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JAPAN'S RESPONSE TO GLOBALIZATION: THE CASE OF JAPANESE DIRECT INVESTMENT

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Abstract

Given the importance of WTO and ASEAN trade dependence, the objectives of this paper are: (i) to review the Uruguay Round (UR) commitments and achievements in the manufacturing sector for the ASEAN-5 - Indonesia, Philippines, Malaysia, Singapore, and Thailand; (ii) to assess the major challenges and opportunities facing the ASEAN-5 members of the WTO; and (iii) to consider WTO-consistent policy options that can be utilized to facilitate the restructuring of the manufacturing sector in the respective economies.

While Malaysia, the Philippines, Singapore and Thailand have committed to reduce their average trade-weighted MFN tariffs by 10.8 per cent, 7.1 per cent, 58.9 per cent and 28.0 per cent respectively, Indonesia chose to bind 94 per cent of its tariff lines. As of the year 2002, it was found that the ASEAN-5 are moving progressively towards fulfilling their respective Uruguay Round commitments at the country level. However, there is still a wide dispersion in the tariffs of these countries with the tariff peaks found in the automobile sector, except for the case of Singapore. Moreover, additional taxes or surcharges imposed on imported goods may off-set the reduction in tariffs in these countries.

The major challenges that are encountered by the ASEAN-5 are China's accession into the WTO in 2001, the future of industrial policy, and new negotiations and new issues. Hence in the short and medium-term, the ASEAN-5 will have to increase trade facilitation with China in order to increase their access in the Chinese markets. Each will also have to increase their research capacity and their ability to negotiate at the global level. At the same time, industrial targeting will be constrained and future industrial development will have to utilize policies that are sectorally-neutral.

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I INTRODUCTION

The global production activities of transnational corporations (TNCs) that is conducted via foreign direct investment (FDI) constitute one important dimension of economic globalization. This is demonstrated by the increasing degree of interdependence and integration between national economies due to the growth and spread of TNCs. The spread of TNC activity, in turn, has led to almost all regions in the world to be either home or host or home *and* host of TNC activity so that there are currently very few countries in the world that are untouched by TNC activity. The importance of the FDI that is undertaken by these TNCs is clearly shown by the higher rate of growth of FDI stock relative to the rate of growth of world output and exports from the 1980s to the 1990s. For example, during 1991-93, world FDI stock grew about twice as fast as worldwide exports of goods and services which, in turn, grew about one and-a half times faster than world gross domestic product (UNCTAD, 1995: 4).

Following these developments, a new global division of labor has emerged as Adam Smith's classical division of labor takes on geographical connotations on a global scale (Dicken, 1992:4). Thus workers are no longer specialized in terms of their participation in different parts of the production process alone but instead the entire production process is fragmented and dispersed across the globe slicing through national boundaries in increasingly complex ways. This has led to a growing intensity and extensity of trade flows as well as a pronounced shift in the pattern of trade stratification in the world.

Therefore the response of a country toward TNC activity and FDI represents a key component of a country's strategy toward harnessing globalization for its national development. In terms of both source and host countries, the "TRIAD", that is Japan, European Union (EU) and the United States, has long accounted for the bulk of international production in the world, providing and receiving most of the global FDI. Of the three, Japan is a relatively late starter in terms of its involvement in overseas direct investment as its transnational investment did not take off until the late 1960s due to internal restrictive policies and the relatively low domestic cost of production then (Dicken, 1992: 77).

Nevertheless, Japan's Direct Investment (JDI) grew very rapidly after that as shown by the increase in its share of world transnational investment from 0.7 per cent in 1960 to 11.7 per cent in 1985 (Dicken, 1992:77). This share increased further to a peak of 20.3 per cent in 1989 (UNCTAD, 1995:397). However, Japan's share dropped drastically during the 1990s due in part to the decline in its domestic economy during this decade. For example, it's share in world transnational investment declined further to 2.3 per cent in 1999 (UNCTAD, 2001:296). Despite this fall, JDI continues to be among the largest foreign direct investor in the manufacturing sector of the ASEAN economies for the 1990s (ASEAN Secretariat, 2000: 98-99, Table 4.2.1). At the same time, it should be noted that the number of Japanese TNCs that joined the world's largest 100 TNCs has actually increased from 12 in 1990 to 18 in 1999 while the network spread of Japanese TNCs, indicating the extent to which TNCs locate their activities in foreign countries, is ranked 8th in the world in 1999 (UNCTAD, 2001: 95 and 104).

In view of the above, this chapter proposes to examine the following issues: First, to analyze Malaysia's approach toward the globalization of production and FDI as well as its impact on the labor market in the country and the international division of labor. Second, to assess Japan's approach toward the globalization of production and investment flows as well as its impact on Japan's labor market and the international division of labor. Lastly, to assess whether the policies that have been utilized by Japan can be used or adapted for Malaysia in view of the rapid changes in technology and Malaysia's current bid to leapfrog the technology gap.

II MALAYSIA'S RESPONSE TOWARD THE GLOBALIZATION OF BUSINESS AND FDI

(i) Inflows

Historically, FDI in Malaysia was concentrated in mining and plantations in the colonial days. Post Independence in 1957, formal government promotion of modern manufacturing in Malaysia was started with the implementation of the import-

substitution (IS) strategy and an ensuing increase in tariff protection. Subsequently, foreign investment in Malaysian manufacturing nearly doubled in the second half of the 1960s in order to circumvent these tariff barriers.

The drive to industrialize led the manufacturing sector to be chosen as the engine for growth in Malaysia and the enactment of the Free Trade Zones in 1971 in order to tap FDI for the industrialization efforts in the country. The government's proactive stance toward FDI was also motivated by the need to reduce unemployment as well as to facilitate the shift from import-substitution to export-promotion. This move coincided with the globalization efforts of the electronics and textiles industries while the fiscal incentives provided by the government under the Investment Incentives Act (IIA), 1968 added to the attraction of Malaysia as a host economy.

The government's recognition of the importance of FDI in the industrialization process can be ascertained from the implementation of the New Economic Policy (NEP) targets in terms of Bumiputera[1] equity participation and employment for this sector. For example, although the Industrial Coordination Act (ICA)[2] was enacted in 1975 in order to ensure the achievement of the NEP targets in this sector, Rasiah (1993: 129) documented evidence on fully-owned foreign firms operating in the FTZs during the 1970s. On the other hand, the flexible implementation of the NEP targets in the manufacturing sector contrasted sharply with its stringent application in the domestic banking sector such that the foreign share in banking declined to less than half by the mid-1970s (Edwards, 1995: 690).

The recognition of FDI's important role in the industrialization process contributed to the government's favorable policy stance toward FDI in the industrial development of the country. In particular, the recession in 1985 and the launch of the First Industrial Master Plan (FIMP: 1986-95) further heightened the government's efforts to tap on FDI in order to deepen the industrialization process. Hence the government actively courted for FDI with the use of fiscal incentives and the

[1] Bumiputera means 'sons of the soil'.
[2] The ICA is essentially a licensing scheme whereby any manufacturing firm with an employment of 25 workers or more and a paid-up capital of at least RM250,000 had to apply for a license, and the issue of a license was subject to the fulfillment of the NEP equity and employment targets.

relaxation of equity restrictions[3] for the manufacturing sector. Similarly the importance of FDI is highlighted in the Second Industrial Master Plan (SIMP: 1996-2005) in the development of the internationally linked clusters which are primarily driven by TNCs (Malaysia, 1996:31). The government's subsequent willingness to remove all equity constraints and export conditions in the manufacturing sector in response to the fall in inflows of FDI in the face of the financial and economic crises of 1997/98, again clearly demonstrates the value of FDI in the eyes of the policy-makers. According to the Eighth Malaysia Plan (8MP, Malaysia, 2001:258), the existing waiver on the equity policy as well as export conditions will be extended to 2003.

Complementary measures in terms of institutional support were also implemented to attract FDI into the country. For example, a one-stop agency for processing investment approvals was established at the Malaysian Industrial Development Authority (MIDA) in 1988 in order to reduce the bureaucratic red-tape in investment approvals while regular trade and investment ministerial missions to sell Malaysia as a host economy are conducted by the Ministry of International Trade and Industry (MITI).[4]

Nevertheless fiscal incentives and the relaxation of equity requirements alone are insufficient to attract FDI into a country due to the intense competition for FDI from both developed and other developing countries, particularly after the mid-1980s when developing countries started to adopt a more favorable view toward FDI after the debt crisis in the early 1980s (United Nations, 1998: 1). Other pull factors that have contributed to the locational advantages of Malaysia as a host economy before the advent of the financial crisis in 1997 were the relatively stable political and macro-economic environment, good infrastructure conditions, relatively low wages, proficiency in English as well as the lack of a minimum wage law for the manufacturing sector (Tham, 1998a: 14).

[3] See for example the replacement of the IIA with the Promotion of Investment Act (PIA) of 1986 while there are export conditions for the relaxation of the equity restrictions.

[4] See Sieh (2000:77) for some anecdotal evidence on the use of trade and investment missions to provide a 'personal touch' for drawing foreign companies to invest in Malaysia.

Concurrently Malaysia also benefited from push factors such as the significant rise in the value of the yen and other East Asian Currencies after the Plaza Accord in 1985 that triggered out an outflow of Japanese direct investment in search of lower production costs. This outflow was followed by an outflow of investment from other East Asian economies in an effort to match the competitiveness of Japanese production abroad.

The combination of both conducive internal and external factors enabled Malaysia to become one of the 10 largest developing host economies for FDI inflows and stock in 1993 (Table 1). Although inflows of FDI continued to increase after that till 1996 (Table 2), there were signs of increasing erosion in the locational advantages of Malaysia with the emergence of infrastructural bottlenecks, the increasing shortage of labor, particularly skilled labor and the ensuing rising cost of wages and overall cost of production in the country (Tham, 1998a: 29). Consequently, Malaysia's share of the total FDI inflows into the developing countries declined from an average of 7.1 per cent between 1988-93 to 4.1 per cent in 1996 (Table 2).

The financial crisis in 1997 served to exacerbate this declining share as the economic contraction in the region reduced corporate profits and negatively affected the investment decisions of the TNCs that were affected by the crisis while the domestic economic slow-down and subsequent recession reduced investors' confidence in the region as a whole and also for Malaysia. Hence Malaysia's share fell further to 1.4 per cent in 1998 (Table 2). With economic recovery in 1999, FDI inflow into Malaysia has recovered in 1999 and 2000 but it stands at 48 per cent and 76 per cent respectively, of the FDI level in 1996.

Table 1. **The 10 largest developing economies host to FDI Inflows and Stock[a], 1993 (Millions of US $)**

Host economy	*Flows*	Host economy	*Stock*
All developing economies	73,351	All developing economies	500,896
Total, 10 largest developing host economies	58,009	Total, 10 largest developing host economies	336,997
Percentage share of the 10 largest developing host economies in total flows into developing economies	79	Percentage share of the 10 largest developing host economies in total flows into developing economies	67
China	27,515	China	57,172
Singapore	6,829	Singapore	50,802
Argentina	6,305	Argentina	44,146
Malaysia	5,206	Malaysia	41,912
Mexico	4,901	Mexico	40,371
Indonesia	2,004	Indonesia	26,936
Thailand	1,715	Thailand	22,463
Hong Kong, China	1,667	Hong Kong, China	21,701
Colombia	950	Colombia	17,669
Taiwan Province of China	917	Taiwan Province of China	13,824
Memorandum: Percentage share of the nine largest host economies, excluding China	42	Memorandum: Percentage share of the nine largest host economies, excluding China	56

Notes: [a] *Excluding tax havens.*

Source: UNCTAD, World Investment Report, 1995.

Table 2. **FDI inflows, by host region and economy, 1990 – 2001 (US$ million)**

Host region/economy	1990-1995 (Annual average)	1996	1997	1998	1999	2000	2001
World	**225,321**	**386,140**	**478,082**	**694,457**	**1,088,263**	**1,491,934**	**735,146**
Developed economies	**145,019**	**219,908**	**267,947**	**484,239**	**837,761**	**1,227,476**	**503,144**
Ireland	1,139	2,618	2,743	11,035	14,929	24,117	9,775
Developing economies	**74,288**	**152,685**	**191,022**	**187,611**	**225,140**	**237,894**	**204,801**
China	19,360	40,180	44,237	43,751	40,319	40,772	46,846
ASEAN	**16932**	**29370**	**30369**	**18504**	**19691**	**11056**	**13241**
Brunei Darussalam	102	654[c]	702[c]	573[c]	596[c]	600[c]	244[c, d]
Cambodia	80[b]	586	-15	230	214	179	113
Indonesia	2,135	6,194	4,677	-356	-2,745	-4,550	-3,277
Lao People's Democratic Republic	33	128	86	45	52	34	24[d]
Malaysia	4,655	7,296	6,324	2,714	3,895	3,788	554
Myanmar	180	310	387	314	253	255	123[d]
Philippines	1,028	1,520	1,249	1,752	578	1,241	1,792
Singapore	5,782	8,608	10,746	6,389	11,803	5,407	8,609
Thailand	1,990	2,271	3,626	5,143	3,561	2,813	3,759
Vietnam	947	1,803	2,587	1,700	1,484	1,289	1,300[a]

Notes:

a. Estimates.
b. Annual average from 1992 to 1995.
c. Balance-of-payments basis, based on the International Transaction Reporting System (ITRS).
d. Preliminary data.

Source: UNCTAD, World Investment Report 2002: Transnational Corporations and Export Competitiveness.

In terms of source countries, Table 3 shows the increasing importance of Japanese Direct Investment (JDI) over time for Malaysia, especially after 1991 when it became the single largest investor, overtaking Singapore's long-standing importance as an investor in the country. It should however be noted that the presence of Japanese investment in Malaysia is not a new phenomenon as Malaysia has welcomed Japanese investment since post-Independence. In fact, since the early 1970s, Malaysia has used trade and investment missions to woo Japanese investors to Malaysia (Denker, 1994: 47). The increase in Japanese investment after 1985 shows the significant impact on investment flows when conducive host country policies (pull factors) coincided with the strategies of Japanese companies in response to the changing economic environment in Japan (push factors).

Although data on companies in production are no longer available after 1998, data based on applications received, indicate Japan's importance as a foreign investor may have been reduced since the crisis while the United States of America is the largest source country from 1999-2000.

Sectorally, JDI in Malaysia was much more diversified in the mid-1980s but it became increasingly more concentrated in the electrical and electronic products over time (Tham, 2000: 9). For example, the share of JDI in the electrical and electronics sub-sector increased substantially from 14.9 per cent in 1986 to 56.8 per cent in 1998.

(ii) Outflows

Investment outflows or reverse investment gained prominence in the 1990s due again to the conducive interplay of both internal and external factors. Domestically, the robust economic performance from the second-half of the 1980s until the onset of the financial crisis in 1997 increased the income and profits of Malaysian firms thereby spurring them to venture abroad in search of strategic alliances (Tham, 1998b: 104). Ragayah (1999:485) found in her 7 case studies, the need to expand abroad and to find new markets to be the main motivational factors for the firms in her study to invest abroad. At the same time, rising labor costs as well as labor shortages in the country may have prompted some Malaysian firms to relocate their industries to labor surplus economies such Viet Nam and China. Investment abroad was also undertaken

in an attempt to acquire foreign technology. Externally the increasingly open door policies of these labor surplus economies enhanced their attraction as host economies.

Table 3. **Sources of Foreign Direct Investment for Companies in Production in Malaysia (%), 1986 - 1998**

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Asia - Pacific													
Australia	3.0	2.8	2.7	2.7	2.8	2.2	2.2	1.8	2.0	1.6	1.6	2.0	1.8
Canada	1.2	1.2	1.1	1.2	1.2	1.0	0.1	0.1	0.1	0.1	0.1	0.5	0.4
Hong Kong	5.9	5.2	4.7	4.5	4.8	4.0	3.8	2.5	4.2	3.4	3.1	2.2	2.2
Indonesia	0.7	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.4	0.4	0.4	1.4	1.3
Japan	20.1	19.7	21.1	25.7	25.9	32.3	35.5	33.7	34.6	32.0	32.7	33.9	33.2
South Korea	0.1	1.3	1.2	1.0	1.0	0.9	0.8	1.1	1.1	1.4	1.6	1.3	1.2
New Zealand	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.04	0.04	0.03	0.01	0.01
Philippines	0.6	0.5	0.5	0.6	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1
Singapore	29.2	28.9	30.5	30.3	28.7	24.1	22.0	21.2	21.0	19.1	17.7	15.7	14.8
Taiwan	0.5	0.5	1.1	1.3	2.0	6.9	8.5	9.3	9.5	15.0	15.2	14.7	12.3
Thailand	0.7	0.8	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3
USA	6.4	5.8	5.5	5.4	7.1	4.4	4.4	6.1	6.4	6.2	7.5	7.6	9.5
Western Europe													
Denmark	1.8	1.8	1.9	1.5	1.8	1.5	1.4	0.8	1.1	0.6	0.8	0.4	0.5
France	0.3	0.3	1.0	0.2	0.2	0.4	0.1	0.1	0.3	0.2	0.2	0.4	0.2
West Germany	2.7	2.5	2.6	3.0	3.5	2.7	2.4	2.8	2.6	2.4	2.8	2.9	3.1
Luxembourg	1.6	1.5	0.1	0.8	1.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	n.a.
Netherlands	2.6	3.1	3.3	3.4	2.5	3.2	2.8	4.5	3.6	3.4	3.9	3.6	6.7
Norway	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.05	0.04	0.1	0.1
Sweden	0.8	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	1.2	0.08	0.1	0.1
Switzerland	2.3	2.5	2.2	2.0	2.2	1.6	1.4	1.3	1.1	1.0	0.9	0.9	0.8
U.K.	15.5	16.2	13.3	11.6	10.0	9.3	8.9	7.0	6.1	5.7	4.6	4.0	2.9
Others	3.6	4.2	5.1	3.0	3.1	3.5	4.1	6.2	8.1	5.6	6.2	7.8	8.5

Note: n.a. : not available

Source: 1986-89: Ariff, M., 1992.
1990-98, Statistics on the Manufacturing Sector, MIDA, Various Years.

Concurrently, the government also actively encouraged reverse investment via the provision of various incentives such as 50 per cent tax reduction for remitted income earned from overseas investment. Apart form the fiscal incentives, just as in the case of inflows, the investment guarantee agreements and double taxation agreements concluded with various countries provided the legal framework for the security and protection of Malaysian investors overseas.

Unlike investment inflow, data on investment outflows are quite sparse. However, the Central Bank of Malaysia, which monitors the flow of investments, through its payments and receipts forms submitted its Balance of Payments Department, does publish some rudimentary data on Malaysian investment abroad as shown in Table 4. Based on this Table, it should be noted that outflows of investment are considerably smaller than inflows. For example, outflow for the year 2000 is only 9.7 per cent of the total inflow of investment approved for the same year. Nevertheless it has increased from a mere RM 318 million in 1980 to RM554 million in 1990 (Tham, 1998b: 114). This further increased significantly to RM1310.2 million in 1992. More importantly, direct investment in business activities jumped from 22.6 per cent to total Malaysian investment abroad in 1980 to 77 per cent in the first three quarters of 1994, thereby shifting away from the dominance of real estate acquisition in Malaysian investment abroad between 1980-85 (Tham, 1998b: 112).

Moreover despite the crisis, Malaysian investment continued to increase from RM6604.2 million in 1996 to more than double in 1999 (Table 4). Unfortunately it is not possible to see if the increase was due to direct equity investment, the purchase of real estate abroad or the extension of loans to non-residents abroad since there is no published data available on the categories of investment abroad since the crisis.

In terms of the host economies for Malaysian investment abroad, Singapore was the largest recipient between 1992-96 while after the crisis, the United States of America has emerged as the largest host economy between 2000-2001. However, the share of investment to other ASEAN economies has increased over time. Within ASEAN, apart from Singapore, Indonesia received an increasing share of Malaysian investment up to 1996. Although this share fell with the economic crisis in 1998, it

Table 4. **Gross Malaysian Investment Overseas in Selected Countries[1], 1992 – 2001**

Countries	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	RM million									
United States of America	93.9 (7.17)	627.6 (18.39)	445.3 (8.04)	478.0 (7.19)	1005.1 (15.22)	1334 (12.75)	1654 (14.23)	547 (4.02)	3930 (28.47)	3959 (31.59)
United Kingdom	63.0 (4.81)	372.2 (10.91)	436.9 (7.89)	439.8 (6.62)	595.1 (9.01)	1716 (16.40)	822 (7.07)	568 (4.17)	538 (3.90)	269 (2.15)
People's Republic of China	20.1 (1.53)	112.2 (3.29)	216.3 (3.91)	326.8 (4.92)	451.3 (6.83)	331 (3.16)	79 (0.68)	201 (1.48)	153 (1.11)	311 (2.48)
Australia	99.9 (7.62)	137.4 (4.03)	461.0 (8.33)	542.2 (8.16)	425.2 (6.44)	505 (4.83)	2748 (23.65)	105 (0.77)	72 (0.52)	303 (2.42)
New Zealand	51.0 (3.89)	9.4 (0.28)	98.6 (1.78)	41.2 (0.62)	30.1 (0.46)	N.A. (-)	N.A. (-)	N.A. (-)	N.A. (-)	N.A. (-)
ASEAN										
Indonesia	10.0 (0.76)	10.6 (0.31)	87.9 (1.59)	309.5 (4.66)	394.3 (5.97)	649 (6.20)	229 (1.97)	398 (2.92)	533 (3.86)	1682 (13.42)
Philippines	5.9 (0.45)	54.0 (1.58)	223.2 (4.03)	643.9 (9.69)	252.0 (3.82)	300 (2.87)	106 (0.91)	100 (0.73)	109 (0.79)	54 (0.43)
SINGAPORE	258.6 (19.74)	686.1 (20.11)	987.4 (17.83)	2063.8 (31.06)	1689.2 (25.58)	1783 (17.04)	2096 (18.04)	1635 (12.01)	2865 (20.75)	2072 (16.53)
Thailand	24.0 (1.83)	32.7 (0.96)	43.4 (0.78)	78.0 (1.17)	126.0 (1.91)	133 (1.27)	540 (4.65)	151 (1.11)	292 (2.12)	133 (1.06)
Vietnam	13.3 (1.02)	7.6 (0.22)	69.2 (1.25)	94.5 (1.42)	106.6 (1.61)	142 (1.36)	71 (0.61)	142 (1.04)	50 (0.36)	87 (0.69)
Cambodia	6.5 (0.50)	7.4 (0.22)	4.3 (0.08)	16.2 (0.24)	57.2 (0.87)	N.A. (-)	N.A. (-)	N.A. (-)	N.A. (-)	N.A. (-)
Myanmar	0.9 (0.07)	3.2 (0.09)	3.7 (0.07)	0.4 (0.01)	17.7 (0.27)	N.A. (-)	N.A. (-)	N.A. (-)	N.A. (-)	N.A. (-)
OTHERS	46.3 (3.53)	223.7 (6.56)	145.9 (2.64)	417.6 (6.29)	114.4 (1.73)	1721 (16.45)	2085 (17.94)	6303 (46.30)	3540 (25.64)	2170 (17.31)
TOTAL	1310.2 (100)	3412.4 (100)	5536.6 (100)	6643.7 (100)	6604.2 (100)	10463 (100)	11621 (100)	13613 (100)	13805 (100)	12534 (100)

Notes: Percentage of total shown in parenthesis.

[1]Refers to direct equity investment, purchase of real estate abroad and extension of loans to non-residents abroad. Includes capital invested or loans extended by the foreign-owned companies to their parent companies abroad. For the purpose of compiling balance of payments statistics, capital invested in parent companies abroad must be offset against the capital invested in Malaysia by the parent companies abroad. At present, the Cash BOP System is not able to segregate this type of transaction.

Source: 1992 – 1996: Ragayah; 1997 – 2001: Bank Negara Malaysia (2001)

Table 5. **Japanese Outward Direct Investment By Major Regions, 1990 – 2002 (in 100 Million Yen)**

Year / Region	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002*
North America	39,958 (47.84)	25,763 (45.31)	18,972 (42.81)	17,591 (42.37)	18,525 (43.27)	22,394 (45.18)	25,933 (47.94)	26,247 (39.63)	14,011 (26.86)	27,629 (37.14)	13,562 (25.26)	8,081 (20.43)	38.27 (18.39)
Latin America	5,289 (6.33)	4,547 (8.00)	3,525 (7.95)	3,889 (9.37)	5,499 (12.85)	3,741 (7.55)	5,008 (9.26)	7,775 (11.74)	8,274 (15.86)	8,295 (11.15)	5,783 (10.77)	9,583 (24.23)	2887 (13.87)
Asia	10,343 (12.38)	8,107 (14.26)	8,316 (18.77)	7,672 (18.48)	10,084 (23.56)	11,921 (24.05)	13,083 (24.19)	14,948 (22.57)	8,357 (16.02)	7,988 (10.74)	6,555 (12.21)	7,730 (19.55)	3171 (15.24)
Mid & Near East	39 (0.05)	123 (0.22)	896 (2.02)	251 (0.60)	303 (0.71)	148 (0.30)	268 (0.50)	578 (0.87)	187 (0.36)	126 (0.17)	21 (0.04)	25 (0.06)	17 (0.08)
Europe	20,975 (25.11)	12,832 (22.57)	9,176 (20.71)	9,204 (22.17)	6,525 (15.24)	8,281 (16.71)	8,305 (15.35)	13,749 (20.76)	17,937 (34.38)	28,782 (38.69)	26,974 (50.24)	13,228 (33.45)	9533 (45.81)
Africa	804 (0.96)	1,014 (1.78)	308 (0.70)	630 (1.52)	366 (0.85)	367 (0.74)	485 (0.90)	407 (0.61)	569 (1.09)	574 (0.77)	59 (0.11)	241 (0.61)	50 (0.24)
Oceania	6,119 (7.33)	4,476 (7.87)	3,119 (7.04)	2,275 (5.48)	1,507 (3.52)	2,716 (5.48)	1,011 (1.87)	2,525 (3.81)	2,833 (5.43)	997 (1.34)	737 (1.37)	660 (1.67)	1322 (6.35)
TOTAL	**83,527 (100)**	**56,862 (100)**	**44,313 (100)**	**41,514 (100)**	**42,808 (100)**	**49,568 (100)**	**54,094 (100)**	**66,229 (100)**	**52,169 (100)**	**74,390 (100)**	**53,690 (100)**	**39,548 (100)**	**20808 (100)**

Note: Percentage of total shown in parenthesis.
2002 : First Half of 2002*

Source: Ministry of Finance, Japan.
http://www.mof.go.jp/english/fdi/2002a_2.htm (Accessed on 20/02/2003)

flows due to the rise in the former and a concurrent fall in the latter (Tables 7 and 5). In terms of source countries, Europe and North America remain the largest investors in Japan between 1990-2001 (Table 7). However, in the first half of the year 2002, Latin America has emerged the second largest investor in Japan.

(iii) Impact on Japan's Labor Market and the International Division of Labor

By engaging in international production, Japan has at the same time affected the international division of labor as well as the production and utilization of labor within Japan itself. Here, it should be cautioned that there may be sectoral differences in the impact. Given the importance of the electrical and electronics sub-sector in the Malaysian economy and the predominance of JDI in this sector for Malaysia, this section will therefore focus mainly on the changes that are affecting this sub-sector.

At the level of the affiliates, the production operations in ASEAN-5[5] have shifted from mere assembly operations to engineering operations since the regional financial crisis in 1997 (Mitarai, 1999: 32). The surge of JDI in the region from the mid-1980s to the mid-1990s has made ASEAN an important center of production for the electronics industry. Mitarai (1999: 32) reported that by 1998, the output of electronics industry in ASEAN amounted to US$104.6 billion or 40 per cent of the domestic output in Japan and 11 per cent of world output. Thus while the crisis has reduced the importance of the region in terms of its internal demand, it nevertheless continues to be an important export platform for Japan. This is because relocating out of ASEAN can be costly as reversing technology decisions once they have been made can be expensive for the investor, in view of the substantial historical investment in the region (Ong-Giger, 1999: 163).

At the same time, the skill component of the human resource that they have helped to develop over the years of their investment in Southeast Asia constitutes a knowledge asset that may not be easily substituted. Moreover the weaker regional currencies actually boosted the export competitiveness of the region provided the import content of these exports are reduced. Hence the increase in local procurement and the need to enhance the value-added of the output of these affiliates in order to increase their cost competitiveness. As a result even though new investment

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leading the establishment of the Human Resource Development Fund (HRDF) in 1992 in an effort to promote training among the firms in Malaysia. The internationalization of the labor market also worsened the situation as it triggered an outflow of skilled and semi-skilled labor in pursuit of higher wages elsewhere.

Third, there was an increasing dependence on foreign labor before the crisis in 1997. The acute shortage of production workers, especially semi-skilled and unskilled, that was experienced between 1992-96 was filled by a phenomenal growth in foreign workers in the manufacturing sector. Tham and Liew (2002: 3) documented a rise in the percentage of legal foreign to total labor from a mere 1 per cent between 1981-83 to 2 per cent between 1984-91 but this percentage increased dramatically to 14 per cent by 1996. While the dependence on foreign workers was reduced during the financial / economic crisis of 1997/98 due to the contraction of the manufacturing sector, it has resurfaced with the recovery of the economy in 1999. Recent government efforts to address the problem appears to be more focussed on reducing the illegal component of foreign labor rather than a concerted effort to phase out the foreign unskilled and semi-skilled workers despite official rhetoric on the need to do so.

Fourth, despite the aspirations of Malaysia to move up the value-added chain in production as envisaged in the Second Industrial Master Plan, the shift from assembly-type operations to higher value-added activity within the regional production networks of TNCs is unfortunately not just determined by policies of the host-economy alone. The global as well as regional strategies of TNCs play equal if not more important roles in ascertaining the division of labor among the affiliates of TNCs. Given the increasing functional specialization of the affiliates of TNCs, the shift toward higher value-added activity in their operations in Malaysia will require this country to better its ASEAN neighbors as well as the Northeast Economies in order to attract the innovative capacity of the TNCs to this country. In this regard, the constraints in human resources in Malaysia, as explained above, continue to impede the progress of the country in moving up the value-added chain. Therefore, although there is some anecdotal evidence that suggests that some TNCs are such as INTEL has moved some of their innovative capacity to Malaysia, it would appear that by and

large, Malaysia has still along way to go toward improving in its position in the division of labor among the affiliates of TNCs.

III JAPANESE DIRECT INVESTMENT: RESPONDING TO THE RAPIDLY CHANGING EXTERNAL ENVIRONMENT

(i) Outflows

Japan's outward FDI grew rapidly in 1970-72 with growth slowing in 1972-82 and then accelerating again in 1982-89, due mainly to the boom in FDI between 1986-89 (Kojima, 1995: 99). Moreover there was a conspicuous shift in Japan's FDI to the developed economies between 1982-89, mainly in the service sector. For example in 1988, 76 per cent of Japanese Direct Investment (JDI) in Europe is in services while only 16 per cent is in manufacturing (Dicken, 1992: 78).

On the other hand, the focus in Asia has been on natural resources such as mining and manufacturing. In the case of manufacturing, the development of indigenous technology gave rise to ownership advantages for Japanese companies. According to Morris-Suzuki (1992: 139), Japan's adaptation of imported technology and the upgrading of indigenous techniques before the Second World War laid the foundations for the expansion of innovative activity in leading edge industries during the second half of the twentieth century. By 1960, Japan already had 86,000 scientific and technical researchers (or 93 per 100,000 population) and possessed an institutional basis for the large expansion of corporate research in the subsequent two decades of high growth. Japanese companies thus possessed firm-specific intangible assets, in the form of technology, that is used in the eclectic ownership, location and internalization (OLI) paradigm for explaining investment abroad in the form of FDI.

Apart from the technology advantage, the high rates of growth and savings between the late 1960s and the mid-1970s before the maturing of the Japanese economy also implied that Japan possessed the capacity to export capital in the form of FDI. Thus the progressive relaxation of investment constraints within Japan led to the first wave of JDI between the late 1960s till the mid 1970s.

Table 6. **Japanese Outward Direct Investment to ASEAN Countries & China, 1990-2002 (in 100 Million Yen)**

Year / Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002*
Brunei	- (-)	0 (0.00)	- (-)	- (-)	15 (0.04)	15 (0.03)	- (-)	- (-)	- (-)	2 (0.00)	- (-)	- (-)	n.a
Myanmar	1 (0.00)	0 (0.00)	- (-)	- (-)	1 (0.00)	22 (0.04)	11 (0.02)	5 (0.01)	3 (0.01)	11 (0.01)	11 (0.02)	- (-)	n.a
Cambodia	- (-)	- (-)	4 (0.01)	1 (0.00)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	n.a
Indonesia	1615 (1.93)	1628 (2.86)	2142 (4.83)	952 (2.29)	1808 (4.22)	1548 (3.12)	2720 (5.03)	3085 (4.66)	1378 (2.64)	1024 (1.38)	457 (0.85)	576 (1.46)	160 (0.77)
Malaysia	1067 (1.28)	1202 (2.11)	919 (2.07)	892 (2.15)	772 (1.80)	555 (1.12)	644 (1.19)	971 (1.47)	658 (1.26)	586 (0.79)	256 (0.48)	320 (0.81)	57 (0.27)
Philippines	383 (0.46)	277 (0.49)	210 (0.47)	236 (0.57)	683 (1.60)	692 (1.40)	630 (1.16)	642 (0.97)	485 (0.93)	688 (0.92)	506 (0.94)	946 (2.39)	130 (0.62)
Singapore	1232 (1.48)	837 (1.47)	875 (1.97)	735 (1.77)	1101 (2.57)	1143 (2.31)	1256 (2.32)	2238 (3.38)	815 (1.56)	1073 (1.44)	468 (0.87)	1223 (3.09)	355 (1.71)
Thailand	1696 (2.03)	1107 (1.95)	849 (1.92)	680 (1.64)	749 (1.75)	1196 (2.41)	1581 (2.92)	2291 (3.46)	1755 (3.36)	910 (1.22)	1029 (1.92)	1102 (2.79)	348 (1.67)
Vietnam	1 (0.00)	0 (0.00)	13 (0.03)	52 (0.13)	177 (0.41)	192 (0.39)	359 (0.66)	381 (0.58)	65 (0.12)	110 (0.15)	24 (0.04)	97 (0.25)	31 (1.67)
ASEAN Total	5995 (7.18)	5051 (8.88)	5012 (11.30)	3548 (8.55)	5306 (12.39)	5363 (10.82)	7201 (13.30)	9613 (14.53)	5159 (9.88)	4404 (5.91)	2751 (5.12)	4264 (10.79)	1081 (5.20)
China	511 (0.61)	787 (1.38)	1381 (3.12)	1954 (4.71)	2683 (6.27)	4319 (8.71)	2828 (5.23)	2438 (3.68)	1363 (2.61)	838 (1.13)	1099 (2.05)	1802 (4.56)	1132 (5.44)
World (total)	**83527 (100)**	**56862 (100)**	**44313 (100)**	**41514 (100)**	**42808 (100)**	**49568 (100)**	**54094 (100)**	**66229 (100)**	**52169 (100)**	**74390 (100)**	**53690 (100)**	**39548 (100)**	**20808 (100)**

Note: 1) Percentage of total shown in parenthesis.
2) No investment in Laos.
3) 2002 : First Half of the Year*
4) n.a : Not Available

Source: Ministry of Finance, Japan.
http://www.mof.go.jp/english/fdi/2002a_2.htm (Accessed on 24/02/2003)

earnings. The fall in corporate profits and investor confidence in the region led Japanese investment to plunge from 66,229 billion yen in 1997 to 52,169 billion yen in 1998 (Table 5). After recovering strongly to 74,390 billion yen in 1999, it fell again in 2000 and 2001 to 53,690 billion yen and 39,548 billion yen, respectively while for the first half of the year 2002, JDI amounted to 20,808 billion yen.

The crisis also affected the share of JDI in Asia as it fell from 22.6 per cent in 1997 to 16 per cent in 1998 (Table 5). Although this share subsequently recovered in 2000 and 2001, Asia's importance as a recipient of JDI fell to the fourth position in 2001 and the first half of the year 2002, after Europe, Latin America, and North America (Table 5).

(ii) ***Inflows***

Inflows of investment into Japan were restricted after the Second World War but these restrictions were subsequently removed in the early 1980s. Nevertheless, there is a significant imbalance between outflows and inflows of investment into Japan. In 1990, inflows amounted to 4,046 billion yen while outflows comprised of 83,527 billion yen or inflows were a mere 4.8 per cent of outflows (Tables 7 and 5).

Miki (1995: 4-6) attributed the high overall cost structure in Japan to be one of the main deterrents of market entry and expansion for foreign investors in the country. Other investment obstacle encountered by investors in Japan include the complicated distribution systems, burdensome regulations that inhibit the establishment of business facilities and hinder market access for foreign products and services as well as corporate practices and market rules that inhibit acquisitions of Japanese firms. As further evidence of the difficulty of local investment conditions in Japan, foreign participation in mergers and acquisition, which account for almost 80 per cent of the FDI among other OECD countries was virtually nonexistent in Japan before 1997. Thus in 1997, inflows was still a relatively small percentage of total outflows (10.2 per cent according to Tables 7 and 5).

Nonetheless there are some changes post-1997 as inflows doubled from 6,782 billion yen in 1997 to 13,404 billion yen due in part to the weaker yen (Table 7). Financial deregulation within Japan also contributed to this increase as Table 8 shows clearly an increasing concentration of inward investment in non-manufacturing activities, especially in the finance and insurance sub-sector since 1997. Thus in the year 2000, inward flows increased significantly to 58 per cent of outwards

Table 7. **Inward Direct Investment into Japan, By Major Regions, 1990 – 2002 (in 100 Million Yen)**

Year / Region	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002*
North America	1,177 (29.09)	2,843 (48.22)	1,837 (34.62)	1,262 (35.20)	1,981 (45.79)	1,786 (48.30)	2,445 (31.73)	1,521 (22.42)	8,095 (60.40)	4,173 (17.39)	10,777 (34.48)	6,922 (31.79)	2383 (37.57)
Latin America	146 (3.62)	142 (2.41)	981 (18.50)	173 (4.81)	136 (3.15)	141 (3.81)	656 (8.51)	591 (8.71)	343 (2.56)	2,895 (12.07)	1,680 (5.38)	648 (2.98)	1845 (29.09)
Asia	188 (4.66)	194 (3.29)	128 (2.41)	539 (15.03)	271 (6.26)	247 (6.69)	1,372 (17.80)	742 (10.94)	211 (1.57)	1,100 (4.58)	418 (1.34)	567 (2.60)	231 (3.64)
Mid & Near East	3 (0.07)	2 (0.03)	13 (0.24)	3 (0.09)	0 (0.01)	0 (0.01)	20 (0.25)	1 (0.01)	1 (0.01)	2 (0.01)	3 (0.01)	2 (0.01)	0 (n.a)
Europe	1,973 (48.76)	1,843 (31.27)	1,901 (35.82)	1,199 (33.44)	1,586 (36.65)	1,274 (34.46)	2,202 (28.57)	3,078 (45.39)	3,023 (22.56)	14,137 (58.92)	6,889 (22.05)	10,962 (50.33)	670 (10.56)
Africa	11 (0.26)	2 (0.03)	16 (0.31)	5 (0.14)	- (-)	10 (0.27)	- (-)	0 (0.00)	0 (0.00)	4 (0.02)	3 (0.01)	35 (0.16)	n.a (n.a)
Oceania	33 (0.82)	5 (0.09)	0 (0.01)	12 (0.32)	33 (0.76)	5 (0.15)	14 (0.18)	7 (0.10)	1 (0.01)	68 (0.28)	69 (0.22)	4 (0.02)	27 (0.43)
Japan	515 (12.74)	865 (14.68)	429 (8.09)	393 (10.97)	320 (7.39)	233 (6.30)	1,000 (12.97)	843 (12.43)	1,729 (12.90)	1,615 (6.73)	11,413 (36.52)	2,638 (12.11)	1186 (18.70)
TOTAL	4,046 (100)	5,896 (100)	5,306 (100)	3,586 (100)	4,327 (100)	3,697 (100)	7,707 (100)	6,782 (100)	13,404 (100)	23,993 (100)	31,251 (100)	21,779 (100)	6342 (100)

Note: Percentage of total shown in parenthesis.
2002 : First Half of the Year*
n.a : not available

Source: Ministry of Finance, Japan.
http://www.mof.go.jp/english/fdi/2002a_6.htm (Accessed on 24/02/2003)

Table 8. **Inward Direct Investment Into Japan, 1990-2002 (Industry – Total); in 100 Million Yen**

Year / Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002*
Food	43 (1.06)	171 (2.90)	12 (0.23)	104 (2.90)	32 (0.74)	41 (1.11)	3 (0.04)	22 (0.32)	258 (1.92)	15 (0.06)	0 (0.00)	352 (1.62)	1 (0.02)
Textile	26 (0.64)	13 (0.22)	7 (0.13)	7 (0.20)	1 (0.02)	23 (0.62)	9 (0.12)	19 (0.28)	36 (0.27)	2 (0.01)	24 (0.08)	28 (0.13)	13 (0.13)
Rubber & Leather	1 (0.02)	76 (1.29)	96 (1.81)	54 (1.51)	40 (0.92)	21 (0.57)	107 (1.39)	188 (2.77)	48 (0.36)	70 (0.29)	11 (0.04)	70 (0.32)	n.a (n.a)
Chemical	636 (15.72)	1,226 (20.79)	931 (17.55)	542 (15.11)	234 (5.41)	1,095 (29.62)	695 (9.02)	740 (10.91)	397 (2.96)	603 (2.51)	1,788 (5.72)	1,156 (5.31)	656 (10.34)
Metal	225 (5.56)	107 (1.81)	52 (0.98)	177 (4.94)	196 (4.53)	1 (0.03)	528 (6.85)	3 (0.04)	20 (0.15)	179 (0.75)	19 (0.06)	1 (0.00)	57 (0.90)
Machinery	1,164 (28.77)	595 (10.09)	829 (15.62)	781 (21.78)	1,339 (30.95)	182 (4.92)	1,558 (20.22)	1,452 (21.41)	2,129 (15.88)	8,652 (36.06)	3,519 (11.26)	1,385 (6.36)	1037 (16.35)
Petroleum	45 (1.11)	234 (3.97)	59 (1.11)	59 (1.65)	147 (3.40)	20 (0.54)	82 (1.06)	58 (0.86)	84 (0.63)	135 (0.56)	2,534 (8.11)	88 (0.40)	17 (0.27)
Glass & Ceramics	9 (0.22)	6 (0.10)	- (-)	5 (0.14)	18 (0.42)	0 (0.00)	0 (0.00)	7 (0.10)	- (-)	57 (0.24)	0 (0.00)	94 (0.43)	4 (0.06)
Others	134 (3.31)	149 (2.53)	94 (1.77)	108 (3.01)	48 (1.11)	29 (0.78)	129 (1.67)	185 (2.73)	153 (1.14)	85 (0.35)	12 (0.04)	105 (0.48)	421 (6.64)
Manufacturing Total	**2,283 (56.43)**	**2,577 (43.71)**	**2,081 (39.22)**	**1,836 (51.20)**	**2,054 (47.47)**	**1,412 (38.19)**	**3,111 (40.37)**	**2,674 (39.43)**	**3,126 (23.32)**	**9,797 (40.83)**	**7,907 (25.30)**	**3,280 (15.06)**	**2206 (34.78)**

.... Continued Table 8)

Year / Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Telecommunication	30 (0.74)	136 (2.31)	63 (1.19)	32 (0.89)	30 (0.69)	53 (1.43)	21 (0.27)	33 (0.49)	168 (1.25)	3,300 (13.75)	7,508 (24.02)	8,286 (38.05)	557 (8.78)
Construction	13 (0.32)	31 (0.53)	0 (0.00)	1 (0.03)	4 (0.09)	1 (0.03)	0 (0.00)	3 (0.04)	14 (0.10)	22 (0.09)	0 (0.00)	86 (0.39)	n.a (n.a)
Trading	1,065 (26.320	1,073 (18.20)	1,554 (29.29)	1,005 (28.03)	1,135 (26.23)	679 (18.37)	1,664 (21.59)	996 (14.69)	1,759 (13.12)	3,485 (14.53)	2,761 (8.83)	1,090 (5.00)	504 (7.94)
Finance & Insurance	159 (3.93)	1,203 (20.40)	190 (3.58)	40 (1.12)	687 (15.88)	1,001 (27.08)	273 (3.54)	1,616 (23.83)	4,569 (34.09)	5,115 (21.32)	10,293 (32.94)	6,608 (30.34)	2174 (34.28)
Service	384 (9.49)	737 (12.50)	1,067 (20.11)	240 (6.69)	374 (8.64)	491 (13.28)	2,360 (30.62)	888 (13.09)	3,181 (23.73)	2,058 (8.58)	2,365 (7.57)	1,664 (7.64)	655 (10.33)
Transportation	18 (0.44)	35 (0.59)	25 (0.47)	51 (1.42)	8 (0.18)	12 (0.32)	10 (0.13)	4 (0.06)	61 (0.46)	22 (0.09)	57 (0.18)	22 (0.10)	2 (0.03)
Real Estate	35 (0.87)	94 (1.59)	307 (5.79)	107 (2.98)	32 (0.74)	16 (0.43)	265 (3.44)	482 (7.11)	416 (3.10)	168 (0.70)	346 (1.11)	736 (3.38)	201 (3.17)
Others	59 (1.46)	11 (0.19)	18 (0.34)	274 (7.64)	3 (0.07)	32 (0.87)	2 (0.03)	87 (1.28)	111 (0.83)	25 (0.10)	13 (0.04)	7 (0.03)	42 (.066)
Non-Manufacturing Total	**1,763 (43.57)**	**3,319 (56.29)**	**3,225 (60.78)**	**1,750 (48.80)**	**2,273 (52.53)**	**2,284 (61.78)**	**4,595 (59.62)**	**4,108 (60.57)**	**10,278 (76.68)**	**14,196 (59.17)**	**23,344 (74.70)**	**18,499 (84.94)**	**4136 (65.21)**
TOTAL	**4,046 (100)**	**5,896 (100)**	**5,306 (100)**	**3,586 (100)**	**4,327 (100)**	**3,697 (100)**	**7,707 (100)**	**6,782 (100)**	**13,404 (100)**	**23,993 (100)**	**31,251 (100)**	**21,779 (100)**	**6342 (100)**

Note: Percentage of total shown in parenthesis.
2002 : First Half of the Year*
n.a : not available

Source: Ministry of Finance, Japan.
http://www.mof.go.jp/english/fdi/2002a_7.htm (Accessed on 24/02/2003)

flows due to the rise in the former and a concurrent fall in the latter (Tables 7 and 5). In terms of source countries, Europe and North America remain the largest investors in Japan between 1990-2001 (Table 7). However, in the first half of the year 2002, Latin America has emerged the second largest investor in Japan.

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At the same time, the skill component of the human resource that they have helped to develop over the years of their investment in Southeast Asia constitutes a knowledge asset that may not be easily substituted. Moreover the weaker regional currencies actually boosted the export competitiveness of the region provided the import content of these exports are reduced. Hence the increase in local procurement and the need to enhance the value-added of the output of these affiliates in order to increase their cost competitiveness. As a result even though new investment

[5] Singapore, Malaysia, Thailand, Indonesia and the Philippines.

may have fallen for the ASEAN region, re-investment and local procurement is expected to increase (Mitarai, 1999: 48).

Nevertheless, competition between the ASEAN economies will intensify as global competitiveness has forced Japanese companies to prioritize cost competitiveness over long established business links (Ong-Giger, 1999: 169). This can be seen by the increasing trend toward outsourcing and sub-contracting. Consequently, Japanese affiliates in the ASEAN-5 would have to compete against each other to win contracts from their parent companies. In other words, the vertically integrated structure that was observed in the past whereby the various divisions of large Japanese companies continue to supply to each other even when more cost-competitive suppliers could be found outside the group will no longer hold.

The arrival of the ASEAN-Free Trade Area (AFTA) in 2003 and the development of extra-ASEAN commitments as such as the ASEAN-China Free Trade Area will only serve to further exacerbate these competitive pressures on two counts. First the lowering of tariffs within ASEAN will lead to production being relocated from the place where the goods are consumed to the place where they can be produced most efficiently within the region. Second, scale economies dictate a reduction in the number of production sites. On the other hand, the enlarged AFTA market will also improve the region's importance in terms of demand so that exports will not necessarily be as dependent on the traditional American market as before.

Within Japan, the country went from full employment during the two decade of rapid growth in the 1970s and 1980s to increasing unemployment in the 1990s and the year after. As shown in Table 9, unemployment fell from 2.6 per cent in 1985 to 2.1 per cent in 1990 and this crept up to 5.0 per cent in 2001 and 5.4 per cent in 2002. The increasing unemployment after the 1980s can be attributed to the economic problems encountered within the country as well as the increasing "hollowing out' of the Japanese manufacturing sector. This can be seen by the decline in employment contributed by the manufacturing sector from the 1990s onwards as its share in total employment fell from 24.1 per cent in 1991 to 20 per cent in 2001 (Table 10).

The relocation of production abroad affected the production structure at home as Japan had to devise strategies in order to maintain the operation of Japan's domestic factories and employees. Faced with the options of either shifting the production in Japan to higher value-added items of the same production line or to other production lines or to shut down, Japanese companies have chosen

the first two strategies. Thus in the case of the electronics industry, Japanese factories in Japan have shifted to the production of higher value-added items such as wide-screen TVs, liquid crystal

Table 9. **Population in Japan, by Labor Force Status (in thousands)**

Year	Population aged 15 years and over	Labor Force			Not in labor force	Unemployment rate (%)
		Total	Employed	Unemployed		
TOTAL						
1985	94650 (100)	59630 (100)	58070 (100)	1560 (100)	34500 (100)	2.6
1990	100890 (100)	63840 (100)	62490 (100)	1340 (100)	36570 (100)	2.1
1995	105100 (100)	66660 (100)	64570 (100)	2100 (100)	38360 (100)	3.2
1998	107280 (100)	67930 (100)	65140 (100)	2790 (100)	39240 (100)	4.1
1999	107830 (100)	67790 (100)	64620 (100)	3170 (100)	39890 (100)	4.7
2000	108360 (100)	67660 (100)	64460 (100)	3200 (100)	40570 (100)	4.7
2001	108860 (100)	67520 (100)	64120 (100)	3400 (100)	41250 (100)	5.0
2002	109270 (100)	66890 (100)	6330 (100)	3590 (100)	42290 (100)	5.4

Notes: Percentage of total in parenthesis.

Source: Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications.
http://www.stat.go.jp/english/data/roudou/zuhyou/1542.xls (Accessed on 24/02/2003)

Table 10. **Employed Persons by Industry in Japan (in thousands)**

Industries/ Year*	1990	1995	1998	1999	2000	2001	2002
Total**	62490 (100)	64570 (100)	65140 (100)	64620 (100)	64460 (100)	64120 (100)	n.a (n.a)
Primary industry							
Agriculture and forestry	4110 (6.58)	3400 (5.27)	3160 (4.85)	3070 (4.75)	2970 (4.61)	2860 (4.46)	2680 (n.a)
Fisheries	400 (0.64)	270 (0.42)	260 (0.40)	280 (0.43)	290 (0.45)	270 (0.42)	280 (n.a)
Secondary industry							
Mining	60 (0.10)	60 (0.09)	60 (0.09)	60 (0.09)	50 (0.08)	50 (0.08)	50 (n.a)
Construction	5880 (9.41)	6630 (10.27)	6620 (10.16)	6570 (10.17)	6530 (10.13)	6320 (9.86)	6180 (n.a)
Manufacturing	15050 (24.08)	14560 (22.55)	13820 (21.22)	13450 (20.81)	13210 (20.49)	12840 (20.02)	12220 (n.a)
Tertiary industry							
Electricity, gas and water	300 (0.48)	420 (0.65)	370 (0.57)	380 (0.59)	340 (0.53)	340 (0.53)	340 (n.a)
Transport and communications	3750 (6.00)	4020 (6.23)	4050 (6.22)	4060 (6.28)	4140 (6.42)	4070 (6.35)	4010 (n.a)
Wholesale and retail trade, eating and drinking places	14150 (22.64)	14490 (22.44)	14830 (22.77)	14830 (22.95)	14740 (22.87)	14730 (22.97)	14380 (n.a)
Finance, insurance and real estate	2590 (4.14)	2620 (4.06)	2570 (3.95)	2510 (3.88)	2480 (3.85)	2400 (3.74)	2410 (n.a)
Services	13940 (22.31)	15660 (24.25)	16850 (25.87)	16860 (26.09)	17180 (26.65)	17680 (27.57)	18040 (n.a)
Government	1950 (3.12)	2180 (3.38)	2170 (3.33)	2140 (3.31)	2140 (3.32)	2110 (3.29)	2170 (n.a)

Note: Percentage of total shown in parenthesis.
Year : End of the month or average during year*
*Total** : not reported.*
n.a : not available
Source: Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications.
http://www.stat.go.jp/english/data/geppou/zuhyou/c02.xls (Accessed on 24/02/2003)

displays, higher performance VCRs (Takayasu and Ishizaki, 1995: 13). In this way, Japan has been "forced" to upgrade the technological skills of its workers.

The increasing competitive global environment has forced Japan to enhance both its price as well as technological competitiveness. While efforts to improve price competitiveness has resulted in the improvement of local sourcing and increase in production capacity at the level of its affiliates, improving Japan's technological competitiveness called for increasing the technological advantage of Japan by developing next generation technologies. This, in turn, has changed the demand and composition of employment in the country. Consequently Table 11 shows an increasing number of persons employed in the professional and technical category and a corresponding fall in the number employed for craftsmen and production process workers. This shift has also created a mismatch between demand and supply as the older workers who have lost their jobs in the old economy may not meet the age and skills requirements of the new jobs created from the need to enhance the technological advantage of Japan.

IV LEARNING FROM THE JAPAN'S RESPONSE

The sections above show clearly that while inflows are significantly more important than outflows for Malaysia, the converse is true for Japan. This disparate response toward the two key components of globalization, that is the globalization of production and capital flows in the form of FDI can be attributed to the different approaches taken toward technology and human capital development in Malaysia and Japan.

As Malaysia has a relatively high savings rate, the need for foreign capital is not primarily driven by a shortage of capital in the country but rather by the need for foreign technology. On the other hand, the development of technology within Japan enabled Japan to develop firm-specific ownership advantages that have contributed to the outward push of investment flows from Japan. While Japan also utilized imported technology to develop its technology advantage, it also simultaneously developed its own indigenous technology (Morris-Suzuki, 1992: 139). But in the case of Malaysia, the development of technology has been driven by the purchase of technology through technology agreements and technology spill-overs from the TNCs operating in the country as well as the public sector research in the agricultural sector, especially in rubber and palm oil.

While the broad conclusion of the various studies that have been conducted on the state of technology transfer in Malaysia indicate that TNCs in Malaysia have contributed significantly to the

Table 11. **Employed Persons by Occupation in Japan (in thousands)**

Occupation	**1990**	**1995**	**1998**	**1999**	**2000**	**2001**	**2002**
Total	**62490 (100)**	**64570 (100)**	**65140 (100)**	**64620 (100)**	**64460 (100)**	**64120 (100)**	**63300 (100)**
Professional and technical workers	6900 (11.04)	7900 (12.23)	8440 (12.96)	8460 (13.09)	8560 (13.28)	8730 (13.62)	8900 (14.06)
Administrative and managerial workers	2390 (3.82)	2360 (3.65)	2220 (3.41)	2150 (3.33)	2060 (3.20)	2020 (3.15)	1870 (2.95)
Clerical and related workers	11570 (18.51)	12520 (19.39)	12900 (19.80)	12730 (19.70)	12850 (19.93)	12490 (19.48)	12280 (19.40)
Sales workers	9400 (15.04)	9450 (14.64)	9280 (14.25)	9210 (14.25)	9110 (14.13)	9680 (15.10)	9340 (14.76)
Protective service and other service workers	5350 (8.56)	6100 (9.45)	6540 (10.04)	6680 (10.34)	6770 (10.50)	6930 (10.81)	7170 (11.33)
Agricultural, forestry and fishery workers	4480 (7.17)	3630 (5.62)	3400 (5.22)	3320 (5.14)	3210 (4.98)	3090 (4.82)	2910 (4.60)
Transport and communications workers	2330 (3.73)	2370 (3.67)	2320 (3.56)	2280 (3.53)	2210 (3.43)	2140 (3.34)	2110 (3.33)
Craftsmen and production process workers	17020 (27.24)	16870 (26.13)	16340 (25.08)	16040 (24.82)	15800 (24.51)	15060 (23.49)	14680 (23.19)
Laborers	2740 (4.38)	3100 (4.80)	3330 (5.11)	3340 (5.17)	3470 (5.38)	3530 (5.51)	3490 (5.51)

Note: Percentage of total shown in parenthesis

Source: Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications.
http://www.stat.go.jp/english/data/geppou/zuhyou/c03.xls (Accessed on 24/02/2003)

improvement in local production capabilities, they have yet to establish their research and development (R&D) base in this country (Ragayah and Tham, 2002: 6). Neither have they facilitated the establishment of independent product technology due, in part, to the self-interest of parent companies that dictate the shape and pace of the R&D in their subsidiary firms abroad.

Although there is some anecdotal evidence of successful technological independence for domestically-owned firms, they are by and large as yet unwilling or incapable of investing in efforts that will enhance their technology. This may be due to their relatively smaller size as these companies are usually small and medium enterprises while the profile of R&D expenditure of the survey respondents in the National Survey of Research and Development, have indicated that there is a positive correlation between sales revenue and employment size with the R&D expenditures of the companies.

Thus even though gross expenditure on R&D has reportedly increased from 0.3 per cent of the Gross Domestic Product (GDP) in 1996 to 0.62 per cent in 1998, Malaysia is still very far off from developing its own indigenous technology and this hampers investment abroad, especially in the case of China where the rapid rate of imitation in that country has shortened the product cycle tremendously. Therefore, investment outflows can only be further encouraged when there is a strong indigenous technology base in the source country.

Japan's investment outflow was also hastened by the shortage of blue-collar workers and the rising cost of production within the country. Although Malaysia has experienced the same problem since the beginning of the 1990s, Malaysia's strategy of importing cheap foreign labor, especially unskilled and semi-skilled workers, stands in stark contrast to Japan's strategy of exporting their factories to the low-cost producing countries in its efforts to improve cost competitiveness. Importing cheap foreign labor has perpetuated the position of Malaysia as a production-site for labor-intensive industries despite the loss in comparative advantage in the country in these industries. This can be seen in the report of JACTIM Trade and Investment Committee in 1997 as well as the speech given by the Chairman of the same committee in 2002 (JACTIM, 1997: 6 and Nishida, S., 2002: 5). In the case of the former, it concluded that "foreign worker who tend to have low "job-hopping" rate constitute a vital force for the Japanese-owned companies in conducting stable production activities." This conclusion was more or less reiterated in the latter's speech and both requested for a more liberal Malaysian policy toward foreign workers as it would enable Malaysia to compete on the basis

of lower wages. Such a policy will also continue to keep Malaysia at the assembly-end of production in the global production networks of TNCs.

However, if Malaysia should follow Japan's strategy of exporting factories but without a technology advantage, it will inevitably lead to the death of the manufacturing sector as there is no R&D to sustain manufacturing activities in the country unlike Japan. The focus on manufacturing development has led to a certain extent the benign neglect in developing the service sector in this country. For example, trade and investment promotion in Malaysia as well as MIDA'a activities have focussed mainly on the manufacturing sector and the service sector, with the exception of the information, communication and technology (ICT) sub-sector, has only received the attention of MITI and MIDA in the last 2 years.

Similarly, Japan's service sector development has also been lacking behind the development of its export-oriented manufacturing activities. The McKinsey Report (2000: 1-2) noted that 90 per cent of economic activity in Japan is conducted by companies that do not export products but instead provides domestic manufacturing and services. Unfortunately, the productivity of this segment of the Japanese economy stands at only 63 per cent of the US levels.

Thus in order to achieve the goal of moving up the value-added chain in manufacturing, Malaysia will have to boost its technology competency significantly and export the assembly-end operations to other low-cost producers. This follows Japan's strategy toward achieving both price and technology competitiveness by utilizing global production networks as well as investment flows in its competitive export-oriented manufacturing activities.

At the same time, an important lesson from Japan's skewed development of its export-oriented manufacturing activities and its domestic-oriented manufacturing and service activities is the need for a balanced approach toward development. Hence Malaysia needs to refocus its development goals beyond manufacturing activities and instead increase its efforts to enhance the development of the service sector in the country. In this matter, Malaysia can also learn from Japan's recent liberalization of its non-manufacturing activities for inward investment by accelerating the shift toward tapping FDI for the development of the service sector in the country.

V CONCLUSION

While both Malaysia and Japan has tapped on the globalization of production and investment flows in their development, the two countries differed significantly in their response. Malaysia utilized investment inflows in the hope of acquiring the appropriate technology that is necessary for furthering its industrial development. In so doing, Malaysia became part of the global production networks of TNCs, especially in the electrical and electronics sub-sector. However, the lack of an indigenous technology base and the utilization of foreign workers have limited its progress up the technology ladder and its position in the TNCs global production networks.

In contrast, the export of capital from Japan is supported by its indigenous technology development. The establishment of global production networks by Japanese TNCs was motivated by the need to maintain cost competitiveness by relocating its production facilities at lower-cost economies. Within Japan, global competitive pressures have also accelerated the development of new products and new technologies in order to preserve the technology advantage of the Japanese TNCs.

Therefore Malaysia has to first develop its own indigenous base if Malaysia aspires to follow Japan's example in capital exports. Without this technology advantage, the export of factories as in the case of Japan, will lead to the "hollowing-out" of the manufacturing sector in Malaysia as there will be no longer any advantage to continue production in this country in view of its current shortage of skilled labor and scientific and technical personnel. This can be seen in the declining importance of manufacturing in Japan as production is relocated abroad while only the core R&D developments are kept in the country.

Concurrently, its is also equally important to learn from Japan's biased focus on export-oriented manufacturing activities and its recent liberalization of inward investment in non-manufacturing activities by refocusing development goals in Malaysia beyond manufacturing activities. Thus there needs to be a concerted effort to develop the service sector in this country and a greater effort to tap FDI for the development of world-class competitive services.

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