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**East Asia's Intra- and Inter-Regional
Economic Relations; Data Analyses on Trade,
Direct Investments and Currency Transactions**

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East Asia's Intra- and Inter-Regional Economic Relations; Data Analyses on Trade, Direct Investments and Currency Transactions

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INTRODUCTION

The currency crisis in the 1997 diversified views on Asian economies. In one view, the ever-expanding image of Asian economies faded away, resulting in a view that Asia could never regain the power to achieve sustainable strong economic growth. In another view, Asia is still believed to continue its high growth rate with strong exports after relatively short adjustment phase. When discussing the future of East Asian economies¹, it is very important to capture the whole image of economic relations with other economic regions as well as its interaction within the region. However, some key statistics, which are available in advanced countries, are not always available in Asian economies. Analyses on trade and direct investment between Asia and advanced countries occasionally depend on the statistics compiled by advanced countries. Also, due to the lack of statistical data, analysis of intra-regional economic activities is not so easy. In this paper, we tried to show the current situation and dynamic change of Asian economies quantitatively through analyses of statistical data from various kinds of sources.

OVERVIEW

Given the fact that economic growth in East Asia has progressed with considerable dependence on exports, we first look at the region's relationship with foreign economies with respect to trade, especially for information technology (IT)-related goods. As direct investments are considered to be closely connected with trade, we also gather data that cover changes in the intra/inter-regional flow of direct investments. In addition, we extend to some statistics to provide data on the usage of currency transactions in East Asia.

¹ In this paper, East Asia comprises nine countries and regions: NIEs (South Korea, Taiwan, Singapore and Hong Kong), four ASEAN countries (Thailand, Malaysia, Indonesia and the Philippines <herein after called "ASEAN 4">) and China.

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1. Intra/Inter-Regional Trade Linkage

(1) Increase in East Asia's dependence on trade and changes in inter-regional trade relationships with advanced countries

Since the 1980s, in East Asia, imports of intermediate and capital goods have increased as a result of export-driven strong economic growth, allowing East Asia's trade between the US, Europe or Japan to expand. This has led to a significant increase in East Asia's share of global trade and a further increase in dependence on trade i.e. ratio of imports/exports to nominal GDP, especially for both the ASEAN 4 and China.

Concerning trade with advanced countries, there has been little change – the US remains to be the largest importer for East Asia, and Japan remains to be the largest exporter. Changes since the 1980s are evidenced by a decrease in direct trade between the US and Japan, while a closer trading relationship between Japan and the US, via East Asia were also observed.

(2) East Asia plays a central role in the global trade of IT (Information Technology)-related goods

East Asia's share of the international trade of IT-related goods is increasing sharply. In the past few years, it has exceeded that of the US and become the world's largest supply center for IT-related goods in its trade share. Thus, expanded trade in IT-related goods has greatly contributed to deepening relationships between East Asia and markets outside the region.

The largest importer of IT-related goods is the US. The story began with the considerable increase of the US direct investments in NIEs for IT-related goods at the early 1990s. The US then proceeded to increase its production of IT-related goods in East Asia, including the ASEAN 4.

After the currency crisis, increased exports, primarily of IT-related goods, have supported the recovery of the East Asian economy, indicating that trade in IT-related goods has become even more important to East Asia. It is also true that, the increase in East Asia's dependence on exports, IT-related goods in particular, means that the region has become more susceptible to fluctuations in the world economy.

(3) Intra-regional trade expansion in East Asia; diversified IT-related goods production in East Asia

Together with the expansion of inter-regional trade with advanced economies, intra-regional trade in East Asia is also expanding rapidly. The size of intra-regional trade in East Asia, ratio to nominal GNP, has increased to exceed even that of the regions where regional trade integration has taken place, including NAFTA and the euro area.

Diversification of IT-related goods production within the region has contributed immensely to activate intra-regional trade. The proportion of IT-related goods exports to total exports has sharply risen not only vis-à-vis inter-regional markets but also among regional countries. In particular, IT trade between NIEs and the ASEAN 4, between NIEs and China/Hong Kong is increasing conspicuously.

2. Flow of Direct Investments in East Asia

(1) Direct investments contributed to capital flow stability into East Asia

The means of capital investments into East Asia before the currency crisis were mainly bank loans and securities investments from advanced countries. These investments lacked stability, evidenced by their rapid inflow and abrupt outflow. In contrast, direct investments have remained relatively stable, even during the currency crisis, thus partially contributing to the stabilization of capital flows in East Asia.

(2) Most of direct investments still come from outside the region

Concerning direct investments in the region, investment from countries outside the region generally outweighs investment from countries within the region. East Asian countries differ in their dependence on direct investments. Specifically, NIEs and the ASEAN 4 are more dependent on inter-regional investments, while China is highly dependent on intra-regional investments. NIEs have received direct investments from countries outside the region, but at the same time actively made direct investments in China. This is one of the reasons for China's dependency on direct intra-regional investments. NIEs are highly dependent on the US investments in IT-related products and finance & insurance while the ASEAN 4 depend on Japan and European countries.

With respect to inter-regional relationship, there is little difference in the direct investment shares of Japan, the US and European countries in the East Asian region. Thus, there is no sign that the region has particularly deepened relationships with any specific region.

(3) Intra-regional direct investments in East Asia are mainly from NIEs to China and the ASEAN 4

Intra-regional direct investments from NIEs to China and the ASEAN 4 are increasing significantly. As the background to the increase, NIEs have been relocating and expanding production centers, particularly for IT-related goods. The increase in intra-regional direct investments from NIEs is closely associated with the expanded share of East Asia in the global trade of IT-related goods, as well as the increase in intra-regional trade, primarily for IT-related goods.

3. Currency transactions in East Asia

If economic relationships continue to deepen in East Asia, for example if the increased intra-regional trade and direct investments continue to rise in the region, it is

probable that the share of the currencies used for settlement within the region may change. Before the currency crisis, because there was no key currency in the region, US dollar was used in settlement for not only trade and capital transactions with external markets but also for intra-regional transactions under a dollar peg system.

After the currency crisis, there was a regime shift to floating exchange rates. However, due to the US dollar being practically established as the key settlement currency in East Asia and the high proportion of transactions with external markets being settled in the dollars, little change in the environment regarding the currency for settlement is observed.

4. Relationships between Japan and East Asia

From Japan's point of view, the linkage with East Asia appears to be deepening in terms of trade and direct investments. Yet, from East Asia's point of view, linkage with external regions in terms of trade and direct investments have actually deepened not only with Japan but also with other areas including the US and European countries. Thus, relationship with Japan is not regarded as having become closer compared to those with other countries, while relationship with the US has become deeper especially in IT-related goods trade. There is hardly a change in the dollar's position as the dominant currency for settlement.

In the process of pursuing its role as an international supply center for IT-related goods, East Asia has strengthened its relationship with external markets in terms of both trade and direct investments. As a consequence, the relationship between Japan and East Asia can be regarded as having grown closer as well.

1. Trade Linkages within East Asia and with External Markets

(1) Increase in East Asia's dependence on trade and changes in trade relationships with external advanced countries

(Table1) World Trade Share by Region

(share of world trade value, %)

	Exports		Imports	
	85-87	95-98	85-87	95-98
World	100	100	100	100
US	11	13	18	15
Euro area	33	29	32	28
Japan	10	9	6	6
East Asia	10	17	10	18
NIEs (excluding Hong Kong)	5	6	4	7
ASEAN 4	2	4	2	4
China+Hong Kong	3	6	4	6
Latin America	5	5	4	6
Mercosur	2	1	1	2

Source: IMF Direction of Trade Statistics

Note: Mercosur comprises Brazil, Argentina, Uruguay and Paraguay.

Comparing the structure of global trade by region in 1985-87 with that in 1995-98, it is clear that East Asia's share of international exports/imports has significantly expanded. According to shares by region in terms of total international exports/imports (see Table 1, as for the euro area, East Asia, South and Central America; intra-regional exports/imports included), the share of the euro area, where intra-regional trade integration took place, has retained its highest level for both exports and imports. However, while shares of advanced areas such as the US, Japan and the euro area stopped rising or in some cases even dropped, East Asia's share of both exports and imports has increased considerably and exceeded that of the US. This indicates the significant expansion of East Asia's trade inside/outside the region, which

is consistent with the fact that the region achieved export oriented economic growth and that imports of intermediate goods and capital goods has increased remarkably, with the expansion of exports. Furthermore, within East Asia, it is also clear that exports/imports shares are rising in every area, i.e. NIEs (Korea, Taiwan and Singapore), the ASEAN4 (Thailand, Malaysia, Indonesia and the Philippines), China and Hong Kong².

² In this paper, China and Hong Kong are counted as one country in the analysis of trade in East Asia. Since Hong Kong has played an important role as a trade relay center for China since early times, we consider it appropriate to regard China and Hong Kong as one region even before the return of Hong Kong to China. For instance, trade statistics for 1999 show more than 80% of exports from Hong Kong as re-exports, and the portion of such re-exports relayed from China accounts for more than 50% of all exports.

Ratio of Re-exports from China to Exports from Hong Kong

Hong Kong dollars; percentage shares shown in parentheses.

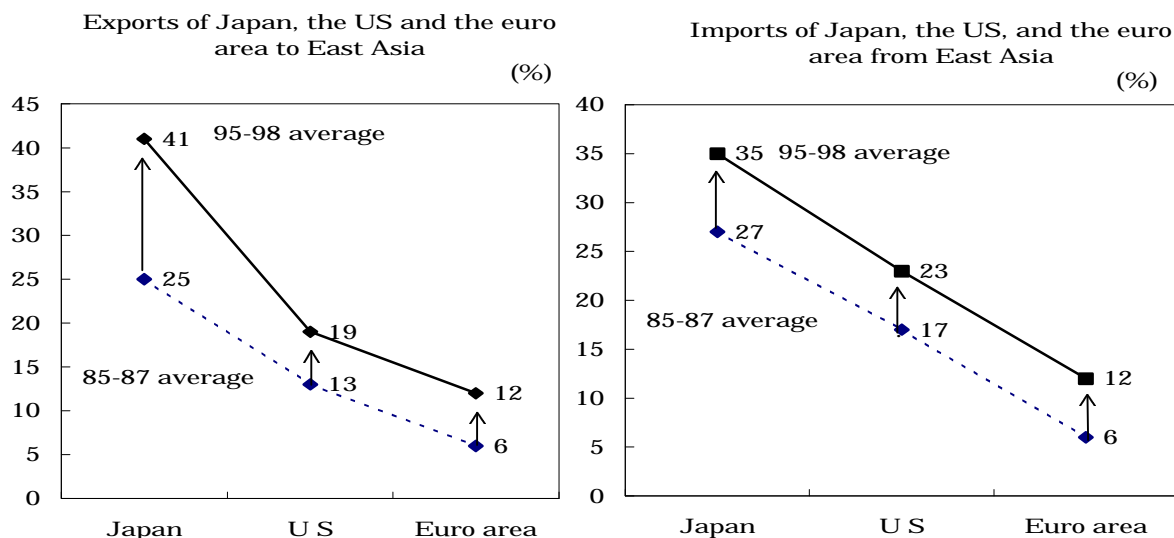
Total exports from Hong Kong	Exports from Hong Kong	Re-exports from Hong Kong	
			Re-exports relayed from China
1,728	242	1,486	886
(100)	(13)	(86)	(51)

Source: Hong Kong Monthly Digest of Statistics

Note: Singapore is also a relay center for the exports/imports of ASEAN countries. However, in this paper, we classified Singapore separately because local exports from Singapore account for approximately 50% or more of the total exports, which is much larger than those for Hong Kong.

[Changes in trade between areas in East Asia]

(Chart1) East Asia's share in advanced countries trade



Source: IMF' Direction of Trade Statistics

Note: For details of East Asian countries' shares of world trade, see Appendix 1.

East Asia's position as an exporter/importer has expanded in Japan, the US and European countries (see Chart 1). In particular, the increase in exports from Japan to East Asia in 1995-98 is remarkable, reversing the position of the US as the top importer of Japanese exports in 1985-87 (At the same time, Japan's imports from East Asia have also increased significantly). For these reasons, Japan's trading relationship with East Asia have been intensified, resulting in a closer relationship between Japan and East Asia.

[East Asian economy is more dependent on trade]
(Table2) Relative Size of Trade to GDP

Exports (Imports) value / nominal GDP, %

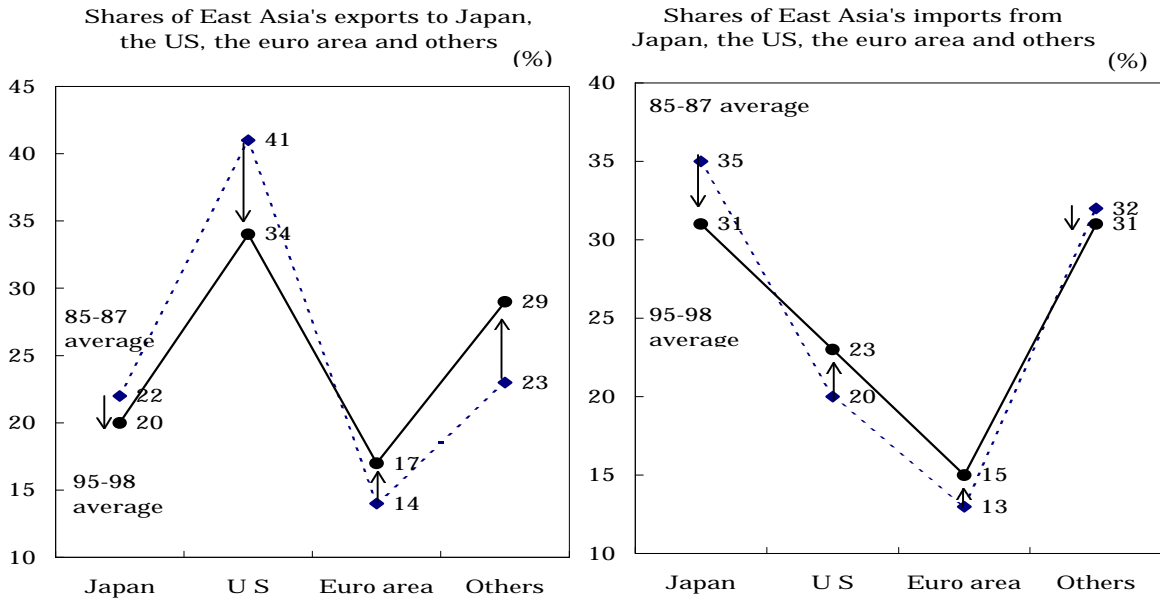
	Exports		Imports	
	85-87 average	95-98 average	85-87 average	95-98 average
Japan	11.4	9.5	7.1	7.0
US	5.6	9.8	9.1	11.5
Euro area	12.0	11.4	11.5	11.1
East Asia	22.8	25.1	21.6	27.2
NIEs (excluding Hong Kong)	44.5	38.8	40.5	42.9
ASEAN 4	27.2	39.2	20.1	38.0
China+Hong Kong	15.0	25.9	19.1	28.3
Latin America	12.8	12.1	8.3	13.9
Mercosur	9.6	6.2	5.2	6.7

Source: IMF, Direction of Trade Statistics

Although East Asia's dependence on trade (ratio of imports/exports to nominal GDP, excluding intra-regional trade) in 1985-87 was already more than twice of that in the advanced countries such as Japan, the US and European countries, such dependence in 1995-98 increased further (see Table 2). According to the detailed figures for each East Asian area, the ratio of inter-regional imports/exports to nominal GDP already reached the level of more than 40% in NIEs, excluding Hong Kong, but there was a little increase in trade dependence in 1995-98. On the other hand, although dependence on trade is relatively low in the ASEAN 4, China and Hong Kong, it increased significantly until 1995-98. This indicates that the increase in East Asia's economic dependence on trade has occurred mainly in the ASEAN 4, China and Hong Kong, suggesting that during this period the countries intended to follow the same economic growth pattern as that of NIEs in order to achieve export-oriented economic growth.

[Changes in trade relationships with advanced countries<Diversification of trade partners>]

(Chart2) Shares of trade with East Asian 9 countries by trade partner



Source: IMF, Direction of Trade Statistics

Note: For details of the shares of regions in the trade of East Asia, see Appendix 1.

By region, the US is the greatest importer from East Asia, followed by Japan. Based on a comparison with 1985-87, while the share of export to the euro area increased, those to Japan and the US decreased, resulting in the flattening of trade share³

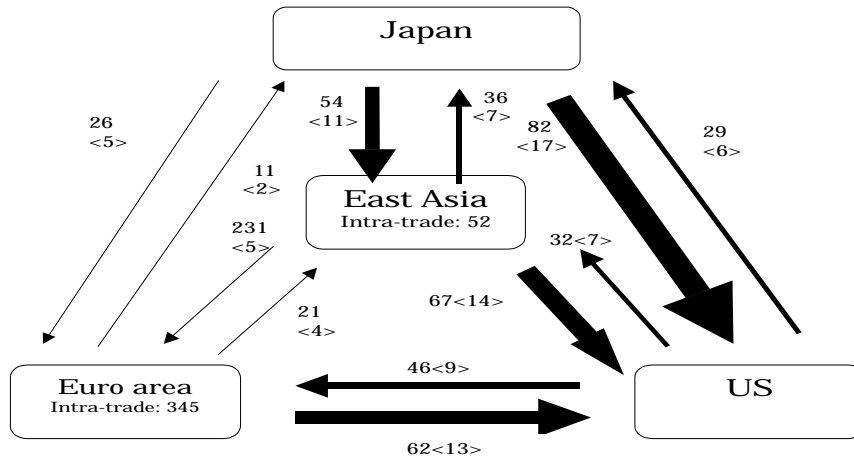
³ Concerning exports in particular, while the euro area's share increased, the shares of the US and

with each region. On the other hand, although the proportion of imports from Japan remains to be the largest, differences between imports from the US, the euro area and Japan have narrowed (see Chart 2).

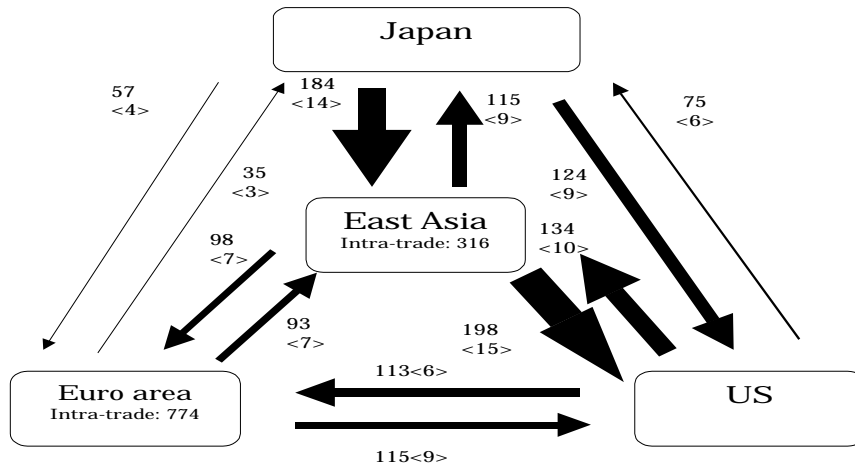
[Trade expansion between Japan, East Asia and the US]

(Chart3) Changes in relative size of inter-regional trade

(85 - 87 Average) (US \$ bil)



(95 - 98 Average)



Source: IMF, Direction of Trade Statistics

Notes: East Asia= NIES, ASEAN 4, China. The size of the arrows reflects the figures in the corresponding < >, which are shares of respective regions' trade in total trades.

Japan decreased. The shares of regions other than Japan, the US and the euro area have also risen, evidencing the progress of diversification of East Asia's trading partners.

In terms of the relative size of exports and imports flows between Japan, the US, the euro area and East Asia (see Chart 3, the size of the arrow indicates the share of trade flow from country A to country B <for example, from Japan to the US> in total trade value for all the four regions), a comparison between the average of 1985-87 and 1995-98 shows the following characteristics: (1) the share of exports from Japan to the US dropped drastically, and on the contrary, the share of exports from Japan to East Asia increased; (2) the share of trade between Japan and the US via East Asia increased conspicuously.

Japan's increased exports to East Asia were partially caused by demand increase in East Asia for capital goods to maintain high economic growth. In addition, exports from Japan to the US were possibly replaced with exports from East Asia, since manufacturers relocated their production center to East Asia where labor costs are relatively low, to compensate for lower competitiveness due to the sharp appreciation of the yen in the late 1990s. With respect to trade expansion between East Asia and the US, East Asia's function as an international supply center of IT-related goods has led to a deeper relationships with the US, the leader of the global IT revolution.

(2) East Asia plays an important role in the global trade of IT-related goods

[Expanded global trade of IT-related goods and importance of East Asia]

(Table3) World Exports by Commodity

	Share (98)	Average growth (90-98)
Agricultural products	11	4
Mining products	10	0
Manufacturing	76	7
Iron and steel	3	4
Chemicals	10	7
Machinery & transport equipment	41	8
Automotive products	10	6
IT products	13	11
Other machinery and transport equipment	18	6
Textiles, clothing	6	6
Other consumer goods	9	6
Total	100	6

Source: WTO, Annual Report (1999)

Note: IT products = office and telecom equipment.

(Table4) World Export Share of IT Products by Country

	92 -> 98 (%)
Japan	29.9->18.0
US	22.8->24.1
EU	12.0->14.6
Asia* (excluding Japan)	24.9->32.0

Source: WTO, Annual Report (1999)

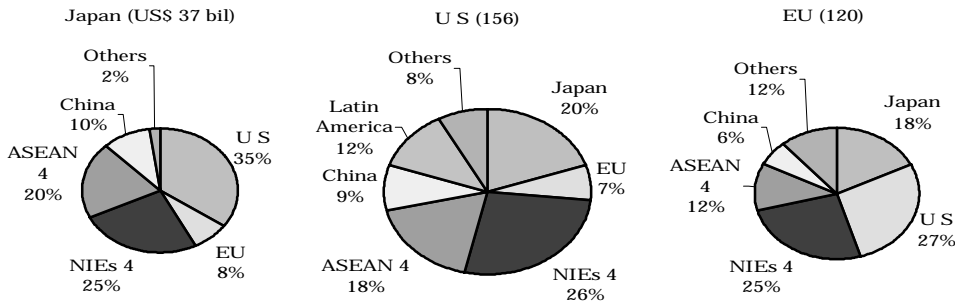
*Broad Asia (incuding East Asia and other Asian countries).

(Table5) Exports of IT Product by Destination

	Intra region (%)	To others (%)
EU	65.9	34.1
Asia* (excluding Japan)	33.6	66.4

Source: WTO, Annual Report (1999)

(Chart4) Share of Imports of IT Products by Region (1998)



Source: WTO, Annual Report (1999)

Looking at the composition of global exports by type of goods (as of 1998, see Table 3), IT-related goods account for 13% of overall exports. Between 1990 and 1998, the average growth of IT-related goods exports was 11%, much higher than overall export growth of 6%, and the highest in the category of industrial products. Asia's⁴ share in global exports of IT-related goods (as of 1998, see Table 4) is approximately 30%, exceeding that of Japan, the US and European countries.

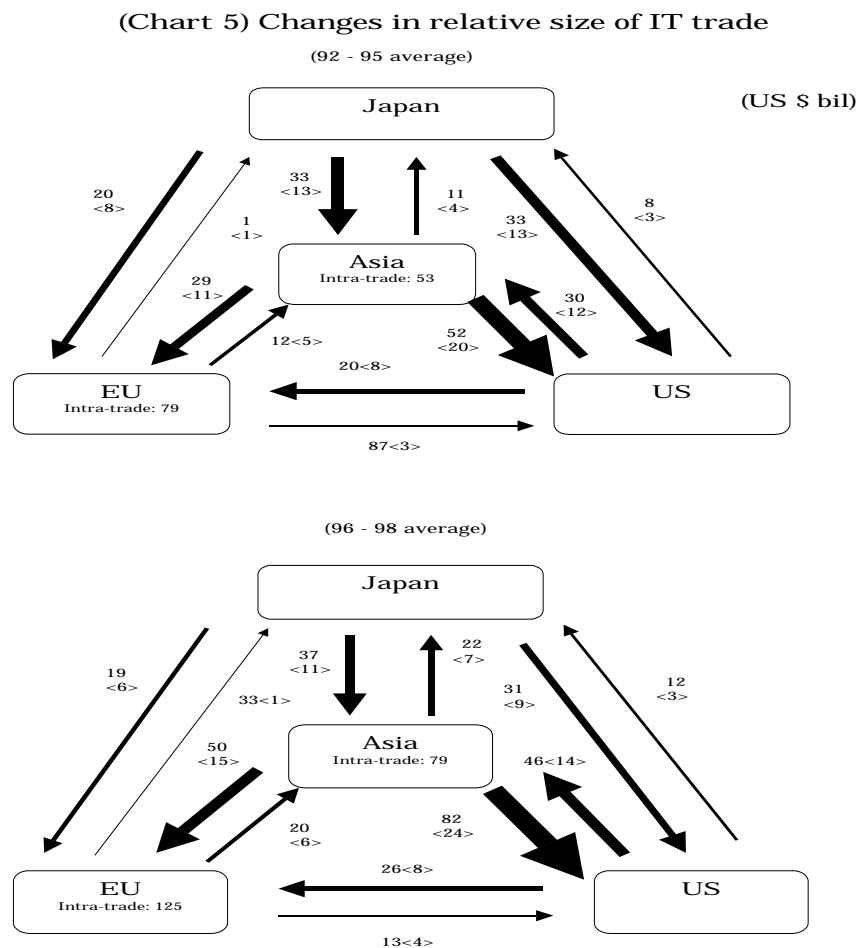
A comparison of Asia and the EU in terms of the destination of IT-related goods exports (Table 5) shows that in the EU intra-regional exports account for 65.9% and exports to external markets 34.1%, while for Asia (excluding Japan) intra-regional exports are 33.6% and exports to external markets 66.4%. This clearly shows that exports to external market dominate East Asia's trade of IT-related goods. With the IT innovation proceeding at a global scale, the trade for the IT related goods is expanding

⁴ Due to data constraints, Asian countries in a broad sense (including South Asia such as India, Pakistan) are included in the data, however, the share of East Asia in the IT-related field is thought to be considerably higher than the other Asian countries. 'Asia' refers to Asian countries in a broad sense hereafter.

rapidly. And East Asia in particular is playing an extremely important role as a global supply center for IT-related goods.

The importance of East Asia as a global supply center for IT-related goods is also shown characteristically by the fact that advanced countries heavily rely on East Asia for the supply of IT-related goods. Specifically, 55% of Japan's IT-related goods imports, 54% in the US and 43%⁵ in European countries came from East Asia in 1998, showing that East Asian exports of IT-related goods contribute considerably to the progress of IT in advanced countries. Moreover, the size of East Asian trade of IT-related goods significantly surpasses the size of trade between advanced countries (see Chart 4).

[Deepened relationship between East Asia and the US in terms of IT-related goods]



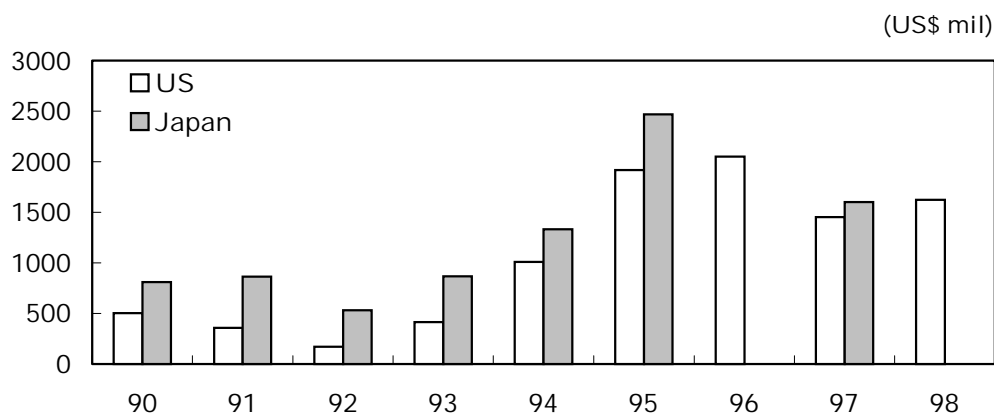
⁵ Share of IT-related goods imports from outside the EU.

(Table 6) Share of Electronic and Other Electric Equipment in the US total FDI Stock to East Asia

(%)

	Electronic and other electric equipment/Manufactures		Electronic and other electric equipment/Total	
	90	98	90	98
NIEs	35.8	43.6	17.1	14.6
ASEAN 4	41.2	44.8	12.2	15.6
China	7.2	39.5	2.8	23.2

(Chart 6) FDI (in electronic and other electric equipment) from Japan and the US to East Asia



Source: U S Department of Commerce, Japan International Financial Report
 Note : Data for Japanese FDI in 1996 and 1998 not available.

Analyzing the flow of global trade in IT-related goods (average between 1996 and 1998, see Chart 5), exports of such goods from Asia to the US and the European countries are relatively large, while those to Japan are relatively small. On the other hand, imports of IT-related goods from the US to Asia are the largest, followed by those from Japan and the EU. As a result, Asia runs a trade balance surplus in IT-related goods with the US and the EU but a deficit with Japan. Specifically, the size of both exports to and imports from the US is particularly large, showing the closer relationship between Asia and the US for IT-related goods. As a result of the expanded direct investments to East Asia, mainly in NIEs by the US companies⁶ (see Table 6), East Asia

⁶ Electric machinery-related direct investments to East Asia from the US, rapidly increased between

plays an important role as a manufacturing center supplying parts for IT goods production in the US. This is one of the contributing factors for IT trade expansion between East Asia and the US.

Japan's direct investments in Asia related to electric machinery also notably increased until the mid-1990s (see Chart 6), seemingly reflecting the shift of production bases in order to maintain export competitiveness to cope with the appreciation of the yen. But it is highly possible that such a shift contributed to reducing the exports of IT-related goods from Japan to the US, and increasing those from Asia to the US through expanded exports to the US from Japanese-affiliated firms overseas.

(3) Significant expansion of East Asia's intra-regional trade; possible diversification of IT goods production in East Asia

[Further expansion of intra-regional trade in East Asia]

(Table7) Share of Intra-regional Trade

(%)

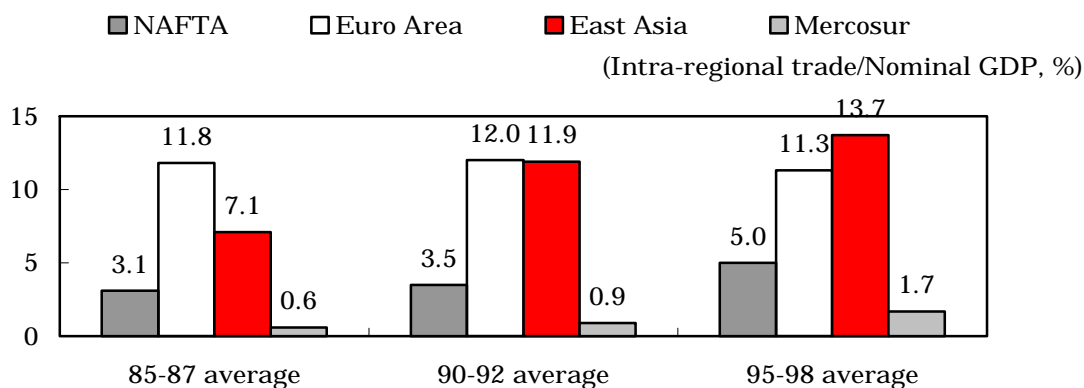
		Intra-regional trade/ Total trade	
		Exports	Imports
NAFTA	85-87	43	32
	95-98	44	39
Euro area	85-87	50	51
	95-98	49	50
East Asia	85-87	24	25
	95-98	35	35
Mercosur	85-87	6	11
	95-98	22	20

Source: IMF, Direction of Trade Statistics

Note: Intra-regional trade among four regions.

1993 and 1996 (The rate of expansion of the US investments to East Asia greatly exceeded the rate of increase in Japanese direct investments related to electric machinery during the same period <see Chart 6>, although due to differences of statistical definition, the figures cannot be compared with Japanese investment amount). The proportion of the US direct investments in electric machinery industries to the total foreign direct investment stock in the US manufacturing industries in East Asia has been rising in NIEs, ASEAN 4 and China (see Table 6).

(Chart7) Relative size of Intra-regional Trade Compared to GDP



Source: IMF, Direction of Trade Statistics

Comparing East Asia with other regions that have strong trade linkages such as NAFTA and the euro area, in terms of size of intra-regional trade to the overall trade (share of intra-regional exports <imports> in all exports <imports>), the ratios of intra-regional trade in NAFTA and the euro areas are relatively high and have been generally stable from 1985-87 to 1995-98 (see Table 7). In contrast, although the ratio of intra-regional exports/imports in East Asia is still low compared with NAFTA and the euro area, the ratio within the region has grown considerably since 1985-87⁷, indicating the significant expansion of trade within East Asia⁸.

Concerning the size of intra-regional trade in terms of nominal GDP ratio, the trade size within East Asia, which remained to be in the middle of NAFTA and the euro area in 1985-87, reached the same level as the euro area in 1990-92, and exceeded the euro area in 1995-98 to become the highest among four regions (see Chart 7). Also, the GDP ratio of intra-regional trade in 1995-98 is about twice (14%) as that of the 1985-87 (7%), which greatly exceeds the increase in the ratio of trade with external markets to GDP as previously stated.

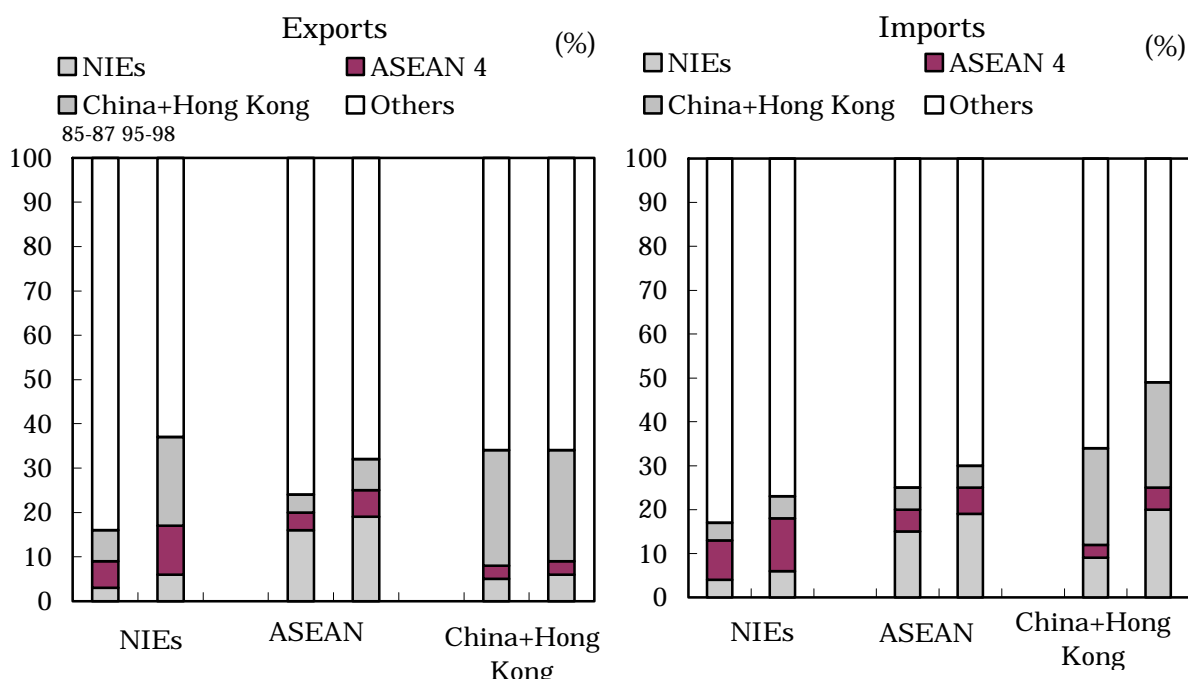
⁷ Some intra-regional trades seem to include trade relayed to external markets, which may be contributing partially to pushing up the ratio within the region.

⁸ Expansion of trade within the region was also seen in Mercosur.

Thus, it is clear that intra-regional trade in East Asia has been greatly expanding from the viewpoints of both the share in all trade and GDP ratio.

[Trade expansion between NIEs and ASEAN 4 as well as between NIEs and China/Hong Kong]

(Chart 8) Share of Intra-regional trade in East Asia by country



Source: IMF, Direction of Trade Statistics

Note: The vertical axis shows shares of East Asian regional trades.

For details, see Appendix 2.

The intra-regional exports/imports of each country in NIEs (Hong Kong excluded), ASEAN 4 and China and Hong Kong expanded in its share of the total trade value in the region, as (1) the trade between NIEs (Hong Kong excluded) and ASEAN 4, which are relatively large in volume, increased in share of exports/imports, and as (2) exports to China and Hong Kong from NIEs (Hong Kong excluded <see Chart 8>) also increased significantly.

As for (1), expansion of trade between NIEs and ASEAN4 is seemingly related to the expansion of intra-regional IT trade in East Asia. As for (2), increase in exports to China and Hong Kong from NIEs is also closely associated with the expansion of direct investments to China and Hong Kong from NIEs (Hong Kong excluded) since the

beginning of the 1990s. It is also highly possible that a significant increase in direct investments in China from Taiwan and other places, aiming to expand production bases for IT-related goods, caused the increase in the exports of capital goods and intermediate goods, including production equipment.

[Deeper relationship both within the region and with external markets due to increased trade of IT-related goods]

(Table8) Share of Exports from Asia by Goods (by intra/inter region)
(%)

	To the world					
			Intra region		To others	
	92	98	92	98	92	98
Agricultural products	14	11	13	11	15	10
Mining products	11	9	13	12	11	7
Manufactures	73	78	72	74	73	80
Iron and steel	2	2	3	3	1	1
Chemicals	4	5	8	9	3	4
Machinery and transport equipment	29	39	31	39	28	39
Automotive products	1	2	1	1	1	3
IT products	17	25	17	24	18	25
Other machinery and transport equipment	10	12	13	13	9	11
Textiles, clothing	18	15	14	11	20	16
Other consumer goods	13	11	8	6	15	14

Note: Change in value of IT exports 92->98 139% 228% 110%

Source: WTO, Annual Report (1999)

Table 8 shows that the exports of IT-related goods have increased, to account for 25% of all exports from Asia, higher than the figure for textile goods, based upon a comparison between 1992 and 1998. It should be noted that the increase in the share of IT-related goods exported to Asia (i.e. intra-regional exports) is almost identical to the share of goods exported to the external markets (inter-regional exports). This indicates the rising importance of Asia as a supply center of IT-related goods within the region, and at the same time, suggests the possibility of expanding trade of IT-related goods within the region, reflecting the diversification IT-related goods production in Asia.

[East Asia as manufacturing center for IT-related goods]

(Table 9) World IT Production by region (%)

	85	90	95	98
Japan	24	29	28	22
US	45	29	29	33
EU	20	24	20	22
NIEs+ASEAN 4	7	12	19	19
NIEs	6	10	14	14
ASEAN4	1	2	5	5
Others	4	5	4	4

Sources: OECD, Information Technology Outlook (1999);
Reed Electronics Research(1999).

(Table10) Penetration of Computers (1997)

	Computers (% of worldwide total)	Computers (per 1,000 people)
Japan	8	228
US	34	450
EU	23	241
Asia	7	108
NIEs	3	212
ASEAN4	2	29
China	2	5

Source: Computer Industry Almanac (1998)

(Table11) Global Demand for IT Products by Region

	(%)		
	87	94	98
Japan	15	17	13
US	47	45	44
EU	20	19	25
NIEs	0	1	3

Source: OECD, Information Technology Outlook(1999)

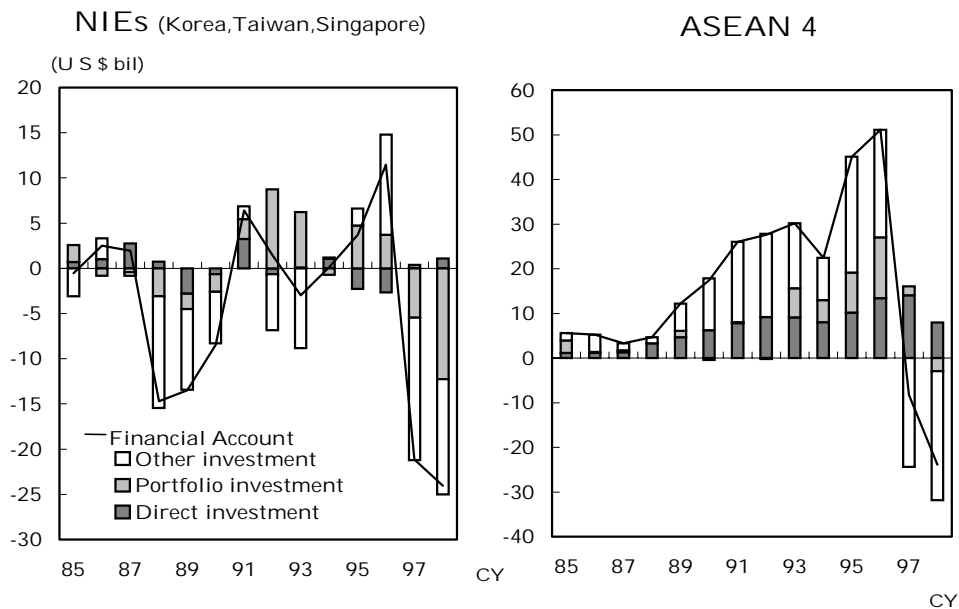
Asia is apparently functioning as a global supply center for IT-related goods. However, production shares of NIEs and ASEAN 4 with respect to IT-related goods are about 20% (1998), lower than that for Japan and the EU (see Table 9). In advanced countries, share of production is higher than that of Asia due to relatively large

proportion of production destined for domestic demand while obtaining the supply of parts and other goods from Asia. In fact, although East Asia has been rapidly catching up with advanced countries in its demand for IT-related devices and computer use within their countries, still a large gap between Asia and the advanced countries can be observed (see Table 10 and 11). Much of the IT-related goods made in East Asia has been exported to advanced countries, especially the US, so far, which means that East Asia has been functioning as a manufacturing center for global IT-related goods.

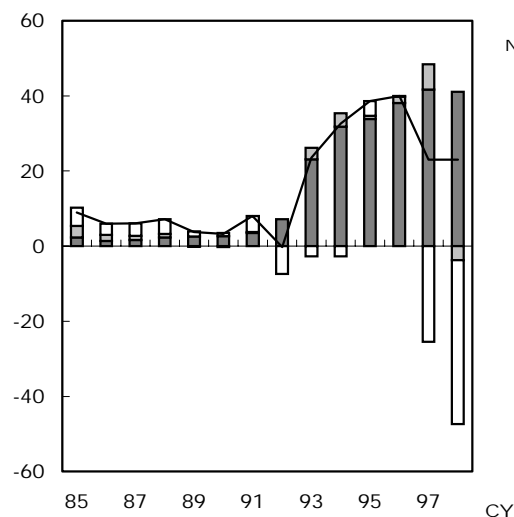
2. Direct Investment Flows in East Asia

(1) Stable inflow of direct investment

(Chart 9) Capital Flows in East Asia



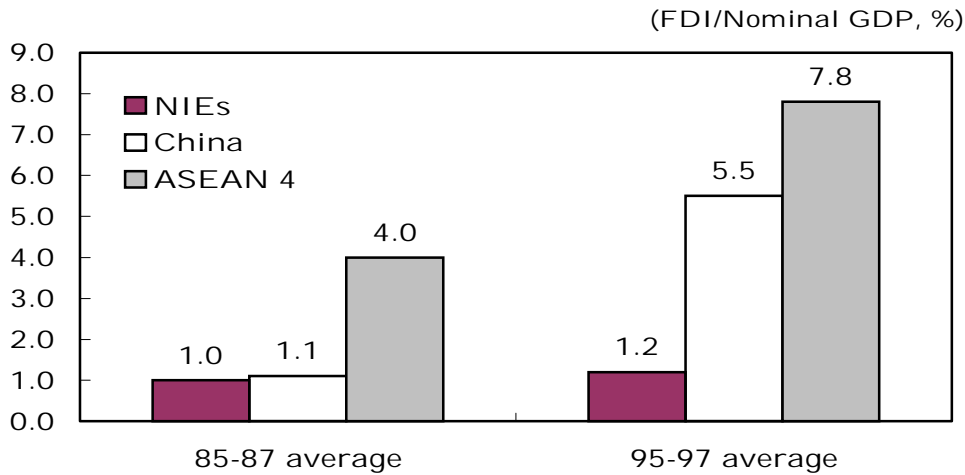
China



Source: IMF, International Financial Statistics

Note: Latest data is for 1998. 1998 data for ASEAN 4 excludes Malaysia.

(Chart10) FDI to GDP ratio in East Asia



Capital inflows to ASEAN 4 and China rapidly increased in the latter half of the 1980s and after. NIEs (Hong Kong excluded⁹) saw an increase in the net inflow between the early (1991-92) and mid-1990s (1994-95). Increasing capital inflow into East Asia continued until the currency crisis in 1997. In particular, net financial inflows have increased remarkably in ASEAN4, where rapid economic growth caused chronic current account deficits problem. Rapid increase in other investments (mainly bank loans) contributed to the increase in capital inflow into ASEAN4 after the end of the 1980s, and net portfolio investment also contributed to the increase after 1993. Unlike other investments and portfolio investments, which showed unstable movement (Even NIEs especially Korea, experienced a significant outflow of portfolio investments during the crisis period.), direct investments to East Asia, mainly to the AESAN 4 and China¹⁰ have remained stable throughout the currency crisis, contributing to the stabilization of capital flows in East Asia (see Chart 9).

Regarding the volume of direct investments to East Asia in the scale of invested countries' and regions' economy (ratio of gross direct investment in East Asia to nominal GDP, see Chart 10), China saw a rapid increase from 1.1% to 5.5%, and ASEAN 4 achieved expansion from 4.0% to 7.8%. On the other hand, the ratio of direct investments in NIEs remained almost unchanged, merely increasing from 1.0% to

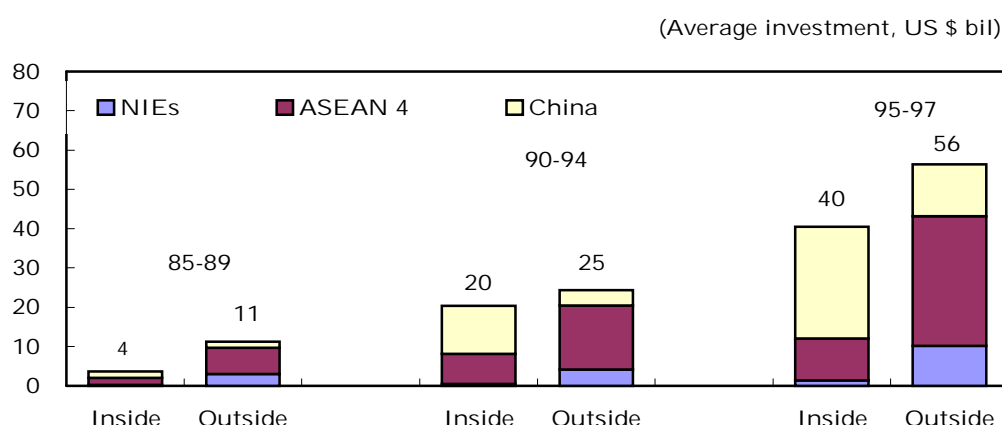
⁹ Hong Kong is excluded from NIEs because time series data for the sub-component of capital flows is not available in Hong Kong balance of international payments statistics.

¹⁰ Direct investments in China have expanded significantly after the deregulation in 1992, including the removal of restrictions that prohibited direct investments to some industries and the provision of legal protection for foreign capital in joint venture business.

1.2%. The fact that inflow of direct investments to ASEAN 4 and China is relatively larger than the direct investments to other parts of East Asia, means that economic growth in these regions was more dependent on direct investments.

(2) Direct investment from outside of the region is still dominant

(Chart11) FDI in East Asia from Inside/Outside East Asia

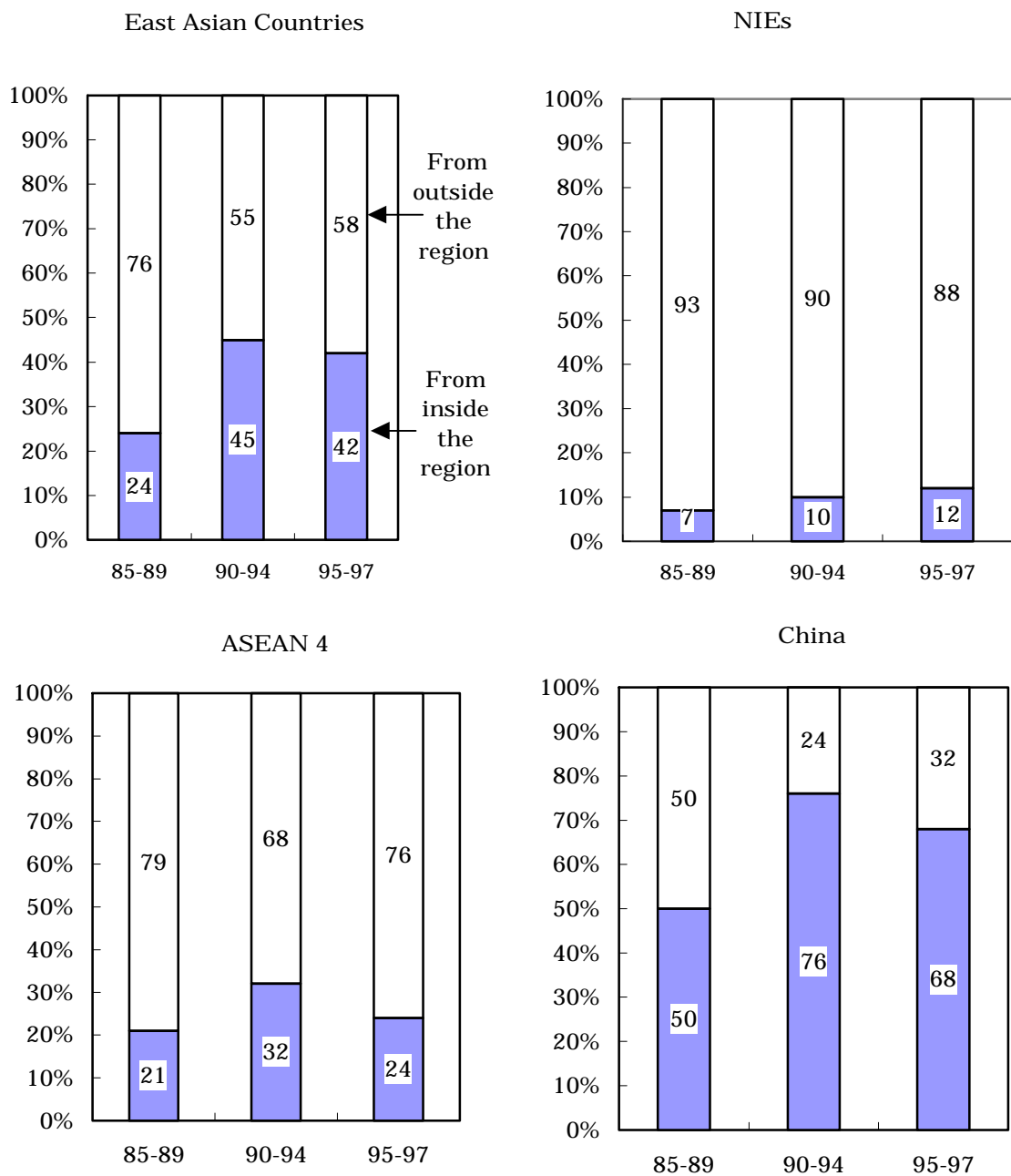


Direct investment in East Asia is divided into two parts; intra-regional direct investment by investors in the region, inter-regional investment by investors outside the region. The share of total intra-regional investments¹¹ in the first half of 1990s increased and the difference between intra-region and inter-region investment narrowed (see Chart 11). By area, intra-regional direct investments to China are notably increasing. It should be noted that these intra-regional direct investments may possibly include investment from outside the region via Hong Kong¹², therefore this high rate of dependence on intra-regional FDI could be overestimated than the actual level.

¹¹ In this section gross liability in direct investments account; investment by non-residents, is used to figure the volume of direct investment inflow. For detail of calculation method of intra-regional direct investments among the nine countries of East Asia by region, see notes to Appendix 3. Note that due to differences in statistical standards, some of the data are inconsistent with balance of international payments statistics.

¹² Because of preferential treatment in terms of taxation on investments, investments to China from Hong Kong may include direct investments to China from external markets, since investors can reduce taxation cost by relaying investments via Hong Kong.

(Chart12) FDI to East Asia



Based upon the data of direct investment in East Asia by intra-¹³ and inter-region, investments from external markets accounted for nearly 76% of the total FDI in the

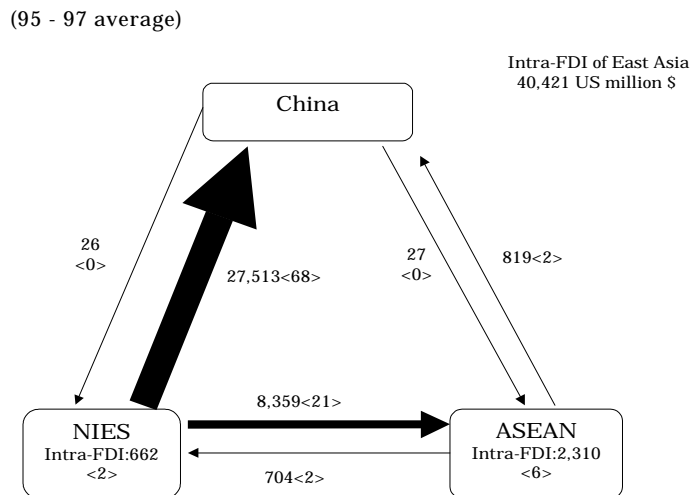
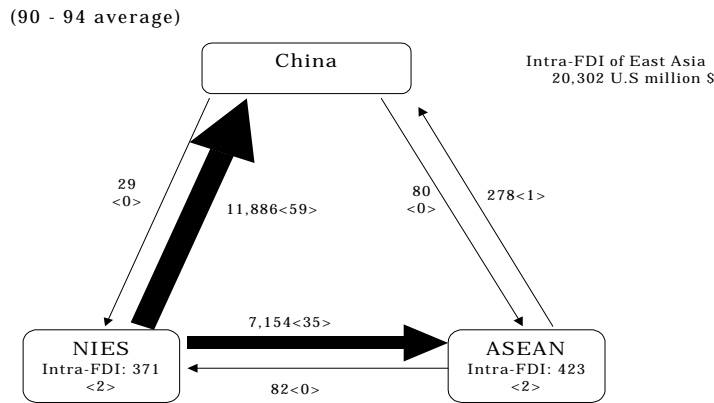
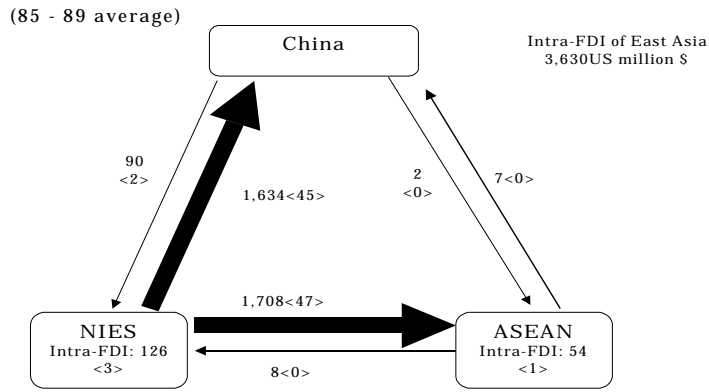
¹³ Ratio of intra-regional DI (Direct Investment) in East Asia is: intra-regional DI/ total DI in the region (including inter-regional DI). Here, the word 'intra-regional' DI refers to the DI from East Asian region. 'Inter-regional' DI refers to DI from areas other than East Asia.

region in the latter half of the 1980s, while intra-regional investments accounted for about 24%. After that, the ratio of intra-regional investments has risen significantly in the first half of the 1990s, and while the ratio of inter-regional investments in 1995-97 has dropped to around 60%, the ratio of intra-regional investment has grown to above 40% (see Chart 12). Excluding China whose contribution to the increase in ratio to intra-regional investments is the greatest, the proportion of intra-regional investments as the part of direct investments within East Asia is around 20%. Therefore, East Asian areas are still highly dependent on investments from external markets when China is excluded.

In terms of direct investment from external markets, the share of US Investment, primarily for IT and financial/insurance-related companies, has been increasing in NIEs, but falling in ASEAN (see Appendix 3). As for the FDI to China, the three regions (i.e. Japan, the US and the EU) have approximately the same level of share respectively, and there has been little change in the investors' share of direct investment to China since the latter half of the 1980s. In the overall East Asian area, the share of the direct investment from Japan and the US decreased, while that from the EU increased and the difference of the share among these three areas has almost disappeared.

(3) Main Flow of Intra-regional direct investments in East Asia is from NIEs to ASEAN

(Chart 13) Intra - regional FDI in East Asia



Notes: East Asia = NIEs, ASEAN4, China. The size of the arrows reflects the figures in the corresponding < >, which are shares of respective regions' FDI in total FDI.

Concerning the flow of direct investment within East Asia, mutual direct investments within NIEs are relatively small, and in fact, it is considered that there is only a one-way flow from NIEs to ASEAN 4 and China (see Chart 13). NIEs received direct investments from external markets such as the US and Japan. The region has also played the role of provider of foreign direct investment, investing in ASEAN 4 and China. Direct investments from NIEs to China and ASEAN 4 are closely associated with the expansion of IT-related production centers, greatly contributing to the diversification of IT-related goods production and expansion of intra-regional trade within East Asia.

3. The currency transactions in East Asia

(1) Trade transactions are mostly settled in the US dollar

(Table12) Currency used for trade settlement in Korea and Indonesia

	Korea		Indonesia	
	Exports	Imports	Exports	Imports
U S \$	88	82	92	78
Yen	5	11	3	8
Mark	3	3	1	6
Others	4	4	4	8

Sources: Bank of Korea, Bank Indonesia.

In Korea and Indonesia where data for trade settlement by currency is available, approximately 80-90 % of exports/imports is settled in the US dollar (see Table 12). Regarding trade between Japan and Asia, the yen is used to settle 48.4% of exports from Japan and 26.7%¹⁴ of Japan's imports.

As in the case of Korea and Indonesia, the ratio of trade settlements in the yen is very low, which means usage of the yen is almost entirely limited to the trade with Japan.

¹⁴ Ratio of trade settlements are obtained from 'Survey on Trend of Settlements for Exports/Imports by Currency' (Ministry of International Trade and Industry, as of September 1997).

(Table13) Foreign Exchange Turnover by Currency in East Asia

		Total			
		US\$	Yen	Mark	
NIEs		100.0	47.1	12.4	10.3
	Korea	100.0	48.8	8.7	4.7
	Taiwan	100.0	47.6	17.0	6.7
	Hong Kong	100.0	46.5	13.5	11.4
	Singapore	100.0	47.4	11.7	10.1
ASEAN 4		100.0	48.1	7.3	2.5
	Malaysia	100.0	43.7	5.5	6.9
	Thailand	100.0	48.1	5.6	0.6
	Indonesia	100.0	48.7	10.9	3.4
	Philippine	100.0	49.8	7.2	1.8
China		100.0	46.4	0.5	0.0

Source: BIS, Central Bank Survey of Foreign Exchange and Derivatives Market Activity (1999)

According to the structure of foreign exchange transactions by major currency in East Asia (as of April 1998, surveyed by BIS), the ratio of the US dollar-based transactions is overwhelmingly high in NIEs, ASEAN 4 and China, while the yen and German mark based transactions are significantly lower (see Table 13). The settlement of trade/capital transactions continues to be dependent entirely on the US dollar, although trade relationships within the region have become deeper.

(2) Strong demand for the US dollar assets in East Asia

[East Asia holds large amount of US Treasury securities]

(Table14) U S Treasury Securities Held Outside the US
(December 1999)

		(US \$ bil, %)		
	Country	Outstanding	Share	
1	Japan	320	(24.9)	
2	United Kingdom	242	(18.8)	
3	Germany	97	(7.6)	Foreign Reserve (US \$ bil)
4	China	52	(4.0)	155
5	Hong Kong	47	(3.7)	96
8	Singapore	31	(2.4)	76
9	Taiwan	29	(2.3)	111
12	Korea	26	(2.0)	74
17	Thailand	11	(0.9)	35
	Overseas total	1,284	(100.0)	
	held by public			
	sector overseas	624		
	Total outstanding	3,652		

Source: U S Department of Treasury, International Financial Statistics

Note: Sum of the shares of China, Hong Kong, Singapore, Taiwan, Korea, and Thailand = 15.2%.

East Asia has strong demand for the dollar-based assets as foreign currency reserves. According to the distribution of overseas holdings of US Treasury securities (approximately 35% of all holdings) by country¹⁵, countries in East Asia rank high alongside advanced countries in the ranking of amounts held (an approximate 15% share held by China, Hong Kong, Singapore, Taiwan, Korea and Thailand; see Table 14).

The fact that the US dollar is used as de-facto standard currency for the settlement of trade/capital transactions in the region, and they have large amount of US Treasury as foreign currency reserves, indicate East Asia's heavy reliance on the US dollar.

[Strong demand for US dollar cash in East Asia]

(Table15) US\$ Cash Holdings Outside the US

(%)

Latin America	20%
Middle East Asia, Africa	20%
Asia	20%
	East Asian 7 countries: 7-9% <See Note>
Europe, Soviet Union	40%
Total	US \$ 250-350 Bil (50-70% of total US\$ cash outstanding)

Sources: US Department of Commerce, "Survey of Current Business"
FRB, "Federal Reserve Bulletin"

Note: Korea, Hong Kong, Taiwan, Singapore, Thailand, the Philippines, Indonesia.

According to the composition of the dollars in circulation outside the US (approximately 50-70% of total in circulation), European countries and the former Soviet Union account for the largest share of 40% and Asia 20% (almost the same level as in Latin America and also the Middle East and Africa) . Based on a survey by the US Department of the Treasury/FRB on distributions by country in Asia, Korea holds the largest portion (US\$ 15 billion) , followed by Hong Kong, the Philippines and Indonesia, which hold about US\$ 2 billion each. Seven countries in East Asia

¹⁵ Figures include those held by private organizations, however, most US bonds seem to be held mainly by public bodies in East Asia.

excluding China and Malaysia hold approximately US\$ 23 billion (about 7-9% of the dollars in circulation overseas, see Table 15).

Appendix 1

World Trade Share by Region

(% of total)

		Exports by destination				Imports by origin			
		Japan	US	Euro area	East Asian countries	Japan	US	Euro area	East Asian countries
Japan	85-87	/	38	12	25	/	21	8	27
	95-98	/	27	13	41	/	23	11	35
US	85-87	12	/	19	13	21	/	16	17
	95-98	10	/	16	19	14	/	13	23
Euro area	85-87	4	18	/	6	8	14	/	6
	95-98	4	14	/	12	8	14	/	12
East Asia	85-87	22	41	14	/	35	20	13	/
	95-98	20	34	17	/	31	23	15	/
NIEs excluding Hong Kong	85-87	16	51	12	/	34	24	10	/
	95-98	16	35	16	/	29	26	13	/
ASEAN 4	85-87	39	28	16	/	32	22	16	/
	95-98	24	31	18	/	34	21	15	/
China+Hong Kong	85-87	17	33	17	/	37	15	18	/
	95-98	20	34	17	/	33	18	20	/

Source: IMF Direction of Trade Statistics

Note: Figures for the Euro area and East Asia exclude intra-regional trade from total exports and imports.

Appendix 2

Goods Trade in East Asia (Exports)

(Percentage share of total exports)

		Total exports (US\$ 100mil)	Exports by destination				
			Total of the region	NIES(excluding Hong Kong)	ASEAN 4	China+Hong Kong	Total outside the region
NIEs	85-87	976	17	3	6	7	83
	95-98	3,474	38	6	11	20	62
ASEAN 4	85-87	529	24	16	4	4	76
	95-98	2,337	32	19	6	7	68
China+Hong Kong	85-87	673	34	5	3	26	66
	95-98	3,248	35	6	3	25	65

Goods Trade in East Asia (Imports)

(Percentage share of total imports)

		Total imports (US\$ 100mil)	Imports by Origin				
			Total of the region	NIES (excluding Hong Kong)	ASEAN 4	China+Hong Kong	Total outside the region
NIEs	85-87	892	17	4	9	4	83
	95-98	3,621	23	6	12	5	77
ASEAN 4	85-87	395	26	15	5	5	74
	95-98	2,107	29	19	6	5	71
China+Hong Kong	85-87	808	33	9	3	22	67
	95-98	3,345	49	20	5	24	51

Source: IMF, Direction of Trade Statistics

Notes: Total exports (imports)=100

Appendix 3

Intra-regional FDI in East Asia

(Percentage share)

		Investment amount (US\$ thousand)	Investor country							
			Total in the region	NIEs	ASEAN4	China	Total outside the region	Japan	U S	EU
NIEs	85-89	33	7	4	0	3	93	38	26	16
	90-94	50	10	7	2	1	90	28	34	20
	95-97	116	12	6	6	0	88	21	34	21
ASEAN4	85-89	84	21	20	1	0	79	25	23	15
	90-94	240	32	30	2	0	68	13	7	11
	95-97	437	24	19	5	0	76	18	7	21
China	85-89	33	50	50	0		50	9	7	3
	90-94	160	76	74	2		24	6	7	4
	95-97	415	68	66	2		32	9	8	7
East Asia	85-89	149	24	23	0	1	76	24	20	13
	90-94	450	45	43	2	0	55	12	10	9
	95-97	968	42	38	4	0	58	14	11	15

Note: Figures calculated from the liabilities of East Asian countries.