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**Intra-industry specialization in the textile industry: A case study for the newly industrializing countries and selected Asian countries**

**Saleem, Mohammad Ishaq, Ph.D.**

**City University of New York, 1988**

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INTRA-INDUSTRY SPECIALIZATION  
IN THE TEXTILE INDUSTRY  
A CASE STUDY FOR  
THE NEWLY INDUSTRIALIZING COUNTRIES  
AND SELECTED ASIAN COUNTRIES.

by

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## ABSTRACT

INTRA-INDUSTRY SPECIALIZATION  
IN THE TEXTILE INDUSTRY  
A CASE STUDY  
FOR NEWLY INDUSTRIALIZING COUNTRIES  
AND SELECTED ASIAN COUNTRIES

by

MOHAMMAD I. SALEEM

Advisor: Professor Mitchell Kellman

Over the last two decades a number of Less Developed Countries have emerged as Newly Industrializing Countries (NICs). Their economic development has been characterized by export-led growth that exceeded the norm for Less Developed Countries (LDCs). This phenomenon has given rise to debate whether other LDCs could emulate the processes that were followed by the NICs.

This thesis analyses at the intra-industry level changes in export shares for the Textile Industry for the NICs and selected Asian ldc's which have the potential to advance to the status of NICs.

Changes in export shares and also export levels have been correlated for SITC three digit product categories for the years 1975 and 1985. Data used for this analysis are imports to OECD

Countries from the selected NICs and Less Developed Countries obtained from Data Research International.

The principal research results include the following:

1. Over the period 1975 to 1985 there were shifts in export shares from the NICs to selected Less Developed Countries for the Textile Industry.
2. At the SITC three digit product category level; NICs have lost export shares to a number of selected LDCs.

3. For the poorer Less developed Countries the composition of textile exports changed over the ten year period to a composition that was quite dissimilar to that of the NICs, indicating a degree of intra-industry specialization.

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I would also like to thank my friends and colleagues who directly or indirectly provided me with the guidance that moved me along to this point.

Last, but certainly not the least, most of my thanks go to my family for providing the encouragement, motivation and support. I would like to dedicate this work to my mother and my father who would have been so proud of me today if they were alive, and to my wife for her encouragement and support.

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## CHAPTER 1

### INTRODUCTION

The last two decades have seen the emergence of a group of countries which have rapidly industrialized and have shown growth rates of Gross National Product (GNP) per Capita and Gross domestic product (GDP) that sets them apart from other less developed countries (LDCs). The table below illustrates this point.

**TABLE 1.1: GROWTH RATE OF MAIN ECONOMIC INDICATORS FOR ALL LDCs, SELECTED LDCS AND THE USA**

COUNTRY	ANNUAL AVERAGE GROWTH RATES				
	GNP/CAPITA 1965-1985	GDP 1965-1980	GDP 1980-85	INDUSTRIAL PRODUCTION 1965-1980	INDUSTRIAL PRODUCTION 1980 1985
ALL LDCs	3.0	6.0	3.0	7.6	3.5
BRAZIL	4.3	9.9	1.3	10.0	0.3
S. KOREA	6.9	9.5	7.9	16.6	9.6
HONG KONG	6.1	8.5	5.9	-	-
SINGAPORE	7.6	10.2	6.5	12.2	5.9
U.S.A.	1.7	2.9	2.5	2.3	2.4

SOURCE: WORLD BANK WORLD DEVELOPMENT REPORT 1987

The less developed countries shown in the above table are included in a group of countries that have received the nomenclature "Newly Industrializing Countries" (NICs). This

nomenclature was popularized as a result of a report published by the Organization of Economic Cooperation and Development (OECD) in 1979<sup>1</sup>. Details of selected NICs their emergence and profiles are discussed in the next chapter.

In the recent past emphasis has shifted in the debate on economic development from Import-substitution policies to export oriented policies<sup>2</sup>, and<sup>3</sup>. The extraordinary success stories of a number of countries of East Asia with export led development has brought into prominence outward oriented development policies. Policy recommendations<sup>4</sup>, call for further shifts towards export orientation for those countries that have previously followed import substitution policies.

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1. OECD. The Impact of Newly Industrializing Countries on Production and Trade in manufacture. Paris OECD 1979. p 84.

2. Little Ian M.D. Economic Development, Theory, Policy, and International Relations. New York: Basic Books Inc. 1982 p 281.

3. Krueger Anne O. "Trade Policy as an Input to Development." American Economic Review, Papers and Proceedings. May 1980 pp 288-292

## THE STRUCTURE OF LDC EXPORTS AND THEIR ORIENTATION.

Export oriented policies have certain advantages among them less distortion of the price mechanism, exposure to a more competitive environment, X-efficiency, efficiencies of scale etc.

**TABLE 1.2: THE STRUCTURE OF LDC EXPORTS**  
(1965, 1976 and 1984)

	1965	1975	1984
Total Exports (million U.S.\$)	36490.0	252262.0	464781.0
Food	32.0%	14.9%	13.8%
Agricultural			
Raw Materials	13.0%	4.4%	3.6%
Mineral, Ores	11.7%	5.7%	5.5%
Manufactures	11.7%	15.7%	30.1

Note: The percentage totals are less than 100% for each of the year because Fuels (SITC 3) have not been included in the table

Source: United Nations (UNCTAD) Handbook of Trade and Development various issues.

Table 1.2 clearly shows the changes that have occurred over the past 19 year period from 1965 to 1984. In 1965 the major share of exports from the less developed countries consisted mainly of food while manufactures comprised about 12%. Over the years the picture has steadily changed. The share of food exports has declined sharply from 32% to 13% while the share of manufactures has more than doubled to 30.1%. This change clearly indicates the rising importance

of manufactures in the composition of exports from the less developed countries.

**TABLE 1.3: STRUCTURE OF LDC EXPORTS BY REGIONS**  
(million U.S. \$)  
1965, 1975, 1984

REGION	1965	1975	1984
<b>AFRICA</b>			
Food	12689.5	38590.0	26713.1
Agricultural			
Raw Materials	2279.6	1837.89	2788.9
Mineral, Ores	3365.4	9311.6	8059.5
Manufactures	7470.0	22733.6	63020.5
<b>AMERICA</b>			
Food	15261.2	40433.0	59895.3
Agricultural			
Raw Materials	1388.9	1123.2	1593.7
Mineral, Ores	3342.6	11851.0	14069.0
Manufactures	4295.5	56834.0	198674.8
<b>ASIA (WEST)</b>			
Food	1851.93	1727.9	6260.9
Agricultural			
Raw Materials	513.3	272.3	464.8
Mineral, Ores	227.4	507.0	1366.0
Manufacturers	5509.0	13185.0	87587.0
<b>ASIA (South &amp; S.E. Asia)</b>			
Food	10631.8	225780.0	22539.2
Agricultural			
Raw Materials	5631.3	32330.0	3917.8
Mineral, Ores	2069.3	49944.0	5737.2
Manufactures	26800.0	201874.0	624864.0

Source : United Nations: (UNCTAD) Handbook of International Trade and Development 1976 and 1986.

Table 1.3 shows the structure of LDC exports by major commodity groups and regions. Examination of this table clearly shows that two regions have made considerable strides in improving their exports of manufactures. These two regions are the less developed countries of America and Asia, (other than those of West Asia.)

**TABLE 1.4: EXPORTS OF MANUFACTURES FROM SELECTED COUNTRIES**  
(million U.S.\$)

COUNTRY	1965	1975	1983
BRAZIL	116.37	2532.0	1050.8
CHINA	1168.95	8270.2	14756.6
HONG KONG	-	-	27769.3
INDIA	735.67	2874.7	5027.4
INDONESIA	130.38	1709.4	2044.9
MALAYSIA	8.89	913.1	4162.1
PAKISTAN	270.9	652.1	1726.2
PHILIPPINES	78.14	583.9	2360.8
SINGAPORE	407.89	3029.1	13231.0
SRILANKA	3.61	73.8	359.9
S. KOREA	151.31	6790.1	27557.5
TAIWAN	268.2	-	-
THAILAND	115.3	566.2	2485.0

SOURCE: World Bank. World Development Report various issues.  
United Nations. Yearbook of International Trade  
Statistics various issues.

Table 1.4 shows the strides made by selected countries in export of manufactures over the 18 year period. In the above table the gains made by a number of countries namely Singapore, South Korea and Brazil are remarkable. These

countries are generally included among the group of " Newly Industrializing Countries " (NICs). In Chapter 2 the emergence and characteristics of these countries will be discussed in detail.

The significantly better performance of the NICs during the last two decades and the consequent improvement in their status in terms of economic development has given rise to debate whether other LDCs could emulate the development process followed by the NICs.

#### **DYNAMIC CHANGES IN COMPARATIVE ADVANTAGE AND INDUSTRIAL SPECIALIZATION**

Krueger<sup>4</sup> points out that in the years immediately after world War II Japan's comparative advantage lay in labor-intensive products such as textiles and apparel. With a low per capita income that Japan had in the early post war years; Japan's comparative advantage lay in labor-intensive products. However as Japan's per capita income rose its comparative advantage started to shift from labor intensive products towards more capital-intensive products such as steel and other metal products that required lesser relative inputs of labor.

Kreuger<sup>5</sup> shows that the skill level of the labor force increases as per capita income rises. Furthermore the

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4. Krueger Anne O. " LDC Manufacturing Production and Implications for OECD Comparative Advantage.", in Western Economies in Transition : Structural Changes and Adjustment policies in Industrial Countries. Boulder. Westview 1980.  
p 241

5. *ibid* p 222

capital stock per worker also rises with rising income per capita. These changes are essentially caused by the increased resources that become available for labor to work with as a direct result of the increased output per man. As economic growth continues those industries that utilized relatively large labor inputs as compared to capital input find themselves at a disadvantage. This is particularly relevant as, with rising per capita incomes, the real wages also rise so that industries move to reduce relative labor inputs. There is thus a process of shifts in comparative advantage for countries as they grow from industries that were labor intensive to industries that are more capital intensive.

Economic growth therefore entails structural shifts such that the country moves away from labor intensive to more capital intensive industries. There is therefore a shift from cottage and small scale industry towards large scale industries producing consumer durables. The evidence suggests, according to Krueger<sup>6</sup>, that efficient growth causes a gradual industrial specialization. To begin with those industries that are labor intensive are initiated and with increasing growth there is a movement towards specialization away from labor intensive to relatively more capital intensive production processes.

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6. *ibid* p 226.

Krueger points out that there are stages of development and corresponding shifts in comparative advantage. Japan has in the post war period gradually lost comparative advantage for labor intensive industries and moved towards capital intensive industries. Similar changes would occur for the current NICs such as Taiwan, S. Korea and Singapore which would with continued growth move towards more capital intensive production techniques. The NICs have in the past two decades shown considerable success in export performance. This success has brought rising living standards accompanied with rising real wages, improvement in skill levels, and increasing capital accumulation. As a result their comparative advantage has shifted from labor intensive to relatively more capital intensive products. This movement would enable other developing countries to move towards those labor intensive industries that have been previously the domain of the NICs. As these NICs shift their production away from labor intensive products they add their demand for these products and at the same time reduce their exports of labor intensive products so that other developing countries can expand their labor intensive industries to supply these products on the world market.

The shifts in comparative advantage are better illustrated by Krueger<sup>7</sup> where a comparative analysis is carried out for Asian NICs : Hong Kong, Singapore, Korea and Taiwan.

Hong Kong initially, in the early fifties, produced textiles and clothing. However in the latter half of the sixties Hong Kong initiated a movement towards other industries such as electrical machinery and instruments. In the mid seventies textile exports started to decline and be replaced by other more capital intensive industries.

In the case of Korea in 1957 manufactured exports were less than 20% of all exports. In the early sixties there was considerable increase in manufactured exports based on labor intensive industries such as textiles and plywood so that by 1967 these products comprised 37% of all exports from S.Korea. There was a further shift in the pattern of exports in the late sixties so that by the early seventies capital intensive industries such as iron and steel and electrical machinery gained in export shares of total exports.

Taiwan also followed a path of changing export patterns with its growth as was the case with Korea. In the fifties its exports consisted chiefly of primary commodities. By the sixties however the pattern of exports changed so that textiles , wood products and clothing gained in importance.

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7. Krueger Anne O., "The experience and lessons of Asian Super exporters.", in Corbo V., Anne O.Krueger and Fernando Osso. Export Oriented Development Strategies: The Success of Five Newly Industrializing Countries. Boulder, Westview 1985. p202

By the end of the sixties still other more capital intensive industries were gaining importance in the export composition for Taiwan.

Balassa<sup>8</sup> argues that the composition of the exports from LDCs would change so that with capital accumulation and the thus changed capital/ labor endowments the LDCs would move towards more skill intensive and physical capital intensive products. Balassa draws parallels with Japan's industrialization, where there was movement in the post war years from labor intensive to more capital (both human and physical) intensive products.

In relation to the NICs Balassa argues that shifts are occurring particularly in the Far eastern NICs which have higher levels of education such that they are moving to replace Japan in exports of more skill- intensive products. Balassa extends this parallel between Japan and the NICs to non NIC less developing countries. He argues that the LDCs at lower stages of development would replace NICs in the production of more standardized and mature products. This process is in keeping with the stages concept of industrial development as developed by him. The First stage being that of import substitution where concentration is placed on production of unskilled labor intensive manufactures. In the second stage of development there is however a choice between export oriented or import substitution

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8. Balassa B. The Newly Industrializing Countries in the World Economy New York: Pergamon Press 1981. pp 6 - 23

industrialization. Countries that have opted for export oriented second stage have generally been successful in achieving rapid growth in manufacturing output.

Cline<sup>9</sup> on the other hand has found no indication of migration of less capital intensive industries to the non NIC LDCs from the NICs. He has grouped selected LDCs in four groups viz Latin American NICs, East Asian NICs, major low income countries and the last group being other LDCs. In the case of traditional products i.e Food, Textiles, Apparel, Footwear, Jewelry and Sawmill products and Nonferrous metals NICs have increased their export shares to the seven industrial countries that he considered. However he finds no indication of migration of industries from the NICs to other LDCs. This conclusion questions the generally accepted thesis that comparative advantage would change in stages and mature unskilled-labor intensive industries would migrate from the NICs to the LDCs in a manner similar to the observed migration of labor intensive industries to the NICs from the Developed Countries.

Hanson<sup>10</sup> suggests that countries such as India, Mexico, Malaysia, Colombia and Brazil are in a phase of industrial expansion of exports so that they could also reach a degree

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9. Cline W.R. Exports of Manufactures from developing Countries: Performance and Prospects for Market Access.: Washington D.C. Brookings Institution 1984. pp 26 - 30

10. Hanson R. D. "Trade, the Developing countries, and North-South Relations." in Tariffs, Quotas and Trade: The Politics of Protection San Fransisco: Institute of Contemporary Studies (ed), 1979 p 225.

of export capabilities similar to those of the present day NICs.

On the other hand Lewis<sup>11</sup> points out that there is a strong link between the growth in the developed countries and the underdeveloped countries. The unprecedented growth in world trade from the early fifties to 1973 enabled the LDCs to achieve growth rates of 6% per annum in their outputs. However this unprecedented growth in world trade may not continue at the same rate as experienced in the decades up to 1973. The probable slowing down would have serious implications for the further growth of LDCs. Furthermore protectionist measures in the developed countries would prevent the LDCs from gaining increased market shares for their products. Thus the only option open to the LDCs if they are to maintain their growth rates at 6% per annum is for them to increase inter LDC trade

Lutz<sup>12</sup> has examined the changes in export shares for selected manufactured exports from a selected group of LDCs and NICs. He correlates changes in export shares over the period 1968 to 1982 for country pairs from the sample. The country pairs are formed according to different selection

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11. Lewis A. W. "The Slowing Down of the Engine of Growth" American Economic Review (September 1980) pp 555-7, 559-61

12. Lutz J.M. "Shifting Comparative Advantage The NICs, and the Developing countries." The International Trade Journal 1 (Summer 1987) pp 339 - 358.

criteria such as developed - developing, Developed - NIC, NIC - NIC and Developing country - Developing country. The results of Lutz's study indicate that there were market shifts to NICs at the expense of Developed countries but generally no such shifts were evident when NICs were paired with non NIC LDCs. Thus indicating that the generally held view that comparative advantage would change as postulated in the case of NIC - non NIC developing country is not borne out.

The objective of the analysis being carried out in this paper is to test the hypothesis that at the intra-industry level whether the changes as suggested by Balassa and which is the generally accepted view are taking place. That is to say whether there is in fact a shift or transfer of production of manufactures within an industry from the Newly Industrializing Countries to the those Less Developed Countries that have the potential to take the place of the current NICs.

The Textile Industry has been selected for detailed analysis for various reasons. These reasons are explained in chapter 4.

The other countries included in table 1.4 may be termed "Potential Newly Industrializing Countries". These countries and the reasons for their inclusion in the group of

Potential Newly Industrializing Countries will be discussed in chapter 3.

Chapter 5 discusses the methodology and the hypothesis to be tested while the results of the analysis are presented and discussed in chapter 6. In Chapter 7 the results of the analysis are summarized and conclusions drawn.

## CHAPTER 2

### THE NEWLY INDUSTRIALIZING COUNTRIES

#### THE NOMENCLATURE

The term Newly Industrializing Countries was popularized as the consequence of the 1979 OECD report<sup>1</sup>. This report studied the impact of a number of countries on the Production and Trade in Manufactures. The report emphasizes the increasing competitiveness in the domestic markets of the OECD countries from "dynamic new suppliers". These dynamic new suppliers or according to the new nomenclature Newly Industrializing Countries (NICs) are identified in the report as those Less Developed Countries (LDCs) that are outwardly oriented and have achieved rapid industrialization.

The OECD report identifies some 10 countries as NICs. These include four that also belong to the OECD group namely Greece, Spain, Portugal and Yugoslavia. Two Latin American countries i.e Brazil and Mexico. The remaining four countries of East Asia namely Hong Kong, Taiwan, South Korea and Singapore.

These countries form in general a heterogeneous group but

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<sup>1</sup>.OECD. The impact of Newly Industrializing Countries on Production and Trade in manufacture. Paris. OECD 1979. p 83.

share certain common features. The OECD report identifies these features as outward orientation, rapid industrialization, a disciplined educated urban labor force, active and efficient entrepreneurs and political stability. These countries achieved appreciable increases in GDP per Capita which increased over a period of 13 years from a range of 9 to 33 percent of the U.S. GDP per Capita to some 20 to 45 percent.

#### **OUTWARD-ORIENTED POLICY AND IMPACT OF EXPORT GROWTH ON INDUSTRIAL DEVELOPMENT**

The outward oriented policies had a number of advantages among them exposure to a more competitive market, easing of balance of payment problems and thus ameliorating the effect of the foreign exchange gap, improved allocation of domestic and foreign resources, economies of scale, and the multiplier effect on the domestic economy of rising exports etc.

Westphal<sup>2</sup> has studied in depth South Korea's export led industrial development. He finds that the turning point was in 1965 when major policy revisions including trade liberalization were introduced. The compound annual rate of growth in the index of manufacturing output rose from 11% to 24% in the following decade. An incentive system that favored exports was gradually implemented in the early 1960s. These incentives included exemption from indirect

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2. Westphal Larry E. " The Republic of Korea's experience with Export-Led Development." World Development 6. pp 347-382.

taxes on inputs and on export sales, reduced prices of electricity and rail transport, a 50% reduction in direct taxes on income from exports and accelerated depreciation. These Policy initiatives led to rapid growth of exports. Westphal has also investigated the sources of growth. He finds that in Korea's industrialization, the growth of exports contributed more than double the amount that was the norm for other countries.

The Growth of Total Factor Productivity that contributed to the rapid growth of manufacture in Korea has been examined in detail by Won<sup>3</sup>. He calculates that scale economies have contributed some 38.1%, technical change 44.6% and changes in capital utilization 17.3%. The growth in capital made it possible for labor to be more effectively used.

Chow<sup>4</sup> has established causality between growth in Exports and industrial development. He concludes that for the East Asian NICs i.e Hong Kong, Korea, Singapore and Taiwan the causality is bidirectional. That is to say that the growth of manufacturing industries had an impact on and promoted the growth of exports which in turn contributed to the growth of the manufacturing industries.

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3. Won J.K. "Capital Utilization, Economies of Scale and Technical Change in the Growth of Total Factor Productivity." Journal of Development Economics 24 (1986) pp 75-89.

4. Chow P.C.Y. "Causality between export Growth and Industrial Development." Journal of Development Economics. 4 (1987) pp 55-63.

Ram<sup>5</sup> has used extensively time series data. His conclusions support those carried out by above mentioned investigators. Michaely<sup>6</sup> has correlated the change in export to GNP ratios with average annual changes in GNP per capita for 41 countries. The Spearman rank correlation is 0.380 and the level of significance is 1%. Thus indicating the importance of exports in growth.

It emerges from the foregoing that export growth and industrial development are closely linked. In fact it would seem that the direction of causality is from export growth to manufacturing growth especially as applicable to a majority of NICs.

#### **PROFILES OF SELECTED NEWLY INDUSTRIALIZING COUNTRIES (NICs)**

The OECD report identifies 10 NICs from these three i.e. Spain, Portugal and Greece are members of the OECD and together with Yugoslavia are considered by the United Nations as developed countries. Mexico in the recent past due to its dependence on petroleum derived income cannot be considered to belong with the same group as the other NICs. This leaves the four South Asian NICs and Brazil. This selection ensures a degree of homogeneity inspite of wide

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5. Ram Rati "Exports and Economic Growth in Developing Countries: Evidence from Time Series and Cross section Data." Economic Development and Cultural Change. 36 (oct.19 87) pp 51-73.

6. Michaely M. "Exports and Growth: An Empirical Investigation." Journal of Development Economics. March 1977 Vol 4 pp 49-53.

divergences in many respects.

**TABLE 2.1: GROWTH OF GDP, MANUFACTURING VALUE ADDED AND EXPORTS**  
(in the period 1965 to 1985 )

COUNTRY	GDP GROWTH	MVA GROWTH	EXPORT GROWTH*	
	%	-	65-85	80-85
BRAZIL	877.41	110.952	9.4	6.6
HONG KONG	1329.30	-	9.59	9.4
SINGAPORE	1701.03	228.28	4.8	5.9
SOUTH KOREA	2772.27	528.69	27.3	13.3
TAIWAN	-	-	-	-

SOURCE: World Tables 1980 and World Development Report 1987  
\* average annual growth rate

All the countries in the above table show considerable gains in almost all the areas shown in the table above. In almost all cases the GDP has grown more than 1000% in 20 years. While the manufacturing value added has also shown considerable gains particularly for South Korea where it grew by more than 5 times in the 20 year period. South Korean exports in the 15 year period to 1980 grew at an annual average rate of over 27%.

**TABLE 2.2: THE HARBISON-MEYERS INDEX FOR SELECTED COUNTRIES**

COUNTRY	HARBISON-MEYERS INDEX			
	1960	1965	1975	1984
BRAZIL	155	118	145	163
SINGAPORE	151	162	152	165
S. KOREA	119	124	144	231
TAIWAN	-	-	-	-
HONG KONG	111	116	136	168

SOURCE: Calculated from various issues of World Development Reports

The Harbison-Meyers index<sup>7</sup> for 1984 in the above table shows that S. Korea has the highest value and it has shown considerable progress since 1960 when it was ranked second last. The other NICs are very close to each other in terms of this index.

#### **BRIEF DETAILS OF THE NICs**

In the following is a brief discussion of each of the selected countries as it relates to this study.

#### **SOUTH KOREA**

The Korean experience of export led growth is held as an example of what can be achieved by a less developed country in a relatively short time. In the first phase of its

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7. The Harbison-Meyers Index is Calculated as a weighted of Primary School enrollment and five times the Higher Education enrollment rate (Harbison 1970).

industrial progress Korea relied on exports that are typical of a country at that stage of development endowed with a well educated labor force. These industries consisted of textiles, toys, plywood, wigs etc. With continued improvements in per capita GDP came rising wages. This caused some of the traditional industries to decline and to be replaced by more capital and skill intensive industries. The leading sectors that contributed to growth were and to a certain extent continue to do so are textiles, footwear, steel, machinery, shipbuilding and electronics. Textiles for example grew at an annual rate of about 20%. Korea's exports of textiles reached \$ 6 billion thus making Korea the second largest exporter of this product. Korea is now aggressively moving towards machinery, durables, electronics and base metals.

#### **HONG KONG**

Hong Kong industrial development was based on the textile industry. In the early fifties the modern textile sector was established by industrialists leaving mainland China. The industry in Hong Kong developed with cotton weaving and via the Hirschman linkages provided impetus to the spinning industry. In the same fashion there were forward linkages to the clothing and apparel industries. Hong Kong moved rapidly from an entrepot trade center in the pre war period to an industrial manufacturing center in the post war years Riedel (9). The GDP in manufacturing rose from \$ HK 295 million in 1950 to \$ HK 44140 million in 1983 this

represents an increase of 14862.7% over a period of 33 years.

### **SINGAPORE**

Singapore is a City State similar to Hong Kong and has a similar background of having been an entrepot center. Its development however has followed a path that is to some extent different from that of Hong Kong. While the authorities in Hong Kong gave free reign to market forces in Singapore on the other hand macroeconomic management tools were judiciously used (Geiger 1973 ). During the war Singapore was occupied by Japan and subsequently internal problems were to be overcome. It was only after the 1950s that sustained progress was possible. The GDP from Manufacturing rose from Singapore \$ 249.6 million in 1960 (World Bank 1980 )to 9892.4 million in 1984 (U.N. National Accounts Statistics 1984). The share of textile exports in the merchandise exports however declined from 6 to 4 percent over the period 1965 to 1985.

### **TAIWAN**

The Japanese colonization of Taiwan had certain very positive contributions to the economic progress that Taiwan has achieved. The colonization left behind both physical and human infrastructure that proved to be invaluable for

Taiwan's rapid post war growth (Fei 1979). Taiwan's other achievement was improved income distribution. Taiwan's Industrialization pursued the more or less standardized stages expounded by Balassa (1981) that is to say a stage of import substitution followed by export substitution. Taiwan's GDP from manufacturing rose from 1400 million new Taiwanese Dollars in 1950 to 273900 million dollars in 1977 ( World Tables 1980) which represents an increase of 19464.29% over a period of 27 years.

#### **BRAZIL**

The aggregate output grew in the post war years at an annual average rate of 7.5%. A crawling peg system of exchange rate adjustment was introduced in 1968. This had the effect of reducing the incentive to speculate, made export related activities more attractive and eased long term financial transactions (Taylor 1980 ).

## CHAPTER 3

### THE POTENTIAL NEWLY INDUSTRIALIZING COUNTRIES

The OECD<sup>1</sup> report identifies a number of potential NICs among them in Asia are India, Pakistan, Malaysia and Philippines. These countries have a significant industrial base and could at some future date emerge as NICs. The linkage between exports and industrial development would also apply to these countries.

Hanson<sup>2</sup> suggests that countries such as India, Mexico, Malaysia and Colombia and Brazil are in phase of industrial expansion of exports so that they could also reach a degree of export capabilities similar to those of the present day NICs.

#### PROFILES OF SELECTED POTENTIAL ASIAN NICs

The OECD report mentioned above has identified some potential NICs. This is essentially based on their having a significant base and / or prospects of increasing their exports of manufactures. In Asia these include India and

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1. OECD. The Impact of Newly Industrializing Countries on Production and Trade in Manufacture. Paris OECD 1979 p 84.

2 Hanson R.D. "Trade, the Developing Countries, and North-South Relations." in Tariffs, Quotas and Trade: The Politics of Protection. San Fransisco: Institute of Contemporary Studies (ed), 1977 p 225.

Pakistan. In addition to these countries the report also identified Malaysia, Philippines and Thailand as less favorably placed but with potential for export growth in view of their export-oriented policies. In addition to these China needs to be considered in view of the recent changes in its policies and its obvious importance in economic terms in the region where most NICs are situated. In the literature great importance is placed on human capital endowments Balassa<sup>3</sup> and OECD<sup>1</sup> which can be identified with the Harbison-Meyers Index. On such an index Sri Lanka and Thailand rank high and therefore both need to be considered as possible candidates for future inclusion in the ranks of the NICs. Another Asian country that needs to be considered is Indonesia. Indonesia has in the past lagged behind in the development process however with recent changes in policies Indonesia with its abundant natural resources could easily be considered as a possible candidate for inclusion with the group of potential NICs.

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3. Balassa B. "A Stages Approach to Comparative Advantage", in Irma Adelman (ed). Economic Growth and resources: National and International Issues. 5, 1979(3)

**TABLE 3.1: GROWTH OF GDP, MANUFACTURING VALUE ADDED AND EXPORTS**

(1965 - 1985)

COUNTRY	GDP GROWTH	MVA GROWTH	EXPORT GROWTH*	
	%	%	60-85	30-85
CHINA	304.3	209.4	5.5	8.8
INDIA	279.83	84.48	3.7	4.6
INDONESIA	157.70	383.47	9.7	1.1
MALAYSIA	899.04	302.74	4.4	10.7
PAKISTAN	418.17	138.41	4.3	2.4
PHILIPPINES	442.26	97.67	4.7	-2.1
SRI LANKA	210.7	352.19	0.5	7.3
THAILAND	844.20	229.57	8.5	8.4

SOURCE: World Bank; World Development Report 1987

\* average annual growth rate

The above table indicates the largest growth in GDP is that for Indonesia this is to be explained by its status as an exporter of petroleum. Malaysia has also registered considerable growth. India and Sri Lanka have registered the lowest growth merely doubling their GDP over the period. As regards growth of the manufacturing value added the picture looks a little different. Although China, Pakistan and the Philippines have registered nearly the same percent growth in GDP but the growth in manufacturing value added (MVA) differs considerably. In this case China takes the lead followed by Pakistan and Philippines.

India and Sri Lanka show lower MVA growth rates than the rest of the group. The average annual growth of exports show considerable differences in the two periods shown. Large gains have been made by Malaysia, Sri Lanka and China in the latter period as compared to the earlier period. In

the latter period a number of these countries changed to more outward oriented policies.

**TABLE 3.2: THE HARBISON-MEYERS INDEX FOR SELECTED COUNTRIES**

COUNTRY	HARBISON-MEYERS INDEX			
	1960	1965	1975	1984
PAKISTAN	40	40	45	50
INDIA	101	66	66	119
SRI LANKA	110	105	100	113
THAILAND	93	146	146	193
MALAYSIA	121	106	111	120
INDONESIA	72	72	77	148
PHILIPPINES	95	190	195	145
CHINA		89		123

SOURCE : CALCULATED FROM VARIOUS ISSUES OF WORLD DEVELOPMENT REPORTS

Looking at the Harbison-Meyers index for 1984 it appears that Thailand is ranked first followed by Indonesia and then Philippines. In contrast in 1960 the top three ranks were occupied by Malaysia, Sri Lanka and India in that order.

#### **BRIEF DETAILS OF SELECTED LESS DEVELOPED COUNTRIES**

##### **CHINA**

A policy of encouraging local industry was initiated during the Great Leap period (1958 - 1960). This policy was not pursued in the interregnum from 1960 to 1970. After 1970 it was again taken up leading to a degree of self sufficiency in agricultural producer's goods. Recently 1976 - 1980 however the per capita national income has risen at an

annual growth rate of 7.1 % as compared to 4.4% in the period 1966 -1976<sup>4</sup>.

Reforms were introduced in the early eighties which included profit retention, bonus schemes, and a degree of decentralization such as limited decision making powers and sales (of output exceeding the target ) on market dictated prices Balassa <sup>5</sup>. The average annual rate of growth in manufacturing improved from 9.5% over the period 1965-1980 to 12.4% in the period 1980-1985. Export performance also improved from 5.5% annual average growth rate to 8.8%.

#### **MALAYSIA**

Malaysia's high growth specially in the sixties and seventies was based on its natural resource endowments, a outward-oriented policy and stable social and political institutions. Export diversification was aggressively promoted and the palm oil industry came to dominate in this drive. In 1961 nearly half of Malaysia's export earning were obtained from one commodity alone and that was rubber. However in 1976 the share of this commodity had fallen to less than 25 %. Malaysia showed a growth rate of manufactured exports of 24% per year in the early seventies. This growth was in the electronics, textiles,

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4. McFarlane J.M. " Political Economy of Class Struggle and Economic Growth in China, 1950 - 1982 in N. Maxwell & B. McFarlane (eds) China's Changing Road to Development: New York : Pergamon Press 1984 pp 22-23

5. Balassa B. Economic Reforms in China World Bank reprint series # 235: Washington D.C. World Bank 1982.

garments and footwear industries.

A large part 45 % was due to increases in the export performance Young<sup>6</sup>. Malaysia's prospects for continued growth appear to be good. Its natural resource endowments, its stability and high enrollment rate in primary education should prove to be useful basis for further growth.

### **PHILIPPINES**

During the seventies the Philippines economy performed so well that it was included among the successful economies of the region. However in the eighties the picture changed. Although the GNP growth rates were high but manufacturing growth was limited to protected sectors. To maintain high growth external financing was resorted to leading to debt servicing problems. These problems culminated in 1983 when international banks terminated further lending. Prospects for improved performance appear to be good with the introduction of policy reforms in agriculture, export liberalization etc. The high ranking that the Philippines have according the Harbison -Meyers Index should augur well for its further growth.

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6. Young K. William, C.F. Bussink and Parvez Hasan. Malaysia : Growth and Equity in a Multiracial Society . Baltimore: John Hopkins Press, 1980

**SRI LANKA**

Beginning in the mid seventies Sri Lanka initiated policy changes towards an outward looking policy mix. This has yielded remarkable dividends. For example annual growth increased to 7% per year. Unemployment declined considerably and there was a marked increase in the level of investments. Export oriented policies led to increases in exports particularly garments, ceramics, leather and wood products. Problems of political stability could in the intermediate term preclude the achievement of growth rates of the seventies and early eighties.

**INDIA**

India's overall performance especially in the manufacturing sector has been disappointing. For example the share of manufacturing in GDP has reached only 14.7% in 1985 as compared to a share of 13.9% in 1961. The main reasons for the poor performance may be attributed to the inward oriented policies pursued. Glodar<sup>7</sup> shows that there is a significant negative relationship between Total Factor Productivity Growth and import substitution.

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7. Goldar B. " Import substitution, Industrial Concentration and Productivity Growth in Indian Manufacturing". Oxford Bulletin of Economics and Statistics. 48 (May 1986): pp 143-163.

The low level of primary and higher education enrollment as reflected in the Harbison-Meyers index also has a contributing effect. The government has however moved towards a more outward oriented policy which if sustained could lead to enhanced manufacturing growth.

#### **INDONESIA**

In the sixties and the early seventies Indonesian manufacturing sector comprised essentially of small scale industries concentrating on import substitution<sup>8</sup>. The Textile industry in Indonesia constituted the third largest and its share of total manufacturing output has remained essentially unchanged since 1970 at 7%<sup>9</sup>. In the recent past revenues derived from petroleum exports have considerably effected the economy. GNP per capita has grown over the period 1965 to 1985 at an annual rate of 4.8% and the share of industry in GDP has grown from 13% to 36% while in the manufacturing sector the increase in share of the GDP been only from 8% to 14%.

#### **PAKISTAN**

Pakistan's industrial development has accelerated in the recent past after overcoming the traumatic experience of the

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8. Donges J.B., Bernd Stecher and Frank Wolter. Industrial Development Policies for Indonesia.: Tuebingen:J.C.B. Mohr 1974 pp 10 - 15.

9. World Bank. World Development Report Washington D.C 1987.

civil war in the early 1970s and the division of the country into what are now Pakistan and Bangladesh. Pakistan however continues to produce for the domestic market. Policies pursued by the government have an import substitution bias. There are currently efforts to liberalize imports of intermediate inputs and capital goods. Pakistan has not in the past given the requisite stress on education. Measured on the Harbison - Meyer's index over a period of 20 years hardly 5 points have been added. This neglect is to be addressed in the current and the upcoming seventh five year plan.

#### **THAILAND**

Thailand ranks on the Harbison-Meyers index in the first position and over the period 1965 to 1985 has improved considerably. This improvement in the index of human resource development is a considerable achievement. On the industrial front however the gains are more modest rising from 13% share of industry in GDP in 1965 to 32% in 1985 while the manufacturing sector has shown a better performance rising from 14% to 20% in the same period. In 1970 Textiles and Clothing represented 6% of the manufacturing value added

## CHAPTER 4

## THE TEXTILE INDUSTRY AND DEVELOPMENT

The textile industry exemplifies industries that were harbingers of the Industrial Revolution. In many respects the Textile Industry was a motivating force among others of the changes that brought about the revolution in manufacturing technology. Kemp<sup>1</sup> sites the invention of the flying shuttle which in turn motivated technological improvements in the Spinning Industry such as Crompton's mule which drastically reduced unit costs in spinning and thus spinning became the first instance of the mass production factory. The Textile Industry thus served as the Leading Sector. The county of Lancashire in England and the marketing city of Manchester were the center of the textile industry and that of the Industrial Revolution<sup>2</sup>. The then industrializing countries USA, Germany, France, The Netherlands etc adopted policies to enhance the textile industry so as to serve as an engine of growth. The industry provided hugely expanded employment to labor released from agriculture thus heralding the take off stage<sup>3</sup>

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1. Kemp T. Historical Patterns of Industrialization. London:

2. Dicken P. Global Shifts : Industrial Change in a Turbulent World. London: Harper & Row 1986, pp 26-30.

3. Rostow W.W. The stages of Economic Growth Cambridge: A non Communist Manifesto. Cambridge: University Press 1960 pp7-8.

that preceded rapid industrial development in the present developed countries.

In the post war era the textile industry has served its traditional role of the leading sector as far as the developing countries are concerned. This is specially evident in the developing countries of East Asia. In the period from 1968 to 1974 textile trade expanded at a rate of nearly 19% per year<sup>4</sup> The export shares of the LDCs improved considerably in the sixties and seventies.

#### **STAGES OF DEVELOPMENT**

The Textile industry's development can be identified in a number of stages. These stages can currently be observed in the less developed countries at various stages of development.

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4. Schmid G. and Owen Phillips. "Textile Trade and The Patterns of Economic Growth. " Welt Wirtschaftliches Archiv. 116, (1980) pp 294-306.

**TABLE 4.1: STAGES OF DEVELOPMENT OF THE TEXTILE INDUSTRY**

STAGE	PRODUCTION CHARACTERISTICS	COUNTRY CHARACTERISTICS
STAGE 1	SIMPLE FABRICS FROM NATURAL FIBERS	LEAST DEVELOPED COUNTRIES
STAGE 2	STANDARD CLOTHING AND TRADITIONAL HANDICRAFT	COUNTRIES AT A HIGHER STAGES OF DEVELOPMENT
STAGE 3	IMPROVED QUALITY AND INTRODUCTION OF MASS PRODUCTION TECHNIQUES	ASEAN AND EAST EUROPIAN COUNTRIES
STAGE 4	PRODUCTION OF SYNTHETIC FIBER AND PRODUCTION EXCEEDINGLY FOR EXPORT	TAIWAN, SOUTH KOREA HONG KONG
STAGE 5	FURTHER SOPHISTICATION AND INCREASED CAPITAL INTENSITY	JAPAN USA ITALY ETC
STAGE 6	DECLINE OF THE INDUSTRY	U. K., WEST GERMANY, FRANCE, BELGIUM, NETHERLANDS

SOURCE: ADAPTED FROM DICKEN<sup>2</sup> p 237

The above table suggests that there is a migration of the Textile Industry in stages to the less developed countries according to the stage of development that the less developed countries achieve. This concept corresponds to the stages concept in changes in Comparative Advantage as identified by Balassa . This feature also suggests that intra-industry specialization should be evident when trade in the various products that comprise the industry are examined in detail. As a country moves along a path of increased capital accumulation (both physical and human capital) it would tend to specialize in products that

require relatively greater inputs of capital. The country's comparative advantage changes as the capital endowment enhances so that capital intensive products attain greater comparative advantage.

**CHAPTER 5**  
**EMPIRICAL METHODOLOGY**

**THE HYPOTHESIS**

The basic hypothesis that underlies the following analysis is as follows:

Within the Textile Industry over the period 1965 to 1985 there has been intra-industry specialization with respect to exports of selected developing countries and the Newly Industrializing Countries.

**Definitions**

Intra-industry specialization for a given pair of countries is defined as an increase in the export share of a product for one country with a corresponding decrease in the export share of the same product for the other country of the country pair. Perfect intra-industry specialization would be indicated when for one country there is an increase in export share for one product and there is exactly the same percent decrease in the export

share of the other country for the same product.

**Selected Countries:** A sample of countries has been selected for this analysis and includes the Newly Industrializing Countries Kihl and Lutz<sup>1</sup> i.e Brazil, Korea (Republic of), Hong Kong, Singapore, and Taiwan (Mexico has been excluded due to its dependence on petroleum derived income which does not have parallels with other NICs) and selected Asian countries i.e China, India, Indonesia, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand. The latter group of countries have been included in the analysis for the reasons given in earlier chapters.

**Export Share:** This is defined as export of a product by a country to OECD Countries divided by the total exports of all textile products by the selected countries to OECD Countries.

**Product:** Standard International Trade Classification (SITC) three digit category i.e # 651 to 657.

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1. Kihl Y.W. and James M. Lutz "Shifting Comparative Advantage, The NICs, and the Developing Countries." The International Trade Journal 1 (Summer 1987)

### Numerical Examples

In the following is a numerical example to clarify the evaluation of Intra-industry Specialization. Consider two countries A and B. Consider say four products Y (=Yarn), F (= Fabric ) ,C (= Carpets)and L (= Lace). Let the Change in percent export shares be as shown below:-

Product	Country A	Country
Y	+5%	-5%
F	-10%	+10%
C	-7%	+7%
L	+15	-15%

Clearly in the above illustration the correlation coefficient would be -1. Country A has gained export shares in Yarn and Lace while country B has lost shares in these products by the same percent as A has gained. B has gained export shares in Fabrics and Carpets while A has lost shares in these products in the same proportion as B has gained. This would indicate that country A would tend to specialize in Yarn and Lace while country B would tend to specialize in Fabrics and Carpets.

The inference that can be drawn from the negative correlations is that there is a movement or a shift in export shares for certain products from one country to the other.

**DATA**

Data on imports to the OECD countries were collected for the years 1975 and 1985 at the 3 digit level for products that comprise the textile industry. The sample of countries included in the analysis is as described above. Data on imports to OECD countries were used, instead of the total textile exports of the countries, for several reasons. The total exports data is published by the United Nations Statistical Office. The data published by the U.N. is based on trade statistics provided by the individual countries. There could be discrepancies in the reporting of data as over/under evaluations would be advantageous to the individual importers/exporters in these countries. It was therefore felt that the data published by the OECD could be more advantageously used for this analysis. The ten year period 1975 to 1985 was chosen because in the sixties the countries that are now NICs had barely initiated their export expansion and the export led growth that ensued. Therefore it was felt that the period to be analyzed should start in the mid seventies. This would ensure that trends towards shifts in textile exports from the NICs to the Potential NIC would be more clearly evident if in fact there had been such shifts. The latest data that is available is that for 1985.

## **CHANGES IN EXPORT LEVELS FOR TEXTILE EXPORTS**

In order to examine the process of change whereby production moves to the Potential Newly Industrializing Countries from the Newly Industrializing Countries it would be useful to correlate the level of exports of the individual products for the less developed countries in the sample and the NICs. Trends in the correlations could give clues to the pattern of change and thereby afford useful indicators for the tendency of transfer of production from the NICs to the Potential NICs.

If the Potential NICs are ranked in order according to some criterion say GNP per Capita then useful inferences could be obtained regarding the shift of production and influences that have a bearing on this process. GNP per capita serves here as proxy for wages and therefore labor costs. Differences in the composition of exports could emerge and would be indications of the influence of labor costs in the process of intra-industry specialization.

In order to obtain a better overview of the changes in the correlation coefficients from 1975 to 1985; plots of the correlation coefficients for these years would provide useful information. If for example the correlation coefficients for the NICs (as a group) and the individual Potential NICs are plotted on the same figure with the

Potential NICs ranked by GNP per Capita an indication of the changing patterns for the export composition over time and also with changes in GNP per Capita could be obtained. Similarly for each of the NICs plots of correlation coefficients, when their textile exports are correlated to the individual NICs, would provide useful information as to the changes in export composition over the period.

The inference that can be drawn for falling values of the correlation coefficients over the period 1975 to 1985 is that there is a tendency towards divergence of the composition of exports of textiles over the period.

A high positive correlation coefficient would indicate that the composition of exports between the country pairs is similar. While a negative correlation coefficient would indicate that the composition of textile exports are dissimilar.

## CHAPTER 6

**EMPIRICAL ANALYSIS: RESULTS FROM EXPORT DATA  
FOR THE SAMPLE OF COUNTRIES**

**CHANGES IN TOTAL EXPORT SHARES FOR THE TEXTILE INDUSTRY**

Table 6.1 shows the percent shares of the total textile exports of the countries listed to OECD countries for each of the years 1975 and 1985. The Table also shows the change in percent shares of the exports for each country.

**TABLE 6.1: PERCENT SHARES OF TOTAL EXPORTS (TEXTILES SITC 65)**  
(From countries listed below to OECD countries)

COUNTRY	PERCENT SHARES OF TOTAL EXPORTS		CHANGE IN EXPORT SHARES 1975 to 1985
	1975	1985	
<i>NICs</i>			
BRAZIL	9.426798	8.688912	-0.7378
HONG KONG	14.49614	7.708304	-6.7878
SINGAPORE	0.953549	0.423739	-0.5298
S. KOREA	18.02075	16.16421	-1.8565
TAIWAN	10.49298	12.86658	2.3735
NIC GROUP	52.5550	45.6592	-7.5384
<i>POTENTIAL NICs</i>			
PAKISTAN	8.715061	9.519231	0.8041
INDIA	15.75292	11.46790	-4.2850
SRI LANKA	0.045831	0.197031	0.1511
THAILAND	2.226427	4.287385	2.0609
MALAYSIA	1.272130	1.534673	0.2625
INDONESIA	0.125140	1.895029	1.7698
PHILIPINES	0.866917	0.663893	-0.2030
CHINA	17.60532	24.58310	6.9777
	-----	-----	
	100.000	100.000	

The interesting features that emerge from the changes in export shares that have occurred in the period 1975 to 1985 is the decline in shares of the NICs. Brazil, Singapore, South Korea and Hong Kong have lost export shares while Taiwan's gains are at just 2.3% comparatively very low. Therefore the inference can be drawn that the potential NICs are increasing their shares at the expense of the NICs. This transfer of export shares from the NICs to the potential NICs would tend to support the generally held view that over time NICs would shift their production away from the more mature industries such as textiles and the potential NICs would take their place. India is clearly an exception. India has had a long tradition with production and export of textiles. It would appear that India is moving out of the export of textiles. An examination of the changes in export shares for the individual products (SITC categories 651 to 657) as given in table 6.4 shows that India has lost shares in all categories.

This shift in exports shares can be better illustrated if account is taken of the size of the country. For this purpose the export shares have been adjusted so that they are expressed in relation to China. That is to say if the population of the country were the same as that of China

then what would be its export share<sup>1</sup> ?.

**TABLE 6.2: ADJUSTED EXPORT SHARES AND CHANGE IN EXPORT SHARES**

(Relative to China as Base)

COUNTRIES	ADJUSTED EXPORT SHARES		CHANGE IN ADJUSTED EXPORT SHARES
	1975	1985	1975 - 1985 <sup>1</sup>
<i>NICs</i>			
BRAZIL	4.747752	2.725449	-2.02230
SINGAPORE	23.18244	0.110275	-23.0721
S.KOREA	27.79125	16.73939	-11.0518
TAIWAN	45.21062	28.31345	-16.8971
HONG KONG	179.2569	61.51753	-117.739
<i>POTENTIAL NICs</i>			
PAKISTAN	6.690329	4.208442	-2.48188
INDIA	1.408485	0.649390	-0.75909
SRI LANKA	2.200927	0.528912	-1.67201
THAILAND	2.89329	11.62654	8.733255
MALAYSIA	5.623218	4.161731	-1.46148
INDONESIA	0.064997	0.493167	0.428170
PHILIPPINES	1.122662	0.516360	-0.60630
CHINA	1.0	1.0	0.0

An example would help clarify the adjusted export shares in Table 6.2. Taking Taiwan as an example; from Table 6.1 its export share in 1975 is 10.493% of the total textile exports from the countries being considered to the OECD countries. However Taiwan is a relatively small country. In order therefore to account for this difference in size, its export

1. The formula used is: (Country export share/China's export share) x (China's population/ by country's population)

share has been related to that of China as a base. That is to say if Taiwan was similar to China in size then its export share would be 179 times the export share of China.

**TABLE 6.3: COUNTRIES THAT HAVE GAINED OR LOST EXPORT SHARES**  
(For the Textile Industry as a whole)

GAINED	LOST
PAKISTAN	BRAZIL
SRI. LANKA	INDIA
THAILAND	SINGAPORE
MALAYSIA	PHILIPINES
INDONESIA	S. KOREA
CHINA	HONG KONG
TAIWAN	

Table 6.3 illustrates that a larger number of countries have gained export shares while the countries losing export shares have been fewer. In the this period i.e 1975-1985 the losses have been distributed over a number of countries. In particular it is significant that of the five NICs included in the sample, four have registered losses in export shares. This would support the hypothesis that the NICs are losing shares to the LDCs (that is those countries that are potential NICs). These countries would then tend to replace the current NICs in regard to the export of Textiles to the OECD.

**CHANGES IN EXPORT SHARES FOR TEXTILE PRODUCTS (SITC 651 TO 657).**

The analysis in this section is based on correlations of the changes in exports of textile products i.e at the SITC three digit level product categories. The changes in percent shares for the products i.e SITC Categories 651 to 657 are given in the table below.

**TABLE 6.4: CHANGES IN EXPORT SHARES FOR TEXTILE PRODUCTS SITC (651 TO 657) FOR THE PERIOD 1975 TO 1985**

SITC	BRAZIL	PAKISTAN	INDIA	SRI LANKA	THAILAND
651	-0.6082	9.3867	-1.5503	0.0591	4.7744
652	-1.9124	-0.3975	0.9913	0.0179	3.1972
653	1.4900	0.2647	-14.671	0.0108	3.6509
654	2.0699	0.1251	-15.4277	0.0026	0.6577
655	-5.0891	-0.0240	-1.7644	0.1073	-5.9402
656	-5.7142	2.1715	-11.9323	0.7029	-1.4101
657	0.2175	-19.232	9.0932	0.0390	0.0335

SITC	SINGAPOR	INDONES	PHILIPP	CHINA	S. KOREA
651	-1.1106	0.3536	-0.3640	1.8765	-11.3281
652	-0.7006	3.6061	-0.0653	7.6858	0.5288
653	0.1606	2.8935	0.0052	5.1786	4.8143
654	0.0309	0.0070	2.4357	15.3630	2.6531
655	-0.2024	-0.5690	-4.2580	2.4248	6.4923
656	-1.0939	0.3960	-0.3951	12.3767	-0.1932
657	-0.0738	1.0826	-0.3126	9.8824	-2.2730

SITC	TAIWAN	HONG KONG	MALAYSIA	NIC-GROUP
651	2.6392	-5.3424	1.2141	-0.3388
652	0.2029	-12.7703	-0.3838	-6.9656
653	-2.2849	-2.7697	1.2570	-1.4989
654	10.2834	-18.2948	0.0943	0.6125
655	8.5498	-0.0926	0.3657	1.6011
656	12.3059	-7.1068	-0.1074	5.8073
657	2.3537	-0.8091	-0.0013	0.7824

The changes in percent shares have been correlated for the individual NICs and the individual Potential NICs as well as for the NICs grouped together. The results of the correlations are given in table 6.5.

**TABLE 6.5: CORRELATION COEFFICIENTS FOR CHANGES OF EXPORT SHARES FOR TEXTILE PRODUCTS (SITC 651 to 657) IN THE PERIOD 1975 TO 1985**

Corrl:	BRAZIL	HKONG	SINGAP	SKOREA	TAIW	NIC
INDIA	-.1405	.4304	-.1399	-.3705	-.3222	-.2783
CHINA	.1885	-.6446	.1528	.1910	.4930	.2663
SRILAN	-.7148	.0666	-.5764	-.0250	.6265	.7081
PAKISTAN	-.1958	-.2868	-.5134	-.1994	.1532	-.0160
INDON	.3040	-.1179	.0934	.0886	-.7792	-.7638
PHILIP	.6991	-.7399	.0921	-.2312	-.0549	-.1613
THAILD	.6374	-.3033	-.1763	-.5583	-.6644	-.5534
MALAYS	.3493	.4011	.1014	-.2420	-.4133	.0267
N of cases:	7					
			2-tailed Signif:	* - .01	** - .001	
" . " is printed if a coefficient cannot be computed						

#### **THE NIC-GROUP AND THE INDIVIDUAL POTENTIAL NICs**

Table 6.5 shows the correlation coefficients for the changes in export shares when these are correlated for the individual countries in the sample and also for the special case when the NICs are taken together as group.

From Table 6.5 it can be seen that the following less developed countries show relatively large negative correlations (i.e less than -0.3) when the changes in their

export shares are correlated with the change in export shares for the NIC-Group over the period 1975 to 1985.

### 1. Thailand

### 2. Indonesia

Examination of table 6.4 which shows the changes in export shares indicates that Thailand has gained relatively large export shares for Textile Yarn, Cotton Fabrics and Textile Fabrics (i.e SITC Categories 651, 652 and 653). While the NIC-Group lost export shares for those very products in which Thailand has gained export shares i.e Textile Yarn (SITC 651), Cotton Fabrics (SITC 652) and Textile Fabrics (SITC 653). The inference that can be drawn here is that Thailand has moved to gain export shares at the cost of the NICs as a group.

The other country that shows a negative correlation coefficient when the changes in its export shares are correlated with those of the NIC-Group is Indonesia.

In the case of Indonesia its gains are in the SITC Categories 652, 653 and 657 and to a lesser extent in SITC Categories 651, 654 and 656 while the NICs have lost export shares in SITC Categories 651, 652 and 653.

### THE INDIVIDUAL NICs AND THE INDIVIDUAL POTENTIAL NICs

In the above section the NICs were considered as a group however it would be useful to consider the individual NICs separately in order to see whether there are shifts in production from the individual NICs to the individual Potential NICs. Therefore correlations for changes in export shares for the individual NICs and the individual Potential NICs given in table 6.5 will be discussed in this section.

Examination of Table 6.5 indicates that the following country pairs show relatively large negative correlations (i.e less than  $-.3$ ).

BRAZIL	-	SRI LANKA
HONG KONG	-	THAILAND
HONG KONG	-	PHILIPPINES
HONG KONG	-	CHINA
SINGAPORE	-	PAKISTAN
SINGAPORE	-	SRI LANKA
S. KOREA	-	INDIA
S. KOREA	-	THAILAND
TAIWAN	-	INDIA
TAIWAN	-	THAILAND
TAIWAN	-	MALAYSIA
TAIWAN	-	INDONESIA

Consideration of the changes of export shares for textile products as given in table 6.4 for the country pair Brazil - Sri Lanka shows that Brazil has lost shares mainly for Special Textiles and Made-up articles (i.e SITC 655 and 656) while Sri Lanka which has registered gains for all textile

products shows the largest gains for these two products.

The country pairs Hong Kong -Thailand, Hong Kong-Philippines and Hong Kong-China show negative correlations. Examination of table 6.4 shows that Hong Kong has lost export shares in all products while Thailand has registered gains in export shares for Textile Yarn (SITC 651), Cotton and Textile Fabrics (SITC 652 and 653). On the other hand the gains made by Philippines are mainly for Lace and Embroidery (SITC 654). China shows gains for all textile products specially for SITC categories 654 and 656.

The NIC Singapore shows relatively large negative correlations with Pakistan and Sri Lanka. Singapore has lost export shares for almost all textile products and where it has gained its gains have been less than 1%. Sri Lanka on the other hand has registered gains for all textile products while Pakistan shows gains specially for Textile Yarn (SITC 651) and Made-up Articles (SITC 656).

South Korea has negative correlations with India and Thailand. South Korea has lost export shares for Textile Yarn (SITC 651), Floor Coverings (SITC 657) and Made-up Articles (SITC 656) while Thailand has gained export shares for Textile Yarn (SITC 651) and to a lesser extent for Floor Covering (SITC 657). India has registered gains mainly for Floor Coverings (SITC 657).

Taiwan is the only NIC that shows overall gains as shown in tables 6.1 and 6.3. The only product in which it has lost export shares is Textile Fabrics (SITC 653). Taiwan's changes in export shares show large negative correlations coefficients when these are correlated with those for India, Thailand, Malaysia, and Indonesia as can be seen from table 6.5. These Potential NICs i.e Thailand, Malaysia and Indonesia have all gained export shares for Textile Fabrics (SITC 653) in which Taiwan has lost export shares.

From the above discussion based on correlations for changes in export shares at the product level it is apparent that the individual NICs have lost shares in certain textile products to individual Potential NICs. The inference that can be drawn is that there is an indication that there is a tendency for intra-industry specialization between the individual NICs and the Potential NICs.

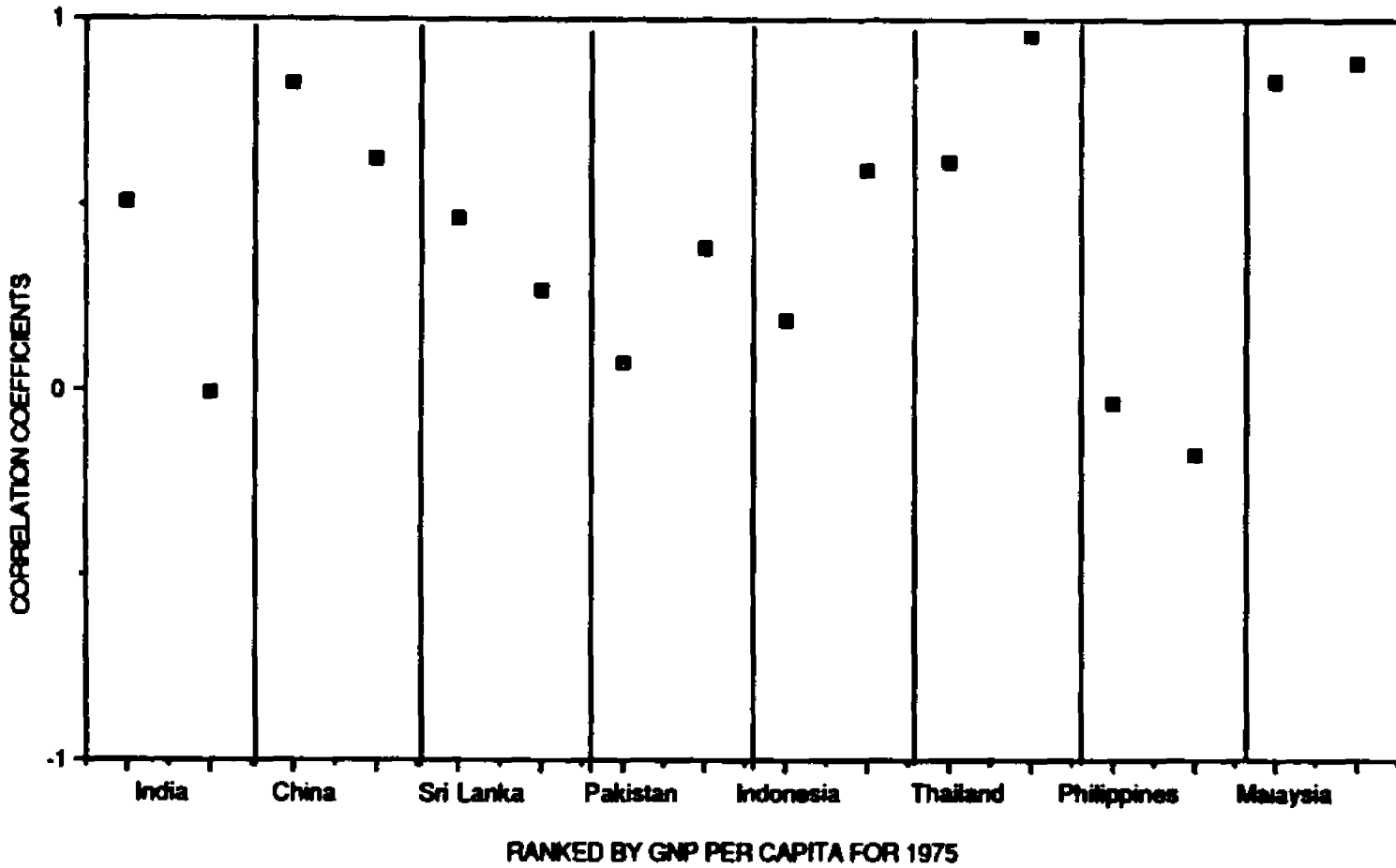
## CHANGES IN THE LEVELS OF EXPORTS FOR TEXTILE PRODUCTS

The purpose of this analysis is to test whether there have been shifts or transfers of exports of textile products from the NICs to the Potential NICs. A useful additional tool for this purpose would be to correlate the level of exports for these products for the potential NICs and the NIC-Group. Also correlating the levels of exports for the Potential NICs and the individual NICs would indicate whether there would be trends in transfer of exports from the individual NICs to the Potential NICs.

The levels of exports of textile products at the 3 digit level were correlated for all the countries in the sample. Figure 1 plots the values of the correlations coefficients when the exports of the NIC-Group are correlated with the exports of textiles of the individual LDCs. A pattern emerges when the countries are ranked according to increasing GNP/Capita. Thus India has the lowest GNP/Capita in 1975 while Malaysia has the highest GNP/Capita in 1975. In the figure India is therefore shown at the left margin while Malaysia is at the right margin.

India and Malaysia are apparently examples of extreme cases. India has traditionally exported textiles. However in the recent past India seems to be moving out of export of

FIGURE 1  
PLOT OF CORRELATION COEFFICIENTS  
WHEN EXPORT LEVELS OF TEXTILES  
FOR THE NICS ARE CORRELATED WITH  
TEXTILE EXPORTS OF INDIVIDUAL  
POTENTIAL NICS



textiles to the OECD countries witness the sharp fall in export of textiles as given in table 6.1.

On examination of figure 1 it is apparent that a pattern emerges for the poorer countries. For these countries that is India, China and Sri Lanka the correlation coefficients fall to lower values over time that is to say that the correlation coefficients in 1985 are lower than those in 1975 for each of these countries. The GNP per Capita for 1975 according to which the countries are ranked in the figure serves as a proxy for the wage level and therefore indicates low production costs. Therefore these countries apparently concentrated on labor intensive products when they expanded their textile exports over the 10 year period.

For the richer countries however the trend is in the opposite direction. The difference in the pattern of changes would indicate that the richer LDCs have passed the stage where they tended to specialize in the more labor intensive products as their labor costs are higher and not very different from that of the NICs. For example Malaysia is considered to be a middle income country according to the World Bank classification. Initially the composition of the textile exports of the richer LDCs were dissimilar to those of the NICs as indicated by the lower correlation coefficients for 1975. But over time as Physical and Human Capital accumulation increased they tended to export textile

products that were more similar to those exported by the NICs.

On the other hand the poorer countries are at a stage of their development where they have embarked on a degree of specialization such that the composition of their textile exports differs from that of the NICs.

An example will help clarify the above discussion. Thus for example in 1975 China's correlation coefficients when its export levels are correlated with those of the NIC-Group was about 0.84 indicating that the composition of exports of textile products for China and the NIC-Group were very similar. Table 6.6 below gives the levels of exports for textile products for China and the NIC- Group. It is apparent that there is a degree of similarity in the levels of exports. For example China's major exports are SITC categories 652, 653, 656 and 657 in that order. For the NIC-Group the order is also similar the first three SITC categories i.e 652, 653 and 656 have the same rank. Thus indicating that China's export composition for its major textile exports were similar to those of the NICs.

**TABLE 6.6 TEXTILE EXPORT FOR CHINA AND THE NIC-GROUP IN 1975**  
(million U.S.\$)

SITC	CHINA	NIC-GROUP
651	43129	257725
652	132308	313748
653	79919	290007
654	1499	14307
655	7532	51887
656	48880	119889
657	40132	24159

However in 1985 the correlation coefficient dropped to a value of about 0.62 as can be seen from figure 1. Examination of the composition of textile exports for China and the NIC-Group as given in Table 6.7 shows that there has been a divergence in the export compositions. China has expanded its exports considerably in certain categories for example SITC 657 while the NIC-Group have not expanded their exports to the same degree as has China. China is therefore specializing in this product while the NIC-Group are moving to increase their export of other products such as SITC 651 and 653.

**TABLE 6.7 TEXTILE EXPORT FOR CHINA AND THE NIC-GROUP IN 1985**

SITC	CHINA	NIC-GROUP
651	171322	690497
652	498103	649742
653	267898	744437
654	20126	56819
655	29756	187633
656	343888	494933
657	230370	88438

Sri Lanka shows a similar pattern of changes in exports over the period under consideration. In 1985 the correlation coefficient with respect to the NIC-Group decreased to 0.26 from about 0.46 in 1975.

Overall it appears that as the countries are ranked by increasing GNP per capita the export pattern changes in such a way that it diverges further away from the pattern of exports for the NIC-Group. This applies to the poorer countries, however for the richer countries that are shown to the right in the figure the pattern is different in that the tendency is towards greater similarity between the export compositions of the potential NICs and the current NICs. The poorer NICs have lower production costs as they are essentially low wage countries. The GNP per Capita serves here as a proxy for the wage rates and therefore labor costs. Thus with low labor costs the tendency is for these countries to specialize in the more labor intensive products which were formerly the domain of the NICs . In the period under examination the poorer countries are replacing the NICs in the OECD markets and encroaching on the export shares previously held by the NICs.

There is however a threshold beyond which the pattern of change reverses. As the country grows richer the tendency is to move towards a composition of textile exports that is

similar to that of the current NICs.

#### **THE INDIVIDUAL NICS VS THE INDIVIDUAL POTENTIAL NICS**

Figure 2 plots the correlation coefficients for Korea's exports of textiles and those of the potential NICs for the years 1975 and 1985. Examples of specialization that is to say changes in the pattern of exports can be seen for India, China, and Sri Lanka i.e. the poorer countries where there is clear fall in the values of the correlation coefficients from 1975 to 1985.

Figure 3 plots the correlations for Taiwan's exports and those of the potential NICs. India and China display the characteristic fall in the correlation coefficients over the period 1975 to 1985. This fall in the value of the correlation coefficient indicates that the export composition for the two Potential NICs i.e India and China has changed in such a way that it tends to become more divergent from the composition in 1975 as compared to Taiwan's export composition for textile products.

FIGURE 2  
 PLOT OF CORRELATION COEFFICIENTS  
 WHEN EXPORT LEVELS OF TEXTILES  
 FOR S. KOREA ARE CORRELATED WITH  
 TEXTILE EXPORTS OF INDIVIDUAL  
 POTENTIAL NICs

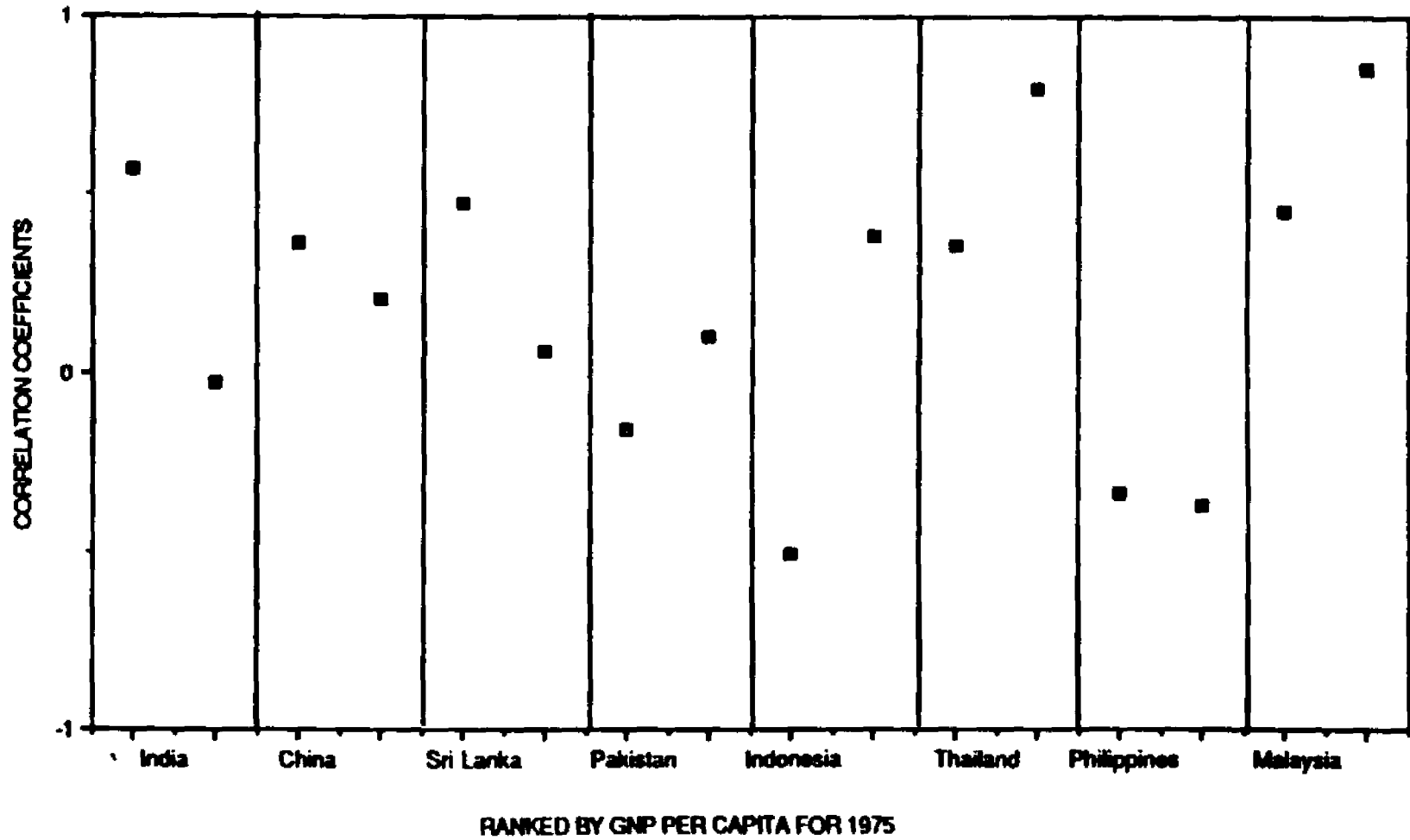


FIGURE 3  
PLOT OF CORRELATION COEFFICIENTS  
WHEN EXPORT LEVELS OF TEXTILES  
FOR TAIWAN ARE CORRELATED WITH  
TEXTILE EXPORTS OF INDIVIDUAL NICs

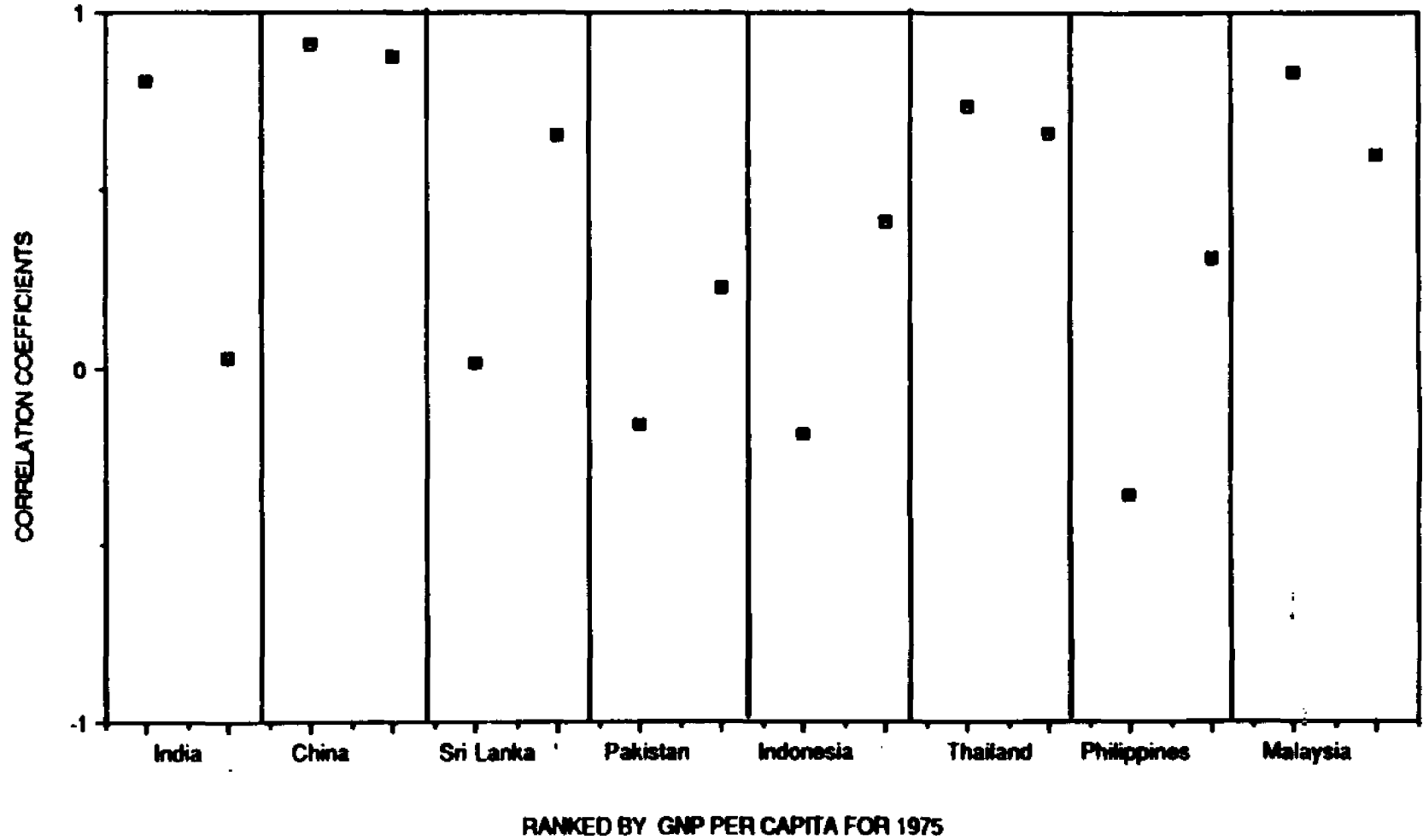


Figure 4 shows the correlation coefficients for the level of textile exports for Hong Kong when these are correlated with the level of exports of textiles for the individual NICs. China and Pakistan, display the characteristic falling pattern of the values for the correlation coefficients. Thus indicating a move towards specialization in products that are different from those for the NIC Hong Kong.

However China and Sri Lanka show a different pattern of change over time of the correlation coefficients. That is to say that their composition of textile exports to begin with was quite different from that of Hong Kong, but overtime there was a tendency for their composition to become similar to that of Hong Kong. The explanation for this discrepancy lies in the fact that Hong Kong appears to be moving out of the textile industry. Table 6.5 above shows that Hong Kong has lost export shares for all SITC Categories. The pattern of change in the correlation coefficients as plotted in figure 4 would therefore indicate changes at the inter-industry level rather than the intra-industry level examined here.

Figure 5 shows the correlation coefficients for Singapore for textile exports when these are correlated with the exports of the individual Potential NICs. In this case too China, Sri Lanka and to some extent Pakistan display the

FIGURE 4  
 PLOT OF CORRELATION COEFFICIENTS  
 WHEN EXPORT LEVELS OF TEXTILES  
 FOR HONG KONG ARE CORRELATED WITH  
 TEXTILE EXPORTS OF INDIVIDUAL  
 POTENTIAL NICs

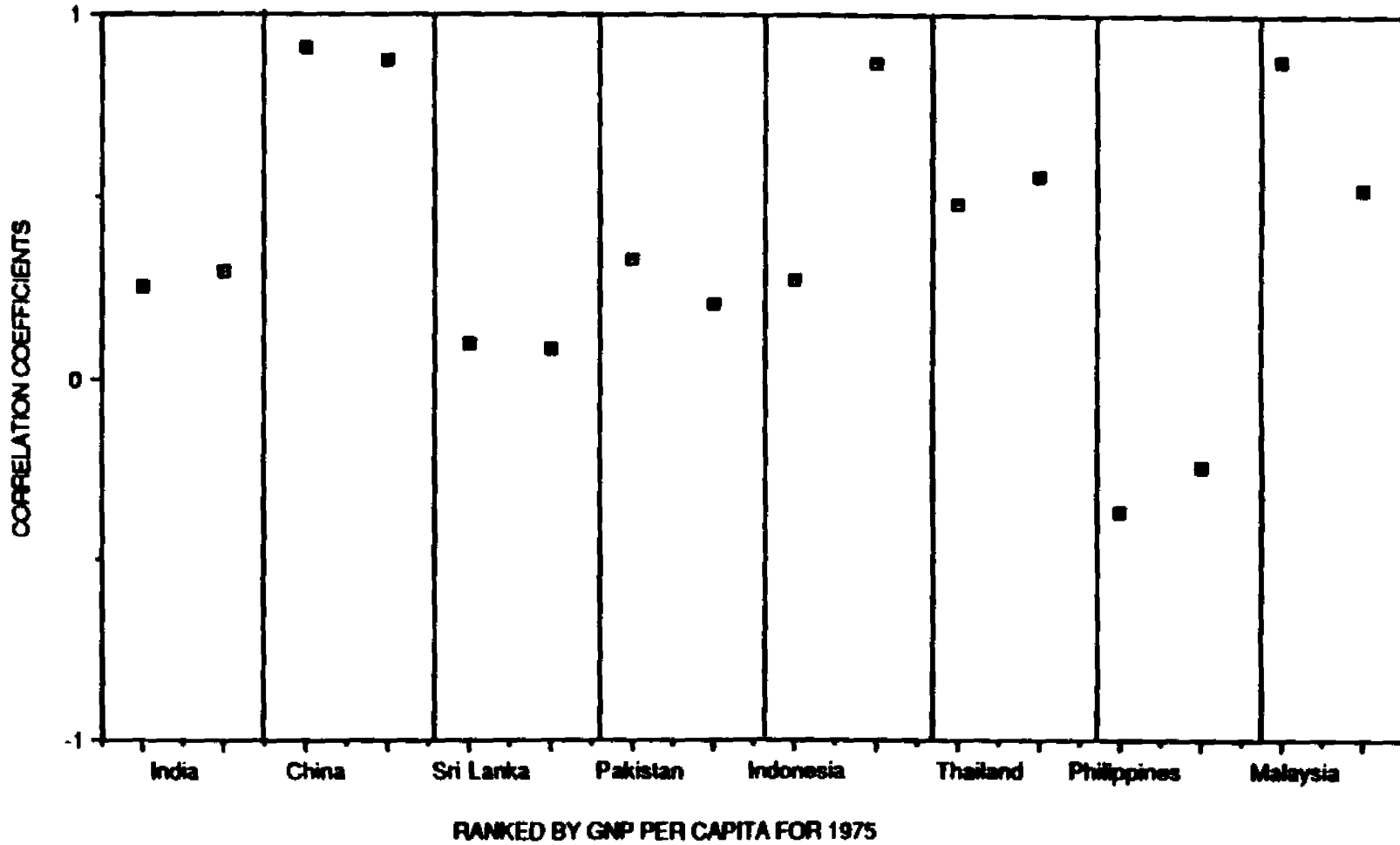
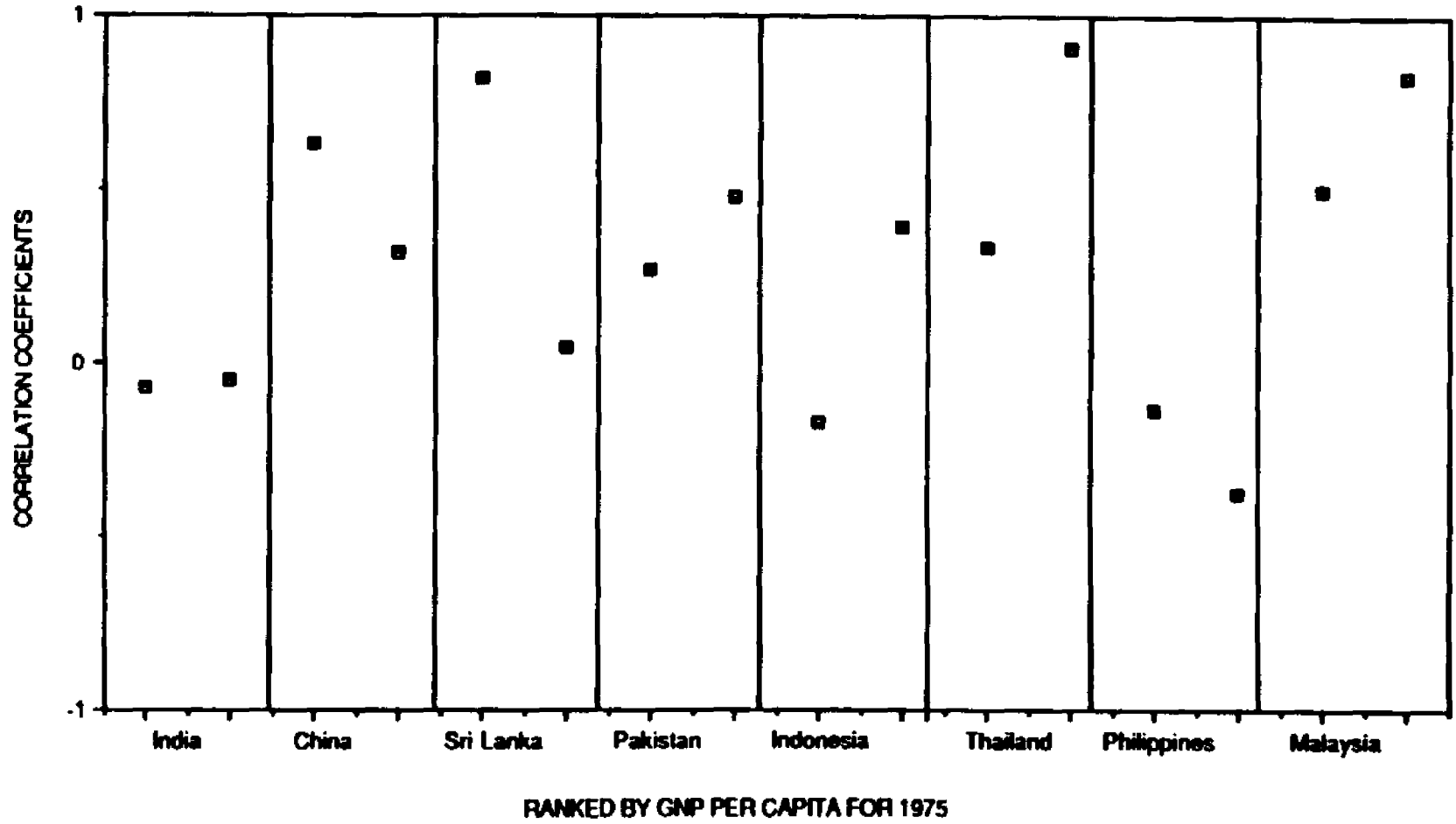


FIGURE 5  
PLOT OF CORRELATION COEFFICIENTS  
WHEN EXPORT LEVELS OF TEXTILES  
FOR SINGAPORE ARE CORRELATED WITH  
TEXTILE EXPORTS OF INDIVIDUAL  
POTENTIAL NICs



characteristic falling pattern of correlation coefficients. Thus supporting the hypothesis that there is a movement towards diverging export composition and therefore intra-industry specialization when the poorer countries are compared to Singapore.

Figure 6 plots the correlation coefficients when Brazil's exports of textiles are correlated with exports of the individual LDCs. India, China, and Sri Lanka show the same falling pattern of correlation coefficients over the period 1975 to 1985. Thus indicating that the changes in export composition for Brazil as compared to those for the poorer countries are diverging. This tendency to diverge supports the hypothesis that there is a degree of intra-industry specialization.

#### **INDIVIDUAL NICs OVER TIME**

Figure 7 shows the plot of correlation coefficients when the exports by the individual NICs are correlated that is to say for example Brazil's export for 1975 were correlated with its exports for 1985. This gives a picture of the changing pattern of exports for the individual NICs over time. This affords the possibility of a degree of control when the changing patterns for figure 1 are interpreted.

FIGURE 6  
PLOT OF CORRELATION COEFFICIENTS  
WHEN EXPORT LEVELS OF TEXTILES  
FOR BRAZIL ARE CORRELATED WITH  
TEXTILE EXPORTS OF INDIVIDUAL  
POTENTIAL NICs

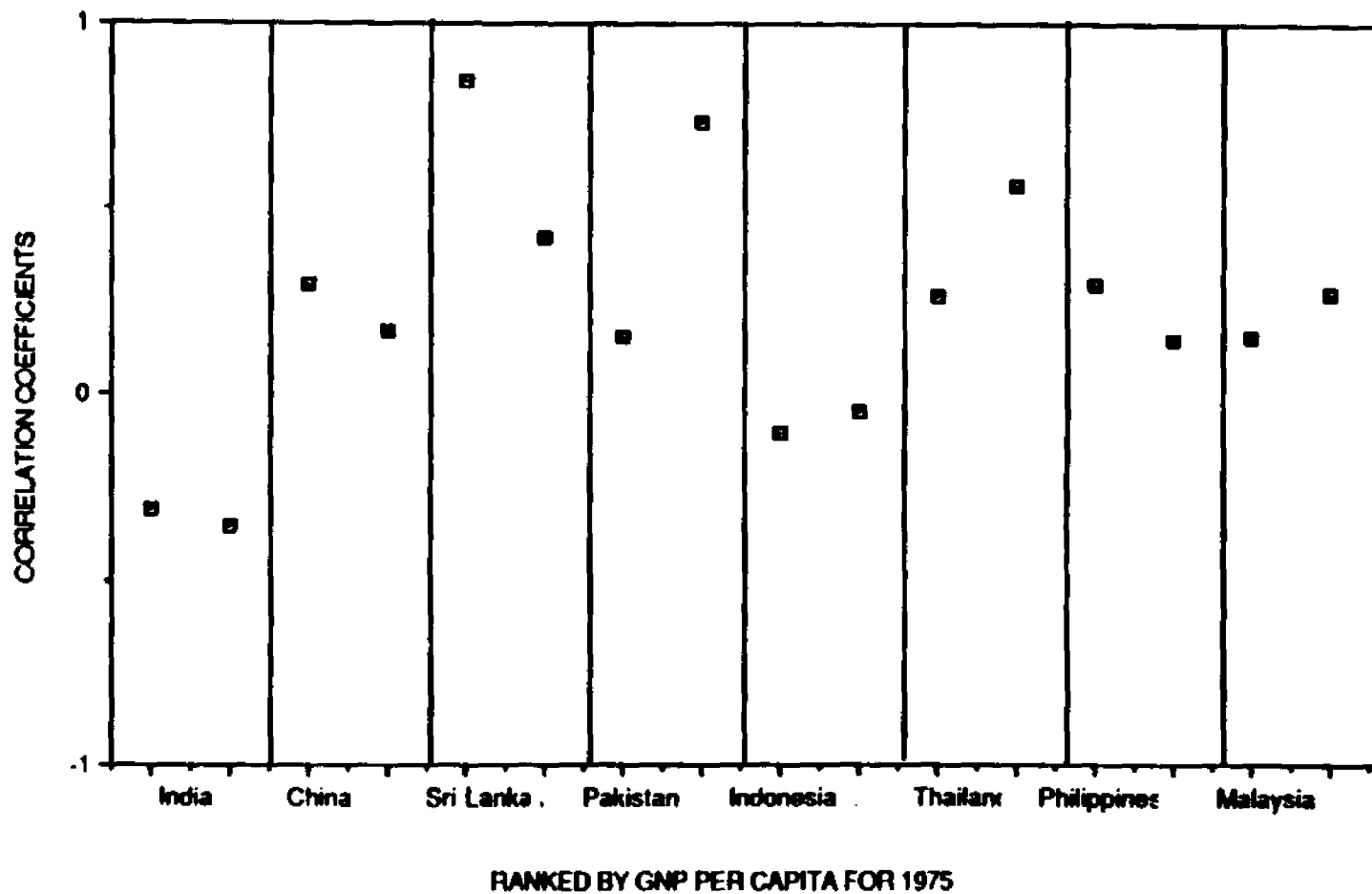
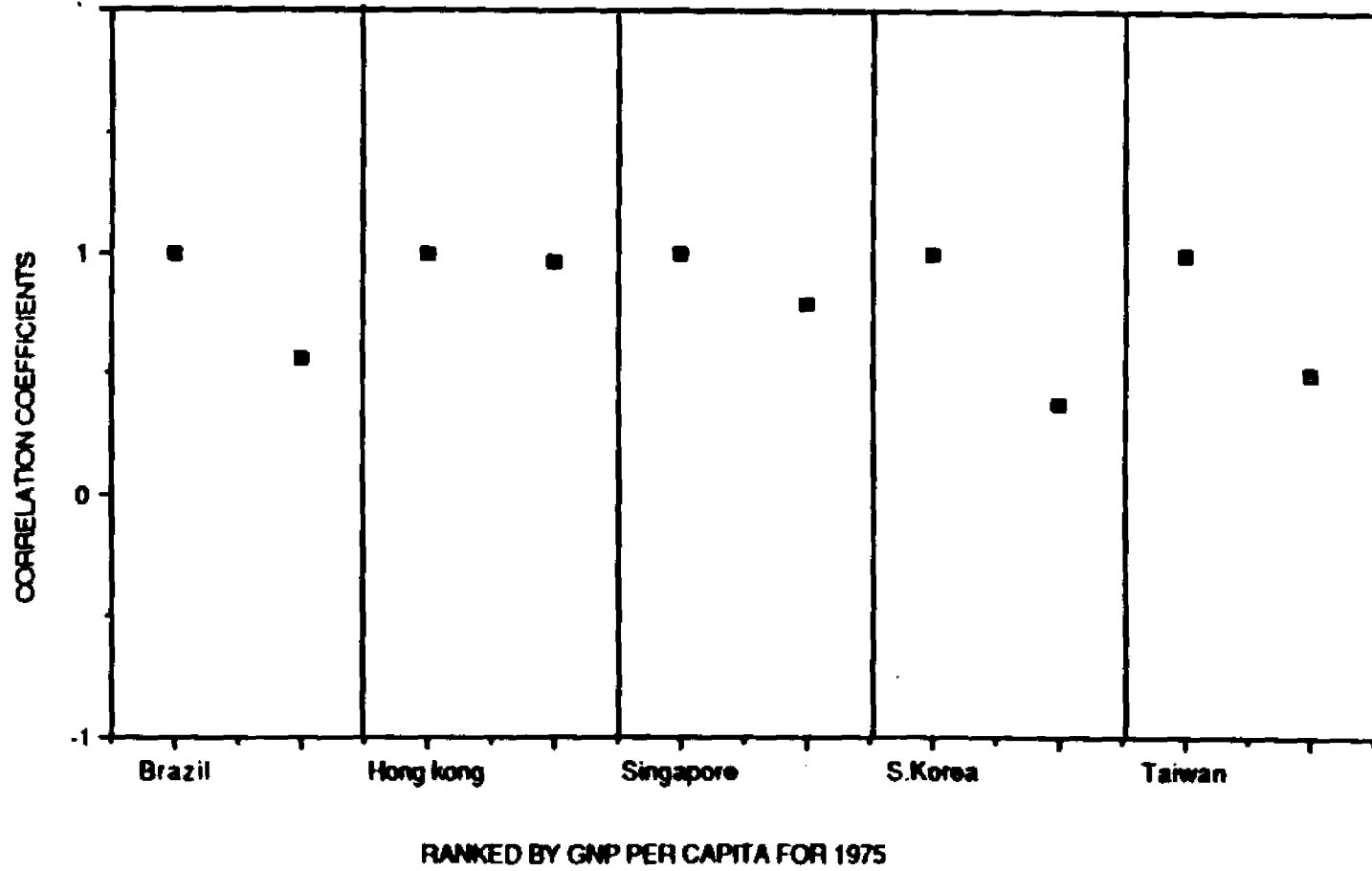


FIGURE 7  
PLOT OF CORRELATION COEFFICIENTS  
WHEN EXPORT LEVELS OF TEXTILES  
FOR THE NICS IN 1975 ARE  
CORRELATED WITH THEIR LEVELS IN  
1985

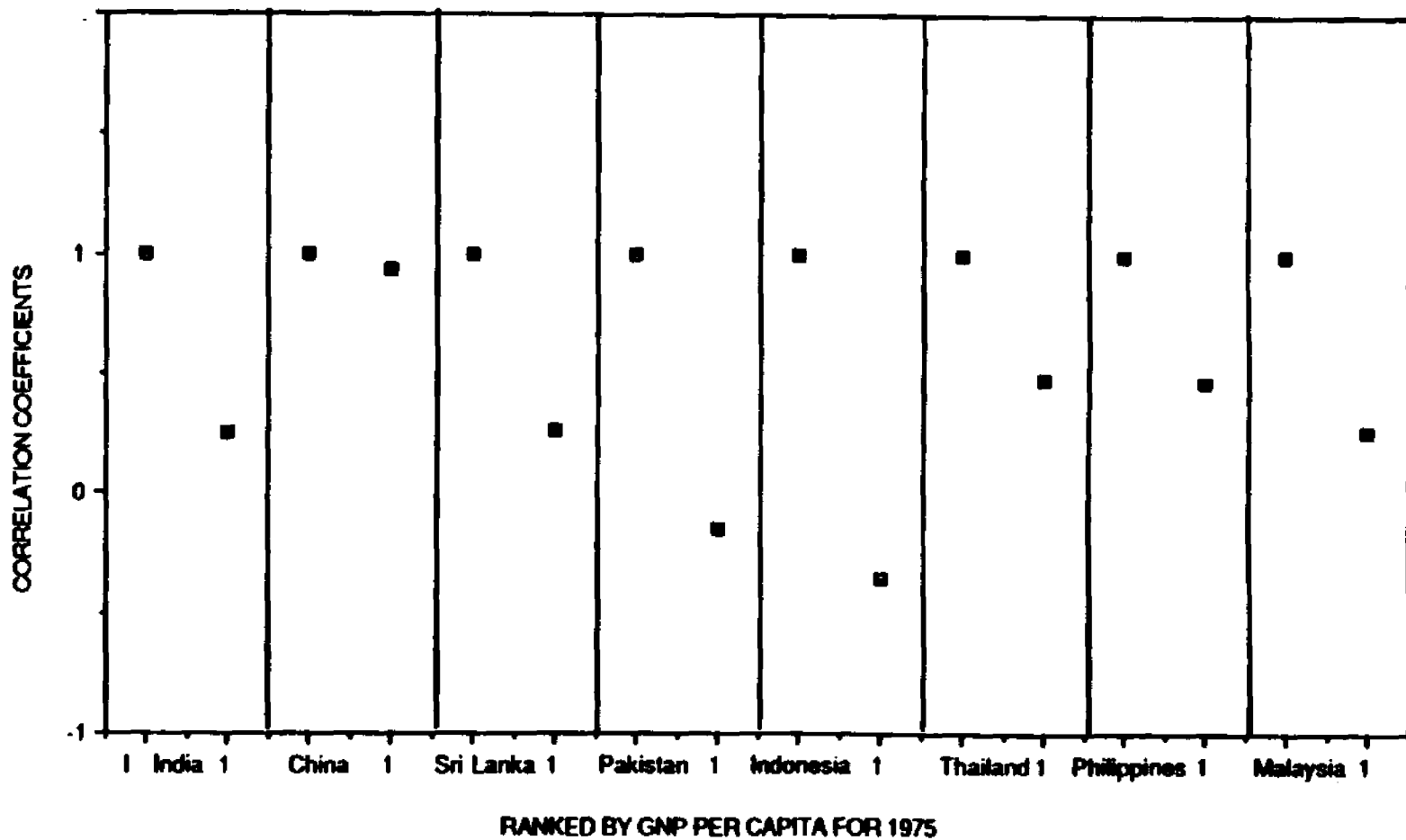


This figure shows that the composition of textile exports for the individual NICs changed over time. For example Taiwan shows a large change in its composition of textile exports. This is also the case of Brazil, Singapore and South Korea. This indicates that the export compositions have changed over time for the individual NICs and that they have tended to specialize in certain products. Some NICs display this tendency to a larger extent than the others as for example Taiwan.

#### **THE INDIVIDUAL POTENTIAL NICs OVER TIME**

Figure 8 shows the correlations for the individual potential NICs overtime i.e their exports for 1975 have been correlated to their exports in 1985. Pakistan, Indonesia and to a lesser extent India and Sri Lanka display changes in their pattern of correlations. Pakistan and Indonesia's export composition changes completely over the 10 years period.

FIGURE 8  
PLOT OF CORRELATION COEFFICIENTS  
WHEN EXPORT LEVELS OF TEXTILES  
FOR THE INDIVIDUAL POTENTIAL NICS  
IN 1975 ARE CORRELATED WITH THEIR  
EXPORT LEVELS IN 1985



To summarize the above discussion for the correlations of the level of exports for textile products; the correlations plotted in figures 1 to 8 indicate that for the poorer countries there is a characteristic fall in the values of the correlation coefficients. That is to say that the correlation coefficients assume values in 1985 that are generally lower than their values in 1975. The inference to be drawn from this pattern of change is that countries with comparatively lower labor costs display a tendency to specialize in products that are different from those in which the NICs have specialized. The GNP per Capita is used as a proxy for wages and therefore for labor costs.

For the richer LDCs however the pattern is different. These countries are apparently moving towards an export composition for textiles that is similar to that of the NICs.

## CHAPTER 7

### SUMMARY AND CONCLUSION

The foregoing examination of intra-industry specialization indicates that there has been a degree of intra-industry specialization within the textile industry at the SITC 3 digit level of product categories for a number of Asian countries and the Newly Industrializing Countries. The evidence is however fragmentary and therefore essentially serves indicative purposes. Further research and work in this direction would be required if more conclusive evidence is to be forthcoming. In the period from 1975 to 1985 gains were registered by the Potential NICs that is those less developed countries that have the potential for further development. And these gains were made at the expense of the current NICs.

In the last chapter three different aspects of intra-industry specialization were examined. In the first instance the textile industry was examined as a whole for shifts in textile exports from NICs as a group and also for the individual NICs to the Potential NICs. The results of the analysis indicate that of the five NICs included in the sample four have lost export shares for the textile industry to the Potential NICs.

The analysis was further refined to look at changes in export shares at the product i.e at the SITC 3 digit category level. At the product i.e the SITC 3 digit level there are seven categories namely SITC 651 to 657. Changes in export shares for the 7 categories were correlated for the NICs as a group and also for the individual NICs with changes in export shares for the individual Potential NICs. The analysis showed that both when the NICs are considered as a group and also for individual NICs there were indications of transfer or shifts in export shares from NICs to the Potential NICs. In addition the export levels for textile products were correlated for NICs both at the Group and individual levels with the export levels of the individual Potential NICs for the years 1975 and 1985. To obtain a better overview; the values of the correlation coefficients were plotted in a series of plots as shown in figures 1 to 8. A pattern of falling correlation coefficients for the poorer countries India, China and Sri Lanka emerged. Thus indicating that the poorer countries with lower labor costs moved towards specialization in products that were different from the products in which the NICs were specializing. For the richer NICs the movement was towards an export composition that was similar to that for the NICs.

The above analysis tends to confirm Balassa's<sup>1,2</sup> argument that industries would migrate to the lesser developed countries as these acquire increased human and physical capital as a result of the process of capital accumulation provided the appropriate policies are followed.

Chow's<sup>3</sup> analysis shows that there is a bidirectional causality between export growth and growth in the manufacturing industry. Therefore policies should be adopted that would promote both exports and the manufacturing sector.

The results obtained here support the hypothesis advanced by Krueger<sup>4</sup> that efficient growth requires a gradual process of industrial specialization where countries move from labor intensive industries to more capital and skill intensive products. The Potential NICs as shown in the last chapter have over the ten year period moved to gain shares at the

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1. Balassa B. "A Stages Approach to Comparative Advantage", in Irma Adelman (ed), Economic Growth and Resources: National and International Issues. 5, 1979.

2. ----- B. The Newly Industrializing Countries in the World Economy New York: Pergamon Press 1981. pp 6 - 23

3 Chow P.C.Y. "Causality between export Growth and Industrial Development." Journal of Development Economics. 24 (1987) pp 55 -63.

4. Krueger Anne O. "LDC Manufacturing Production and Implications for OECD Comparative Advantage." in Leveson Irving and Jimmy W. Wheeler (eds.), Western Economies in Transition: Structural Change and Adjustment Policies in Industrial Countries. Boulder Westview 1980 p 226

cost of the NICs thus displacing them in the OECD markets for certain textile products.

The results of the analysis carried out in this paper would question the conclusions arrived at by Lutz<sup>5</sup> and Cline<sup>6</sup>. In the case of Lutz's study the analysis was based on inter-industry changes in export shares. Cline's work also concentrated on broad categories of industries. Therefore strict comparisons to the results obtained here are not

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5 Lutz J.M. "Shifting Comparative Advantage The NICs, and the Developing countries ." The International Trade Journal. 1 (Summer 1987) pp 339-357

6. Cline W.R. Exports of Manufactures from developing Countries: Performance and Prospects for Market Access. Washington D.C. Brookings Institution 1984. pp 26 - 30

## APPENDIX

## DATA

OECD IMPORTS OF SITC 651-657  
REPORTED IN THOUSAND US DOLLARS

SITC CODE		1975	1985
Brazil			
3651	TEXTILE YARN AND THREAD	71301	237369
3652	COTTON FABRICS, WOVEN (NOT INC	45936	98891
3653	TEXTILE FABRICS, WOVEN, OTHER	5694	33773
3654	TULLE, LACE, EMBROIDERY, RIBBO	115	2349
3655	SPECIAL TEXTILE FABRICS AND RE	27865	75460
3656	MADE-UP ARTICLES, WHOLLY OR CH	38078	101466
3657	FLOOR COVERINGS, TAPESTRIES, E	239	2592
Pakistan			
3651	TEXTILE YARN AND THREAD	33788	232066
3652	COTTON FABRICS, WOVEN (NOT INC	49830	134382
3653	TEXTILE FABRICS, WOVEN, OTHER	283	4176
3654	TULLE, LACE, EMBROIDERY, RIBBO	553	2419
3655	SPECIAL TEXTILE FABRICS AND RE	185	525
3656	MADE-UP ARTICLES, WHOLLY OR CH	18128	101324
3657	FLOOR COVERINGS, TAPESTRIES, E	72174	129748
India			
3651	TEXTILE YARN AND THREAD	16483	37450
3652	COTTON FABRICS, WOVEN (NOT INC	52165	163428
3653	TEXTILE FABRICS, WOVEN, OTHER	131544	137095
3654	TULLE, LACE, EMBROIDERY, RIBBO	4896	6483
3655	SPECIAL TEXTILE FABRICS AND RE	2073	2201
3656	MADE-UP ARTICLES, WHOLLY OR CH	48730	79783
3657	FLOOR COVERINGS, TAPESTRIES, E	60324	301975
Sri Lanka (Ceylon)			
3651	TEXTILE YARN AND THREAD	603	2802
3652	COTTON FABRICS, WOVEN (NOT INC	159	739
3653	TEXTILE FABRICS, WOVEN, OTHER	3	149
3654	TULLE, LACE, EMBROIDERY, RIBBO	4	19
3655	SPECIAL TEXTILE FABRICS AND RE	4	277
3656	MADE-UP ARTICLES, WHOLLY OR CH	104	8064
3657	FLOOR COVERINGS, TAPESTRIES, E	43	465
Thailand			
3651	TEXTILE YARN AND THREAD	3893	72382
3652	COTTON FABRICS, WOVEN (NOT INC	9905	79669
3653	TEXTILE FABRICS, WOVEN, OTHER	11772	77295
3654	TULLE, LACE, EMBROIDERY, RIBBO	12	644
3655	SPECIAL TEXTILE FABRICS AND RE	8575	12450
3656	MADE-UP ARTICLES, WHOLLY OR CH	9859	27027
3657	FLOOR COVERINGS, TAPESTRIES, E	676	2858

<b>Malaysia</b>			
3651	TEXTILE YARN AND THREAD	1595	20485
3652	COTTON FABRICS, WOVEN (NOT INC	12888	30214
3653	TEXTILE FABRICS, WOVEN, OTHER	9267	39665
3654	TULLE, LACE, EMBROIDERY, RIBBO	11	131
3655	SPECIAL TEXTILE FABRICS AND RE	307	1870
3656	MADE-UP ARTICLES, WHOLLY OR CH	1442	5024
3657	FLOOR COVERINGS, TAPESTRIES, E	26	90
<b>Singapore</b>			
3651	TEXTILE YARN AND THREAD	6933	10085
3652	COTTON FABRICS, WOVEN (NOT INC	5780	5008
3653	TEXTILE FABRICS, WOVEN, OTHER	2453	8245
3654	TULLE, LACE, EMBROIDERY, RIBBO	18	103
3655	SPECIAL TEXTILE FABRICS AND RE	402	771
3656	MADE-UP ARTICLES, WHOLLY OR CH	3264	2151
3657	FLOOR COVERINGS, TAPESTRIES, E	291	552
<b>Indonesia</b>			
3651	TEXTILE YARN AND THREAD 80 4645		
3652	COTTON FABRICS, WOVEN (NOT INC	648	60120
3653	TEXTILE FABRICS, WOVEN, OTHER	104	38165
3654	TULLE, LACE, EMBROIDERY, RIBBO	16	73
3655	SPECIAL TEXTILE FABRICS AND RE	542	310
3656	MADE-UP ARTICLES, WHOLLY OR CH	283	5503
3657	FLOOR COVERINGS, TAPESTRIES, E	839	11552
<b>Philippines</b>			
3651	TEXTILE YARN AND THREAD	2577	4352
3652	COTTON FABRICS, WOVEN (NOT INC	381	20
3653	TEXTILE FABRICS, WOVEN, OTHER	426	1135
3654	TULLE, LACE, EMBROIDERY, RIBBO	360	3701
3655	SPECIAL TEXTILE FABRICS AND RE	6879	11237
3656	MADE-UP ARTICLES, WHOLLY OR CH	5252	18254
3657	FLOOR COVERINGS, TAPESTRIES, E	1527	3470
<b>China (Mainland)</b>			
3651	TEXTILE YARN AND THREAD	43129	171322
3652	COTTON FABRICS, WOVEN (NOT INC	132308	498103
3653	TEXTILE FABRICS, WOVEN, OTHER	79919	267898
3654	TULLE, LACE, EMBROIDERY, RIBBO	1499	20126
3655	SPECIAL TEXTILE FABRICS AND RE	7532	29756
3656	MADE-UP ARTICLES, WHOLLY OR CH	48880	343888
3657	FLOOR COVERINGS, TAPESTRIES, E	40132	230370
<b>South Korea</b>			
3651	TEXTILE YARN AND THREAD	128095	299932
3652	COTTON FABRICS, WOVEN (NOT INC	39529	120248
3653	TEXTILE FABRICS, WOVEN, OTHER	155027	451141
3654	TULLE, LACE, EMBROIDERY, RIBBO	5803	26595
3655	SPECIAL TEXTILE FABRICS AND RE	5862	34499
3656	MADE-UP ARTICLES, WHOLLY OR CH	18874	78896
3657	FLOOR COVERINGS, TAPESTRIES, E	8548	15403

China (Formosa)			
3651	TEXTILE YARN AND THREAD	28610	130883
3652	COTTON FABRICS, WOVEN (NOT INC	51218	148009
3653	TEXTILE FABRICS, WOVEN, OTHER	85707	184613
3654	TULLE, LACE, EMBROIDERY, RIBBO	1685	16314
3655	SPECIAL TEXTILE FABRICS AND RE	15983	71526
3656	MADE-UP ARTICLES, WHOLLY OR CH	20107	219653
3657	FLOOR COVERINGS, TAPESTRIES, E	7320	46258
Hong Kong			
3651	TEXTILE YARN AND THREAD	22786	12228
3652	COTTON FABRICS, WOVEN (NOT INC	171285	277586
3653	TEXTILE FABRICS, WOVEN, OTHER	41126	66665
3654	TULLE, LACE, EMBROIDERY, RIBBO	6686	11358
3655	SPECIAL TEXTILE FABRICS AND RE	1775	5377
3656	MADE-UP ARTICLES, WHOLLY OR CH	39568	92767
3657	FLOOR COVERINGS, TAPESTRIES, E	7761	23633

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