

International Trade in Goods: Performance of India vis-à-vis a Few Important Economies in South and East Asia

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This paper analyses India's performance in international trade in goods with a few important economies in South and East Asia, *viz.*, China, Hong Kong SAR (China), Taiwan (China), Indonesia, Republic of Korea, Malaysia, Philippines, Singapore and Thailand based on certain trade indicators during the years 1980, 1990, 2000, 2001, 2002 and 2003. It is observed that performance by India in merchandise trade did not compare well with these economies. However, the study reveals that India managed a less concentrated trade structure in products exported than many of the economies under study except the USA, China, Hong Kong SAR (China) and Indonesia. On the other hand, a more concentrated trade structure signified India's imports trade. Also, merchandise trade by India is found below expected levels with many Asian economies under study.

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Introduction

One main objective of the Foreign Trade Policy (2004-09) announced by the Government of India is to double the country's percentage share of global merchandise trade within the next five years. In 2003, India accounted for around 0.75 per cent of world exports and 0.93 per cent of world imports. In 1980 these shares were 0.42 per cent in case of exports and 0.72 per cent in case of imports.

During the same period a few economies in South and East Asia, *viz.*, China, Hong Kong SAR (China), Taiwan (China), Republic

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of Korea, Malaysia, Philippines, Singapore and Thailand almost doubled or more than doubled their exports. The four Newly-Industrializing Countries (NICs) of East Asia [Hong Kong SAR (China), Singapore, Republic of Korea and Taiwan (China)] together with the Asean-4 (Indonesia, Malaysia, Philippines and Thailand) and China accounted for almost 80 per cent of the increase in the value of manufactures exported by all developing countries from 1980 to 1990 (Maizels). Except Hong Kong SAR (China) and Philippines all the other South and East Asian economies mentioned above had continuous trade surplus in all the years from 2000 to 2003. Strong economic performance in East Asia was driven, to a considerable extent, by robust export growth. Percentage share of exports to GDP of each of the economies mentioned above rose above thirty per cent in 2003 against a world average of around 21 per cent and around 10 per cent for India.

A question of considerable interest is how does global trade in goods by India compares with the emerging economies in South and East Asia mentioned above. A comparative analysis in that direction is presented in this paper. The analysis has been done based on certain important trade indicators as discussed in Section I. Section II describes the data used while Section III presents the results of the analysis. Section IV concludes.

Section I

Methodology Used

The analysis in this paper has been done based on certain important trade indicators *viz.*, share in world trade, growth, trade balance, percentage share to GDP, market concentration indices on commodities traded, country-wise distribution of exports and imports, terms of trade indices [*viz.* ‘net barter terms of trade’ (NBTT) and the income terms of trade’ (ITT)] and trade intensity indices. Indicators on share in world trade, growth, trade balance, and share to GDP are quite straightforward in concept. However, a discussion may be helpful on indices on ‘market concentration’, ‘terms of trade’ and ‘trade intensity’ and this is presented below.

Market Concentration Index on Products Traded

Market concentration index measures the degree to which a country's exports is dispersed over various products and is called index of market concentration or Herfindahl-Hirschman index. The index reveals the degree of market concentration and is computed according to the following formula:

$$H_j = \frac{\sqrt{\sum_{i=1}^N \left(\frac{x_i}{X}\right)^2} - \sqrt{1/N}}{1 - \sqrt{1/N}}$$

where, H_j = country index, x_i = value of exports of product i , $X = \sum_{i=1}^N x_i$ and N = number of products traded. Values of this index range between 0 and 1. Values closer to one indicate more concentrated trade structures. Countries with more concentrated trade structures depend on certain specific products and therefore remain vulnerable to high price movements of those products. Countries with lower export concentration have a well diversified trade structure and thereby reduce the impact of international trade risks due to possible price fluctuations of specific products.

Terms of Trade: Definition and Concept

Terms of trade of a country refers to two concepts *viz.* the 'net barter terms of trade (NBTT)' and the 'income terms of trade (ITT)'. When the phrase 'terms of trade' is used without qualification it refers to the NBTT concept. The terms of trade measures the relative change in export and import prices. It is defined as percentage ratio of the export unit value index to the import unit value index. Changes in the relative prices of exports and imports are important factors in influencing the values of exports and imports and the balance of payments of a country. A rising terms of trade results if import prices are rising slower than export prices. Conversely, if import prices are rising faster than export prices, it results in a fall in the terms of trade. Increase in the terms of trade index number is an encouraging movement, as a unit of exports will buy more imports. For the same reason, decline in the terms of

trade index is described as an adverse movement in trade (a unit of exports will buy fewer imports).

One limitation of NBTT is that it does not take into account the influence of changes in trade volumes. Due to this fact, the NBTT can not completely indicate the impact of changing market conditions on the trade balance of a country. This limitation is overcome by the second concept *viz.* 'the income terms of trade' (ITT). ITT is defined as the NBTT multiplied by export volume. An alternative interpretation is that the ITT measures the purchasing power of exports in terms of importable goods and services.

Change in a country's terms of trade directly affects the balance of payments position of the country. Any adverse change will worsen a country's trade balance. In order to restore balance it will need to export more and/or import less. Substantial cut in imports may seriously hamper the economic growth of many developing countries as they depend heavily on imported capital equipment. On the other hand, a rise in a country's NBTT, or in its ITT, would allow it to expand imports, including imports of capital equipment, and thus help the country for a continuous or accelerated economic growth.

Trade Intensity Index

The trade intensity index (TII) is used to determine whether the value of trade between two countries is greater or smaller than would be expected on the basis of their importance in world trade. It is defined as the share of one country's exports going to a partner divided by the share of world exports going to the same partner. It is calculated as:

$$T_{ij} = (x_{ij}/X_{it})/(x_{wj}/X_{wt}) \quad \dots \quad (1)$$

where x_{ij} is the value of country i 's exports to country j , x_{wj} is the value of world exports to country j , X_{it} is country i 's total exports and X_{wt} is total world exports. In this formula, x_{wj} and X_{wt} will also include x_{ij} and X_{it} . The formula given at (1) above may be slightly modified using Rest of the World's (RoW) exports instead of world exports as shown below (RoW is defined as World excluding the country 'i'):

$$T'_{ij} = (x_{ij}/X_{it})/(x'_{wj}/X'_{wt}) \quad \dots \quad (2)$$

where x'_{wj} = Rest of the World's exports to country $j = x_{wj} - x_{ij}$ and X'_{wt} = Rest of the World's exports = $X_{wt} - X_{it}$. We define T'_{ij} as modified TII. For countries with insignificant share in world exports, values of T_{ij} and T'_{ij} will remain almost same. The difference may be significant for countries with a significant share in world exports. Value of the index (T_{ij} or T'_{ij}) will be one for an expected bilateral trade flow. Share of one country's exports to its partner should be at least equal to the share of world exports to the same partner for an expected bilateral trade flow. Otherwise, it means that the country fails to exploit the market in its partner country and there is scope for expansion of its exports trade in the partner country. An index of more (less) than one indicates a bilateral trade flow that is larger (smaller) than expected, given the partner country's importance in world trade.

Section II

Sources and Nature of Data

The analysis has been done based on the trade data published in the United Nations Conference on Trade and Development (UNCTAD) Handbook of Statistics (2004) and IMF's Direction of Trade Statistics (DTS) (1997 and 2004). In both the publications, exports data are published as per free on board (f.o.b.) value while imports data are published as per 'cost, insurance and freight' (c.i.f.) value. Most of the data are published country-wise as well as various group wise. Data are available at the highest aggregate level *i.e.*, the world as a whole. In the Handbook (2004), data are also presented in three broad groups *viz.* 'Developed economies', 'South East Europe (SEA) and Commonwealth of Independent States (CIS)' and 'Developing economies'. These three groups are mutually exclusive and combined together present the world total. India, China and all the East Asian economies mentioned earlier are in the third group *viz.* 'Developing economies'. Needless to mention that the USA and Japan are in the first group *viz.* 'Developed economies'. Erstwhile USSR is in the second group *viz.* 'SEA & CIS'.

Section III

Analysis Based on the Indicators

This section presents the factual analysis based on the values of the indicators discussed above. Although the focus of this analysis is on the trade performance of India *vis-à-vis* the South and East Asian economies mentioned above, values of the indicators are also presented for the USA and Japan, the two most important trade partners of the economies under study. Analysis is also presented for the three groups *viz.* 'Developed economies', 'South East Europe (SEA) and Commonwealth of Independent States (CIS)' and 'Developing economies' mentioned above wherever relevant. Values of indicators pertaining to growth, market concentration, distribution and terms of trade were readily available in the UNCTAD Handbook (2004). Indicators pertaining to share in world trade, percentage share to GDP and trade intensity indices were compiled using trade data available in the Handbook (2004), IMF's DTS(2004, 1997) and the UNCTAD website (www.unctad.org). Data used for compilation were all in US dollar.

Share in World Exports

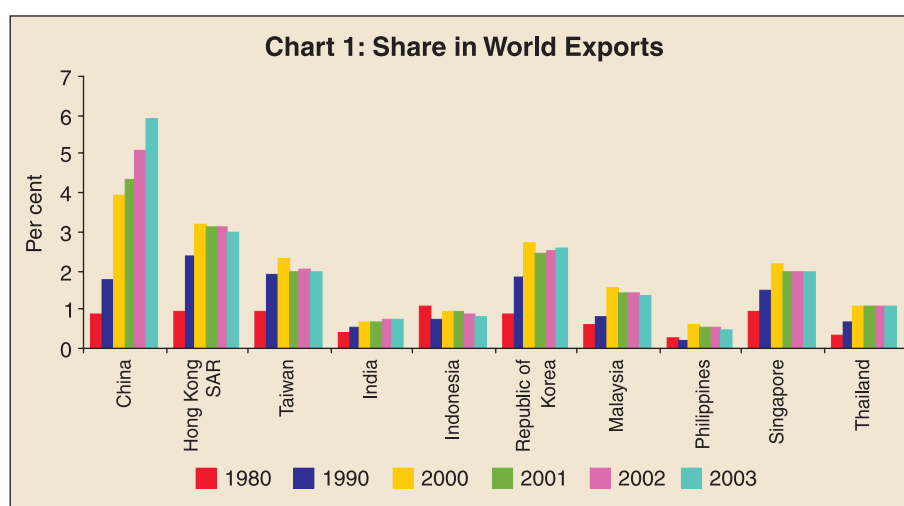
Table 1 presents the share in world trade by the economies under study. Share of Developed Economies in exports came down noticeably after 1990 and remained around 65 per cent during the years 2000 to 2003. Share of the South-East Europe & CIS economies too declined from 5.27 per cent in 1980 to around 2.68 per cent in 2000. The same, however, increased marginally in the subsequent years and remained around three per cent. During the period after 1990, Developing Economies have been able to exhibit a significant improvement in their exports. Share of these economies in world exports increased from 24.21 per cent in 1990 to around 32 per cent in 2000 and remained almost same in the subsequent three years. The noticeable improvement in the share of Developing Economies can be mainly attributed to the striking performance of the economies in the South and East Asia *viz.* China, Hong Kong SAR (China), Taiwan (China), Republic of Korea, Malaysia, Singapore and Thailand. Share of China in world exports increased from 1.78 per

Table 1: Percentage Share in World Exports

	1980	1990	2000	2001	2002	2003
Developed Economies	65.31	72.08	65.34	66.03	65.29	64.53
Developing Economies	29.43	24.21	31.97	31.18	31.87	32.39
South-East Europe and CIS	5.27	3.70	2.68	2.79	2.84	3.08
USA	11.10	11.27	12.27	11.94	10.85	9.72
Japan	6.42	8.24	7.53	6.59	6.51	6.34
China	0.89	1.78	3.92	4.35	5.09	5.88
Hong Kong SAR (China)	0.97	2.35	3.17	3.10	3.13	3.01
Taiwan (China)	0.97	1.92	2.32	2.00	2.04	1.94
India	0.42	0.51	0.67	0.71	0.77	0.75
Indonesia	1.08	0.74	0.98	0.92	0.91	0.84
Republic of Korea	0.86	1.86	2.71	2.46	2.54	2.60
Malaysia	0.64	0.84	1.54	1.44	1.46	1.33
Philippines	0.28	0.23	0.63	0.53	0.57	0.49
Singapore	0.95	1.51	2.17	1.99	1.96	1.95
Thailand	0.32	0.66	1.09	1.06	1.08	1.08

Source : Author's calculation based on UNCTAD Handbook (2004) data.

cent in 1990 to 5.88 per cent in 2003 (Chart 1). During the same period, the share of the USA and Japan declined from 11.27 per cent and 8.24 per cent, respectively, in 1990 to 9.72 per cent and 6.34 per



cent, respectively, in 2003. During this period, share of India in world exports increased from around 0.51 per cent in 1990 to 0.75 per cent in 2003, substantially lower than many of its South and East Asian neighbours under study.

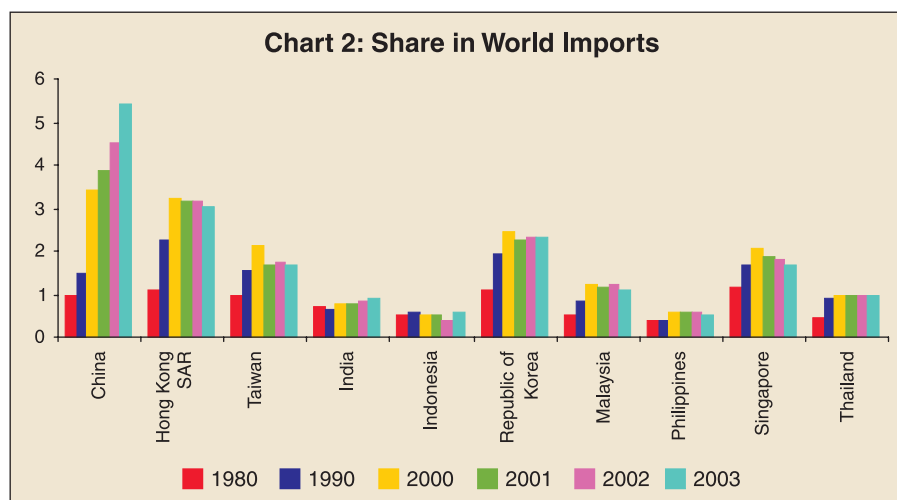
Share in World Imports

Share in world imports by Developing Economies also followed similar trends to that of exports during the period 1980 to 2003 (Table 2 and Chart 2). After 1990 share of these economies significantly went up, mostly because of the South and East Asian region. China increased its share in world imports from 1.48 per cent in 1990 to 5.42 per cent in 2003. Share of India in world imports increased from 0.65 per cent in 1990 to only 0.93 per cent in 2003. As in case of exports, share in world imports by India did not rise much during the period under study. The share was found to be lower than all the economies under study except for Indonesia and Philippines. During the same period, the share

Table 2: Percentage Share in World Imports

	1980	1990	2000	2001	2002	2003
Developed Economies	70.93	73.05	69.21	69.26	68.77	68.18
Developing Economies	23.90	22.53	28.99	28.59	28.93	29.28
South-East Europe and CIS	5.17	4.42	1.80	2.15	2.30	2.54
USA	12.40	14.31	19.21	18.69	18.40	17.14
Japan	6.82	6.51	5.79	5.53	5.16	5.03
China	0.96	1.48	3.43	3.86	4.52	5.42
Hong Kong SAR (China)	1.08	2.28	3.25	3.19	3.18	3.05
Taiwan (China)	0.95	1.52	2.13	1.70	1.73	1.67
India	0.72	0.65	0.79	0.80	0.86	0.93
Indonesia	0.52	0.60	0.51	0.49	0.39	0.55
Republic of Korea	1.08	1.93	2.45	2.24	2.33	2.35
Malaysia	0.52	0.81	1.25	1.17	1.22	1.08
Philippines	0.40	0.36	0.56	0.55	0.57	0.52
Singapore	1.16	1.68	2.05	1.84	1.78	1.68
Thailand	0.44	0.91	0.94	0.98	0.99	1.00

Source : Author's calculation based on UNCTAD Handbook (2004) data.



of the USA increased from 14.31 per cent to 17.14 per cent. However, share of Japan in world imports declined from 6.51 per cent in 1990 to 5.03 per cent in 2003. Share of South-East Europe and CIS economies in world imports trade also declined significantly after 1980 (from 5.17 per cent in 1980 to around 1.80 per cent in 2000) but made a turnaround in 2001.

One important observation regarding share in world trade by developed economies vis-à-vis developing economies is that the share of imports by the former, especially the USA, in world imports is found to be higher in the years under study than the same observed in case of exports (and the opposite is the observation for the other group).

Growth in Exports

Exports by the Developing Economies experienced rapid growth than that by the Developed Economies after 1990 except for the year 2000-01 (Table 3). During that year, there was a decline in exports by Developed as well as Developing Economies. The world trade in exports had a negative growth of around four per cent in that year. China and India were among the few countries that showed positive, although lower, growth in that year. Annual average growth rate of exports from India during the period under study stood above world average except during the year 2002-03. The growth was also higher than many economies under study after 1990.

Table 3 : Annual Average Growth in Exports

(Per cent)

Year	1980-90	1990-2000	2000-01	2001-02	2002-03
World	6.0	6.6	-3.8	4.5	16.4
Developed Economies	7.3	5.7	-2.8	3.3	15
Developing Economies	3.2	9.0	-6.2	6.8	18.3
South-East Europe and CIS	2.9	6.7	0.2	6.4	26.2
USA	5.7	7.3	-6.4	-5.1	4.3
Japan	8.9	4.1	-15.8	3.3	13.2
China	12.8	14.5	6.8	22.4	34.5
Hong Kong SAR (China)	16.8	8.3	-5.9	5.4	11.8
Taiwan (China)	14.9	7.2	-17.1	6.5	10.5
India	7.3	9.5	2.3	13.8	13.5
Indonesia	-0.9	8.1	-9.1	3.0	7.8
Republic of Korea	15.1	10.1	-12.7	8.0	19.3
Malaysia	8.6	12.2	-10.4	6.0	6.5
Philippines	3.9	18.9	-17.9	11.8	0
Singapore	9.9	9.9	-11.7	2.8	16.1
Thailand	14.0	10.5	-5.7	5.6	17.1

Source : UNCTAD Handbook (2004).

Growth in Imports

As in the case of exports, developing economies experienced higher growth in world trade in imports than developed economies after 1990 except during the year 2000-01. During this year, there was negative growth in world trade in imports. China, however, managed an impressive growth in its import trade by around 8.2 per cent in that year. Barring 2000-01, imports by India grew impressively after 1990 and the growth was above the world average and above that of many other important economies.

Share of Exports and Imports to GDP

Share of exports and imports of Developing Economies to their GDP (at current prices) went up significantly after 1990 and remained

Table 4: Annual Average Growth in Imports

(Per cent)

Year	1980-90	1990-2000	2000-01	2001-02	2002-03
World	6.1	6.5	-3.7	3.6	16.5
Developed Economies	6.9	6.0	-3.7	2.8	15.5
Developing Economies	4.2	8.3	-5.1	4.8	17.9
South-East Europe and CIS	4.2	3.5	14.7	11.1	28.5
USA	8.2	9.5	-6.4	2.0	8.6
Japan	5.1	4.6	-8.0	-3.4	13.6
China	13.5	13.1	8.2	21.2	39.9
Hong Kong SAR (China)	15.0	8.8	-5.5	3.3	11.7
Taiwan (China)	12.4	8.5	-23.3	5.1	12.9
India	4.3	10.1	-2.2	12.2	25.1
Indonesia	2.6	2.7	-7.5	-18.1	64.2
Republic of Korea	11.9	7.1	-12.1	7.8	17.6
Malaysia	7.7	9.5	-9.9	8.1	2.6
Philippines	2.9	12.5	-5.7	6.5	6.3
Singapore	8.0	7.8	-13.8	0.4	9.9
Thailand	12.7	5	0.2	4.2	17.3

Source : UNCTAD Handbook (2004).

very high in comparison to that of world ratio as well as to that of Developed Economies and 'SE Europe and CIS' economies (Table 5). Share of exports and imports trade to GDP is more than 100 per cent in case of Singapore and Hong Kong SAR (China) and around 100 per cent in case of Malaysia in exports. Philippines, China and Thailand are the other three countries under study which raised their shares of exports and imports to their GDP very significantly. Share of exports and imports to GDP in case of all the developing Asian economies under study except India remained substantially higher than that observed for the USA and Japan.

Trade Balance

Developing economies and 'S.E. Europe and CIS economies' had trade surplus consecutively in the first four years of the new

Table 5: Percentage Share of Exports and Imports to GDP

	Percentage Share of Exports to GDP (at current prices)						Percentage Share of Imports to GDP (at current prices)					
	1980	1990	2000	2001	2002	2003	1980	1990	2000	2001	2002	2003
World	18.98	16.12	20.20	19.62	19.77	20.53	19.36	16.68	20.80	20.22	20.20	21.00
Developed Economies	16.47	14.78	17.21	16.94	16.78	17.21	18.25	15.50	18.77	18.31	18.06	18.60
Developing Economies	24.76	22.55	30.75	29.25	31.09	33.31	20.51	21.72	28.72	27.65	28.83	30.81
SE Europe and CIS	45.41	14.52	23.68	20.94	19.81	20.69	45.45	17.93	16.39	16.59	16.39	17.42
USA	8.14	6.84	7.96	7.24	6.62	6.59	9.27	8.99	12.83	11.67	11.47	11.88
Japan	12.16	9.42	10.09	9.69	10.49	10.97	13.17	7.71	7.99	8.39	8.49	8.90
China	8.97	17.51	23.06	22.63	25.72	31.06	9.89	15.04	20.83	20.71	23.31	29.30
Hong Kong SAR (China)	69.32	109.86	122.07	116.62	123.87	141.09	78.77	110.30	128.69	123.49	128.55	146.22
Taiwan (China)	47.77	41.88	47.76	43.57	46.27	50.42	47.72	34.24	45.23	38.16	40.00	44.49
India	4.69	5.67	9.20	9.15	10.01	9.73	8.13	7.44	11.18	10.64	11.47	12.29
Indonesia	28.08	22.44	41.36	39.41	33.53	30.07	13.89	19.08	22.31	21.65	14.65	20.01
Republic of Korea	28.15	25.74	33.67	31.22	29.71	32.02	35.83	27.65	31.36	29.28	27.81	29.54
Malaysia	51.91	66.90	108.95	100.03	98.27	96.32	43.22	66.46	90.91	83.96	84.15	79.44
Philippines	17.66	18.31	53.21	46.00	47.54	46.07	25.51	29.33	49.52	49.17	48.42	49.86
Singapore	165.34	143.80	148.80	141.58	141.80	159.14	204.87	165.73	145.28	134.89	131.91	140.06
Thailand	20.11	27.03	56.26	56.35	54.19	56.24	28.48	38.72	50.45	53.71	50.95	52.95

Source : Author's calculation based on UNCTAD Handbook (2004) data and GDP values available on UNCTAD web site (www.unctad.org).

millennium under study (Table 6). Developed Economies had trade deficit in all these years. Trade deficit as percentage of imports for the USA went up from 37.97 per cent in 2000 to 44.55 per cent in 2003. China and all the East Asian economies under study except Hong Kong SAR (China) and Philippines had trade surplus in these years. India had trade deficit in all these years and the same as percentage to imports declined in 2001 and 2002 but increased to 20.83 per cent in 2003. Trade deficit of India as percentage of imports also remained higher than the world average in all these years.

Table 6: Trade Balance as Percentage of Imports

	1980	1990	2000	2001	2002	2003
World	-1.98	-3.36	-2.91	-2.99	-2.11	-2.24
Developed Economies	-9.75	-4.63	-8.33	-7.52	-7.06	-7.48
Developing Economies	20.69	3.84	7.07	5.78	7.84	8.13
South-East Europe and CIS	-0.08	-19.02	44.44	26.19	20.88	18.77
USA	-12.23	-23.87	-37.97	-38.02	-42.30	-44.55
Japan	-7.68	22.18	26.28	15.59	23.59	23.21
China	-9.24	16.40	10.71	9.26	10.31	6.01
Hong Kong SAR (China)	-12.01	-0.40	-5.14	-5.56	-3.64	-3.51
Taiwan (China)	0.11	22.34	5.61	14.20	15.70	13.31
India	-42.24	-23.80	-17.75	-13.98	-12.75	-20.83
Indonesia	102.22	17.58	85.36	82.03	128.93	50.26
Republic of Korea	-21.44	-6.91	7.34	6.62	6.80	8.38
Malaysia	20.09	0.66	19.85	19.14	16.77	21.26
Philippines	-30.76	-37.58	7.44	-6.46	-1.82	-7.59
Singapore	-19.29	-13.24	2.42	4.96	7.50	13.63
Thailand	-29.40	-30.19	11.52	4.92	6.36	6.22

Source : Author's calculation based on UNCTAD Handbook (2004) data.

Table 7 presents trade balance as a per cent of GDP (at current prices). Developed Economies' trade deficit to GDP ratio remained below two per cent. But, in the case of the USA, trade deficit as per cent of GDP increased from 1.13 per cent in 1980 to 5.29 per cent in 2003.

Market Concentration Indices for Commodities Traded

Table 8 furnishes the market concentration indices on exports and imports for commodities traded in the years 1992 and 2002, respectively. As noted earlier, the index value closer to one indicates higher market concentration which means higher impact on trade due to possible price fluctuations of specific products. Data in Table-8 show that merchandise trade of the Developing Economies has higher concentration than that of Developed Economies. The indices reveal very low market concentration of merchandise trade by the USA indicating a well diversified trade structure. In case of exports trade, China also shows very low concentration. In case of imports the same

Table 7: Trade Balance as Percentage of GDP

	1980	1990	2000	2001	2002	2003
World	-0.38	-0.56	-0.61	-0.61	-0.43	-0.47
Developed Economies	-1.78	-0.72	-1.56	-1.38	-1.28	-1.39
Developing Economies	4.24	0.83	2.03	1.60	2.26	2.51
SE Europe and CIS	-0.04	-3.41	7.28	4.35	3.42	3.27
USA	-1.13	-2.15	-4.87	-4.44	-4.85	-5.29
Japan	-1.01	1.71	2.10	1.31	2.00	2.07
China	-0.91	2.47	2.23	1.92	2.40	1.76
Hong Kong SAR (China)	-9.46	-0.44	-6.62	-6.87	-4.68	-5.13
Taiwan (China)	0.05	7.65	2.54	5.42	6.28	5.92
India	-3.43	-1.77	-1.98	-1.49	-1.46	-2.56
Indonesia	14.20	3.35	19.05	17.76	18.88	10.06
Republic of Korea	-7.68	-1.91	2.30	1.94	1.89	2.48
Malaysia	8.69	0.44	18.04	16.07	14.11	16.89
Philippines	-7.85	-11.02	3.69	-3.18	-0.88	-3.79
Singapore	-39.53	-21.94	3.52	6.69	9.90	19.08
Thailand	-8.37	-11.69	5.81	2.64	3.24	3.29

Source: Author's calculation based on UNCTAD Handbook (2004) data and GDP values available in UNCTAD web site (www.unctad.org).

is observed for Japan. Among other Asian economies under study, concentration indices on products traded increased significantly in the case of Hong Kong SAR (China), Republic of Korea, Malaysia, Philippines, Singapore and Taiwan (China).

Indices indicate that India's exports were somewhat more diversified in 2002 in comparison to the position in 1992. In 2002, market concentration of India in products exported was lower than the world average as well to all other economies under study except USA, China, Hong Kong SAR (China) and Indonesia. However, in case of imports trade, degree of concentration increased in 2002 in comparison to 1992 and was higher than all the economies under study in 1992 and all economies except Malaysia and Philippines in 2002. High oil imports along with higher prices of oil might have increased the concentration in import trade for India.

Table 8: Concentration Indices for Products Traded

	Export		Import	
	1992	2002	1992	2002
World	0.139	0.157	0.083	0.103
Developed Economies	0.098	0.115	0.074	0.088
Developing economies	0.25	0.234	0.096	0.139
USA	0.081	0.084	0.096	0.102
Japan	0.14	0.149	0.106	0.099
China	..	0.085	..	0.113
Hong Kong SAR (China)	0.09	0.119	0.065	0.118
Taiwan (China)	0.089	0.153	0.085	0.165
India	0.14	0.13	0.195	0.248
Indonesia	0.195	0.12	0.063	0.119
Republic of Korea	0.109	0.148	0.107	0.139
Malaysia	0.156	0.216	0.12	0.262
Philippines	0.293	0.417	0.161	0.305
Singapore	0.184	0.249	0.107	0.203

Source : UNCTAD Handbook (2004) (data on Thailand were not available).

Distribution of Exports by Main Regions of Destination

Table 9 furnishes the percentage distribution of exports by main regions of destination for the years 1990, 1995, 2000 and 2003. Due to unspecified destinations, the total may not add to 100 per cent for some economies. It is observed that in case of all the Asian economies under study except China, share of exports to the Developing Economies in 'Other Asia¹' (Asia other than West Asia²) increased significantly and share of exports to the Developed Economies decreased with almost equal proportion after 1990. Similar change in direction of exports trade is also observed in case of the USA and Japan. In case of Hong Kong SAR (China), Philippines, Singapore and Thailand, the reduction in share of exports to Europe, the USA and Canada is more prominent. In case of Korea, the decrease in share is more prominent in case of exports to the USA, Canada and Japan. Share of exports to 'Other Asia' from China declined substantially from about 54 per cent in 1990 to around 33 per cent in 2003 but share of exports to Europe, the USA and Canada increased with almost equal proportion.

Table 9 : Distribution of Exports by Main Regions of Destination*

(Per cent)

	Developed Economies						SEA & CIS	Developing Economies				
	Year	Total	Europe	USA & Canada	Japan	Other		Total	America	Africa	West Asia ²	Other Asia ¹
China	1990	35.7	11	9.2	14.7	0.8	3.7	59.8	1.2	2.1	2.2	54.1
	1995	52.2	14.1	17.6	19.1	1.4	1.5	46.3	2.1	1.7	2.2	40.4
	2000	58.4	16.5	24.2	15.8	1.9	1.2	40.4	2.6	1.8	2.3	33.7
	2003	56.2	18.3	22.4	13.6	1.9	2.4	41.5	2.7	2.3	3.2	33.2
Hong Kong SAR (China)	1990	53.6	20	26	5.7	1.9	0.3	46.1	1.8	1.8	1.4	40.8
	1995	47.4	16.1	23.3	6.1	1.8	0.2	52.3	2.8	1.5	1.4	46.6
	2000	48.6	16.4	24.9	5.5	1.8	0.1	51.3	2.4	0.9	1.1	46.7
	2003	41.5	14.4	20	5.4	1.7	0.2	58.3	1.4	0.7	1.2	54.9
Taiwan (China)	1990	68.3	18.3	35.1	12.5	2.4	0.2	30.9	1.9	1.1	1.8	26.1
	1995	52.7	13.9	25	11.8	2.1	0.2	46.4	2.4	1.5	1.7	40.8
	2000	53.5	15.8	24.8	11.2	1.7	0.2	45.6	2.6	0.9	1.4	40.6
	2003	42.8	13.9	19.4	7.7	1.7	0.4	56.1	2.8	0.8	1.4	50.9
India	1990	57.3	30.5	16	9.3	1.5	16.8	21.5	0.4	2.5	6.3	12.2
	1995	55.8	28.6	18.3	7	1.9	3.8	36.4	1.2	4.9	8.3	22
	2000	54.6	25.5	22.8	4.1	2.2	2.7	39.4	2.2	5.3	10.9	20.9
	2003	52	24.5	22	3.2	2.4	1.7	42.9	3	4.8	8.4	26.5
Indonesia	1990	70.5	12.4	13.6	42.5	1.9	0.4	29.1	0.4	0.7	2.7	25.2
	1995	59.5	15.4	14.7	27.1	2.3	0.4	40.1	1.6	1.4	3.3	33.6
	2000	54.7	14.6	14.3	23.2	2.6	0.3	45	1.7	1.8	3.3	38.1
	2003	52	13.8	12.7	22.3	3.2	0.6	47.5	1.4	2	3.3	40.6
Japan	1990	59.1	22.1	34	0	3	1	39.9	3.4	1.9	3.2	31.1
	1995	48.2	16.9	28.9	0	2.4	0.3	51.5	4.2	1.7	1.9	43.6
	2000	51.6	17.6	31.7	0	2.3	0.2	48.2	3.9	1	2	41.2
	2003	45.5	16.5	26.3	0	2.7	0.5	54	3.2	1.2	2.8	46.2
Republic of Korea	1990	67.1	15.7	31.2	18.6	1.6	..	24.6	3	1.8	3	16.7
	1995	48.6	14	19.9	13	1.7	1.7	44.7	5.4	2.3	3.2	33.7
	2000	52.4	15	23.4	11.9	2.1	0.9	46.7	5.3	1.9	4.1	35
	2003	44.7	14.5	19.8	8.4	2.2	1.2	54.5	6.2	2.4	4	41.3
Malaysia	1990	50.8	15.8	17.7	15.3	1.9	0.8	48.4	0.7	0.8	2.4	44.5
	1995	50.4	14.6	21.6	12.5	1.8	0.2	48.9	1.6	1.1	2.4	43.8
	2000	51.4	14.2	21.4	13	2.8	0.1	48.4	1.5	0.8	2	44.1
	2003	46.3	13.4	20.9	9.4	2.6	0.3	53.3	2.8	1.1	2	47.4
Philippines	1990	79.3	18.8	39.4	19.8	1.3	0	20.6	0.9	0.3	1.6	17.5
	1995	71.6	17.9	36.9	15.8	1	0	28.3	1.1	0.2	1.2	25.6
	2000	64.7	18.3	30.8	14.7	1	0	34.9	1.1	0.1	0.4	33.2
	2003	52.7	15.2	21.8	14.4	1.4	0.1	47.2	1.8	0.2	0.5	44.7
Singapore	1990	50.3	16.4	22.1	8.8	3	0.9	48.8	1.3	2.1	2.4	41.8
	1995	43.6	14.3	18.7	7.8	2.7	0.9	55.6	1.4	1.3	1.4	51
	2000	42.5	14.5	17.7	7.5	2.8	0.1	57.4	1.9	1.2	1.5	52.2
	2003	39.7	14.7	14.6	6.7	3.8	0.2	60	1.8	1.2	1.9	54.5
Thailand	1990	68.1	24.8	24	17.2	2.1	0.6	30.8	1.4	2.5	4.8	22
	1995	54.1	17	18.7	16.6	1.8	0.9	45	1	1.7	4	35.6
	2000	57.7	17.2	22.5	14.7	3.3	0.2	41.7	1.5	1.9	2.4	35.8
	2003	52.4	16.4	18.2	14.2	3.7	0.5	47	1.5	2.1	2.9	40.4
USA	1990	64.9	28.2	21.1	12.4	3.3	1	33.8	13.7	2	2.6	15.4
	1995	58.6	22.9	21.6	11	3.1	0.8	40.5	16.5	1.7	2.5	19.8
	2000	57	23.2	22.6	8.4	2.8	0.5	42.4	21.6	1.4	2	17.2
	2003	56.4	22.8	23.4	7.2	3	0.6	43	20.6	1.5	2.1	18.7

* Total may not lead to 100 per cent due to unspecified destinations.

Source: UNCTAD Handbook (2004).

Share of Indian exports to developing economies in 'Other Asia', notwithstanding an increase after 1990, remained substantially lower than the other Asian economies under study. Share of exports from India to Europe and Japan reduced by around 12 percentage points in 2003 *vis-à-vis* that in 1990; however, share of exports to the USA increased by around 6 percentage points during the same period. Among all the economies under study, share of Indian exports to the S.E. Europe and CIS economies was substantially higher in 1990. However, the share which was around 16.8 per cent in 1990 decreased to around 1.7 per cent in 2003, indicating that India's business with the economies in that region has drastically reduced in the last decade.

Distribution of Imports by Main Regions of Origin

Table 10 furnishes the distribution of imports by main regions of origin for the years 1990, 1995, 2000 and 2003. Due to unspecified origins, here also the total may not add to 100 per cent for some economies. It is observed that in case of all the Asian economies under study, shares of imports from developed economies reduced noticeably after 1990. As was observed in case of exports, share of imports too from 'Other Asia' by all the Asian economies under study except China increased substantially after 1990. A similar trend is observed for imports by the USA and Japan. However, in case of China, there has not been much change in the share after 1990, although the same remained higher than Taiwan (China), India, Korea and Thailand in the years under study. Share of Indian imports from the USA and Canada reduced substantially after 1990 and the share remained much lower in comparison to other Asian economies under reference. However, imports from developed Europe account for a significantly higher share in case of India (although the share declined after 1990) *vis-à-vis* the other Asian economies while opposite is the fact in respect of imports from 'Other Asia'. These trends about India have to be read with the fact that for India, share of imports from origins unspecified was very high, around 23 and 21 per cent in 2000 and 2003, respectively.

Table 10: Import Structure by Main Regions of Origin*

(Per cent)

	Developed Economies						SEA & CIS	Developing Economies				
	Year	Total	Europe	USA & Canada	Japan	Other		Total	America	Africa	West Asia ²	Other Asia ¹
China	1990	51.3	19.3	15	14.2	2.8	4.8	43.1	2.8	0.7	1	38.5
	1995	55.7	17.2	14.2	21.9	2.3	3.9	38.7	2.2	1.1	1.6	33.7
	2000	46	14.3	11.2	17.8	2.6	3.1	47.9	2.1	2.1	3.9	39.6
	2003	43.5	14.1	9.3	18	2.2	3.3	47.1	3.6	2	3.5	38
Hong Kong SAR (China)	1990	38.6	12.3	8.5	16.1	1.7	0.1	61.3	0.8	0.6	0.3	59.6
	1995	36.8	12	8.4	14.8	1.6	0.3	63	0.6	0.4	0.6	61.3
	2000	30.8	10	7.5	12	1.4	0.2	68.9	0.6	0.3	0.5	67.5
	2003	28.9	9.9	6	11.9	1.2	0.3	70.8	0.8	0.4	0.8	68.8
Taiwan (China)	1990	76.1	17.7	25	30	3.6	0.2	23.5	2.4	0.5	6.1	14.5
	1995	70	16.2	21.6	29.2	3	1.9	28	2.3	1.8	3.7	20.2
	2000	61.7	12.3	18.9	27.5	3.1	1.3	36.9	1.5	2.3	4.5	28.5
	2003	52.6	10.8	14.5	24.8	2.5	1	46.1	1.3	1.9	6.3	36.6
India	1990	58.6	35	12.3	7.5	3.8	6.3	34.6	2.2	3.1	18	11.2
	1995	49.6	29	10.6	6.5	3.5	3.5	41.1	1.5	5	20.5	14.1
	2000	41.6	27.3	7	4	3.2	1.6	33.4	1.5	6.4	8.3	17.2
	2003	37.3	22.6	7.4	3.2	4.1	3.7	38.2	2.9	5	8.1	22.2
Indonesia	1990	66.2	22	13.3	24.8	6	0.4	33	2.3	0.7	5.1	24.8
	1995	63.4	21.6	13.7	22.7	5.5	1.3	35.1	2.6	1.5	4	26.8
	2000	47.1	13.2	12	16.1	5.7	0.7	51.3	1.8	2.5	8.5	38.4
	2003	39.8	11.9	9.3	13	5.5	1.1	58.2	1.7	4.9	8	43.1
Japan	1990	50.8	18.3	26.1	0	6.4	1.5	47.7	4	1.6	13	28.8
	1995	47.5	16.3	25.8	0	5.5	1.5	50.9	3.4	1.4	9.1	36.6
	2000	39.9	13.8	21.4	0	4.7	1.3	58.8	2.8	1.3	12.8	41.7
	2003	36.7	14.4	17.6	0	4.6	1.3	62.1	2.5	1.7	13.2	44.5
Republic of Korea	1990	66.9	13.1	24.7	25	4.1	..	20.7	2.3	0.8	7	10.3
	1995	67.9	14.9	24.4	24.1	4.4	1.8	29.6	2.9	1.7	8.4	16.4
	2000	54.8	10.9	19.6	19.8	4.4	1.6	43.6	2	2	15.6	23.9
	2003	51.2	12.1	15	20.5	3.6	1.2	47.6	2.4	1.4	13.7	30.1
Malaysia	1990	63.8	17.5	17.9	24.2	4.1	0.4	35.7	1.8	0.5	1.2	32
	1995	64.5	17.3	16.8	27.3	3.1	0.4	34.4	1.2	0.5	0.8	31.8
	2000	52.7	12.3	17.1	21.1	2.3	0.3	45.1	0.8	0.5	2	41.8
	2003	38.5	11.6	12.5	12.5	1.8	0.6	59.6	0.9	0.4	1.8	56.4
Philippines	1990	56.5	12.8	21	18.4	4.3	0.4	43.1	2.6	0.7	11.4	27.9
	1995	57.2	11.5	19.4	22.3	4	0.3	39.8	1.7	0.6	7.9	29.1
	2000	52.2	9.8	19.2	18.9	4.3	0.3	46.8	0.8	0.2	9.1	36.5
	2003	49.6	8.8	18.5	20	2.3	0.5	49.1	1.1	0.2	6.7	41
Singapore	1990	54.6	15.5	16.7	20.1	2.3	0.3	45	1.2	0.8	10.8	32.3
	1995	53.6	15.2	15.5	21.1	1.8	0.4	46	0.9	0.6	6.4	38.1
	2000	48.5	13.8	15.4	17.2	2.1	0.3	50.7	0.7	0.5	7.9	41.6
	2003	43.6	15	14.5	12	2.1	0.6	55.7	0.9	0.6	8.4	45.7
Thailand	1990	63.7	19	11.9	30.4	2.4	0.7	34.9	2	0.9	3.8	28.1
	1995	61	17.1	12.2	29.3	2.4	1.8	37.2	1.5	0.9	3.4	26.7
	2000	51.4	11.7	12.3	24.7	2.7	1	45.5	1.3	1.3	9.7	33.1
	2003	48.5	11.4	10	24.1	3	1.1	48.5	2	1.3	9.3	35.7
USA	1990	59.7	21.7	18.1	18	1.9	0.4	39.8	13	3.3	3.4	20.1
	1995	56.7	19.6	19.2	16.5	1.4	0.7	42.5	14	2.1	1.8	24.6
	2000	52.3	19.9	18.5	12.1	1.8	0.9	46.9	17	2.3	2.4	25.1
	2003	49.7	21.2	17.4	9.3	1.7	0.9	49.4	17.1	2.6	2.7	27

* Total may not lead to 100 per cent due to unspecified destinations.

Source: UNCTAD Handbook (2004).

Terms of Trade Indices

Table 11 furnishes the terms of trade indices for the economies under study. In the years under study, except 1980, terms of trade remained more favourable to Developed Economies vis-à-vis Developing Economies. Korea, Malaysia, Singapore and Thailand enjoyed very good terms of trade in the 1990s. However, the same deteriorated significantly in 2001 and 2002. Among the developing Asian economies under study, China exhibited stable terms of trade. Moreover, after 1995, China has been able to manage better terms of trade than the Developed Economies as a whole in almost all the years under study. India's terms of trade fluctuated in the years under study. The deterioration in 2001 and 2002 may possibly be attributed to depressed prices for exports and high prices of oil [Economic Survey (2002-2003)].

Purchasing Power Indices of Exports

Table 12 furnishes the purchasing power indices of exports for the economies under study. It is observed that in all the years under

Table 11: Terms of Trade Indices(Terms of trade indices³ 2000 = 100)

	1980	1990	1994	1995	1996	1997	1998	1999	2001	2002
World	105	102	104	104	104	103	104	103	100	101
Developed Economies	97	103	105	105	104	103	105	105	101	102
Developing Economies	117	100	102	102	102	103	100	99	99	100
China	117	102	102	102	107	110	110	104	103	102
Hong Kong SAR (China)	100	100	100	99	100	100	102	101	101	102
Taiwan (China)	-	97	94	91	97	99	101	104	111	117
India	72	86	119	108	99	114	117	105	98	88
Indonesia	-	95	85	90	98	99	82	66	94	100
Republic of Korea	114	134	137	139	125	122	117	114	95	95
Malaysia	71	103	110	109	112	112	107	104	98	98
Philippines	99	87	78	80	81	83	87	102	96	104
Singapore	127	116	106	104	105	105	105	103	96	94
Thailand	152	119	120	117	114	115	109	107	91	90

'-': Not available.

Source: UNCTAD Handbook (2004).

Table 12: Purchasing Power Indices of Exports(Purchasing power indices³ of exports: 2000 = 100)

	1980	1990	1994	1995	1996	1997	1998	1999	2001	2002
World	33	50	64	70	74	81	85	90	100	105
Developed Economies	35	55	68	73	77	84	89	93	101	104
Developing Economies	23	39	59	66	71	79	78	85	97	106
China	8	26	49	58	60	75	78	81	112	140
Hong Kong SAR (China)	11	40	71	77	82	87	85	86	97	107
Taiwan (China)	-	63	79	85	87	92	82	91	88	97
India	15	30	62	72	75	80	86	87	107	112
Indonesia	-	42	61	64	72	82	79	80	95	97
Republic of Korea	9	32	51	62	67	75	88	96	96	108
Malaysia	13	27	55	64	68	75	74	87	91	98
Philippines	4	21	32	44	48	58	67	88	83	96
Singapore	14	39	66	75	79	85	86	89	92	95
Thailand	15	41	74	82	73	78	81	89	87	98

‘-’ : Not available.

Source: UNCTAD Handbook (2004).

study except for the year 2002, exports by Developed Economies yielded higher purchasing power than that of the Developing Economies. However, purchasing power of exports of Developing Economies improved substantially after 1990 possibly because of strong growth in exports in volume terms. In contrast to a fluctuated terms of trade indices, purchasing power of exports of India increased significantly after 1990 fuelled by strong export growth in volume terms. Furthermore, the country had higher purchasing power of exports in majority of the years than many of the economies under study.

Trade Intensity Index

As stated in Section I, the trade intensity index (TII) can be used to determine whether the value of trade between two countries is greater or smaller than would be expected on the basis of their importance in world trade.

Table 13 furnishes the TII (T_{ij}) and Table 14 furnishes the modified TII (T'_{ij}) for the Asian economies under study for their

Table 13: Trade Intensity Indices – 1990 and 2003
Trading Partner

	Japan	China	Hong Kong SAR	Taiwan (China)	India	Indonesia	Republic of Korea	Malaysia	Philippines	Singapore	Thailand
Trade Intensity Indices – 1990											
Japan	-	1.47	1.89	3.67	0.88	3.35	3.48	2.56	2.23	2.27	3.57
China	2.39	-	17.96	0.35	0.41	1.22	0.39	0.79	0.83	1.95	1.53
Hong Kong SAR	0.93	17.08	-	2.88	0.55	1.75	1.33	0.94	2.69	1.94	1.47
Taiwan (China)	2.09	2.34	4.66	-	0.94	3.86	1.25	3.26	3.21	2.37	2.92
India	1.52	0.07	1.27	0.46	-	0.99	0.53	0.94	0.30	1.05	1.27
Indonesia	6.94	2.24	1.00	2.26	0.35	-	3.04	1.31	1.60	4.51	0.82
Republic of Korea	3.17	..	2.42	1.31	0.99	3.16	-	1.45	1.97	1.69	1.67
Malaysia	2.50	1.45	1.32	1.48	2.42	2.22	2.65	-	3.43	13.98	3.94
Philippines	3.23	0.52	1.67	1.74	0.04	1.42	1.61	2.07	-	1.78	2.14
Singapore	1.43	1.05	2.70	2.46	3.11	..	1.27	17.39	3.26	-	7.43
Thailand	2.81	0.80	1.87	0.99	0.41	1.27	0.98	3.33	1.85	4.48	-
Trade Intensity Indices – 2003											
Japan	-	2.41	2.06	4.09	0.62	2.94	3.34	2.08	3.23	1.95	3.72
China	2.94	-	5.69	1.27	0.93	1.99	2.08	1.23	1.20	1.26	0.96
Hong Kong SAR	1.17	8.47	-	1.50	1.04	0.87	0.93	0.78	1.69	1.28	1.13
Taiwan (China)	1.69	5.37	2.89	-	0.57	0.93	1.46	1.98	1.73	2.20	1.94
India	0.71	1.27	1.56	0.58	-	1.94	0.84	0.88	0.78	1.35	1.45
Indonesia	4.83	1.24	0.63	2.26	3.48	-	3.22	3.40	2.63	5.51	2.51
Republic of Korea	1.94	3.62	2.49	2.26	1.81	3.40	-	1.75	2.62	1.50	1.44
Malaysia	2.32	1.29	2.11	2.22	2.95	3.94	1.32	-	2.33	9.79	4.83
Philippines	3.45	1.18	2.79	4.25	0.34	1.59	1.65	5.96	-	4.17	3.75
Singapore	1.46	1.40	3.27	2.96	2.62	..	1.91	13.87	3.82	-	4.70
Thailand	3.08	1.41	1.76	2.01	0.97	5.60	0.90	4.23	3.43	4.54	-

‘..’ corresponding exports data not available.

Source : Author’s calculation based on DTS (1997 & 2004) data.

bilateral trade flows in exports in 1990 and 2003 (the column in the extreme left lists the exporting economies while the following columns list their trading partners). Any of these two tables suffices for our analysis. As stated earlier, T_{ij} and T'_{ij} remain almost same for countries with low share in world exports. The difference is significant for countries with a large share in world exports. The same can also be observed from the values shown in Tables 13 and 14.

Table 14: Modified Trade Intensity Indices – 1990 and 2003
Trading Partner

	Japan	China	Hong Kong SAR	Taiwan (China)	India	Indonesia	Republic of Korea	Malaysia	Philippines	Singapore	Thailand
Modified Trade Intensity Indices – 1990											
Japan	-	1.54	2.07	4.88	0.88	4.28	4.53	3.00	2.52	2.58	4.69
China	2.45	-	26.45	0.34	0.40	1.22	0.39	0.78	0.83	1.99	1.54
Hong Kong SAR	0.93	28.46	-	3.02	0.55	1.78	1.34	0.94	2.80	1.98	1.49
Taiwan (China)	2.13	2.40	5.03	-	0.94	4.09	1.26	3.42	3.36	2.44	3.03
India	1.52	0.07	1.27	0.46	-	0.99	0.53	0.94	0.30	1.05	1.27
Indonesia	7.27	2.26	1.00	2.28	0.35	-	3.09	1.32	1.61	4.63	0.82
Republic of Korea	3.31	..	2.49	1.32	0.99	3.30	-	1.47	2.01	1.71	1.70
Malaysia	2.53	1.46	1.32	1.49	2.45	2.24	2.68	-	3.50	15.77	4.05
Philippines	3.25	0.52	1.68	1.74	0.04	1.42	1.61	2.07	-	1.79	2.14
Singapore	1.44	1.05	2.78	2.52	3.22	..	1.28	23.47	3.38	-	8.27
Thailand	2.84	0.80	1.88	0.99	0.40	1.28	0.98	3.38	1.86	4.59	-
Modified Trade Intensity Indices – 2003											
Japan	-	2.66	2.22	5.16	0.60	3.39	3.96	2.25	3.81	2.08	4.56
China	3.34	-	8.03	1.29	0.93	2.12	2.23	1.25	1.22	1.28	0.96
Hong Kong SAR	1.18	11.00	-	1.52	1.04	0.86	0.93	0.77	1.73	1.29	1.14
Taiwan (China)	1.72	6.03	3.03	-	0.56	0.93	1.48	2.03	1.77	2.27	1.99
India	0.70	1.27	1.57	0.58	-	1.95	0.84	0.88	0.78	1.35	1.45
Indonesia	4.99	1.24	0.63	2.29	3.56	-	3.28	3.47	2.67	5.72	2.54
Republic of Korea	1.99	3.89	2.59	2.34	1.85	3.63	-	1.79	2.74	1.52	1.46
Malaysia	2.36	1.29	2.15	2.26	3.03	4.11	1.32	-	2.37	11.19	5.11
Philippines	3.49	1.18	2.82	4.32	0.34	1.59	1.65	6.11	-	4.24	3.80
Singapore	1.47	1.41	3.42	3.08	2.70	..	1.94	18.56	4.04	-	5.06
Thailand	3.15	1.41	1.77	2.03	0.97	5.89	0.90	4.39	3.52	4.72	-

‘..’ corresponding exports data not available.

Source : Author’s calculation based on DTS (1997 & 2004) data.

The bilateral trade flows of India have significantly improved as indicated by the TII (T_{ij} as well as T'_{ij}) after 1990, although at the same time they remained below expected levels with many of the economies under study. As indicated by the TII (T_{ij} as well as T'_{ij}), in 2003, bilateral trade flows by India with Japan, Taiwan (China), Republic of Korea, Malaysia and Philippines were smaller than expected. Bilateral trade flows of India which were above expectation level in 1990 with Japan as indicated

by the TII (T_{ij} as well as T'_{ij}) degraded to below expectation level in 2003. On the other hand, Republic of Korea, Malaysia, and Singapore had bilateral trade flows above expectation with all the economies under study in 2003, Japan and Philippines with all but India, China with all but India and Thailand, Taiwan (China) with all but India and Indonesia, Thailand with all but India and Korea, Hong Kong SAR with all but Indonesia, Korea and Malaysia, and Indonesia with all but Hong Kong SAR.

Section IV

Conclusion

A strong external sector is found in most country experiences to be the companion of a growing economy. The most striking and well-known example is the South and East Asian economies' experience. This paper makes a comparative study of India's export performance *vis-à-vis* a few important economies in the region *viz.* China, Hong Kong SAR (China), Taiwan (China), Indonesia, Republic of Korea, Malaysia, Philippines, Singapore and Thailand. In terms of size of the country and economy although India is much larger than most of these economies, the country does not match well with these economies so far as performance in international trade in goods is concerned. Share of India in world trade in exports as well as in imports remains very low in comparison to many of its South and East Asian neighbours under reference.

However, India has enhanced its performance in annual average growth rate in exports as well as in imports after 1990. The growth was mostly above the world average during the period under study and was above that of many other important economies under study. Furthermore, although India's terms of trade indices fluctuated in the years under study, purchasing power of exports (representing the income terms of trade) of the country increased significantly after 1990 due to strong export growth in volume terms. Also, the country managed higher purchasing power of exports in majority of the years than many of the economies under study.

The analysis has shown that India reduced its market concentration index on products exported in 2002 in comparison to the position in 1992. India, thus, managed a less concentrated (*i.e.* more

diversified) trade structure on products exported than many of the economies under study except the USA, China, Hong Kong SAR (China) and Indonesia. However, in imports, the country had a more concentrated (*i.e.* less diversified) trade structure (in terms of products imported) than most of the economies under study. A more concentrated trade structure on commodities traded carries higher risk that may arise due to possible price fluctuations. Finally, it is found that international trade in goods by India with many of the economies under study is below expected level as indicated by the trade intensity indices. Developing economies in 'Other Asia' account for a very low share in India's exports as well in imports *vis-à-vis* the other Asian economies under study. Possibly, the country can improve its performance in international trade in goods by concentrating on higher trade with its Asian neighbours, especially in the South and the East Asian region.

Notes:

- ¹ Other Asia (26 countries): Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Hong Kong SAR(China), India, Indonesia, Korea (Democratic People's Republic of), Korea (Republic of), Lao People's Democratic Republic, Macao SAR (China), Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan (China), Thailand, Timor-Leste, Viet Nam; [UNCTAD Handbook (2004)].
- ² West Asia (14 countries): Bahrain, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Palestinian territory, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Turkey, United Arab Emirates, Yemen; [UNCTAD Handbook (2004)].
- ³ Compiled after converting the current value of exports (f.o.b.) or of imports (c.i.f.) to dollars and expressed as a percentage of the average for the base period (2000); [UNCTAD Handbook (2004)].

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