.5	5.9	3.5	1.7	2.9	1.1	6.5	7.4	4.1
Transportation	0.0	66.3	34.8	36.7	36.2	27.1	34.7	46.9	40.4
Real estate	0.0	0.0	0.7	0.1	0.1	1.5	1.0	0.4	0.5
others	52.7	2.1	0.1	0.4	0.0	0.0	0.0	0.0	3.0
Non-manufacturing	78.7	99.9	99.9	100.0	100.0	100.0	99.9	98.9	98.9
Branch	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acquiring real estate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

Table A-10. Japanese FDI by Industry (Latin American 8 countries)

(US\$ thousand)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	126,891	54,719	77,765	1,341	8,261	15,767	11,255	32,141	259,375
Textiles	304,947	62,912	32,217	261	8,286	11,032	576	12,062	400,076
Lumber & Pulp	182,730	8,274	8,284	0	2,714	200	2,300	3,070	199,288
Chemicals	209,475	55,521	210,049	2,174	3,000	27,998	6,554	170,323	475,045
Iron, nonfer. metals	730,971	917,271	421,060	34,442	76,330	169,048	77,402	63,838	2,069,302
Machinery	248,546	104,290	70,204	1,789	4,915	16,930	15,704	30,866	423,040
Electric, Electronics	208,324	91,666	307,740	17,366	40,945	124,934	44,389	80,106	607,730
Transport equipment	332,804	444,417	501,578	201,702	13,063	54,192	18,550	214,071	1,278,799
Others	75,867	28,271	53,874	2,510	1,834	20,544	11,127	17,859	158,012
Manufacturing	2,420,555	1,767,341	1,682,771	270,585	159,348	440,645	187,857	624,336	5,870,667
Agriculture & Forestry	108,486	26,145	37	2,881	6,056	2,664	13,769	12,024	167,025
Fisheries	54,364	17,802	54,332	9,307	700	39,066	193	5,066	126,498
Mining	1,137,896	222,668	94,009	32,328	16,135	7,829	0	37,717	1,454,573
Construction	99,676	13,384	24,309	2,307	2,850	4,567	10,725	3,860	137,369
Commerce	276,179	259,427	203,599	8,909	13,437	14,618	108,770	57,865	739,205
Finance & Insurance	239,387	161,660	745,354	144,302	58,347	169,595	147,342	225,768	1,146,401
Services	32,781	78,529	149,190	25,595	12,411	41,946	35,724	33,514	260,500
Transportation	0	7,166	187,424	3,000	0	2,400	500	181,524	194,590
Real Estate	0	13,401	42,715	190	28,570	715	11,853	1,387	56,116
Others	237,955	47,597	19,326	18,493	300	0	533	0	304,878
Non-manufacturing	2,181,724	847,779	1,557,652	247,312	138,806	283,400	329,409	558,725	4,587,155
Branch	14,794	14,997	4,144	1,383	2,201	0	0	560	33,935
Acquiring real estate	19,645	0	0	0	0	0	0	0	19,645
TOTAL	4,636,718	2,630,117	3,244,567	519,280	300,355	724,045	517,266	1,183,621	10,511,402

Note: These 8 countries are Argentina, Brazil, Chile, Colombia, Mexico, Peru, Puerto Rico, Venezuela.

(Percentage Share)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	2.7	2.1	2.4	2.0	2.8	2.2	2.2	2.7	2.5
Textiles	6.6	2.4	1.0	0.1	2.8	1.5	0.1	1.0	3.8
Lumber & Pulp	3.9	0.3	0.3	0.0	0.9	0.0	0.4	0.3	1.9
Chemicals	4.5	2.1	6.5	0.4	1.0	3.9	1.3	14.4	4.5
Iron, nonfer. metals	15.8	34.9	13.0	6.6	25.4	23.3	15.0	5.4	19.7
Machinery	5.4	4.0	2.2	0.3	1.6	2.3	3.0	2.6	4.0
Electric, Electronics	4.5	3.5	9.5	3.3	13.6	17.3	8.6	6.8	5.8
Transport equipment	7.2	16.9	15.5	38.8	4.3	7.5	3.6	18.1	12.2
Others	1.6	1.1	1.7	0.5	0.6	2.8	2.2	1.5	1.5
Manufacturing	52.2	67.2	51.9	52.1	53.1	60.9	36.3	52.7	55.9
Agriculture & Forestry	2.2	1.0	1.2	0.6	2.0	0.4	2.7	1.0	1.6
Fisheries	1.2	0.7	1.7	1.8	0.2	5.4	0.0	0.4	1.2
Mining	24.5	8.5	2.9	6.2	5.4	1.1	0.0	3.2	13.8
Construction	2.1	0.5	0.7	0.4	0.9	0.6	2.1	0.3	1.3
Commerce	6.0	9.9	6.3	1.7	4.5	2.0	21.0	4.9	7.0
Finance & Insurance	5.2	6.1	23.0	27.8	19.4	23.4	28.5	19.1	10.9
Services	0.7	3.0	4.6	4.9	4.1	5.8	6.9	2.8	2.5
Transportation	0.0	0.3	5.8	0.6	0.0	0.3	0.1	15.3	1.9
Real estate	0.0	0.5	1.3	0.0	9.5	0.1	2.3	0.1	0.5
Others	5.1	1.8	0.6	3.6	0.1	0.0	0.1	0.0	2.9
Non-manufacturing	47.1	32.2	48.0	47.6	46.2	39.1	63.7	47.2	43.6
Branch	0.3	0.6	0.1	0.3	0.7	0.0	0.0	0.0	0.3
Acquiring Real Estate	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1.0	100.0

Source: Ministry of Finance (on notification).

Table A-11. Japanese FDI by Industry (Africa 4 countries)

(US\$ thousand)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	80	210	0	0	0	0	0	0	290
Textiles	24,395	635	0	0	0	0	0	0	25,030
Lumber & Pulp	0	0	0	0	0	0	0	0	0
Chemicals	1,769	0	0	0	0	0	0	0	1,769
Iron, nonferr. metals	15,347	77,284	0	0	0	0	0	0	92,631
Machinery	0	61	0	0	0	0	0	0	61
Electric, Electronics	378	300	0	0	0	0	0	0	678
Transport equipment	6,419	0	0	0	0	0	0	0	6,419
Others	2,174	0	0	0	0	0	0	0	2,174
Manufacturing	50,562	78,490	0	0	0	0	0	0	129,052
Agriculture, etc.	0	0	0	0	0	0	0	0	0
Fisheries	9,150	1,051	0	0	0	0	0	0	10,201
Mining	378,745	57,913	0	0	0	0	0	0	436,658
Construction	858	135	0	0	0	0	0	0	993
Commerce	1,696	990	1,043	0	0	88	407	548	3,729
Finance & Insurance	699	244	34,478	556	18,922	0	15,000	0	35,421
Services	20,495	615,070	65,050	3,286	24,801	31,283	5,330	350	700,615
Transportation	0	1,023,478	2,209,074	285,007	223,125	547,219	622,997	530,726	3,232,552
Real estate	0	0	69,370	0	0	69,370	0	0	69,370
Others	769,782	25,220	150	150	0	0	0	0	795,152
Non-manufacturing	1,181,425	1,724,101	2,379,165	288,999	266,848	647,960	643,734	531,624	5,284,691
Branch	80	0	0	0	0	0	0	0	80
Acquiring real estate	970	0	0	0	0	0	0	0	970
TOTAL	1,233,037	1,802,591	2,379,165	288,999	266,848	647,960	643,734	531,624	5,414,793

Note: These 4 countries account for more than 93% of Japanese FDI for Africa, and the list is as follows: Liberia, Nigeria, Zaire, Zambia

(percentage share)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Textiles	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Lumber & Pulp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chemicals	0.1	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0
Iron, nonferr. metals	1.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Machinery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric, Electronics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transport equipment	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Others	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	4.1	4.4	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Agriculture, etc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fisheries	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Mining	30.7	3.2	0.0	0.0	0.0	0.0	0.0	0.0	8.1
Construction	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commerce	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Finance & Insurance	0.1	0.0	1.4	0.2	7.1	0.0	2.3	0.0	0.7
Services	1.7	34.1	2.7	1.1	9.3	4.8	0.8	0.1	12.9
Transportation	0.0	56.8	92.9	98.6	83.6	84.5	96.8	99.8	59.7
Real estate	0.0	0.0	2.9	0.0	0.0	10.7	0.0	0.0	1.3
Others	62.4	1.4	0.0	0.1	0.0	0.0	0.0	0.0	14.7
Non-manufacturing	95.8	95.6	100.0	100.0	100.0	100.0	100.0	100.0	97.6
Branch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acquiring real estate	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

Table A-12. Japanese FDI by Industry (Oceania 6 countries)

(US\$ thousand)

	1951-80	1981-85	1986-90	1996	1987	1988	1989	1990	SUM('51-90)
Food	43,263	14,610	233,292	783	8,109	44,191	64,609	115,600	291,165
Textiles	4,756	972	6,007	231	2,824	1,846	0	1,106	11,735
Lumber & Pulp	93,367	32,578	30,298	1,503	127	173	8,427	20,068	156,243
Chemicals	98,627	5,696	26,263	1,098	5,664	1,756	12,780	4,965	130,586
Iron, nonferr. metals	253,511	109,025	92,650	1,220	337	30,704	33,281	27,108	455,186
Machinery	22,454	14,850	43,163	4,150	11,645	1,248	15,721	10,399	80,477
Electric, Electronics	20,515	12,301	70,940	5,309	14,543	3,507	10,257	37,324	103,756
Transport equipment	220,510	26,643	700,334	127,223	238,375	146,649	26,791	161,296	947,487
Others	30,457	48,419	43,888	9,437	9,145	8,446	11,794	5,066	122,774
Manufacturing	787,470	265,104	1,246,835	150,954	290,769	238,520	183,660	382,932	2,293,409
Agriculture, etc.	66,277	36,976	228,088	5,259	61,403	47,088	35,070	79,248	331,321
Fisheries	36,910	6,651	15,193	2,150	5,270	907	4,768	2,098	58,754
Mining	915,384	436,035	1,593,883	193,140	56,766	156,379	486,928	702,670	2,947,302
Construction	8,450	16,671	42,397	7,676	13,063	13,751	2,631	5,276	67,518
Commerce	247,616	338,742	991,716	82,934	131,433	113,247	303,291	360,811	1,578,074
Finance & Insurance	62,222	277,766	1,414,405	91,821	207,646	369,819	544,747	200,372	1,754,393
Services	59,384	150,184	2,479,569	270,753	141,251	330,503	1,058,428	678,634	2,689,137
Transportation	0	14,299	151,508	51,759	6,429	28,840	39,639	24,641	165,607
Real estate	0	78,964	5,249,057	129,720	449,749	1,318,350	1,769,836	1,581,402	5,328,021
Others	312,783	81,348	129,657	4,561	15,941	0	107,660	1,495	523,788
Non-manufacturing	1,709,026	1,437,636	12,297,253	839,773	1,088,951	2,378,884	4,352,998	3,636,647	13,443,915
Branch	6,117	3,810	125,751	122	1,707	36,470	14,194	73,258	135,678
Acquiring real estate	6,983	0	0	0	0	0	0	0	6,983
TOTAL	2,509,596	1,706,550	13,669,839	990,849	1,381,427	2,653,874	4,550,852	4,092,837	17,885,985

Note: These 6 countries account for more than 99% of Japanese FDI for Oceania, and the list is as follows:
Australia, Fiji, Mariana Is., New Zealand, Papua New Guinea, Vanuatu.

(Percentage Share)

	1951-80	1981-85	1986-90	1996	1987	1988	1989	1990	SUM('51-90)
Food	1.7	0.9	1.7	0.1	0.6	1.7	1.4	2.8	1.6
Textiles	0.2	0.1	0.0	0.0	0.2	0.1	0.0	0.0	0.1
Lumber & Pulp	3.7	1.9	0.2	0.2	0.0	0.0	0.2	0.5	0.9
Chemicals	3.9	0.3	0.8	0.1	0.4	0.1	0.3	0.1	0.7
Iron, nonferr. metals	10.1	6.4	0.1	0.1	0.0	1.2	0.7	0.7	2.5
Machinery	0.9	0.9	0.1	0.4	0.8	0.0	0.3	0.3	0.4
Electric, Electronics	0.8	0.7	0.2	0.5	1.1	0.1	0.2	0.9	0.6
Transport equipment	8.8	1.6	0.4	12.8	17.3	5.5	0.6	3.9	5.3
Others	1.2	2.8	0.3	1.0	0.7	0.3	0.3	0.1	0.7
Manufacturing	31.4	15.5	9.1	15.2	21.0	9.0	4.0	9.4	12.9
Agriculture, etc.	2.6	2.2	1.7	0.5	4.4	1.8	0.8	1.9	1.9
Fisheries	1.5	0.4	0.1	0.2	0.4	0.0	0.1	0.1	0.3
Mining	36.5	25.6	11.7	19.5	4.1	5.9	10.7	17.2	16.5
Construction	0.3	1.0	0.3	0.8	0.9	0.5	0.1	0.1	0.4
Commerce	9.9	19.8	7.3	8.4	9.5	4.3	6.7	8.8	8.8
Finance & Insurance	2.5	16.3	10.3	9.3	15.0	13.9	12.0	13.3	9.8
Services	2.4	8.8	18.1	27.3	10.2	12.5	23.3	16.6	15.0
Transportation	0.0	0.8	1.1	5.2	0.5	1.1	0.9	0.6	0.9
Real estate	0.0	4.6	38.4	13.1	32.6	49.7	38.9	38.6	29.8
Others	12.5	4.8	0.9	0.5	1.2	0.0	2.4	0.0	2.9
Non-manufacturing	68.1	84.2	90.0	84.8	78.8	89.6	95.7	88.9	86.3
Branch	0.2	0.2	0.9	0.0	0.1	1.4	0.3	1.8	0.8
Acquiring real estate	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

Table A-13. Japanese FDI by Industry (Middle East 5 countries)

(US\$ thousand)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	0	0	0	0	0	0	0	0	0
Textiles	4,102	0	0	0	0	0	0	0	4,102
Lumber & Pulp	0	0	0	0	0	0	0	0	0
Chemicals	944,315	179,899	0	0	0	0	0	0	1,124,214
Iron, nonferr. metals	29,174	6,169	7,730	0	0	7,730	0	0	43,073
Machinery	10,216	581	232	232	0	0	0	0	11,029
Electric, Electronics	12,465	2,041	2,209	0	0	1,494	715	0	16,715
Transport equipment	2,539	570	0	0	0	0	0	0	3,109
Others	39,018	5,718	0	0	0	0	0	0	44,736
Manufacturing	1,041,829	194,978	10,171	232	0	9,224	715	0	1,246,978
Agriculture, etc.	1,385	409	0	0	0	0	0	0	1,994
Fisheries	1,342	0	0	0	0	0	0	0	1,342
Mining	38,995	151,827	207,606	0	7,547	194,221	5,838	0	398,428
Construction	10,357	27,304	0	0	0	0	0	0	37,661
Commerce	9,205	6,387	24,643	0	0	675	23,968	0	40,235
Finance & Insurance	22,821	65,655	32,195	1,530	416	30,000	249	0	120,671
Services	3,244	369	549	0	240	309	0	0	4,162
Transportation	0	2,380	0	0	0	0	0	0	2,380
Real estate	0	0	0	0	0	0	0	0	0
Others	73,195	13,451	0	0	0	0	0	0	86,646
Non-manufacturing	160,744	267,782	264,993	1,530	8,203	225,205	30,055	0	693,519
Branch	1,024,688	246,481	173,717	41,164	54,883	20,416	31,739	25,515	1,444,886
Acquiring real estate	2,350	0	0	0	0	0	0	0	2,350
TOTAL	2,229,611	709,241	448,881	42,926	63,086	254,845	62,509	25,515	3,387,733

Note: These 5 countries account for more than 99% of Japanese FDI for Middle East), and the list is as follows:
Bahrain, Iran, Kuwait, Saudi Arabia, U.A.E.

(Percentage Share)

	1951-80	1981-85	1986-90	1986	1987	1988	1989	1990	SUM('51-90)
Food	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Textiles	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Lumber & Pulp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chemicals	42.4	25.4	1.4	0.0	0.0	0.0	0.0	0.0	33.2
Iron, nonferr. metals	1.3	0.9	0.1	0.0	0.0	3.0	0.0	0.0	1.3
Machinery	0.5	0.1	0.5	0.5	0.0	0.0	0.0	0.0	0.3
Electric, Electronics	0.6	0.3	0.1	0.0	0.0	0.6	1.1	0.0	0.5
Transport equipment	0.1	0.1	1.3	0.0	0.0	0.0	0.0	0.0	0.1
Others	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Manufacturing	46.7	27.5	2.3	3.5	0.0	3.6	1.1	0.0	36.8
Agriculture, etc.	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Fisheries	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining	1.7	21.4	46.2	0.0	12.0	76.2	9.3	0.0	11.8
Construction	0.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Commerce	0.4	0.9	5.5	0.0	0.0	0.3	38.3	0.0	1.2
Finance & Insurance	1.0	9.3	7.2	3.6	0.7	11.8	0.4	0.0	3.6
Services	0.1	0.1	0.1	0.0	0.4	0.1	0.0	0.0	0.1
Transportation	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Real estate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	3.3	1.9	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Non-manufacturing	7.2	37.8	59.0	3.6	13.0	88.4	48.1	0.0	20.5
Branch	46.0	34.8	38.7	95.9	87.0	8.0	50.8	100.0	42.7
Acquiring real estate	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance (on notification).

BIBLIOGRAPHY

Froot, Kenneth A. [April 1990] Japan's Foreign Direct Investment, mimeo, Harvard University, MIT University, and NBER.

Horaguchi, H. [1992] Direct Foreign Investment of Japanese Firms: Investment and Disinvestment in Asia, Tokyo, University of Tokyo Press (in Japanese).

Horaguchi, H. and H. Kwak, [March 1993], mimeo, International Economics Department, World Bank, Washington, D.C.

Japan External Trade Organization (JETRO), [March 1993], JETRO White Paper on Foreign Direct Investment 1993, Tokyo.

Japan Institute for Overseas Investment (JOI), [May 1993], Foreign Direct Investment in East Asia: Trends and Outlook, Tokyo.

Japan Small Business Corporation [1990], Fade-out Cases of Overseas Medium and Small Size Firms (in Japanese)

Komiya, R. [1990], The Japanese Economy: Trade, Industry, and Government, Tokyo, University of Tokyo Press.

Komiya, R., Okuno, M. and Suzumura, K.(eds.) [1988], Industrial Policy of Japan, Tokyo, San Diego, California, Academic Press.

Ministry for International Trade and Industry (MITI), International Corporations Section [1983, 1986, 1988 and 1991], Basic Survey on Overseas Investment (in Japanese).

MITI [1991], White Paper on International Trade (in Japanese).

Rutter, J., [May 1993], "Recent Trends in Japanese Direct Investment Abroad: The End of an Era?", U.S. Department of Commerce, International Trade Administration, Trade Development.

Tejima, S, [1993], The Short-Term and Medium-Term Prospects of Japanese Foreign Direct Investment in the 1990s, Reflecting the Japanese FDI in the 1980s, Export-Import Bank, Tokyo.

Yamazawa, I. [1988], "The Textile Industry", in Komiya, Okuno and Suzumura (eds.).

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