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IMPLICATIONS OF THE ECONOMIC RISE OF THE PRC FOR ASEAN AND INDIA: TRADE AND FOREIGN DIRECT INVESTMENT

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**IMPLICATIONS OF THE ECONOMIC RISE OF THE PRC FOR THE ASEAN AND INDIA:
TRADE AND FOREIGN DIRECT INVESTMENT****ABSTRACT**

An important and vigorous policy debate ongoing in Asia concerns the impact of the economic rise of the PRC on the rest of the region. This paper examines the relative performances of the PRC, selected ASEAN countries (Indonesia, Malaysia, the Philippines, Singapore and Thailand), and India over time, as well as the intensity and changing dynamics of their intra-regional economic interactions. Focus is on trends and patterns in merchandise trade, trade in commercial services, and FDI flows the last two decades and potential impact of the PRC's continued economic emergence on ASEAN and India.

I. Introduction¹

The People's Republic of China (PRC) has been opening up its economy to the outside world in a carefully managed and phased manner since 1979. The PRC's economy has grown at an annual average rate of 9.2% between 1980 and 2000, and its merchandise exports have expanded by more than 15% annually over the same period. With the PRC's phenomenal growth over the last two decades, it has emerged as a major economic power in Asia. The PRC is the most populous country in the world, stands second largest economy in terms of GDP at Purchasing Power Parity (PPP), the world's sixth biggest merchandise trading nation, the twelfth largest global exporter of commercial services, and the largest recipient of Foreign Direct Investment (FDI) among developing countries. The PRC's accession to the World Trade Organisation (WTO) in December 2001 is widely expected to give a further fillip to the country's FDI, export, and overall growth prospects over the medium and longer terms.

Against this background, an important and vigorous policy debate ongoing in Asia concerns the impact of the economic rise of the PRC on the rest of the region. The general perception is that there is a likelihood of substantial diversion of FDI from other developing countries in Asia towards the PRC in order to service the large domestic market and in search of more cost-efficient production locations (Rajan, 2003a,b).

Members of the Association of Southeast Asian Nations (ASEAN) are expected to face particularly intense competitive pressure from the PRC in view of the overlap in relative factor endowments, export markets (the US), and heavy reliance on FDI inflows from similar sources. The economic emergence of the PRC may also significantly impact another large emerging economy in Asia, viz. India. India has been positioning itself

¹ This paper draws partly on Rajan (2003a,b) and Sen and Srivastava (2003). We would like to thank Mukul Asher and Rahul Sen for useful comments and suggestions on earlier versions. The usual disclaimer applies.

relatively favourably to attract and benefit from FDI since 1991, the year when wide-ranging measures were introduced to liberalize the economy. These reform measures have continued over the last decade, though the pace has been uneven at times. The Indian economy is the second most populous in the world, is ranked fourth largest in terms of GDP at Purchasing Power Parity (PPP), and has been one of the fastest growing economies over the last decade (World Bank, 2002a).

Some studies warn that the “China threat” to ASEAN and India may be immediate and severe in labour-intensive products in which the PRC has a strong comparative advantage, but could move on to impact the broader technological spectrum (Lall, 2003 and Lall and Albaladejo, 2001). However, such negatives from stiffened competition could be outweighed by the potential for mutually beneficial and complementary relationships that may accrue to its trading partners from the PRC’s growth and trade expansion. It is thus important to understand the relative performances of the PRC, ASEAN countries and India over time, as well as the intensity and changing dynamics of their intra-regional economic interactions.

The remainder of this chapter is structured as follows. Section II examines trends in merchandise trade, trade in commercial services, and global FDI flows at an aggregate level for the PRC, ASEAN and India. Section III briefly examines the dynamics of economic interactions among these economies since the mid 1980s. Particular attention is paid to the complexities involved in interpreting cross-country FDI data. Section IV attempts to analyze the impact of the PRC’s emergence on the more advanced ASEAN members (Indonesia, Malaysia, the Philippines, Singapore and Thailand) – henceforth referred to as ASEAN-5 – with regard to export competitiveness in manufacturing and the services sector at a disaggregated product level. Section V concerns itself with the impact of the PRC’s rise on ASEAN’s and India’s FDI prospects.

Section VI offers a few concluding remarks regarding bilateralism and regionalism in Asia.

2. **Broad Trends in Trade and FDI: The PRC, ASEAN-5 and India, 1980-2000**
In order to provide a general overview, this section compares broad aggregate trends relating to trade (merchandise and commercial services) and FDI for the PRC, ASEAN-5 and India over the last two decades.

2.1 Merchandise Trade

Table 1 summarizes the major external sector indicators of the PRC, the ASEAN-5 countries and India between 1980 and 2000. The PRC's share of global merchandise trade increased from 1.5% in 1980 to 2.7% in 2000, while that of ASEAN-5 rose from 4% to about 6.5%. During 1996-2000, the highest share in world exports and trade among the ASEAN-5 members was that of Singapore (2.2%), followed by Malaysia (1.5%), and Thailand (about 1.1%). On the other hand, India's share in world trade remained stagnant at between 0.6% and 0.7%, a reflection of its *dirigiste* policies pursued by the country until the early 1990s.

Table 1
External Sector Indicators of PRC and ASEAN member countries

PRC

	1980-90	1991-1995	1996-2000
Exports of goods and services (% of GDP)	11.0	21.1	22.8
Exports of goods and services (annual % growth)	11.0	17.2	15.3
Share in World Exports (%)	1.5	2.6	2.7
Share in World Trade (%)	1.5	2.5	2.7
Manufactures exports (% of merchandise exports)	62.1	80.3	86.7
Trade (as % of GDP)	22.4	40.6	42.2
Import duties (% of imports)	8.0	5.0	2.8
Nominal Exchange rate (RMB / US \$)	2.9	6.7	8.3
Current A/c balance (% of GDP)	0.0	0.8	2.4
Reserves (US \$ billion.)	14.4	43.0	145.0
Foreign direct investment, net inflows (current US\$ billion)	2.0	22.5	41.1
Foreign direct investment, net inflows (% of GDP)	0.5	4.3	4.4
Foreign direct investment, net inflows (% of GDI)	1.5	10.6	11.5
GDP growth (%)	9.0	12.1	8.2

Indonesia

	1980-90	1991-1995	1996-2000
Exports of goods and services (% of GDP)	25.5	26.7	36.1
Exports of goods and services (annual % growth)	1.9	10.9	2.2
Share in World Exports (%)	1.0	0.9	0.9
Share in World Trade (%)	0.8	0.8	0.8
Manufactures exports (% of merchandise exports)	16.4	48.8	50.1
Trade (as % of GDP)	47.8	51.8	67.2
Import duties (% of imports)	4.8	4.7	1.8
Nominal Exchange rate (Rupiah / US \$)	1199.2	2095.3	6308.0
Current A/c balance (% of GDP)	-3.1	-2.3	1.6
Reserves (US \$ billion.)	5.0	11.4	22.5
Foreign direct investment, net inflows (current US\$ billion)	0.4	2.3	0.6
Foreign direct investment, net inflows (% of GDP)	0.4	1.4	-0.1
Foreign direct investment, net inflows (% of GDI)	1.4	4.5	-3.8

Table 1 (Contd.)
Malaysia

	1980-90	1991-1995	1996-2000
Exports of goods and services (% of GDP)	58.8	83.2	109.6
Exports of goods and services (annual % growth)	10.0	16.2	10.5
Share in World Exports (%)	0.8	1.3	1.5
Share in World Trade (%)	0.7	1.3	1.4
Manufactures exports (% of merchandise exports)	32.9	68.6	78.4
Trade (as % of GDP)	115.2	168.0	205.0
Import duties (% of imports)	7.3	4.1	3.4
Nominal Exchange rate (RM / US \$)	2.5	2.6	3.4
Current A/c balance (% of GDP)	-2.7	-6.5	4.7
Reserves (US \$ billion.)	5.7	20.9	26.7
Foreign direct investment, net inflows (current US\$ billion)	1.1	4.5	3.1
Foreign direct investment, net inflows (% of GDP)	3.4	7.0	3.4
Foreign direct investment, net inflows (% of GDI)	11.6	18.5	10.2

India

	1980-90	1991-1995	1996-2000
Exports of goods and services (% of GDP)	6.3	9.9	11.8
Exports of goods and services (annual % growth)	5.6	14.6	7.4
Share in World Exports (%)	0.5	0.6	0.6
Share in World Trade (%)	0.6	0.6	0.7
Manufactures exports (% of merchandise exports)	61.1	73.8	75.5
Trade (as % of GDP)	15.3	21.7	26.8
Import duties (% of imports)	40.4	31.6	21.3
Nominal Exchange rate (Rupees / US \$)	12.1	28.6	40.2
Current A/c balance (% of GDP)	-2.2	-1.1	-1.1
Reserves (US \$ billion.)	5.1	11.4	28.6
Foreign direct investment, net inflows (current US\$ billion)	0.1	0.8	2.6
Foreign direct investment, net inflows (% of GDP)	0.0	0.2	0.6
Foreign direct investment, net inflows (% of GDI)	0.2	1.0	2.7

Table 1 (Contd.)

Philippines

	1980-90	1991-1995	1996-2000
Exports of goods and services (% of GDP)	25.0	32.1	49.9
Exports of goods and services (annual % growth)	7.3	9.5	4.3
Share in World Exports (%)	0.3	0.3	0.5
Share in World Trade (%)	0.3	0.4	0.6
Manufactures exports (% of merchandise exports)	28.6	47.6	88.9
Trade (as % of GDP)	51.9	70.2	103.6
Import duties (% of imports)	14.1	16.1	8.5
Nominal Exchange rate (Pesos / US \$)	16.2	26.4	36.0
Current A/c balance (% of GDP)	-3.8	-3.4	3.0
Reserves (US \$ billion.)	1.3	4.9	10.6
Foreign direct investment, net inflows (current US\$ billion)	0.2	1.0	1.5
Foreign direct investment, net inflows (% of GDP)	0.6	1.7	2.1
Foreign direct investment, net inflows (% of GDI)	3.1	7.3	10.0

Thailand

	1980-90	1991-1995	1996-2000
Exports of goods and services (% of GDP)	26.6	38.2	54.2
Exports of goods and services (annual % growth)	13.5	14.3	6.9
Share in World Exports (%)	0.5	1.0	1.1
Share in World Trade (%)	0.5	1.1	1.0
Manufactures exports (% of merchandise exports)	40.7	69.8	73.4
Trade (as % of GDP)	56.6	81.7	102.1
Import duties (% of imports)	12.2	9.3	5.2
Nominal Exchange rate (Baht / US \$)	24.3	25.3	35.2
Current A/c balance (% of GDP)	-4.3	-6.4	4.1
Reserves (US \$ billion.)	4.2	25.5	31.8
Foreign direct investment, net inflows (current US\$ billion)	0.7	1.9	4.6
Foreign direct investment, net inflows (% of GDP)	1.1	1.5	3.6
Foreign direct investment, net inflows (% of GDI)	3.5	3.7	16.1

Table 1 (Contd.)

Singapore

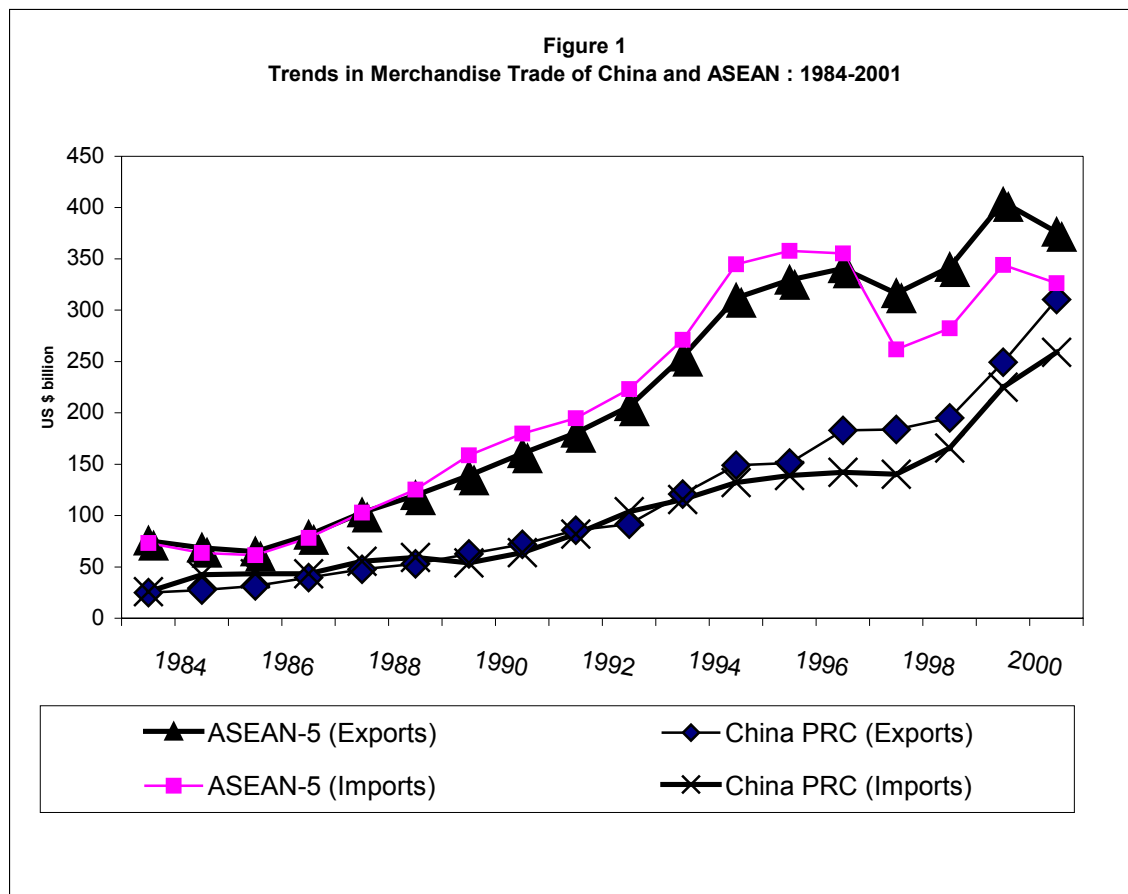
	1980-90	1991-1995	1996-2000
Exports of goods and services (% of GDP)	191.3	182.1	167.8
Exports of goods and services (annual % growth)	11.6	17.2	3.0
Share in World Exports (%)	1.3	2.0	2.2
Share in World Trade (%)	1.4	2.1	2.2
Manufactures exports (% of merchandise exports)	57.5	78.8	85.1
Trade (as % of GDP)	382.6	352.3	318.7
Import duties (% of imports)	0.7	0.3	0.3
Nominal Exchange rate (S \$ / US \$)	2.1	1.6	1.6
Current A/c balance (% of GDP)	-1.0	13.0	21.4
Reserves (US \$ billion.)	13.5	49.9	76.0
Foreign direct investment, net inflows (current US\$ billion)	2.2	5.8	8.6
Foreign direct investment, net inflows (% of GDP)	10.5	9.4	9.6
Foreign direct investment, net inflows (% of GDI)	26.0	26.7	27.6

Source: Computed from World Development Indicators, World Bank, CD-Rom

Figure 1 reveals trends in the PRC's and ASEAN's merchandise trade over the period 1984 and 2001. While ASEAN's exports were nearly triple those of the PRC in 1984, exports of the PRC by 2001 closely matched that of the ASEAN-5 countries. Of course, the convergence between the PRC's and ASEAN's exports largely took place between 1996 and 2000, the period of general downturn in much of Southeast Asia following the regional financial crisis of 1997-98². A broadly similar trend is observed for imports, though the PRC's export growth has outpaced its growth in imports since the early 1990s, leaving the PRC with aggregate merchandise trade surplus vis-à-vis the

² For details of the Southeast Asian financial crisis, see Rajan (1998).

rest of the world. In contrast, ASEAN-5, which had registered continuing and increasing trade deficits up to the crisis in 1997, ran trade surpluses thereafter.

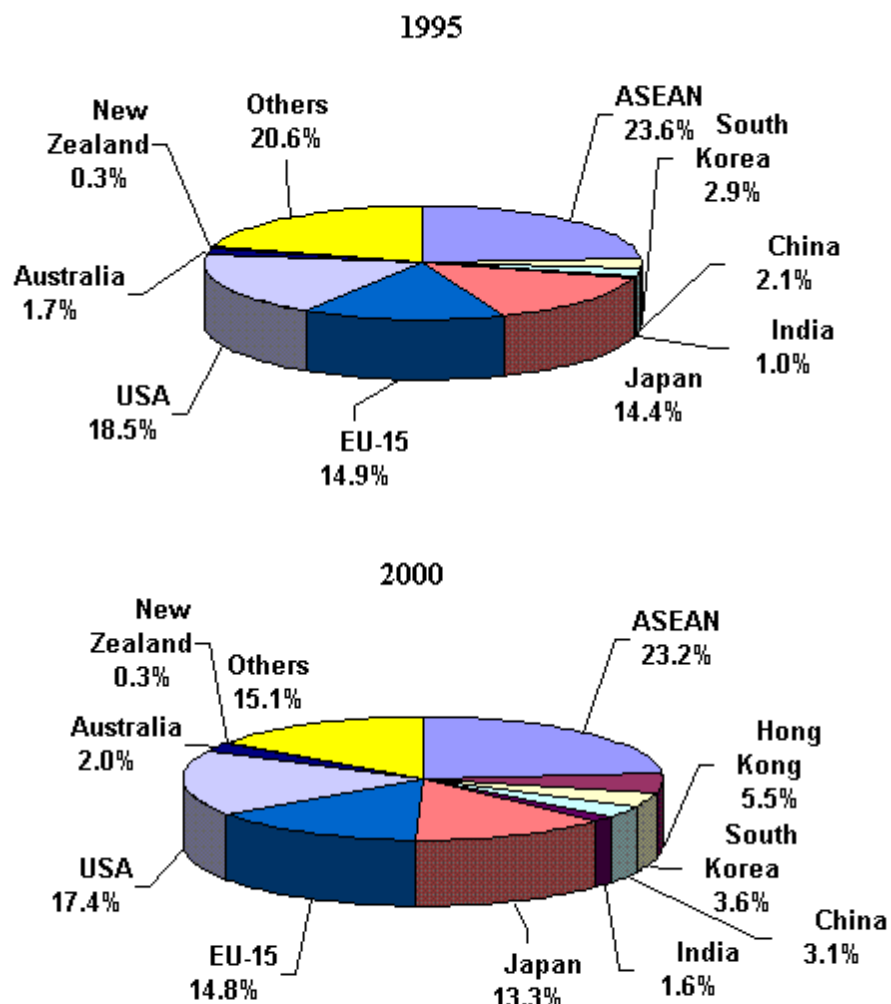


Source: ADB (2002)

Figure 2 reveals the geographical distribution of ASEAN's exports to its major trading partners in 1995 and 2000. In 2000, the PRC was ASEAN's sixth largest export market, accounting for 3.1% of the latter's global exports, behind other ASEAN countries (23.2%), the US (17.4%), the EU (14.8%), Japan (13.3%) and South Korea (3.6%). Two important points warrant noting. One, the PRC plus Hong Kong have constituted 8.6% of ASEAN's global exports. Two, the share of the PRC in ASEAN's total export basket has risen by a full percentage point in the last five years.

Figure 2

Share of ASEAN's exports to major trading partners

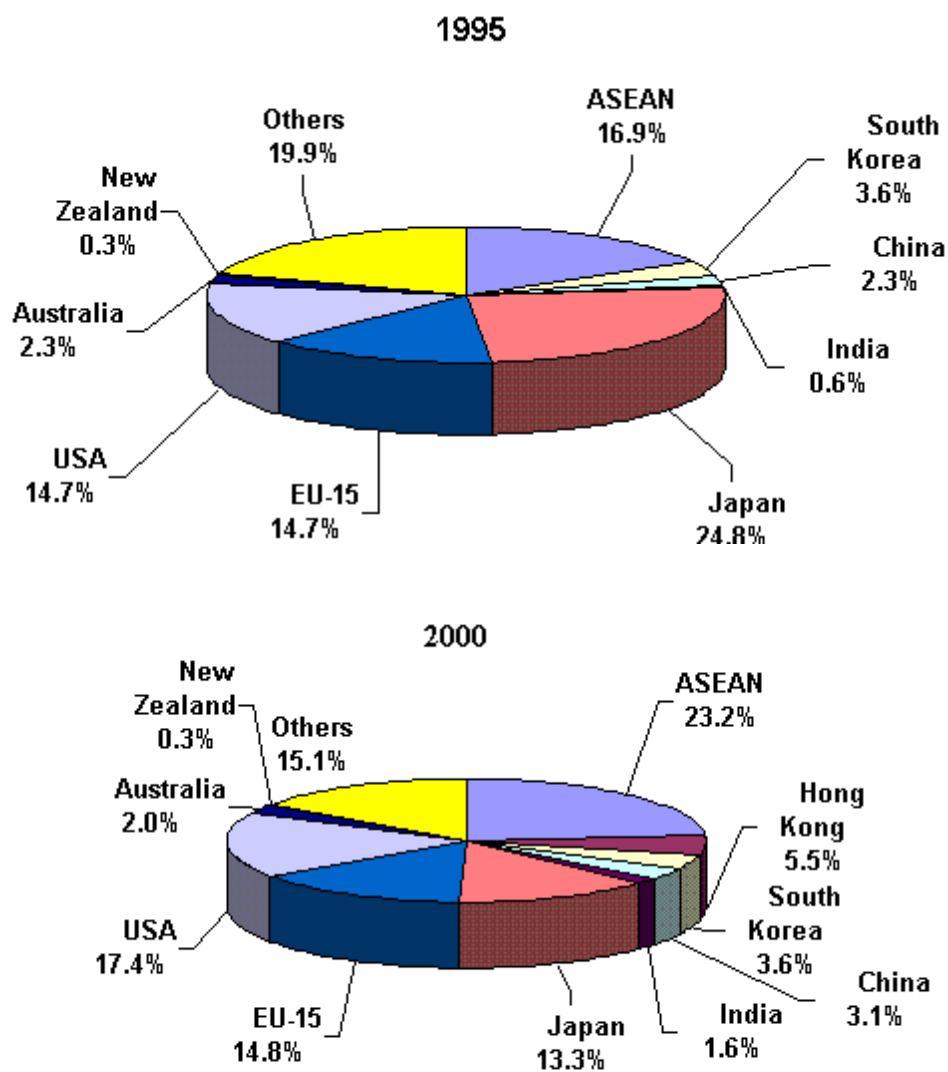


Source: ASEAN Trade Statistics (2002).

Figure 3 reveals the geographical distribution of ASEAN's imports from its major trading partners in 1995 and 2000. By 2000, the PRC constituted 4.8% of the overall imports of ASEAN-5, up from 2.9% in 1995. Hong Kong plus the PRC together constituted 7.9% of ASEAN's imports in 2000, only behind other ASEAN members

(21.4%), Japan (19%), USA (14.3%) and the EU (11.4%). The PRC constitutes a much larger share of trade with Indonesia (5.7%) and Singapore (5.3%) among ASEAN-5, and was of least significance in the Philippines (about 1.5%) (Table 2). We will have more to say about bilateral merchandise trade relations between ASEAN-5 and the PRC in Section III.

Figure 3
Share of ASEAN's imports from major trading partners



Source: ASEAN Trade Statistics (2002).

Table 2

Export share of PRC in ASEAN member countries (%)

Year	1985	1990	1995	1996	1997	1998	1999	2000	2001
Indonesia	0.5	3.2	3.8	4.1	4.2	3.8	4.1	4.5	5.0
Malaysia	1.0	2.1	2.6	2.4	2.3	2.7	2.7	3.1	4.2
Philippines	NA	NA	NA	NA	NA	NA	NA	NA	NA
Singapore	1.5	1.5	2.3	2.7	3.2	3.7	3.4	3.9	4.4
Thailand	3.8	1.2	2.9	3.4	3.0	3.2	3.2	4.1	4.4
ASEAN-5	1.2	1.8	2.6	2.8	2.9	3.1	3.0	3.4	4.0

Import share of PRC in ASEAN member countries (%)

Year	1985	1990	1995	1996	1997	1998	1999	2000	2001
Indonesia	2.4	3.0	3.7	3.7	3.6	3.3	5.2	6.0	6.8
Malaysia	2.0	1.9	2.2	2.4	2.8	3.2	3.3	3.9	4.9
Philippines	5.4	1.4	2.3	2.1	2.5	4.2	3.3	2.4	2.6
Singapore	8.6	3.4	3.2	3.4	4.3	4.8	5.1	5.3	6.2
Thailand	2.4	3.3	2.8	2.7	3.6	4.2	5.0	5.5	6.0
ASEAN-5	5.2	2.9	2.9	2.9	3.6	4.1	4.5	4.8	5.5

Trade shares of PRC in ASEAN member countries (%)

Year	1985	1990	1995	1996	1997	1998	1999	2000	2001
Indonesia	1.2	3.1	3.8	3.9	3.9	3.6	4.5	5.0	5.7
Malaysia	1.5	2.0	2.4	2.4	2.6	2.9	3.0	3.5	4.5
Philippines	2.9	0.9	1.4	1.2	1.5	2.2	1.6	1.1	1.3
Singapore	5.3	2.5	2.8	3.1	3.8	4.2	4.3	4.6	5.3
Thailand	3.0	2.4	2.9	3.0	3.3	3.7	4.0	4.7	5.2
ASEAN-5	3.1	2.4	2.7	2.9	3.2	3.5	3.6	4.1	4.7

Source: Computed from ADB (2002)

Tables 3 and 4 reveal the product composition of ASEAN's major exports and imports respectively over the period 1993-2000. The top three products, viz. Electrical Machinery, Sound Recorders, etc (HS 85), Nuclear Reactors, Boilers and Parts (HS 84) and Mineral Fuels, Oils, etc (HS 27), constituted more than half of ASEAN's trade basket in all the time periods considered. The share of both these products increased in 2000 compared to 1993. Among individual ASEAN countries, in 2000, nearly 60% of the Philippines' exports consisted of Electrical and Electronic products, the highest among

ASEAN countries for this product category, while Singapore accounted for the highest share in HS 84 category (31.6%). Indonesia has been the only ASEAN-5 economy whose shares in these two products have been the lowest, with nearly 38% of its exports composed of Mineral Fuels (HS 27). In comparison to 1993, the shares of HS 84 and HS 85 product groups have increased for all the ASEAN-5 economies in 2000, the largest increase being that of Indonesia (ASEAN Trade Statistics Database, 2002).

Table 3

Shares of Top 10 Products in ASEAN's Total Exports, 1993-2000

1993			1996		
HS	Products	Share (%)	HS	Products	Share (%)
85	Electrical Machinery, Sound Recorders, etc	23.1	85	Electrical Machinery, Sound Recorders, etc	27.2
84	Nuclear Reactors, Boilers, etc. and parts	15.1	84	Nuclear Reactors, Boilers, etc. and parts	19.1
27	Mineral Fuel, Oils, Waxes & products, etc.	11.5	27	Mineral Fuel, Oils, Waxes & products, etc.	10.1
44	Wood & articles thereof	5.5	44	Wood & articles thereof	3.5
62	Articles of Apparel & Accessories, Not Knitted, etc	3.4	40	Rubber & articles thereof	2.9
40	Rubber & articles thereof	2.6	62	Articles of Apparel & Accessories, Not Knitted, etc	2.1
61	Articles of Apparel & Accessories, Knitted, etc.	2.4	15	Animal Vegetables, Oils, Fats, Waxes, etc.	1.9
15	Animal Vegetables, Oils, Fats, Waxes, etc.	2.3	71	Natural Pearl, Precious Stones & Metals, etc.	1.7
03	Fish, Crustaceans, Molluscs, etc.	2.1	61	Articles of Apparel & Accessories, Knitted, etc	1.6
39	Plastics & articles thereof	1.9	39	Plastics & articles thereof	1.6
	Ten Major Commodities	69.9		Ten Major Commodities	71.7
	Others	30.1		Others	28.3
	Total	100		Total	100

Note: Including exports to Singapore
Thailand exports for 2000 cover only quarter 1 to quarter 3.

Source: ASEAN Trade Statistics Database (2002). Covers only ASEAN 6.

Table 3 (Contd.)

SHARES OF TOP 10 PRODUCTS ASEAN'S TOTAL EXPORTS, 1993-2000

1999			2000		
HS	Products	Share (%)	HS	Products	Share (%)
85	Electrical Machinery, Sound Recorders, etc.	31.3	85	Electrical Machinery, Sound Recorders, etc.	33.6
84	Nuclear Reactors, Boilers, etc. and Parts	21.4	84	Nuclear Reactors, Boilers, etc. and Parts	20.8
27	Mineral Fuel, Oils, Waxes & Products etc	8.0	27	Mineral Fuel, Oils, Waxes & Products, etc	10.0
44	Wood & articles thereof	2.4	39	Plastics & articles thereof	2.2
15	Animal Vegetables, Oils, Fats, Waxes, etc	2.1	44	Wood & articles thereof	2.1
39	Plastics & articles thereof	2.0	62	Articles of Apparel & Accessories, not knitted, etc.	1.8
62	Articles of Apparel & Accessories, not Knitted etc	1.8	29	Organic Chemicals	1.6
29	Organic Chemicals	1.8	90	Optical Photographic Measuring Instruments, etc.	1.6
40	Rubber & articles thereof	1.7	40	Rubber & articles thereof	1.5
61	Articles of Apparel & Accessories,	1.7	61	Articles of Apparel & Accessories,	1.5
	Ten Major Commodities	74.2		Ten Major Commodities	76.8
	Others	25.8		Others	23.2
	Total	100		Total	100

Source: ASEAN Trade Statistics Database (2002). Covers only ASEAN 6.

Table 4
Share of Top 10 products in ASEAN's Total Imports, 1993-2000

1993			1996		
HS	Products	Share (%)	HS	Products	Share (%)
85	Electrical Machinery, Sound Recorders	24.0	85	Electrical Machinery, Sound Recorder, etc.	26.0
84	Nuclear Reactors, Boilers, etc. and Parts	18.5	84	Nuclear Reactors, Boilers, etc. and Parts	19.7
27	Mineral Fuel, Oils, Waxes & Products, etc.	8.4	27	Mineral Fuel, Oils, Waxes & Products, etc.	7.4
87	Vehicles & Parts excluding Railway Rolling-Stock	4.2	87	Vehicles & Parts excluding Railway Rolling-Stock	4.4
72	Iron & Steel	4.2	72	Iron & Steel	3.6
39	Plastics & articles thereof	2.9	39	Plastics & articles thereof	2.6
88	Aircraft, Spacecraft & Parts	2.4	29	Organic Chemicals	2.3
90	Optical Photographic Measuring, Instruments, etc.	2.3	90	Optical Photographic Measuring Instruments, etc.	2.2
29	Organic Chemicals	2.2	88	Aircraft, Spacecraft & Parts	1.9
73	Articles of Iron or Steel	2.1	73	Articles of Iron or Steel	1.9
	Ten Major Commodities	71.1		Ten Major Commodities	72.0
	Others	28.9		Others	28.0
	Total	100		Total	100

Note: Including imports to Singapore
 Thailand imports for 2000 cover only quarter 1 to quarter 3.

Source: ASEAN Trade Statistics Database(2002). Covers only ASEAN 6.

Table 4 (Contd.)
Shares of Top 10 products in ASEAN's Total Imports, 1993-2000

1999			2000		
HS	Products	Share (%)	HS	Products	Share (%)
85	Electrical Machinery, Sound Recorder, etc.	32.2	85	Electrical Machinery, Sound Recorder, etc.	33.3
84	Nuclear Reactors, Boilers, etc. and Parts	17.0	84	Nuclear Reactors, Boilers, etc. and Parts	17.3
27	Mineral Fuel, Oils, Waxes & Products, etc.	8.3	27	Mineral Fuel, Oils, Waxes & Products, etc.	10.9
39	Plastics & articles thereof	2.8	39	Plastics & articles thereof	2.9
72	Iron & Steel	2.6	87	Vehicles & Parts excluding Railway Rolling-Stock	2.8
90	Optical Photographic Measuring Instruments, etc.	2.5	90	Optical Photographic Measuring Instruments, etc.	2.7
29	Organic Chemicals	2.4	29	Organic Chemicals	2.4
87	Vehicles & Parts excluding Railway Rolling-Stock	2.2	72	Iron & Steel	2.3
73	Articles of Iron or Steel	1.9	73	Articles of Iron or Steel	1.4
88	Aircraft, Spacecraft & Parts	1.7	71	Natural Pearl, Precious Stones	1.3
	Ten Major Commodities	73.5		Ten Major Commodities	77.2
	Others	26.5		Others	22.8
	Total	100		Total	100

Source: ASEAN Trade Statistics Database(2002). Covers only ASEAN 6.

Analysis of the PRC's major merchandise export shares over 1997-98 indicates that Chinese exports have been dominated by Miscellaneous manufacturing products (SITC 8). Thus, Toys, Sporting goods (SITC 894) (4.5%), Footwear (SITC 851) (4.4%),

Outer garments knit non-elastic (SITC 845) (3.6%) and Women's outwear non-knit (SITC 843) (3.6%) accounted for nearly a fifth of the PRC's total exports. Electronic products, viz. Data processing machines (SITC 752) (3.4%), Telecommunication equipment and parts (SITC 764) (3.2%) constituted the other major Chinese export. Overall, the PRC's export structure has been largely labour-intensive in nature, with such products constituting more than a third of the PRC's total exports (Shafaeddin, 2002). Chinese imports have been more dominated by SITC 7 category, accounting for five out of the top ten imports. These products consisted mostly of Electronic products and machinery equipment viz. Electronic Valves (SITC 776) (5.2%), SITC 764 (4.7%), Other Machinery and equipment (SITC 728) (3.6%) and SITC 759 (2.6%) have made up nearly a fifth of the PRC's total imports over 1997-98.

India's exports grew at 7.6% per annum during 1980-95 in aggregate volume terms compared to 10% per annum for the PRC over the same period. Specifically, between 1991 and 2000, while India's exports doubled, the PRC's exports expanded more than three-fold. The growth of India's imports has steadily outpaced that of its export growth, thus resulting in persistent trade deficits, which averaged to about US \$6.9 billion annually during 1995-2000. The geographical distribution of India's exports in 1995-2000 reveals that the majority of India's exports are still destined to OECD markets which accounted for 57% of India's total exports in 1999-2000. Among the OECD countries, the US is the largest export market, accounting for 22% of India's global exports in 1999-2000. This is followed by the UK (5.6%) and Germany (4.7%). A similar trend is observed for India's imports from its major trading partners. Notably, India-PRC bilateral trade has been growing significantly in recent years. The PRC is now the sixth largest trading partner of India among the East Asian countries, registering a growth rate of about 28% during 2001-2002 (G.O.I, 2003).

Table 5 shows India's composition of exports during two sub-periods, 1988-90 and 1998-2000. Changes in average exports are computed over the pre and post-reform periods. While India's export dependence on primary products reduced from 24% in 1988-90 to about 20% of its total exports in 1998-2000, that on manufactured products increased marginally. With regard to the manufactured exports during the 1998-2000 period, the largest share of exports consisted of Handicrafts, primarily Gems and Jewelry (18.0%), Engineering goods (14.0%), Readymade Garments (12%), Textile Yarn Fabrics (11.6%) and Chemicals and Allied products (9.0 %) (Srinivasan, 2001). This composition has remained virtually unchanged over the past decade in spite of a phased removal of export restrictions and export promotion strategies that were adopted as part of the economic reforms in 1991.

Table 5
Commodity composition of Exports in India over pre and post-reforms period
(U.S \$ billion)

		1988-90	1994-96	1998-2000	1994-96 over	1998-2000 over
No.	Commodity				1988-90	1988-90
1	Primary products	3.4	5.8	7.0	2.4	3.6
		(24.1)	(21.6)	(19.9)	(18.8)	(17.0)
2	Manufactured products, of which	10.1	20.2	27.3	10.1	17.2
		(71.0)	(75.4)	(77.3)	(80.3)	(81.6)
2.1	<i>Handicrafts, of which</i>	3.2	5.4	7.4	2.2	4.1
		(22.7)	(20.2)	(20.8)	(17.4)	(19.6)
2.1.1	<i>Gems and Jewellery</i>	2.7	4.6	6.3	1.8	3.6
		(19.3)	(17.1)	(17.9)	(14.7)	(16.9)
2.2	<i>Engineering goods</i>	1.6	3.6	4.9	2.1	3.3
		(11.1)	(13.6)	(13.9)	(16.4)	(15.9)
2.3	<i>Readymade Garments</i>	1.6	3.2	4.3	1.6	2.7
		(11.2)	(11.9)	(12.3)	(12.6)	(12.6)
2.4	<i>Textile Yarns, Fabric</i>	1.1	2.9	4.1	1.8	3.0
		(7.9)	(10.8)	(11.6)	(14.2)	(14.2)
2.5	<i>Leather products</i>	1.1	1.6	1.6	0.5	0.6
		(7.5)	(5.8)	(4.6)	(3.9)	(2.6)
2.6	<i>Chemicals and Allied products</i>	0.9	1.9	3.1	1.1	2.2
		(6.0)	(7.2)	(8.8)	(8.5)	(10.7)
3	Petroleum products	0.7	0.8	1.0	0.1	0.3
		(4.9)	(3.0)	(2.8)	(0.8)	(1.4)
1+2+3	Total Exports	14.2	26.8	35.3	12.6	21.1

Notes: a) Figures in parentheses constitute percentages of the total exports (1+2+3)

b) Mid-point to mid-point compound annual growth rates of total exports:

1988-90 to 1994-96: 11.12 percent per annum over 6 years.

1988-90 to 1998-2000: 9.51 percent per annum over 10 years.

Source: Srinivasan (2001)

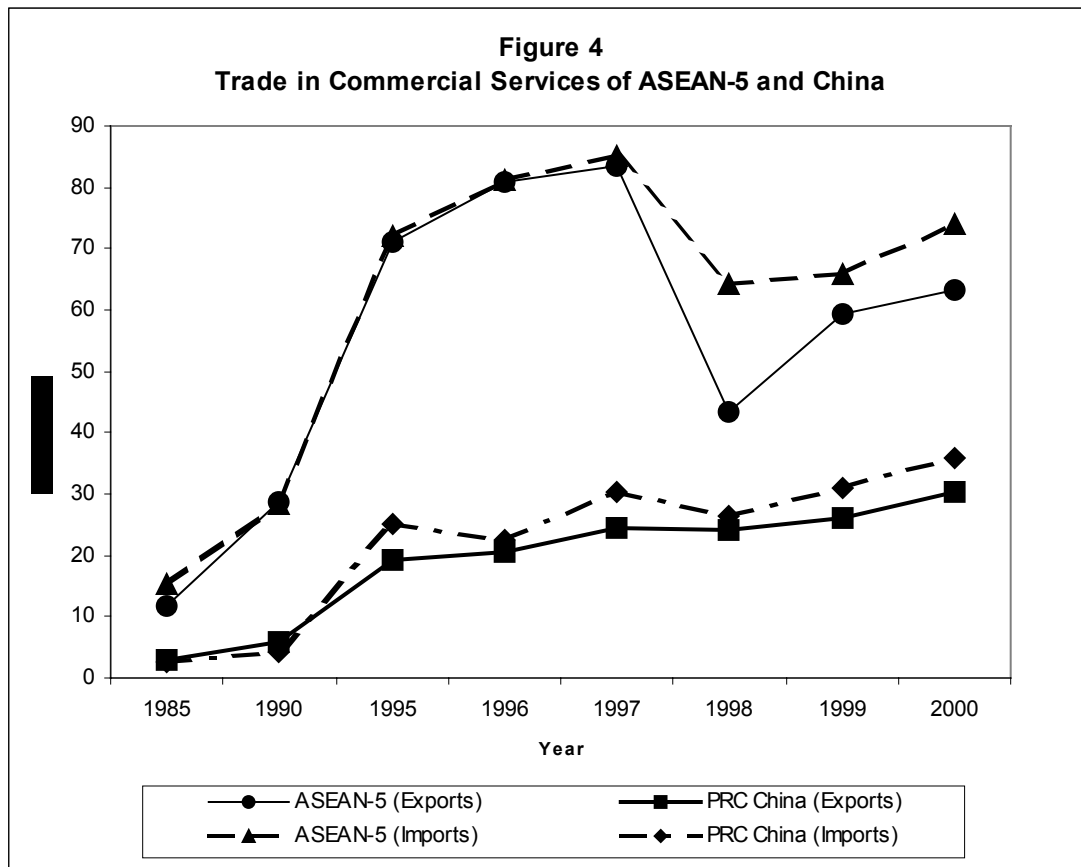
2.2 Trade in Commercial Services³

Figure 4 documents trends in trade in commercial services of the ASEAN-5 economies and the PRC. Table 6 offers data on trends in commercial service exports and imports of individual ASEAN-5 economies, the PRC and India.

In terms of rankings in world trade in commercial services, the PRC was the 12th largest service exporter and the 10th largest service importer in 2001. In volume terms, ASEAN-5's trade in commercial services in 1985 was more than double that of the PRC⁴. Between 1985 and 1997, while ASEAN-5 experienced an eight-fold increase in the volume of trade in commercial services, that of the PRC expanded slightly more rapidly (twelve to fifteen times). Nonetheless, given the higher initial volume of ASEAN trade, by 2000, the PRC's trade in commercial services remained about half that of ASEAN-5.

³ We focus only on commercial services as this is the only component of service trade for which data are available. The WTO defines commercial services as services minus government services, n.i.e. (not included elsewhere) (WTO, 2001 p.216). Commercial services are further sub-divided into transport, travel, and other commercial services (including communication, construction, financial, insurance, computer and information services and other business services). This data is only available in aggregate terms from the WTO (i.e. no bilateral trade data are available).

⁴ Two points should be noted here. One, the bulk of ASEAN's trade in commercial services is attributable to Singapore which has a comparative advantage in many service sector activities (see Findlay and Sidorenko, 2003 and Rajan, 2003c). Two, the figures above also include intraregional ASEAN-5 trade which really ought not to be included when considering ASEAN-5 as a group.



Source: The World Bank (2002b)

India's share in Asia's global exports of commercial services (as defined by the WTO) increased from 3.5% to 5.8% between 1990 and 2000. India's share of global commercial services exports in 2000 was higher than Malaysia, Indonesia and the Philippines; it was about two-thirds that of the PRC and three-fourths that of Singapore (WTO, 2001a, Table III.79). In 2001, India ranked 19th in terms of its global export share of commercial services, which is below PRC (12th) and Singapore (16th), but above Malaysia (26th), Thailand (27th), Indonesia (39th) and Philippines (above 40th). Indeed, India outranked all individual ASEAN-5 in terms of global import share of commercial services. In 2001, India ranked 18th compared to Singapore (21st), Malaysia (22nd), Thailand (28th), Indonesia (29th) and Philippines (more than 40).

Table 6
Shares of China, ASEAN and India in world trade in commercial services

Exporters	Share (%)			Rank in 2001
	1990	1995	2001	
United States	17.0	16.7	18.1	1
United Kingdom	6.9	6.4	7.4	2
France	8.5	7.0	5.5	3
Germany	6.6	6.3	5.5	4
Japan	5.3	5.4	4.4	5
Hong Kong, China	2.3	2.9	2.9	10
China	0.7	1.5	2.3	12
Singapore	1.6	2.5	1.8	16
India	0.6	0.6	1.4	19
Taipei, Chinese	0.9	1.3	1.4	20
Malaysia	0.5	1.0	1.0	26
Thailand	0.8	1.2	0.9	27
Indonesia a	0.3	0.4	0.4	39
Philippines	0.4	0.8	0.2	more than 40
ASEAN-5	3.6	5.9	4.3	
World			100.0	
Importers	Share (%)			Rank in 2001
	1990	1995	2001	
United States	12.0	10.8	13.0	1
Germany	9.7	5.4	9.2	2
Japan	10.3	10.2	7.4	3
United Kingdom	5.5	5.2	6.3	4
France	6.2	5.4	4.3	5
China	0.5	2.1	2.7	10
Hong Kong, China	1.4	1.7	1.7	15
Taipei, Chinese	1.7	1.9	1.6	16
India	0.7	0.8	1.6	18
Singapore	1.1	1.4	1.4	21
Malaysia	0.7	1.2	1.1	22
Thailand	0.8	1.6	1.0	28
Indonesia a	0.7	1.1	1.0	29
Philippines	0.2	0.6	0.4	more than 40
ASEAN-5	3.4	5.9	4.9	
World			100.0	

Source: WTO (2002)

In contrast, note that during 2001, India ranked a lowly 30th in world merchandise exports and 27th in world merchandise imports. Among other economies under

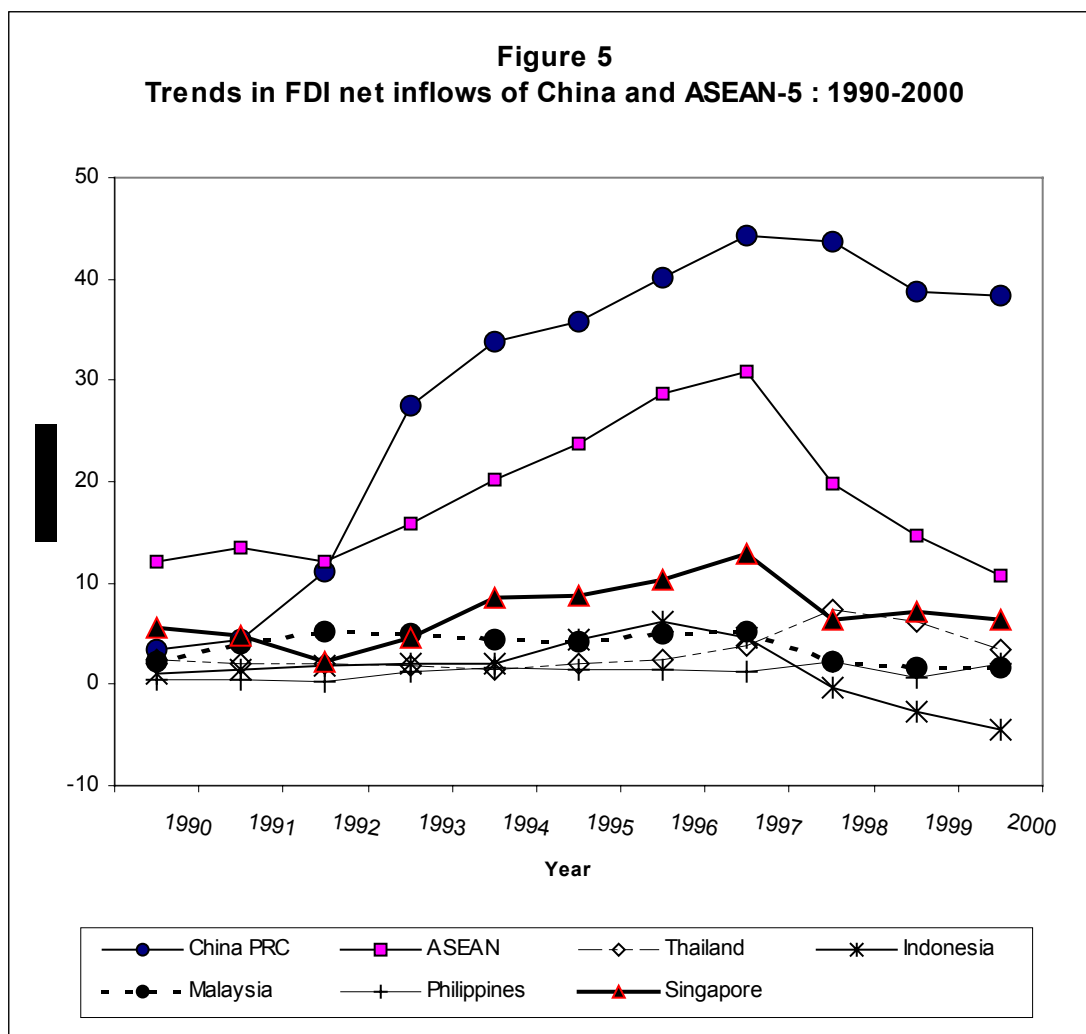
consideration, save the Philippines, were ranked far higher in merchandise trade than services. Specifically, the PRC ranked 6th in global merchandise exports and imports, respectively. Singapore and Malaysia ranked 15th and 18th in world merchandise exports and 15th and 19th rank in world merchandise imports, respectively. Thailand comes next, followed by Indonesia, their respective ranks being 24th and 30th in world merchandise exports and 22nd and 39th in world merchandise imports. The Philippines ranked 35th in world merchandise exports and 37th in world merchandise imports.

2.3 FDI

An important commonality shared by the PRC with ASEAN has been the heavy dependence on FDI as an instrument of export-led growth. Net FDI inflows to the PRC increased from an annual average of US\$ 2 billion between 1980 and 1990 to just over US\$ 40 billion between 1996 and 2000. Comparatively, while ASEAN-5 attracted slightly over three times of FDI in pre-1990s, its average net inflows of FDI amounted to an annual average of only US\$ 20 billion between 1996 and 2000, nearly half that of the PRC. On the other hand, India has attracted relatively insignificant amounts of FDI inflows in the pre 1990 period. However, India's economic reforms have spurred larger amounts of FDI inflows -- averaging about US\$ 2.5 billion in annual terms during 1991-2000. Overall, India approved nearly US\$ 72 billion worth of narrowly defined FDI since the post-reform period. Nonetheless, the realization of this approved FDI into actual disbursements has been quite slow; the average realization ratio (i.e. actual inflows-to-approvals) was about 36% over the entire period.

Of course, averages tell only one part of the story. As [Figure 5](#) reveals, the PRC has overtaken ASEAN as an FDI destination since 1992. The gap remained steady between 1993 and 1997 (with the PRC receiving about US\$ 10-15 billion more FDI than ASEAN-5 annually on average), but has been increasing markedly since then. While this

might be expected *a priori* in view of the decline of FDI into ASEAN following the 1997-98 crisis and the lingering after-effects, interestingly, FDI into the PRC has also been on a downward trend in recent years. However, the decline of FDI into the PRC has been far more gradual than that to ASEAN, hence giving rise to a growing gap between the two. The most dramatic declines have been in Indonesia (Figure 5). While annual FDI inflows were about US\$ 5 billion at its peak in 1995-96, there has been an outflow of FDI since 1998. In other words, the stock of FDI in Indonesia has been eroding (Rajan, 2003a,b). This issue is revisited in Section IV.1.



Source: ADB (2002)

The share of FDI to ASEAN-5 to global FDI, which averaged about 6.7% during 1993-96, registered a substantial decline since 1997, hovering at around 1.6% during 1999. As a proportion of all developing countries, ASEAN's share fell from 13.6% in 1997 to 6.8% in 1999 (UNCTAD, 1999, 2000). Among developing countries, the PRC has remained the single most important destination of FDI. The share of the PRC as a percentage of developing countries averaged about 32% during 1993-96, but declined gradually to 19.5% in 1999 due to increasing competition from other developing economies. The PRC's share in total FDI of developing economies of Asia increased from 43% in 1996 to about 46% in 2001. India marginally improved its share in total FDI to developing Asia, increasing from 2.7% in 1996 to 3.3% in 2001, though it lags the PRC as an investment destination by some margin (G.O.I, 2003 pp. 120).

The preceding notwithstanding, it is important to keep in mind that cross-country FDI comparisons of FDI stocks and flows are particularly problematic due to data inconsistencies. For instance, in the case of the PRC, the official FDI figures may be somewhat fictitious and artificially inflated and consequently need to be interpreted with caution. While Hong Kong has been a major direct investor, part of the investments may be due to "round-tripping". Round-tripping" refers to the phenomenon whereby domestic (Chinese) investors try to take advantage of tax and tariff benefits extended to foreign investors by moving their funds out of the PRC to other countries -- mainly Hong Kong and the Caribbean tax havens, viz. Bermuda, British Virgin Islands and Cayman Islands (MTI, 2002). Although the true magnitude of "round-tripping" cannot be precisely quantified, using some indirect evidence at the macro-level, the Census and Statistics Department in Hong Kong estimated that about 80% of Hong Kong's Inward FDI originated from the PRC, the British Virgin Islands, and Bermuda in the year 2000, while 96% of Hong Kong's FDI outflows went back to these countries. Also, the net errors and omissions in the PRC's Balance of Payments, a proxy of unrecorded capital flows,

seems to be strongly correlated with FDI inflows from Hong Kong and other tax havens, which provides further indirect evidence in support of the phenomenon of “round-tripping”. In order to obtain a more realistic estimate of FDI inflows in the PRC, one therefore needs to net out the inflows that are due to the “round-tripping” (Wu et al., 2002b).

Even among the ASEAN-5 countries there are considerable differences in the measurement of data. For instance, in the case of the Philippines, FDI figures exclude reinvestment earnings and hence the official figures are underestimated. Other ASEAN countries such as Indonesia and Thailand adopt FDI definitions comprising equity and loans. Singapore's figures are based on gross inflows of FDI and exclude repatriation of dividends, royalties and loans. On the other hand, in the case of India, the FDI figures report the value of new equity investments only. Thus, India's official FDI figures are significantly understated compared to that prescribed by IMF's standard measurement guidelines as they do not include reinvested earnings, intra-company loans and some part of portfolio flows that are sub-components of FDI flows (Srivastava, 2003). According to the World Bank's *World Business Environment Survey 2002*, the FDI gap between India and the PRC is not nearly as huge as may be suggested by official figures. It notes that if FDI figures are adjusted for both round-tripping in the case of the PRC and underestimation of FDI inflows in the case of India, the difference in terms of ratio of adjusted FDI to GDP was only about 15% during 2000, far lower than the unadjusted figure of 85%⁵.

⁵ See <http://rru.worldbank.org/psdforum/forum2002/documents/Pfeffermann.ppt>. In view of this, the government of India adopted a revised FDI classification in 2003 which includes reinvested earnings, venture capital along with the equity capital in conformity with IMF definition.

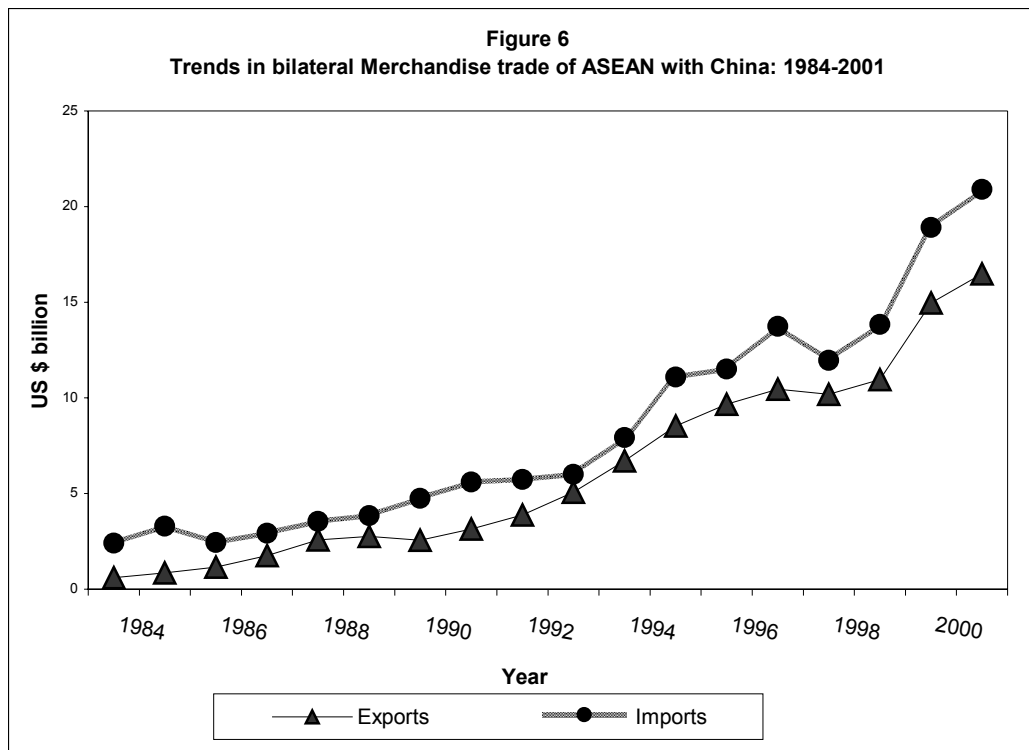
3. Economic Interactions Between the PRC, ASEAN-5 and India, 1984-2001

Having outlined trends in trade and investment linkages of the PRC, ASEAN-5 and India with the rest of the world, the next section briefly examines economic interactions between these economies since the mid 1980s.

3.1 The PRC and ASEAN-5

a) *Merchandise Trade*

Figure 6 reveals trends in bilateral trade between ASEAN-5 and the PRC between 1985 and 2001. A few noteworthy points warrant highlighting. Between 1985 and 1992, while bilateral trade did rise, the rate of increase was rather gradual. The bilateral trade rose sharply between 1992 and 1996. This period corresponds to a time when FDI began to surge into the PRC. Expectedly, trade between the two stagnated between 1996 and 1998 during the economic crisis in Southeast Asia, though it has rebounded since then. Bilateral trade between ASEAN-5 and the PRC totaled US\$ 39.5 billion in 2002, growing at an annual average of slightly over 20% since 1991 when overall trade amounted to only US\$ 7.9 billion (ASEAN-China Expert Group on Economic Cooperation, 2002). While both ASEAN's exports to and imports from the PRC have increased in tandem, the latter has consistently exceeded the former, ensuring that the PRC has enjoyed a persistent trade surplus with ASEAN. There are signs that this deficit has been on the rise in the last few years as the rate of growth of ASEAN's imports from the PRC has outpaced that of its exports. The PRC's share of ASEAN's trade remained rather stagnant between 1985 and 1994, but shot up since then, particularly with regard to the PRC as a source of ASEAN's imports.



Source: ADB (2002)

In order to analyze changes in export composition of ASEAN's trade with the PRC, [Tables 7 and 8](#) present the top ten exports and imports in ASEAN's trade with the PRC between 1993 and 2000. In comparison to 1993, when ASEAN's exports to the PRC were dominated more by primary products like Wood & Wood articles and Mineral Fuels, the product composition shifted markedly by 2000 to manufactured products, particularly Electrical and Electronic and Nuclear Boiler products. This is evident in the increasing share of these products in ASEAN's exports to the PRC over the 1993-2000 period. These products, along with that of Nuclear Boilers and parts, accounted for about half of ASEAN's imports from the PRC by 2000. There is, therefore, increasing evidence of intra-industry trade in these products between ASEAN-5 and the PRC. The PRC is rapidly improving its production and export capacity in light manufactured products as well as in the assembly of parts and components of a limited number of capital goods. Its exports of light manufactured goods compete mainly with South Asian countries and a

few Latin American and African countries in the third markets, while it competes head-on with some lower and middle income ASEAN countries in the production and assembly of some capital goods. However, insofar as the intermediate goods used in the manufacture of the PRC's exports of capital goods are largely imported from ASEAN and other East Asia countries, trade is as much complementary as it is "competitive" (Shafaeddin, 2002).

Table 7
Share of 10 Major Products in ASEAN'S Exports to China: 1993-2000

1993			1996			1999			2000		
HS	Products	Share (%)	HS	Products	Share (%)	HS	Products	Share (%)	HS	Products	Share (%)
27	Mineral Fuel Oils waxes & Products, etc.	32.3	27	Mineral Fuel Oils waxes & Products, etc.	23.3	84	Nuclear Reactors, Boilers, etc. & Parts	20.3	85	Electrical Machinery, Sound Recorders, etc.	21.0
44	Wood & Articles Thereof	22.6	84	Nuclear Reactors, Boilers, etc. & Parts	13.2	85	Electrical Machinery, Sound Recorders, etc.	17.9	84	Nuclear Reactors, Boilers, etc. & Parts	17.5
15	Animal Vegetable Oils Fats, Waxes, etc.	8.4	85	Electrical Machinery, Sound Recorders, etc.	9.0	27	Mineral Fuel Oils waxes & Products, etc.	11.4	27	Mineral Fuel Oils waxes & Products, etc.	17.0
84	Nuclear Reactors, Boilers, etc. & Parts	6.4	44	Wood & Articles Thereof	8.8	15	Animal Vegetable Oils Fats, Waxes, etc.	5.4	39	Plastics & Articles Thereof	6.1
85	Electrical Machinery, Sound Recorders, etc.	6.0	15	Animal Vegetable Oils Fats, Waxes, etc.	6.7	44	Wood & Articles Thereof	5.3	44	Wood & Articles Thereof	4.9
39	Plastics & Articles Thereof	3.2	40	Rubber & articles thereof	4.2	39	Plastics & Articles Thereof	5.1	29	Organic Chemicals	4.3
72	Iron & Steel	2.3	24	Tobacco and manufacture of tobacco substitutes	3.9	29	Organic Chemicals	3.7	15	Animal Vegetable Oils Fats, Waxes, etc.	3.9
98	Postal packages & special transactions	2.1	10	Cereals	3.7	38	Miscellaneous Chemical Products	3.5	47	Wood Pulp & Waste of paper or paperboard	3.0
74	Copper & Articles Thereof	1.8	74	Copper & Articles Thereof	3.1	48	Paper & Paperboard Articles of Paper pulp	3.4	48	Paper & Paperboard Articles of Paper pulp	2.2
29	Organic Chemicals	1.5	39	Plastics & Articles Thereof	3.0	40	Rubber & articles thereof	2.9	90	Optical Photographic measuring instruments, etc	1.8
	10 Major	86.8		10 Major	78.8		10 Major	78.9		10 Major	81.8
	Others	13.2		Others	21.2		Others	21.1		Others	18.2
	Total	100.0		Total	100.0		Total	100.0		Total	100.0

Notes: (a) Covers only ASEAN-5 plus Brunei.

(b) Thailand imports for 2000 cover only quarter 1 to quarter 3.

Source: ASEAN Trade Statistics Database (2002).

b) *FDI*

In order to analyze the patterns of FDI inflows in ASEAN member countries, and the role of PRC (as well as “Greater China”, i.e. Hong Kong and Taiwan), Table 9 presents trends in net FDI inflows into ASEAN-5 countries between 1995 and 2000, while Table 10 presents the data as a share of total FDI inflows into individual ASEAN countries.

While intra-regional FDI within ASEAN has declined significantly with the advent of the crisis in 1997-98, especially due to large FDI outflows from Indonesia, extra-regional FDI flows to ASEAN-5 also registered a significant decline since 1996. The share of ASEAN-5 in total Asia-bound FDI also fell dramatically from 51% in 1990 to only 11% in 2001. The PRC’s direct investment in ASEAN-5 is non-negligible. They primarily tend to be market and resource seeking. However, consistent with the merchandise trade data, Chinese companies have invested in electronics and electrical industries in Malaysia and Thailand, in particular (MTI, 2001). The data reveal that the PRC accounted for less than 1% of ASEAN’s total FDI inflows on average, except for 1998 (when it was 1.7%). On the other hand, Hong Kong as well as Taiwan accounted for about 4 to 5% each of ASEAN-5 total net FDI inflows during this period (Table 1.10). As of 2000, Greater China accounted for nearly 14% of net FDI inflows into ASEAN, having averaged 9% over the five-year period. However, there exists a great deal of intra-ASEAN variation. Greater China accounted for about 13% of total inflows into the Philippines and Thailand. For the remainder of the ASEAN countries, FDI from Greater China hovered at around 5 and 10%.

Table 9
Trends in Net Inflows to ASEAN: 1995-2000

Net FDI inflows from the PRC												
Amount (US \$ million)												Share in total (%)
	1995	1996	1997	1998	1999	2000	1995	1996	1997	1998	1999	2000
Indonesia	5.7	0.0	8.0	-44.0	-1.2	-2.8	5.1	0.0	-55.8	-16.3	-1.4	-9.9
Malaysia	22.5	13.3	43.6	5.5	3.2	1.3	20.3	13.1	-304.5	2.1	3.8	4.7
Philippines	7.4	3.8	2.4	143.0	65.0	0.0	6.7	3.7	-16.5	52.9	78.0	0.0
Singapore	73.5	80.7	-60.5	160.8	18.6	22.5	66.2	79.4	422.4	59.5	22.3	79.7
Thailand	1.9	3.9	-7.8	5.1	-2.2	7.2	1.7	3.8	54.4	1.9	-2.6	25.6
TOTAL (ASEAN-5)	110.9	101.7	-14.3	270.4	83.4	28.3	100.0	100.0	100.0	100.0	100.0	100.0
Net FDI inflows from ASEAN (intra-ASEAN FDI)												
Amount (US \$ million)												Share in total (%)
	1995	1996	1997	1998	1999	2000	1995	1996	1997	1998	1999	2000
Indonesia	608.9	193.3	272.2	-37.1	-427.8	-232.6	19.3	8.1	5.3	-3.0	-39.8	-30.3
Malaysia	1,676.5	1,475.8	2,261.5	469.9	536.0	365.6	53.2	61.9	44.3	37.6	49.8	47.6
Philippines	204.8	73.9	139.4	109.9	114.2	88.5	6.5	3.1	2.7	8.8	10.6	11.5
Singapore	503.2	332.9	2,131.3	136.5	283.7	157.8	16.0	14.0	41.8	10.9	26.4	20.5
Thailand	160.6	308.1	297.5	569.6	569.5	389.0	5.1	12.9	5.8	45.6	52.9	50.6
TOTAL (ASEAN-5)	3,154.1	2,384.0	5,101.9	1,248.8	1,075.5	768.5	100.0	100.0	100.0	100.0	100.0	100.0
Net FDI inflows from Hong Kong												
Amount (US \$ million)												Share in total (%)
	1995	1996	1997	1998	1999	2000	1995	1996	1997	1998	1999	2000
Indonesia	106.8	94.5	232.3	13.3	-143.9	-122.2	10.8	8.6	18.5	1.8	-29.8	-18.2
Malaysia	198.0	337.1	315.8	126.3	234.0	269.2	20.0	30.7	25.2	17.4	48.4	40.1
Philippines	440.8	90.4	70.9	42.1	64.6	45.9	44.6	8.2	5.7	5.8	13.4	6.8
Singapore	-35.4	361.9	191.2	150.6	94.8	147.0	-3.6	32.9	15.3	20.7	19.6	21.9
Thailand	279.1	215.1	442.4	393.9	233.7	331.3	28.2	19.6	35.3	54.2	48.4	49.4
TOTAL (ASEAN-5)	989.3	1,099.1	1,252.7	726.2	483.1	671.2	100.0	100.0	100.0	100.0	100.0	100.0

Table 9 (Contd.)
Trends in Net Inflows to ASEAN: 1995-2000
Net FDI inflows from Taiwan, ROC

	Amount (US \$ million)						Share in total (%)					
	1995	1996	1997	1998	1999	2000	1995	1996	1997	1998	1999	2000
Indonesia	-14.1	19.5	7.7	-6.9	-20.5	-4.9	-2.4	4.6	1.1	-1.2	-6.5	-0.8
Malaysia	322.9	21.0	119.5	73.5	56.8	78.0	54.3	5.0	17.3	12.6	18.1	12.3
Philippines	13.3	56.1	23.4	100.7	9.0	8.3	2.2	13.3	3.4	17.3	2.9	1.3
Singapore	175.9	187.6	404.8	310.2	146.5	393.5	29.6	44.4	58.7	53.1	46.7	62.1
Thailand	96.6	138.0	133.8	106.3	121.6	159.0	16.2	32.7	19.4	18.2	38.8	25.1
TOTAL (ASEAN-5)	594.6	422.2	689.2	583.9	313.4	633.9	100.0	100.0	100.0	100.0	100.0	100.0
Net FDI inflows from Rest of the World												
	Amount (US \$ million)						Share in total (%)					
	1995	1996	1997	1998	1999	2000	1995	1996	1997	1998	1999	2000
Indonesia	3,737.1	6,000.7	4,405.5	-318.1	-2,317.2	-4,317.4	21.0	25.0	20.8	-2.0	-15.6	-43.8
Malaysia	4,138.5	5,821.2	4,061.5	2,244.1	3,359.1	3,421.5	23.3	24.3	19.2	13.9	22.6	34.7
Philippines	1,373.2	1,558.1	1,145.6	1,680.2	1,586.8	1,637.5	7.7	6.5	5.4	10.4	10.7	16.6
Singapore	6,705.1	8,651.2	8,202.7	5,654.7	6,684.7	6,232.4	37.7	36.1	38.8	35.1	44.9	63.2
Thailand	1,843.4	1,962.5	3,329.3	6,864.0	5,580.3	2,891.2	10.4	8.2	15.7	42.6	37.5	29.3
TOTAL (ASEAN-5)	17,797.3	23,993.7	21,144.6	16,124.8	14,893.6	9,865.1	100.0	100.0	100.0	100.0	100.0	100.0

Notes:

Negative sign means disinvestment.

Myanmar's figures are in fiscal year which ends in March of the following calendar year.

Source: Computed from ASEAN Secretariat: ASEAN FDI Database (2002)

Table 10
Share of the PRC in net FDI inflows in ASEAN member countries (%)

	1995	1996	1997	1998	1999	2000	Average
Indonesia	0.03	0.0	0.0	-0.3	0.0	0.0	0.0
Malaysia	0.1	0.1	0.2	0.0	0.0	0.0	0.1
Philippines	0.0	0.0	0.0	0.9	0.5	0.0	0.2
Singapore	0.4	0.4	-0.3	1.0	0.1	0.3	0.3
Thailand	0.0	0.0	0.0	0.0	0.0	0.1	0.0
TOTAL (ASEAN-5)	0.7	0.5	0.1	1.7	0.7	0.7	0.7
Share of intra-ASEAN Net FDI inflows in ASEAN member countries (%)							
	1995	1996	1997	1998	1999	2000	Average
Indonesia	14.0	3.1	5.8	10.4	15.6	5.1	9.0
Malaysia*	28.8	20.2	35.8	17.3	13.8	9.7	20.9
Philippines	13.0	4.5	10.8	6.1	6.7	5.1	7.7
Singapore	7.0	3.7	20.6	2.4	4.1	2.5	6.7
Thailand	8.0	13.6	8.2	7.7	9.3	11.9	9.8
TOTAL (ASEAN-5)	15.2	10.2	19.8	9.6	8.5	9.4	12.1
Share of Hong Kong's Net FDI inflows in ASEAN member countries (%)							
	Share in total (%)						
	1995	1996	1997	1998	1999	2000	Average
Indonesia	2.5	1.5	5.0	-3.7	5.2	2.7	2.2
Malaysia*	3.4	4.6	5.0	4.7	6.0	7.1	5.1
Philippines	27.9	5.5	5.5	2.3	3.8	2.7	8.0
Singapore	-0.5	4.0	1.9	2.6	1.4	2.3	1.9
Thailand	13.9	9.5	12.2	5.3	3.8	10.1	9.1
TOTAL (ASEAN-5)	5.0	4.4	5.2	4.8	3.0	5.9	4.7

Table 10 (Contd.)

Share of Taiwan's Net FDI inflows in ASEAN member countries (%)							
	Share in total (%)						
	1995	1996	1997	1998	1999	2000	Average
Indonesia	-0.3	0.3	0.2	1.9	0.7	0.1	0.5
Malaysia*	5.6	0.3	1.9	2.7	1.5	2.1	2.3
Philippines	0.8	3.4	1.8	5.6	0.5	0.5	2.1
Singapore	2.4	2.1	3.9	5.4	2.1	6.2	3.7
Thailand	4.8	6.1	3.7	1.4	2.0	4.8	3.8
TOTAL (ASEAN-5)	3.4	2.6	3.7	4.4	2.5	7.8	4.1

Share of PRC and Greater China's Net FDI inflows in ASEAN member countries (%)							
	Share in total (%)						
	1995	1996	1997	1998	1999	2000	Average
Indonesia	7.1	1.8	-210.5	14.2	7.3	7.7	-28.7
Malaysia*	20.8	11.4	-614.0	8.6	8.8	9.3	-92.5
Philippines	35.3	12.8	-56.5	59.9	76.9	3.1	21.9
Singapore	66.5	86.3	-1625.7	66.4	24.2	47.9	-222.4
Thailand	20.4	19.4	-194.4	8.6	8.2	27.6	-18.3
TOTAL (ASEAN-5)	9.1	7.5	9.0	10.8	6.1	14.5	9.5

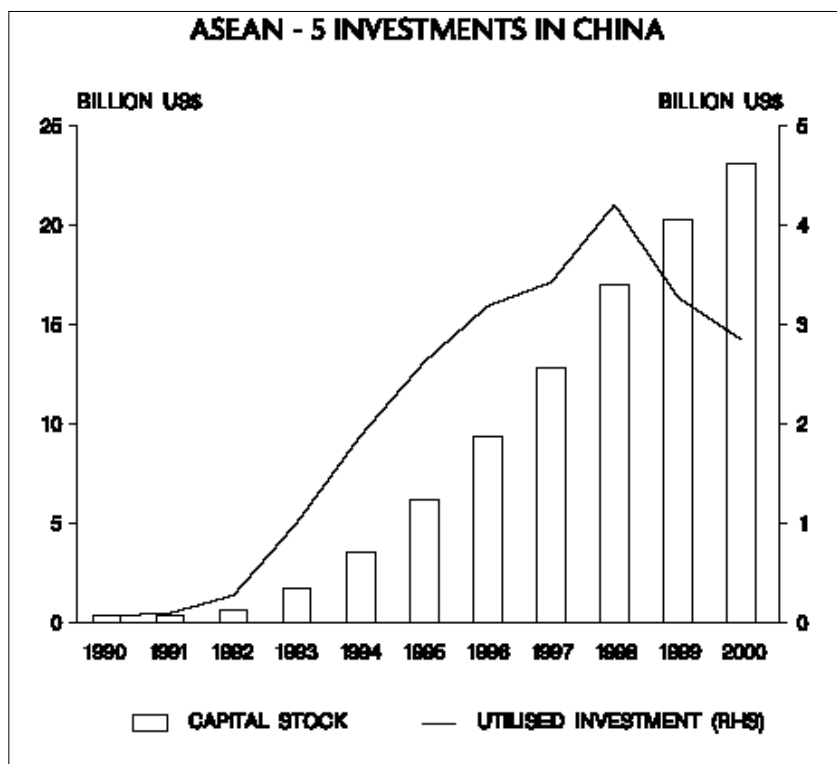
Notes: Negative sign means disinvestment.

Myanmar's figures are in fiscal year which ends in March of the following calendar year.

Source: Computed from ASEAN Secretariat: ASEAN FDI Database (2002).

Available data on ASEAN's cumulative FDI into the PRC suggests a marked rise from about US\$ 290 million in 1990 to over US\$ 20 billion by 2000 (Figure 7). This indicates increasing interest of ASEAN investors -- particularly those from Singapore -- in the PRC, especially since the post-crisis period.

Figure 7



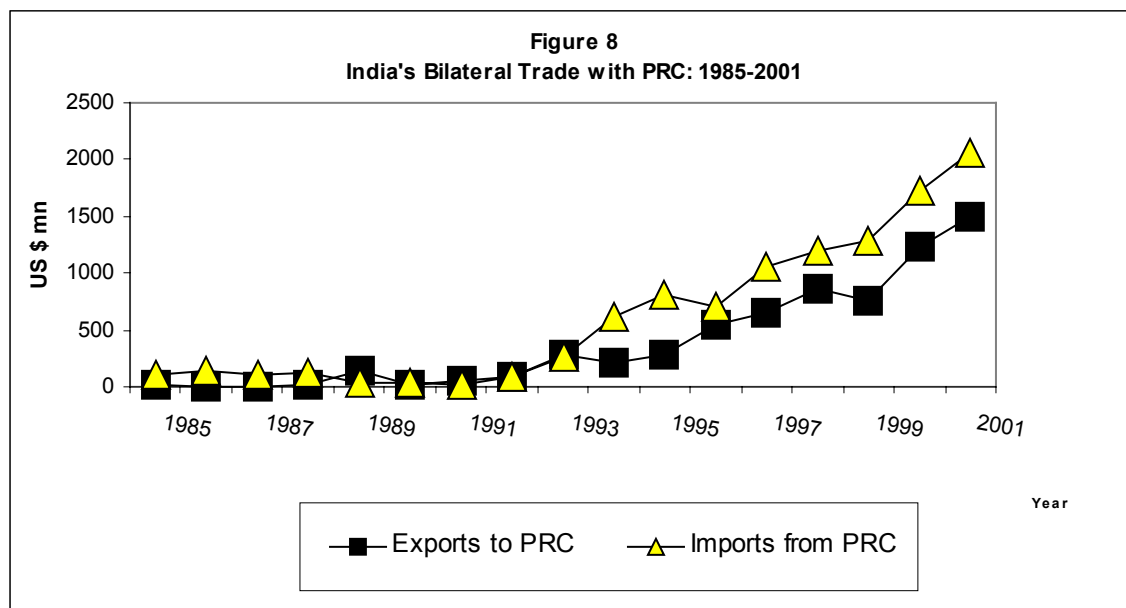
Source: MTI (2001)

3.2 The PRC and India

a) Merchandise Trade

Figure 8 illustrates the trends in India-PRC bilateral trade over the period 1985-2001. There has been a discernible upward trend in bilateral merchandise trade between the two countries since the economic reforms undertaken in India in 1991-1992. In particular, trade between India and the PRC more than doubled over the period 1992-2001, with the share of the PRC in India's exports increasing to about 3.3% in 2001

compared to less than 1% in 1991. The share of PRC in India's imports was even higher than that of exports during this period. The pace of expansion of bilateral trade has been particularly strong since 1999, with imports expanding at a much more rapid rate than that of exports.



Source: ADB (2002)

Thus, bilateral merchandise trade between India and PRC jumped from US\$ 265 million in 1991 to US\$ 4,950 million in 2002, with the annual average growth rate exceeding 30% between 1998 and 2002 (Business Times, Singapore, April 30, 2003). Of course, there is again a large discrepancy between bilateral trade figures depending on whether the data source is from the PRC or from India. The Indian official data puts bilateral trade in 2001-02 at US\$ 3000 million, substantially lower than the PRC's figures. Such large data discrepancies would require further investigation.

b) FDI

As bilateral relations between India and the PRC continue to improve, it is anticipated that trade and investment relations will deepen. The sectors that have attracted investment from Chinese companies in India are particularly in Information

Technology (IT), natural resources, light engineering, and white goods. To some extent, intra-industry division of labour is also observed between the two countries in pharmaceuticals, and engineering industries (Asher and Srivastava, 2003).

Among ASEAN countries, the investments by Malaysia have been primarily in infrastructural projects such as roads. The establishment of a representative office of the Confederation of Indian Industry (CII) in Kuala Lumpur has laid the foundation for greater investment collaborations by the companies, including the Small and Medium Enterprises (SMEs) between the two countries. There has been steady investment by Singapore-based companies in India, primarily in the telecommunications, IT, ports, logistics, and the health care sectors (Asher et al., 2003).

There also exists significant outward investment flows from India with its substantially liberalized policy framework that has facilitated Indian companies and financial institutions to invest abroad. Specifically, Indian companies are investing in significant magnitudes in the PRC as well as selected ASEAN countries, viz. Singapore, Malaysia, Thailand (Kumar, 2002, Table 10). India is thus gradually but definitely integrating with the rest of East Asia.

4. Is the PRC a Threat to ASEAN and India's Export Competitiveness?

In order to obtain a better understanding of the implications of the PRC's ongoing integration with the world economy -- including its WTO accession -- on both ASEAN and India, it would be useful to chart out the comparative advantage position of both countries in the manufacturing as well as the services sector.

4.1 Complementarities or Competition in Manufacturing Trade?

a) The PRC and ASEAN-5

The persistently sharp increase in the PRC's share of global exports, on the one hand, and the inconsistent growth of that of ASEAN's over the last few years, on the other, is often portrayed as "evidence" of the adverse impact of the rise of the PRC on ASEAN. Analysis of the extent of export competition between ASEAN and the PRC between 1990 and 2000 to the US market offers some useful insights (Kwan, 2002). Singapore, Malaysia and Thailand have been increasing their respective export shares to the US in certain products that coincide with the PRC's exports to the US. The largest increase is observed for Singapore; the percentage of its exports to US in products that were similar to the PRC's exports to the US increased from 19.2% in 1995 to 35.8% in 2000. However, the actual share of Singapore's export similarity with the PRC was the lowest among all the ASEAN-5 economies in 2000, with Indonesia having the highest share of about 82.8%, followed by Thailand with 65.4%. All in all, there seems to exist a rather high and growing degree of product overlap in the exports of the PRC and ASEAN-5 to the US, suggesting increased export competition between ASEAN-5 with the PRC.

Analysis of revealed comparative advantage (RCA) indices at the 3-digit level leads to a slightly different conclusion. Between 1992 and 1998, the PRC's export structure appears to be most similar to Malaysia in the final market for a number of "finished" capital goods, particularly data processing equipment, telecommunications equipment and some electric machinery, but not so much for light manufactured goods. Thailand's export structure is similar to that of the PRC with respect to clothing, miscellaneous household equipment and electric machinery. Indonesia appears to share few export similarities with the PRC except for furniture (Shafeddin, 2002, Table 9).

The inconsistency in conclusions offered by the analysis of export similarity indices and RCA ones as noted above (particularly with regard to Indonesia) may be at least partly due to the fact that the former focused on East Asia's exports to the US

market only, while the latter involved East Asia's global exports. This said, there is a more general problem with such trade data analyses. While somewhat informative, they tend to offer limited insights as they are based on fairly aggregated data. However, within each product category, goods could be differentiated according to quality and brand (horizontal differentiation) or they could be further differentiated into sub-parts and components with differing factor intensities (vertical specialization). Thus, just because a study finds that the PRC and ASEAN may share similar degrees of export similarity at the 2, 3 or even 4 or even finer product categories that in and of itself need not suggest the countries are direct competitors.

In addition to vertical specialization, openness to international trade allows countries to also specialize horizontally based on price/quality. Thus, even if a country's comparative advantage happens to coincide exactly with the PRC (which may be likely given the vastness and differing levels of development of various regions in the PRC), it can still develop its own export market niche by specializing in differentiated products. This said, a concern about the PRC's ascendancy and price competitiveness is that "cheap Chinese imports" will keep the price pressures on imperfect substitutes down, i.e. other countries will import price deflation from the PRC with consequent depressing effects on business margins and factor returns, including wages. It is in this sense that ASEAN countries may have complementarities with the PRC in production and export structures (i.e. vertical specialization), while other parts are simultaneously competitive (horizontal specialization).

These global competitive pressures emanating from PRC and the potential deflationary effects are of particular concern in the areas of textiles and clothing where the PRC's WTO accession is expected to be a significant boon to Chinese exporters who are no longer limited by the quantitative restrictions under the Multifiber Arrangement (MFA). Quantitative analyses suggest that the removal of these quotas (in

2005) will lead to a significant increase in the PRC's exports in these areas at the expense of many ASEAN countries as well as other Asian countries more generally (Adhikari and Yang, 2002 and Martin and Ianchoviachina, 2001). A study by Francois and Spinanger (2001) summarizes the welfare impacts on selected Asian countries. It observes that while the possibility of horizontal specialization suggests that the above costs are over-estimates, there are bound to be non-negligible price pressures and adjustment cost effects on other textile and clothing exporting countries.

This said, one might reasonably argue that there will be significant adjustment costs whenever a new trading partner enters the global and regional trading system. While this is true as a general statement, the PRC's entry has not been sudden by any means. As noted, the PRC has been going through a process of liberalization and reform since 1979, accelerating since the 1990s. While its accession to the WTO may hasten the process, it is unlikely that there will be any sudden adverse adjustment costs to other regional countries. There is ample evidence suggesting that the other East Asian countries have already largely adjusted to the PRC's emergence (Kwan, 2002).

Nonetheless, with the PRC's continued opening up with the growth effects spreading to the inland regions, there are real concerns that small variations in costs could lead to large shifts in comparative advantage thus necessitating large and sudden domestic adjustments. Bhagwati (1997) refers to this phenomenon as "kaleidoscope" or "knife-edge" comparative advantage. Countries need to be ever aware of these potential costs shifts and ensure constant industrial upgrading so as to remain important cogs in the larger regional production network. In other words, the continued opening of the PRC may well contribute to a far more uncertain and competitive environment for ASEAN countries (especially as PRC's western regional develop and labour intensive industries migrate to the inland regions). In relation to this, opportunities for lower income ASEAN countries to upgrade to higher value added stages of production might be harder to

come by compared to the transition made by their higher income neighbours in earlier periods. Offsetting these concerns is the significant potential upside gains noted previously.

In addition, accession to the WTO ought to offer even more benefits to regional countries as it would involve increased access to the Mainland's domestic market, allowing ASEAN countries the possibility of enhancing exports. Thus, while the PRC has remained an important import source for ASEAN, as discussed previously, it has also become an increasingly important export market. If current trends persist, the growing importance of the PRC -- and Greater China more generally -- may well provide a much-needed cushion to smaller ASEAN countries against gyrations in the industrial country economic environment.

b) The PRC and India

Much of the preceding arguments also hold in the case of India's interaction with the PRC.

Table 11a estimates the Export Revealed Comparative Advantage (XRCA) indices as in Balassa and Noland (1989) for manufacturing sector exports of India and the PRC over the period 1987-98. We use the Garnaut and Anderson (1980) classification of products according to relative factor intensities (Annex 1). An individual XRCA index value of greater than one indicates revealed comparative advantage, while a value less than one, indicates comparative disadvantage in the exports of a particular commodity category. Table 11b analyzes the export pattern of these commodities in the two countries⁶.

⁶ The results must be interpreted with some degree of caution, however, as the Garnaut-Anderson classification is only based on the 3-digit product level which does not adequately differentiate between the final good and its parts and components.

Compared to the PRC, the only category in which India continues to have a comparative advantage in exports is in unskilled labour intensive (ULI) manufacturing goods, especially textiles and textile yarns and in clothing and accessories. However, even within this category, while the PRC has increased its specialization and expanded its share in world exports, India has not been able to do so despite a decade of economic reforms. The PRC has also gained a comparative advantage in Technology Intensive (TI) goods and has improved its capability in production and exports of components. Thus, in 1985, out of 60 components, the PRC had a comparative advantage in 6.7% of them, which increased to 8.3% in 1996 (Ng and Yeats, 2001, Table 1). Although India could benefit from exporting those necessary inputs for production of many labour-intensive products in this sector, competition is unlikely in the area of office machines and data processing machines as India is not a major producer or exporter of these products.

From the estimates in Tables 11a and 11b, it is evident that in the manufacturing sector, the only sector in which some competition could emerge between India and the PRC would be in ULI goods, especially in textiles and clothing. However, using further disaggregated level within the textiles and clothing sector, Shafaeddin (2002) reveals that the PRC's competitive strengths are in outer garments, whereas India's exports are concentrated in textiles and non-knitted undergarments. Thus, this indicates that the possibilities of competition in the manufacturing sector appear limited, suggesting greater complementarities. Nevertheless, India is unlikely to gain from complementarity effects from the PRC's accession in an important area of exports of parts and components of electronic products since it has not been a part of the regional division of labour in this area which has been largely concentrated in East Asia (Rajan and Sen, 2002, 2003a).

Table 11a
Export Revealed Comparative Advantage (XRCA) estimates of India and China
in the Manufacturing Sector: 1987-98
(According to Garnaut and Anderson Classification of products by Factor intensities)

UNSKILLED LABOUR INTENSIVE GOODS						
Countries	XRSCA	1987	1992	1996	1997	1998
INDIA	XRCA >1	2.62	2.29	3.57	2.5	2.16
	XRCA <1					
CHINA	XRCA >1	2.5	3.69	3.54	4.06	4.29
	XRCA <1					
TECHNOLOGY INTENSIVE GOODS						
Countries		1987	1992	1996	1997	1998
INDIA	XRCA >1					
	XRCA <1	0.27	0.27	0.22	0.29	0.25
CHINA	XRCA >1					1
	XRCA <1	0.26	0.6	0.82	0.93	
PHYSICAL CAPITAL INTENSIVE GOODS						
Countries	XRSCA	1987	1992	1996	1997	1998
INDIA	XRCA >1					
	XRCA <1	0.26	0.51	0.49	0.61	0.53
CHINA	XRCA >1					
	XRCA <1	0.28	0.46	0.61	0.71	0.74
HUMAN CAPITAL INTENSIVE GOODS						
Countries	XRSCA	1987	1992	1996	1997	1998
INDIA	XRCA >1					
	XRCA <1	0.29	0.49	0.31	0.46	0.36
CHINA	XRCA >1					
	XRCA <1	0.41	0.51	0.59	0.66	0.73

Notes: Refer to Appendix 1 for a list of commodities under this classification

Source: Computed from United Nations, *UN International Trade Statistics Yearbook*, 2000

$$\begin{aligned}
 XRCA &= \frac{X_i^k / X_w^k}{X_i / X_w} \\
 &= \frac{X_i^k / X_j}{X_w^k / X_w}
 \end{aligned}$$

Where X_i^k = Exports by country i of commodity k

X_w^k = World Exports of commodity k

X_i = Total exports of country i

X_w = Total World Exports

Table 11b

**Export pattern of commodities among India and China in the
Manufacturing sector: 1987-98
(According to Garnaut and Anderson Classification of products by Factor intensities)**

UNSKILLED LABOUR INTENSIVE GOODS						
Countries	RCA	1987	1992	1996	1997	1998
INDIA	S _w	1.15	1.12	1.4	1.5	1.45
	S _{ct}	32.5	31.4	31.39	32.82	28.34
CHINA	S _w	4.98	8.42	10.13	11.95	11.96
	S _{ct}	31.2	51	45.26	52.76	56.12
TECHNOLOGY INTENSIVE GOODS						
Countries		1987	1992	1996	1997	1998
INDIA	S _w	0.12	0.13	0.17	0.18	0.17
	S _{ct}	4.79	5.09	6.76	6.88	5.9
CHINA	S _w	0.51	1.37	2.34	2.73	3.11
	S _{ct}	4.7	11.6	17.96	21.37	26.48
PHYSICAL CAPITAL INTENSIVE GOODS						
Countries	RCA	1987	1992	1996	1997	1998
INDIA	S _w	0.12	0.25	0.31	0.37	0.35
	S _{ct}	5.07	9	9.19	10.27	8.9
CHINA	S _w	0.56	1.05	1.75	2.08	2.05
	S _{ct}	5.5	8.2	10.51	11.67	12.43
HUMAN CAPITAL INTENSIVE GOODS						
Countries	RCA	1987	1992	1996	1997	1998
INDIA	S _w	0.13	0.24	0.28	0.28	0.24
	S _{ct}	5.48	9.62	8.24	8.24	6.92
CHINA	S _w	0.81	1.16	1.7	1.93	2.02
	S _{ct}	7.9	9.9	10.18	11.56	13.83

Note: S_w indicates country share in world exports of a particular commodity group
S_{ct} indicates country share in its total exports to the world

Source: Computed from WTO, *International Trade Statistics Yearbook*, 2000

Overall, threat perceptions of the PRC in this regard appear to be exaggerated for ASEAN in general, and particularly the higher income ASEAN countries as well as India. Recent estimates of the welfare effects of PRC's accession to the WTO reveal that while the more advanced developing countries in Asia gain, the less advanced ones tend to lose over the short and medium run (Martin and Ianchovichina, 2001). However,

over time, the PRC could well be a growth locomotive for the region (Fernald et al., 1999) or at least act as a buffer against possible downturn in other major export markets in the US, EU and Japan. In addition, as the PRC expands, its demand for agricultural and mineral products and raw materials - including energy products, forestry, agriculture and fishery and aquaculture products - will continue to rise as well, hence benefiting a number of resource rich countries in ASEAN and elsewhere, particularly Indonesia (Adhikari and Yang, 2002).

4.2 Complementarities or Competition in Services Trade?

With services trade gaining importance in world trade, it is essential to also analyze the complementarities and competition in the services sector between the PRC, ASEAN and India. Indeed, services trade liberalization is an important dimension of the PRC's WTO accession. As Mattoo (2002) notes:

(The PRC's) GATS commitments represent the most radical services reform program negotiated in the WTO..(The PRC)..has promised to eliminate over the next few years most restrictions on foreign entry and ownership, as well as most forms of discrimination against foreign firms (p.22).

a) The PRC and ASEAN-5

With WTO accession there will be greater scope and demand for services by the PRC, particularly with regard to distribution, professional and infrastructural services (telecommunications and financial). As the PRC continues to rapidly urbanize and industrialize, there will invariably be vast opportunities for ASEAN businesses to be involved in major infrastructural development projects. Thus, richer and more developed ASEAN countries such as Singapore and Malaysia, which have growing strengths in these areas, should benefit significantly from the PRC's continued economic transformation.

With respect to PRC and ASEAN-5, there appears to be greater potential in cooperating in Travel and Tourism services, given the strong comparative advantage that most ASEAN-5 economies enjoy in this area. Indeed, there is significant tourism potential from the PRC as average Chinese household incomes rise. Travel and tourism constitute slightly over 8% of ASEAN's GDP and over 7% of the region's employment (Wu et al., 2002a). The PRC is the world's fastest growing tourist market in both inbound and outbound travel. Two-way flows between ASEAN and the PRC have been on an increase. ASEAN tourists visiting the PRC totaled almost 1.1 million in 1995; the number reached an estimated 1.8 million in 2000. While ASEAN-5 received about 0.8 million tourists from the PRC in 1995, this number almost tripled to 2.3 million persons in 2000. Conversely, ASEAN tourists were less than 8% of the total tourist arrivals (19.8 million) to the PRC during 1999, while Chinese tourists in ASEAN made up just 10 % of the 22.6 million persons visiting ASEAN in 2000 (Wattanaputtipaisan, 2002). The growth in tourists from the PRC was particularly significant in Malaysia and Singapore, where Chinese visitors increased from 10th largest visitor group in 1995 to 4th and 5th positions, respectively in 2001 (Wu et al., 2002a). Between 1995 and 2001, the number of Mainland Chinese visitor arrivals to Malaysia quadrupled, while they doubled to Thailand and Singapore.

A number of ASEAN countries like Malaysia, Thailand and Singapore are taking specific steps to enhance their attractiveness as tourist destinations to PRC residents. More can be done in this regard, particularly with ASEAN countries working in tandem or as clusters to promote the region as a whole (also see Wu et al., 2002a). There have been important initiatives in this direction, with an announcement recently by the ASEAN Secretariat that ASEAN planned on forging closer tourist relations with the PRC, Korea and Japan. The areas of ASEAN-wide collaboration are expected to span tourism

promotion, human resource development, use of information technology and public-private sector cooperation.

b) *The PRC and India*

The services sector in India has outperformed merchandise trade, especially over the post-reform period. The average annual growth of services trade over the 1990-98 period was about 15%. India's growth in services trade was nearly double that of merchandise trade during the 1992-98 sub-periods itself.

Within the service sector, while the Information and Communications Technologies (ICTs) and related services were viewed as being non-tradable just a few years ago, they have in fact been the main thrust of rapid expansion of services trade in India, accounting for about 70% of service exports in the year 2000 (World Bank 2002b). Its share in India's services exports was almost double that in 1995. The development of the ICT industry in India has primarily been attributable to the software and product services segments that registered an average revenue growth of about 50 to 60% annually during the 1990s. The development of this sector has been largely market-driven and has been propelled by the nurturing of a pool of skilled IT professionals, coupled with an increasing international demand for such professionals. However, despite rapid growth, India's share in the total global software market remains very low, suggesting significant scope for further expansion. Thus, the Indian government has identified the software industry as a major export and growth thrust area.

How competitive are the PRC's service exports, including ICT services exports, vis-à-vis ASEAN-5 and India? Since the concept of comparative advantage can be extended to services trade, a similar set of XRCA indices is estimated in [Table 12](#) for the four major categories of service exports within India, ASEAN-5 and the PRC over the period 1990-2000. It is apparent that India clearly enjoyed a comparative advantage in exports of ICT services (Communications, computer etc. related services) vis-à-vis the

PRC and most of the ASEAN-5 economies (except for Malaysia and Singapore) during this period, while the PRC appears well on its way to attaining comparative advantage in this area. Apart from this sector, India has not gained or improved on its comparative advantage position in exports of other services.

Table 12
Export Revealed Comparative Advantage (XRCA) estimates of India, China and ASEAN in
Services Trade: 1990-2000

COMMUNICATIONS, COMPUTER, ETC., RELATED SERVICES				
Countries	XRCAs	1990	1995	2000
INDIA	XRCAs>1	1.15		1.84
	XRCAs<1		0.82	
CHINA	XRCAs>1			
	XRCAs<1	0.54	0.71	0.88
INDONESIA	XRCAs>1			
	XRCAs<1	0.29	0.11	0.12
MALAYSIA	XRCAs>1		1.16	1.25
	XRCAs<1	0.69		
SINGAPORE	XRCAs>1	1.25	1.46	1.45
	XRCAs<1			
THAILAND	XRCAs>1			
	XRCAs<1	0.32	0.75	0.57
PHILIPPINES	XRCAs>1	2.12	2.19	
	XRCAs<1			0.50
INSURANCE AND FINANCIAL SERVICES				
Countries	XRCAs	1990	1995	2000
INDIA	XRCAs>1			
	XRCAs<1	0.51	0.44	0.17
CHINA	XRCAs>1		1.68	
	XRCAs<1	0.73		0.08
INDONESIA	XRCAs>1			
	XRCAs<1			
MALAYSIA	XRCAs>1			
	XRCAs<1	0.01	N.A	N.A
SINGAPORE	XRCAs>1			
	XRCAs<1	0.11	0.21	0.37
THAILAND	XRCAs>1			
	XRCAs<1	0.03	0.11	0.07
PHILIPPINES	XRCAs>1			
	XRCAs<1	0.07	0.11	0.44
TRANSPORT SERVICES				
Countries	XRCAs	1990	1995	2000
INDIA	XRCAs>1		1.18	
	XRCAs<1	0.84		0.46
CHINA	XRCAs>1	1.87		
	XRCAs<1		0.74	0.52
INDONESIA	XRCAs>1			
	XRCAs<1	0.10		
MALAYSIA	XRCAs>1	1.11		
	XRCAs<1		0.84	0.90
SINGAPORE	XRCAs>1			
	XRCAs<1	0.62	0.66	0.85

Table 12 (Contd.)

TRANSPORT SERVICES				
THAILAND	XRCAs>1			
	XRCAs<1	0.74	0.66	1.01
PHILIPPINES	XRCAs>1			
	XRCAs<1	0.27	0.12	0.92
TRAVEL SERVICES				
Countries	XRCAs	1990	1995	2000
INDIA	XRCAs>1	1.03	1.18	
	XRCAs<1			0.56
CHINA	XRCAs>1		1.41	1.68
	XRCAs<1	0.90		
INDONESIA	XRCAs>1	2.53	2.83	2.98
	XRCAs<1			
MALAYSIA	XRCAs>1	1.28	1.01	
	XRCAs<1			0.92
SINGAPORE	XRCAs>1	1.06		
	XRCAs<1		0.77	0.67
THAILAND	XRCAs>1	1.97	1.60	1.68
	XRCAs<1			
PHILIPPINES	XRCAs>1			1.74
	XRCAs<1	0.42	0.36	

Source: Computed from The World Bank (2002), *World Development Indicators*, CD-Rom.

With the PRC's entry into the WTO and resultant liberalization of its services sectors, viz. telecommunications and finance, the demand for software services is projected to increase. With the PRC strengthening its competitive position in hardware and focusing on software development through setting up of IT training institutions and encouraging R&D by multinationals, there is likely to be an impending competition that could directly affect India's comparative advantage in ICT services.

Table 13, adapted from Tschang (2003), summarizes the relative competencies of Indian and Chinese firms. It is evident that while Indian software firms possess strong capabilities in process maturity and management skills, Chinese firms are stronger in R&D and product branding. This implies that in order to gain from the opportunities from the growth in the PRC's software industry, Indian firms need to set up their operations in the PRC and cooperate with the software firms there on a long-term basis. Certain top Indian IT firms have already adopted this strategy of engagement. Thus, NIIT has already established centers in the PRC to train IT professionals in English and Mandarin courses. Infosys has established facilities in Shanghai to tap the domestic market. Satyam and Tata Consultancy Services (TCS) have also set up its operations in the PRC. It is estimated that by 2004, 60% of the top twenty-five Indian software and application development companies would have a direct presence or a Joint Ventures with Chinese firms (Gartner, 2002). This strategy of competition co-existing with cooperation on a long-term basis is likely to be adopted by most Indian and ASEAN firms interested in venturing into the PRC.

Table 13
Comparison of capabilities of Indian and Chinese Software firms

Aspect	India	China
Software Processing	Strong, climbing up the value chain	Weaker than India at the organizational level
Management	Strong in many of the top firms	Weak
Technology	Weak in university based R&D, strong in commercial technology	Strong focus on R&D, and linkages between universities and firms
Revenue Model	Export of Services	Product Sales, with systems integration
Individual technical skills	Strong	Strong
Product Marketing	Weak	Weak

Source: Tschang (2003)

5. Is the PRC a Threat to ASEAN's and India's FDI Prospects?

The commonly noted statistic is that in the early 1990s, three-fifths of FDI to Asia was channeled into the ASEAN countries and less than one-fifth to the PRC. By 1999-2000, over two-fifths went to the PRC (more than two-thirds went to PRC plus Hong Kong), while only about one-fifth found its way to ASEAN (Wu et al., 2002b).

However, even at a superficial level one must doubt the importance of direct competition from the PRC as it too suffered a marginal decline in net FDI inflows in recent years, albeit less than ASEAN (see Figure 5 and also see Wu et al., 2002b). Indeed, as discussed, the relatively sharp decline in ASEAN's FDI flows was primarily due to Indonesia which was the only ASEAN country to experience an outright erosion in the cumulative stock of FDI in the country since 1997, as there was a sharp outflow of FDI between 1998 and 2000 (Rajan and Siregar, 2002). Indonesia in turn has been hurt by domestic socio-political convulsions and investor uncertainty as opposed to competition from the PRC per se. Similarly, stagnation in FDI flows to Malaysia in the late 1990s and early 2000 were probably more due to policy uncertainty following the imposition of currency and capital controls in September 1998 (Bhaskaran, 2003).

This said, in the current environment where there is a global race for FDI (Rajan, 1994), on the one hand, and the emergence of the PRC a viable and promising investment alternative, on the other, investors are obviously far less tolerant of actual or perceived economic weaknesses in any potential host country or region. Insofar as the accession of the PRC to the rules-based WTO system makes it an even more attractive host for FDI, there may well be (further) diversion of FDI from “unstable ASEAN”. Indeed, McKibbin and Woo (2002) model the impact of the PRC’s WTO accession as a reduction in the risk premium demanded by export-oriented investors as the PRC becomes a more reliable supplier to international markets.

To the extent that domestic growth rates have often showed up as a significant factor in attracting FDI, continued outpacing of growth in the PRC relative to ASEAN may well personify diversion of FDI from the PRC to ASEAN. This is particularly so as the PRC remains an under-performer in attracting FDI inflows when one considers FDI as a proportion of GDP⁷. This is apparent from UNCTAD (2002, p.25) which reveals that in a ranking of FDI performance of 140 countries based on FDI to GDP ratio between 1998 and 2000, the PRC comes in at 47. While this is an improvement from its 1988-90 ranking (61), it is by no means suggestive that the PRC is attracting more than its “fair share” of FDI⁸. Indeed, the PRC’s rise in rankings has not even been the most impressive in Asia. For instance, Vietnam’s rankings rose from 53 to 20. However, what is revealing is the sharp drop in rankings of the other ASEAN countries between 1998-90 and 1998-2000. Among the most dramatic declines was Indonesia (from 63 to 138). Malaysia’s rankings decline from 8 to 44, Thailand’s from 25 to 41, Singapore from 1 to

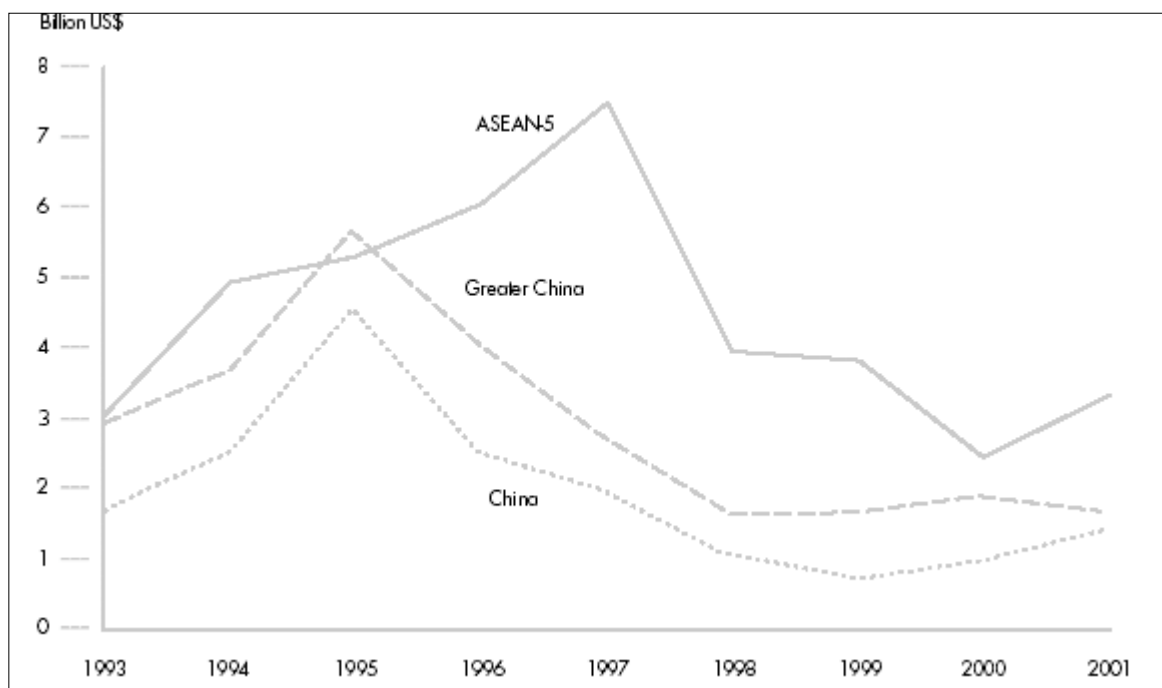
⁷ This is even more so in the case of the other emerging Asian giant, India (Rajan and Sen, 2002, 2003a).

⁸ Also see Wei (1999) who makes a similar argument using a gravity model. If one considers Hong Kong and the PRC together, the improvement in the PRC’s rankings would be more impressive as Hong Kong rose from 2 to 4.

18 and the Philippines from 39 to 89. This adds further weight to the foregoing argument that the recent “shift” of FDI flows from ASEAN to the PRC in relative tests is far more due to the severe crisis in 1997-98 and resulting loss of confidence and structural weaknesses in the regional economies made apparent by the crisis than to competition from the PRC per se.

More detailed analysis of the sources of FDI into ASEAN and the PRC is also suggestive of limited direct “competition” between the two. For instance, the bulk of FDI to the former has been from Japan and the US in particular. Japan has hitherto been a rather reluctant investor in the PRC. The recent declines in FDI flows to ASEAN have in large part been due to lower investment levels from Japan (Figure 9). The extent of fall in Japanese FDI can be seen from the fact that while it has consistently been the single largest investor in ASEAN since the late 1980s, it did not even figure in the top ten investors in 2000 (Table 14).

Figure 9
FDI Flows from Japan to Greater China and ASEAN-5



Source: Wu et al. (2002b)

Table 14
TOP 10 Investors in ASEAN, 1995-2000
Balance of Payments Flow Data
(US \$ Million)

No	1998		1999		2000		1995-2000	
	Country	Value	Country	Value	Country	Value	Country	Value
1	Japan	2826	USA	2960	USA	2320	Japan	19194
2	USA	2759	Netherlands	2833	United Kingdom	1493	USA	17975
3	Netherlands	1790	Bermuda	1355	Bermuda	889	United Kingdom	9654
4	Singapore	1443	Japan	762	Taiwan (ROC)	802	Singapore	9241
5	United Kingdom	1166	United Kingdom	742	France	772	Netherlands	8141
6	Hong Kong	918	France	655	Germany	696	Hong Kong	5602
7	Taiwan (ROC)	842	Singapore	629	Singapore	684	Taiwan (ROC)	4454
8	South Korea (ROK)	643	Canada	489	Hong Kong	611	Germany	3685
9	Germany	547	Hong Kong	483	Malaysia	273	France	3456
10	France	465	Germany	482	South Korea (ROK)	180	South Korea (ROK)	2996
Total		13400		11391		8720		84398

Source: Mirza (2001)

As noted, the bulk of investments to the PRC have been from overseas Chinese in Hong Kong and Taiwan. Analysis of FDI data from the US and the EU reveals a fairly sharp turnaround (i.e. boom-bust-partial recovery) in investments from the EU and the US to Malaysia, Thailand and the Philippines between 1996 and 2000 (Wu, 2002b). These dynamics of FDI flows were out of sync with those to the PRC which remained stable though the period. As noted by Wu et al. (2002b):

(S)ource-country data show that, despite a booming FDI market in China, developed countries have so far not diverted investments away from ASEAN-5 to China. Arguably, if investors did not have an alternative investment location in China, the reduction in FDI to ASEAN-5 might not have been so drastic... However, because the decline in FDI to ASEAN-5 has been an abrupt turnaround, it does not appear to be very closely related to China's increasing attractiveness as FDI destination, which has been more of a gradual process...(U)nless ASEAN gets its own house in order, there can be no guarantee that investments would flow back to ASEAN as before (p.107).

The foregoing notwithstanding, there are a number of reasons to remain positive about ASEAN's and India's FDI potential. First, some multinationals that are concerned about what might be "excessive" exposure to the PRC are considering setting up factories in some other ASEAN countries like Vietnam or India as a form of "risk hedging" strategy. Second, the PRC's continued opening up and growth may lead some Chinese businesses make investments in ASEAN countries and India. Third, the lowering of import barriers (both actual trade barriers as well as "behind the border" ones) in the PRC may reduce the incentive to establish tariff-jumping FDI in the PRC as the market may, in some instances, be served via exports. This appears to be the case in some areas such as automobiles and petrochemicals which have hitherto been heavily protected in the PRC⁹.

⁹ Of course, this argument runs both ways. As trade barriers in PRC continue to decline and infrastructural and communications facilities improve further, FDI may move from some ASEAN countries to the PRC, and the ASEAN markets will be served from the PRC in the face of competitive pressures and falling margins.

6. Concluding Remarks on Asian Regionalism

In an increasingly globalized world, decisions about production, investment and trade are closely interlinked and often cannot be made independently of one another. From ASEAN's perspective, this implies the need for more aggressive and urgent steps to deepen regional economic integration and reduce the extent of fragmentation that currently exists among ASEAN markets. As Mirza (2001) notes:

ASEAN is a region which is having to compete with other regions and growth zones, including Mercosur, "Greater China" and India in the developing world alone: it therefore needs to stress its critical mass as a community of closely co-operating economies as opposed to a club of individual and individualistic nation states (p.6).

In relation to this, mention should be made of the proposed ASEAN-China Free Trade Area (ACFTA) first mooted by Chinese Premier Zhu Rongji during the ASEAN-China Summit in November 2001. After a series of negotiations, the so-called ASEAN-China Closer Economic Partnership Framework Agreement was given concrete shape during the ASEAN Summit in Cambodia in November 2002. A key feature of the ACFTA agreement is the "early harvest" clause which commits ASEAN and the PRC to reduce their respective tariffs for certain products within three years. These early harvest products are mainly agricultural products that represent about 10% (or more than 600) of all tariff lines in the Harmonized System (HS) of tariff classification¹⁰. Tariff reduction/elimination for goods that are not included under the early harvest program are to be negotiated through the ACFTA, with negotiations to be completed by June 2004. The timetable for the formation of the ACFTA in goods for the older ASEAN members

¹⁰ The early harvest products belong to the following categories: Live animals. Meat and edible meat offal, Fish, Dairy produce, Other animal products, Live trees, Edible vegetables, and Edible fruits and nuts (MTI, 2002).

(ASEAN-5 plus Brunei) is 2010, and that for the others (i.e. Cambodia, Myanmar, Laos, PDR, and Vietnam) is 2015.

The framework agreement also commits both parties to commence negotiations for the liberalization of services and investment by early 2003. The framework agreement identified five priority areas for economic cooperation apart from trade liberalization and facilitation measures. These are agriculture, human resource development (HRD), information and communication technology (ICT), investment and the Mekong River basin development. It has agreed to implement capacity building programs and provide technical assistance for newer ASEAN members to help catch up the ASEAN-6 members and increase their trade and investment cooperation with the PRC.

The ACFTA is a significant development in Asian regionalism, not only because it is the first such agreement that the PRC has entered into after becoming a WTO member, but also because it is going to be one of the largest FTAs ever negotiated, involving about 1.7 billion people, over US\$ 2 trillion in aggregate GDP and US\$1.2 in total trade spanning eleven diverse and heterogeneous economies (both in terms of their size and levels of development). The ACFTA will invariably offer first mover advantages to businesses from both the PRC and ASEAN into one another's markets. Another big benefit of an ACFTA would be to reduce transactions costs and ensure the procurement of parts and components can be done in the region efficiently, hence benefiting all countries involved in the regional production network. The creation of the ACFTA also effectively raises the costs of engaging in conflict among the countries involved and offers more systematic procedures and avenues to negotiate areas of dispute, thus possibly contributing to greater regional stability.

While the ACFTA ought to speed up the growing mutual interdependence between ASEAN and the PRC, the impact of the ACFTA on individual ASEAN member

economies is likely to be felt differentially depending upon the extent to which its economic structure and composition of trade complements or competes with that of the PRC. Without getting into details about the likely impact of the ACFTA, which is well beyond the scope of this paper, simulation results by Roland-Holst and van der Mensbrugge (2002) using a global forecasting model leads them to the following conclusion:

there would be little enthusiasm for an..(ACFTA).. arrangement outside East Asia since..it reduces ROW (rest of the world)..trade...(There is)..unwelcome trade diversion with respect to East Asian neighbours, driving down total exports and imports for Japan, Korea, and Taiwan...Chinese import demand would be diverted away from important regional allies such as Japan and Korea...The AFTA results.. offer a real incentive paradox, where China's participation is critical to the benefits enjoyed by other regional partners .. (as) .. it significantly enlarges the internal market to which they would have access. Unfortunately these partners cannot provide the depth and diversity of demand and supply that China needs to maintain stable terms, of trade..Indonesia might prefer unilateralism to an (ACFTA)... (p.27 and 34)¹¹.

Differential potential effects of the ACFTA may well act as a roadblock preventing its full implementation. Nonetheless, an immediate positive side effect of the ACFTA proposal is that it appears to have provided an impetus for ASEAN countries to hasten the process of intra-ASEAN integration. It has had further domino effects, with the other major economic powers in Asia, viz. Japan, India and Korea, also seeking out trade pacts with ASEAN. In addition, the US President, George W. Bush, launched the Enterprise for ASEAN Initiative (EAI) during the APEC Summit in October 2002 to strengthen bilateral trade linkages with ASEAN (Lien, 2002). All of this in turn has offered ASEAN the potential to act as a hub with the consequent benefits of being one.

ASEAN needs to encourage and act on such courtships in parallel with the implementation of the ACFTA for their own sake and also to act as buffers against the PRC's dominance in the Southeast Asian region. At the same time, it is imperative that

ASEAN maintain its cohesion and reinvigorate efforts to foster more intensive intra-ASEAN economic integration. Failure to do so could lead to a loss of hub status as the larger economic powers may come to view ASEAN as a body that is disjointed and uncoordinated. There was a growing perception that this was the case during the height of the East Asian crisis in 1997-98 (Chang and Rajan, 1999, 2001). ASEAN has done remarkably well since then to rebuild its image in this regard. Greater efforts need to be made to deepen intra-ASEAN integration; current extra regional initiatives should not distract ASEAN from furthering its own regional integration under AFTA and the ASEAN Investment Agreement (AIA) (Kesavapany, 2003).

Some individual ASEAN members have aggressively sought to form bilateral trade pacts individually with extra regional countries separately from ASEAN. In particular, Singapore has gained first mover advantage over other ASEAN members by seeking out its own bilateral trade pacts with a number of countries in Asia and elsewhere (Rajan and Sen, 2003b and Rajan et al. 2001). For instance, while there are ongoing discussions on an ASEAN-Korea FTA, there have simultaneously been separate negotiations between Korea and Singapore on a bilateral basis. The same is true with regard to India and ASEAN, on the one hand, and India and Singapore, on the other. The formation of an India-Singapore Comprehensive Economic Cooperation Agreement (CECA) was proposed during the Indian Prime Minister's recent visit to Singapore, the scope of which has been studied by a Joint Study Group (JSG)¹². The study group has now tabled its recommendations, and negotiations on the CECA are expected to start soon. This agreement is expected to be as comprehensive as a Free

¹¹ Roland-Holst et al. (2001) arrives at a broadly similar conclusion, as does the ASEAN-China Expert Group on Economic Cooperation (2001).

¹² See Mehta (2003) and Mohanty (2003) for in-depth discussions on India-Singapore economic relations. See Asher et al. (2003) for an exploration of ASEAN-India economic relations.

Trade Agreement covering trade in both goods and services as well as trade generating investments. An India-Thailand FTA is also being negotiated.

With respect to the PRC and India, both countries are now much more focused on opportunities for mutual rather than zero sum gains. There are signs of intensified business and economic interactions between these two Asian giants, as there are in bilateral cultural and political ties (Nagpal, 2003). There has in fact been a serious suggestion regarding the possible formation of a bilateral FTA at some stage (Li Wei, 2003). As direct bilateral ties are fortified, the need for third countries acting as middlemen appears to be fast diminishing. Growing emphasis is being placed in some circles on pan-Asian regional integration involving Japan, ASEAN, China, India and Korea (JACIK) (Kumar, 2002). This is a potentially important initiative that ought to be further explored. In the meantime, ASEAN, India and the PRC ought to continue to take steps towards the fortification of economic linkages amongst themselves.

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Annex 1
Classification of Commodities according to Relative factor intensities
Garnaut and Anderson (1980)

Unskilled Labour intensive goods	SITC Code	Technology Intensive goods	SITC Code
Textile yarn, n.e.s	65	Medicinal and pharmacy products.	54
Textile yarn	651	Fertilizers, manufactures.	56
Cotton fabrics, woven	652	Explosives and pyrotechnic	57
Fabrics, woven of man-made fibres	653	Artificial resins and plastic materials	58
Other textile fibres	654	Chemical material and products.	59
TOTAL	651-654	Automatic data process	752
Special textile fabrics	657	Parts, n.e.s of and accessories	759
Glass	664	Telecommunication equipment	76
Glassware	665	Electrical machinery and parts thereof	77-775
Pottery	666	Professional, scientific, and controlling instruments	87
TOTAL	664-666	Photographic apparatus- watch clock	88-885
Sanitary, plumb fixtures	81		
Furniture and parts	82	Physical capital intensive goods	SITC Code
Travel goods	83		
Apparel and clothing accessories	84	Organic chemicals	51
Footwear	85	Inorganic chemicals	52
Misc. jewellery, art antiques	89-896-897	Iron and Steel	67
Baby carriages, toy	894	Non ferrous metals	68
		Power generating machinery	71
Human capital intensive goods	SITC Code	Machinery specialized	72
		Metalworking machinery	73
Essential oils	55	General industrial machinery and equipment, n.e.s	74
Rubber manufactures	62	Office machines	751
Paper, paperboard	64		
Metal manufactures n.e.s	69		
Household electric and non-electric Equipment	775		
Road vehicles	78		
Other transport equipment.	79		
Watches and clocks	885		
Works of art +jewellery	896-897		

Source: Garnaut and Anderson (1980)