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**PATTERNS OF SOUTH-SOUTH TRADE IN MANUFACTURES**

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## PATTERNS OF SOUTH-SOUTH TRADE IN MANUFACTURES

Harmen Verbruggen and Johan Wuijts

### 1. Introduction

This contribution attempts to provide an overview of the principal patterns in South-South trade in manufactures for the period from 1955 to 1985. Special attention will be paid to the capital goods component in this trade flow.

It will not be attempted to explain the (changes in) composition and direction of trade flows with the help of one or more of the prevailing theories of international trade, nor shall we explicitly deal with such questions as the supposed downward-biased volume of South-South trade (Stewart, 1976; Havrylyshyn and Wolf, 1983) and the factor proportions in manufactured exports of developing countries (Krueger et al., 1981; Amsden, 1980).

It is important to note that international trade flows are expressed in current dollar values. Obviously, trend analyses based on current values are deceptive in periods of price changes and this was true of the 1970s. As no appropriate price deflators are available for different trade flows, the analysis to follow is carried out almost exclusively in terms of percentage shares of trade flows, whether by country group, product group or destination. Where necessary, information on (changes in) the absolute values of the numerator and denominator of the share measures will be given. To provide insight into the impact of the dramatic oil price fluctuations on the pattern of world trade, trade flows are presented both inclusive and exclusive of trade in fuels (SITC 3).

### 2. Market Shares of World Trade

In order to place the developments of South-South trade, and South-South trade in manufactures in particular, in a proper context, Figures 1-2 show the development of the shares in total world exports of two major country groups, North and South, respectively, and their mutual trade flows, both inclusive and exclusive of trade in fuels. As the share in the world trade of the centrally planned economies of the East remained fairly stable at about 9 to 10 per cent during the entire period under review, the analysis is restricted to the trends in the trade flows from the North and from the South.

It is immediately clear from Figures 1-2 that the industrialized countries of the North predominate international trade in the world economy. It emerges also with clarity from these figures that the North strengthened its trading position till the early 1970s, but since then had to accept a steady decline. The years 1984-85 show again a slight recovery. The developments are most pronounced in North total trade share, inclusive of fuels. The overall participation of the developing countries of the South in world trade shows opposite trends. In fact,

the early 1970s signified a reversal of the postwar trends in volume, value, composition and direction of many an international trade flow.

The share of the total exports from the North in world trade recorded a permanent increase from 64.3 per cent in 1955 to 71.9 per cent in 1971. This increase was almost entirely attributable to a rapid expansion in North-North trade, which share in world trade increased from 45.1 to 55.7 per cent, from 1955 to 1971. By contrast, exports from the North to the South as a proportion of world trade were systematically reduced from 17.9 per cent in 1955 to 13.6 per cent in 1971. Over the same period, the South could not keep pace with the rapid growth of trade in the North. As a result, the share of total exports from the South in the world trade fell from 25.1 per cent in 1955 to 17.0 per cent in 1971. The decline in this share in world trade occurred both in its South-South and its South-North component: from 1955 to 1971, the share of trade among developing countries recorded a decrease from 6.2 to 3.6 per cent, and the share of the South-North trade fell from 18.3 to 12.5 per cent. Similar trends in the shares of North and South trade flows are also observed if trade in fuels is excluded, as the share of fuels in total world exports as well as in North and South trade flows was relatively stable in the period before the early 1970s.

As from the early 1970s, significant changes took place in respect of the relative importance of the various trade flows. In fact, almost all above-treated trends were reversed, on the understanding, however, that the final years of the period under review, 1984-85, show again signs of a partial re-reversal. To begin with, the share of the North in world trade recorded a decrease from almost 72 per cent in 1971 to 62.7 per cent in 1982. This fall is explained by two developments. First, the trade share of the North in total world exports exclusive of fuels remained fairly stable at about 77 per cent throughout the 1970s; during the years thereafter this share started to decrease. Second, the oil price increases of the 1970s resulted in a fall in the North trade share in total world exports inclusive of fuels. Contrary to the period before the 1970s, the North-North and North-South trade flows showed opposite trends during the period thereafter. The North-North trade share witnessed a steady reduction, whereas the North-South trade share has moved upwards since 1971. By 1982, North-South trade had returned to the level prevalent in the mid-1950s with a share in world trade of almost 20 per cent. In 1984-85, however, the North trade share in world exports recovered with the North-North component as the driving force. North-South trade had again to accept a reduction in these years.

Furthermore, the share of the South in world trade recorded a pronounced increase from its lowest point of 17.0 per cent in 1971 to 27.5 per cent in 1980, but fell slightly thereafter. Both the fast increase in the South trade share and the reduction from 1981 onwards reflect the oil price increases of 1973 and 1978-79, the stabilization of the oil price up to 1984 and its subsequent decrease in 1985. The shares of South-South and South-North trade flows follow similar upward and downward movements at first glance. It appears, however, that if trade in fuels is excluded, the South share in world trade starts to increase steadily from the lowest point of 11.4 per cent in 1971 to

about 16 per cent at the end of the period under review. This increase is largely accounted for by a doubling of the South-South trade share in world exports from 2.4 per cent in 1971 to 4.8 per cent in 1981, followed by a slight decrease in 1985. The South-North trade share also recorded an increase. The increases in the relative importance of both South-South and South-North trade flows, exclusive of fuels, during the 1970s and early 1980s seem to be structural trend reversals compared to the pre-1970 period. This recovery of the South trade share is at the expense of the trading position of the North.

Apart from these structural changes in world trade shares, a cyclical pattern can be discerned in the changes in the various trade flow shares over time, most clearly if world trade flows are examined exclusive of fuels. Generally, in periods of world economic recovery and growth, the share of North-North trade in particular increases. The South-North trade share shows a less pronounced but similar cyclical pattern from the early 1970s onward. Thus, the North-North trade share increased from 1955 to 1971, and both North-North and South-North trade flows showed upward trends in the periods 1976-79 and 1983-85. An opposite cyclical pattern can be discerned in the world trade shares of South-South and North-South trade flows. In the period 1955 to 1971, South-South and North-South shares in world trade decreased, but these shares moved upward exactly in those periods where the world economy experienced a slowdown in growth: 1973-75 and 1979-83. Despite these cyclical movements, however, participation of the South in world trade has reached a structurally higher level since its lowest level in the early 1970s.

The reasons for so many reversals and cyclical movements in the trends in trade of the North and the South are numerous. It will not be attempted to give a full account. It appears, however, that, at the risk of generalization, the impact of a number of world economic developments since 1970 cannot go unrecorded. First, it is important to notice that the period 1970-85 has witnessed tremendous fluctuations in world trade as compared to the preceding two decades. Floating exchange rates since 1971, followed by fluctuating currency values, the US dollar in particular, buoyant inflation on a world scale, commodity price boom from 1972 to 1974, the oil price sharply increasing in 1973 and 1979-80, world crises around 1975 and 1980-82, and an overall slowing down of economic growth in the developed countries, are among the essential factors shaping these fluctuations in world trade. Thus, on average, the value of world exports increased annually by 8.3 per cent from 1950 to 1970 (IMF, 1982). Over the same twenty-year period, the world export unit value increased by no more than 1 per cent annually, indicating an almost inflation-free expansion of world trade. During the 1970s, by contrast, world exports in value terms increased on average by 20.7 per cent a year, whereas the annual average unit value of world exports increased sharply by 14.4 per cent. In volume terms, world export rose by 5.5 per cent a year, and actually contracted in 1975 (IMF, 1982). The year 1980 marked the beginning of a severe world economic crisis. In that year, the volume of world exports still increased a little, but then contracted in three consecutive years, both in value and in volume. World trade recovered and expanded

Figure 1 Trends in the Directions of Trade Flows from the North as Percentages of World Exports, 1955-1985

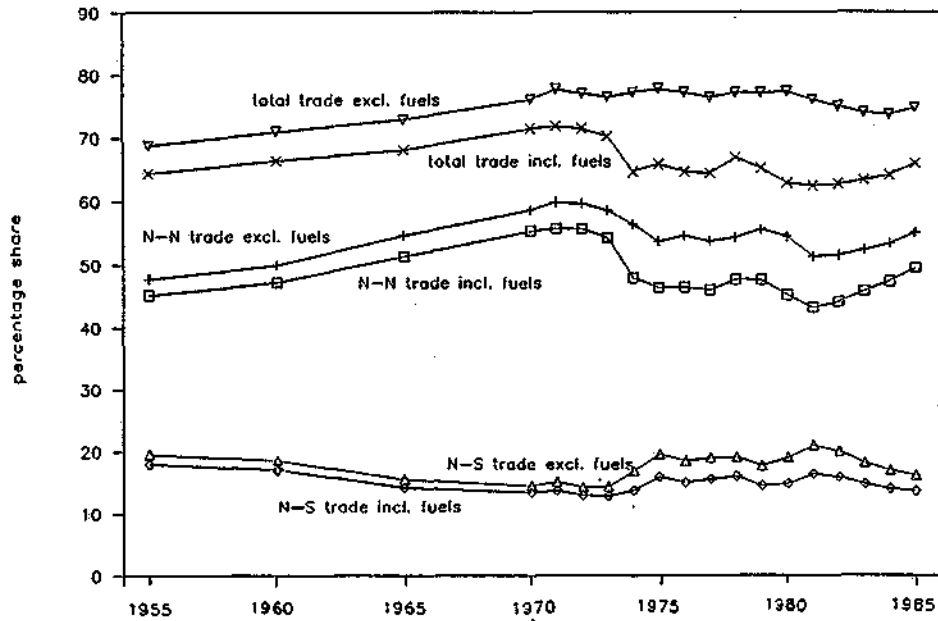
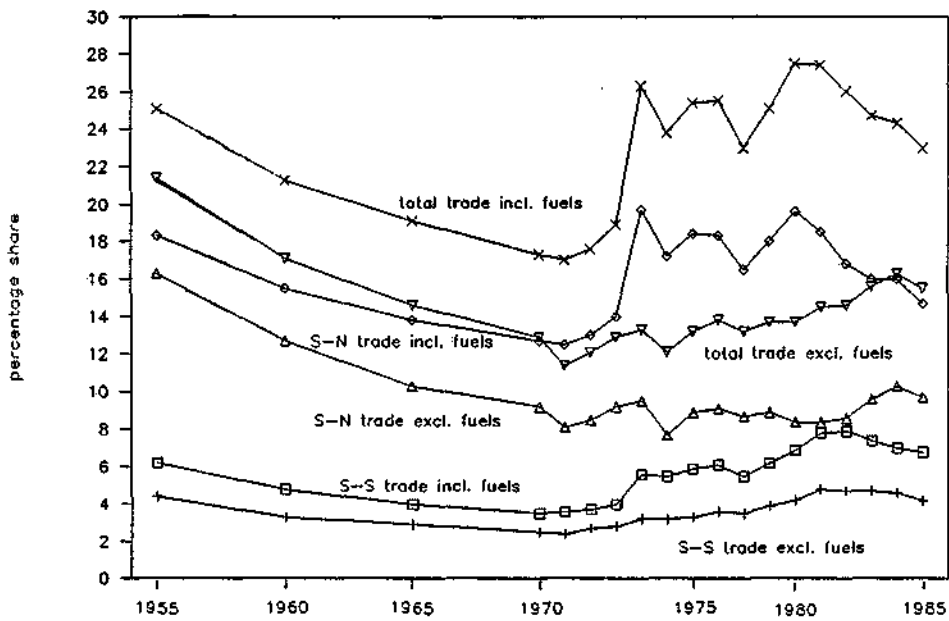


Figure 2 Trends in the Directions of Trade Flows from the South as Percentages of World Exports, 1955-1985





again in 1984 and 1985 (GATT, 1986).

Second, the large rises in the price of petroleum in late 1973 and in 1978-79 not only resulted in changing relative prices, finding expression in an almost threefold increase of the share of fuels in world exports from 9.3 per cent in 1970 to more than 24 per cent in 1980-81. Above all, it signified huge increases in export earnings of especially the oil exporting developing countries. As a consequence of this redistribution of world income and, hence, import capacity, shifts have occurred in the pattern of world trade flows. The direction of these shifts is a recurrent subject in the sections to follow.

Third, over the past two decades, an increasing number of developing countries has been rather successful in expanding their exports of manufactures. These so-called newly industrializing countries (NICs) of the South with their strongly increased industrial production capacities have become serious competitors for the industrial countries, both on the latter's own domestic markets and on their markets in other developing countries. The main effects of the rise of the NICs on the pattern of world trade flows will be examined in the final sections. First, attention will be paid to the changing commodity position of the various trade flows.

### 3. World Trade Flows of Primary Products and Manufactures

As is well-known, the international division of labour on a world scale took shape in the colonial era. Whether the countries of the contemporary Third World were actually colonized or not, their economies and trade relations were structured along the lines of what has become known as the traditional or colonial division of labour. In principle, this division of labour is characterized by South-North trade in primary commodities and North-North and North-South trade in manufactures. It has never been the intention of colonial rule to establish manufacturing industries in the colonies, except perhaps some agro- or natural-resource based manufacturing industries, nor to develop trade relations with colonies of rival imperialist powers.

These patterns of production and trade have proven difficult to displace. Figure 7 shows that the main characteristics of the traditional international division of labour prevailed in world trade until the early 1970s: North-North trade was at that time for two-thirds and North-South trade for almost three-quarters composed of manufactures, whereas more than four-fifths of South's major trade flow, viz. South-North trade, was composed of primary commodities.

A comparison of Figures 3-7 reveals that the composition of exports from the North changed appreciably in favour of manufactures during the period 1955-71. The driving force behind this development has been a rapid increase in intra-North trade in manufactures. This trade flow alone reached its highest share in total world trade of 37.2 per cent in 1972.

Exports from the South also became more "industrialized" during the 1955-71 period, albeit at a substantially lower level. The share of exports of manufactures from the South in total world exports increased from 2.0 to about 3.0 per cent during this period. However, as the corresponding share of primary products dropped sharply from 23.2 to about 14 per cent over the same period, the share of manufactures in total exports from the South doubled from 8.0 to about 16.0 per cent. It is clear that the decreasing participation of the South in world trade during the 1950s and 1960s was entirely due to sluggish primary commodity exports, both to the North and the South, whereas manufactured exports from the South could keep up with the overall growth of world trade. Hence, in a global context, the "industrialization" of the South's exports during the period 1955-71 was a typical case of "prosper under oppression". This relative prospering of manufactured exports was in fact only the case for the South-North trade flow, of which the share in world trade increased from 0.9 per cent in 1955 to about 2.0 per cent in the early 1970s. South-South trade in manufactures stagnated during the period under review with an almost constant share in world trade of slightly less than 1 per cent.

The opposite trends in manufacturing trade flows of the North and the South over the period up to 1970 are generally attributed to important differences in industrialization and trade regimes of the countries of the North and the South. Thus, while the North embarked on a policy of progressive trade liberalization, especially for trade in manufactures, the South turned to inward-looking industrialization strategies.

The changes in the commodity composition of respective trade flows from the early 1970s onwards can best be examined exclusive of trade in fuels. It then becomes clear from Figures 3-7 that intra-North trade in manufactures fluctuated around a more or less stable share in world trade of about 40 per cent. The downward trend in North-South trade in manufactures up to the early 1970s, by contrast, was reversed in the period thereafter, especially so in the recession years 1975-77 and 1980-82, where it reached levels of about 15.0 per cent of world trade. The share of total manufactured exports from the North in world trade thus slightly increased. As regards the commodity composition of North total exports, by 1985 both North-North and North-South trade flows were for three-quarters composed of manufactures.

In the 1970s and the first half of the 1980s, exports of manufactures from the South experienced an undeniable upswing. With respect to South-North trade in manufactures there has been a clear acceleration of the pre-1970 trend, which can be explained by the rise of a number of export-oriented newly industrializing developing countries. By 1985, manufactures accounted for no less than 56.7 per cent of South-North trade, exclusive of fuels. As regards South-South trade in manufactures, moreover, the stagnating pre-1970 trend was reversed. Although South-South trade in manufactures accounted for only 2.3 per cent of world trade, it signifies more than a redoubling of this share since the early 1970s. It is also of interest to note that manufactured products have since long formed a larger part of South-South than of

South-North trade. In South-South trade, this part continued to increase to 58.7 per cent in 1984. The increasing role of developing countries in world trade in manufactures is, as outlined in Figures 3-7, attributable to both South-North and South-South trade in manufactures. Apart from the impact of the oil price increases since 1973, these dynamic trade flows explain the trend reversals and increased participation of the South in world trade in the 1971-85 period, discussed in the preceding section.

#### 4. Changing Directions of World Trade Flows

The changing relative importance of the various trade flows from the North and from the South in total world trade may imply, of course, a redirection of trade flows. This becomes clear when Figures 8 and 9 are examined, which show the directions of trade flows as shares of the country groups total exports, exclusive of fuels, over the period under review.

Between 1955 and the early 1970s, the share of North total exports going to other developed countries steadily increased from 71.0 to about 80.0 per cent, as shown in Figure 8. From the early 1970s to 1985, a clear cyclical pattern is discernable with a substantial fall in this share around 1975 and the early 1980s. On average, the trend in the North-North component of North total exports is downward since 1972. The share of North total exports going to developing countries shows, of course, opposite fluctuations and a slightly upward trend. This changing pattern in the destination of exports from the North since the early 1970s, equally applies to exports of primary and manufactured products.

Until the early 1970s, the reliance of the South on the markets of developed countries remained high at a constant level of almost 80 per cent of its exports. A pronounced downward trend, however, is recorded in the years thereafter, which reached its lowest level till now of about 64.0 per cent in 1981-82. By contrast, the share of South total exports traded among developing countries started to increase from about 20 per cent in the early 1970s to about 36 per cent in 1981-82, but fell slightly thereafter. Primary commodity exports from the South follow the same change in market destination as recorded for South total exports, but clearly less interrupted by periodical fluctuations as is the case with manufactures. Thus, from the early 1970s onwards, an ever increasing share of South exports of primary commodities is traded with other developing countries. The changes in market destination of South manufactured exports are more erratic. Until 1973, the markets of the developed countries became ever more important. In that year, 70.5 per cent of South manufactured exports was traded with the North. Since then, however, this market destination lost importance, especially so in the recession years. During the 1970s and the early 1980s, the share of intra-South trade in South manufactured exports, by contrast, clearly recovered from the steady decline during the preceding period. This share recorded its recent highest level in 1981, when 40.3 per cent of South manufactured exports were sold to other developing countries.

Figure 3 Percentage Shares of Trade Flows from the North in World Exports, 1955-1985: Primary Products

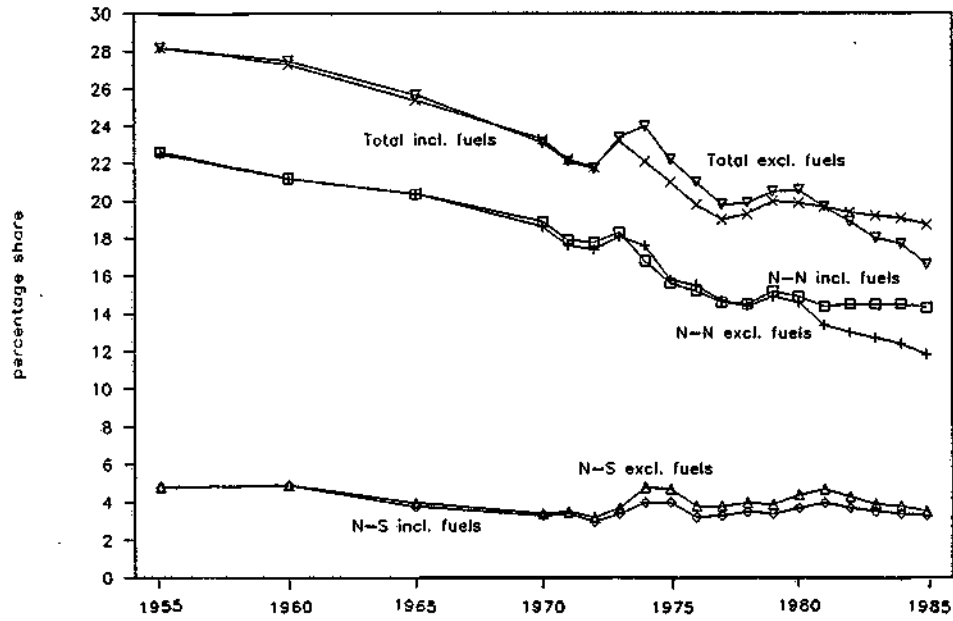


Figure 4 Percentage Shares of Trade Flows from the South in World Exports, 1955-1985: Primary Products

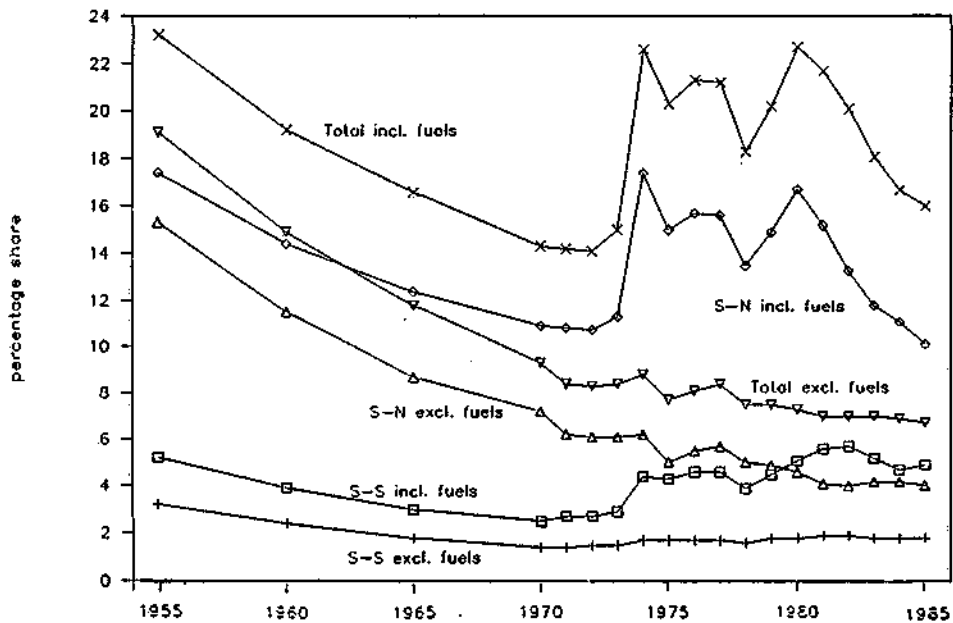


Figure 5: Percentage Shares of Trade Flows from the North in World Exports, 1955-1985: Manufactures

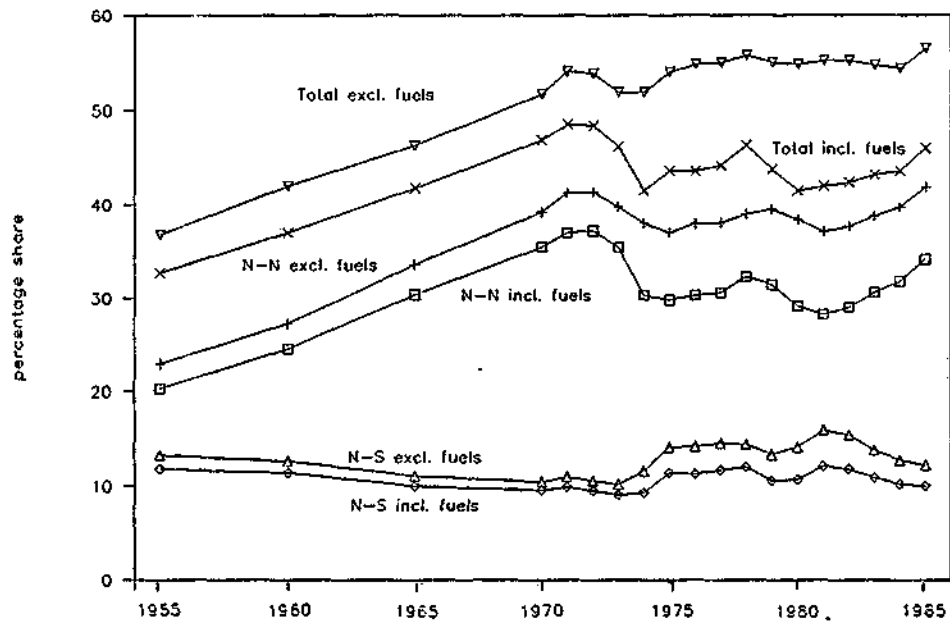


Figure 6 Percentage Shares of Trade Flows from the South in World Exports, 1955-1985: Manufactures

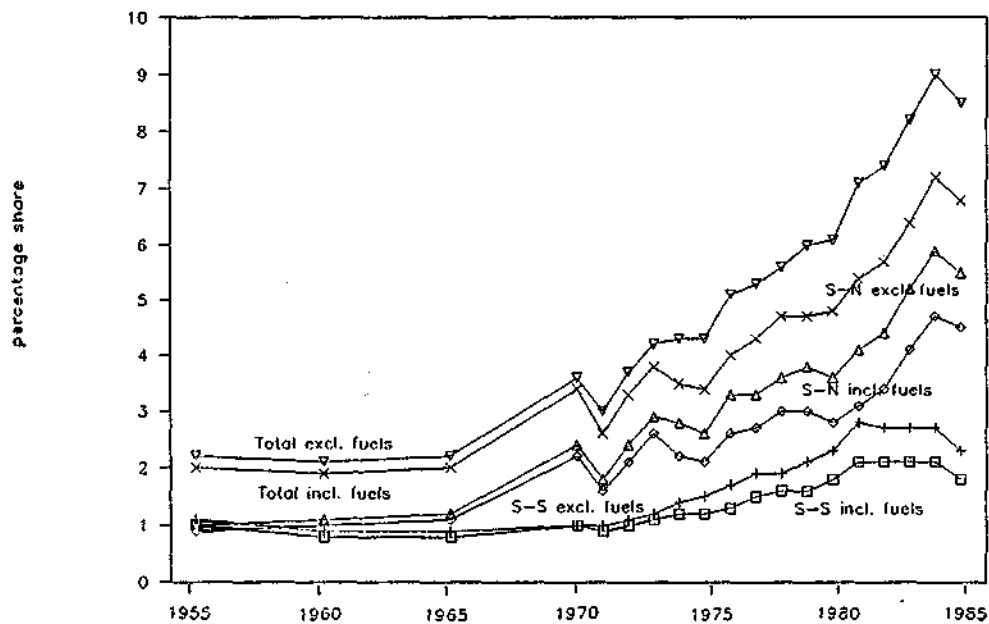


Figure 7 Percentage Shares of Manufactures in Respective Trade Flows from the North and from the South, 1955-1985

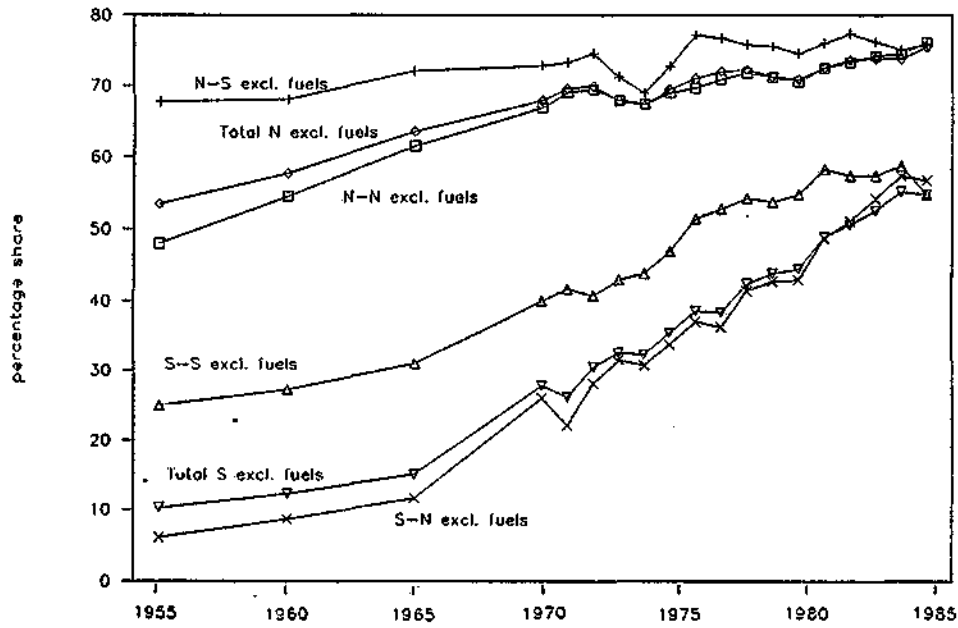


Figure 8 Direction of Trade Flows from the North as Share of Exports from the North, Exclusive of Trade in Fuels, 1955-1985

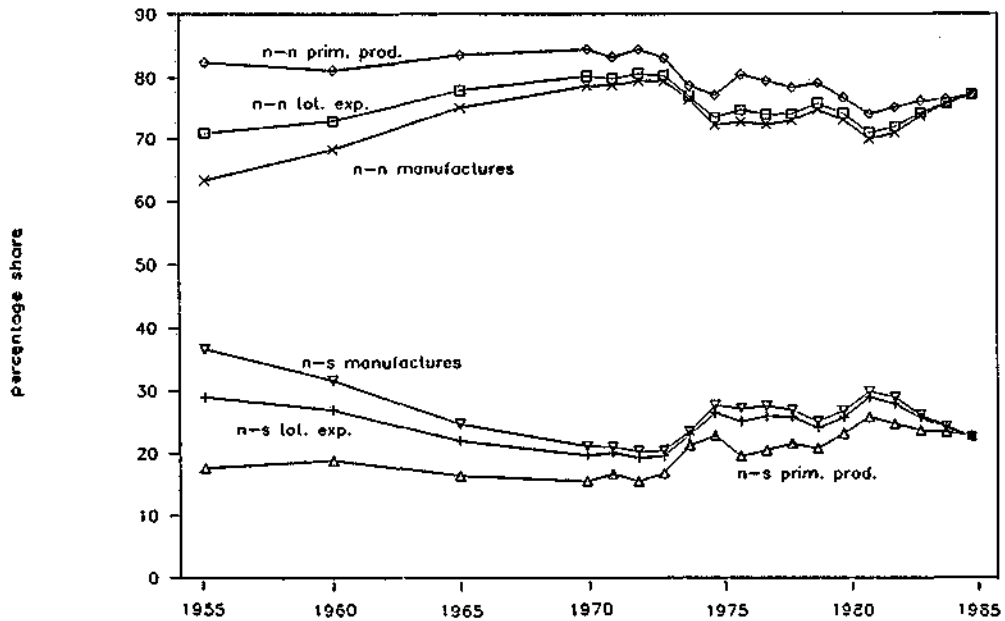
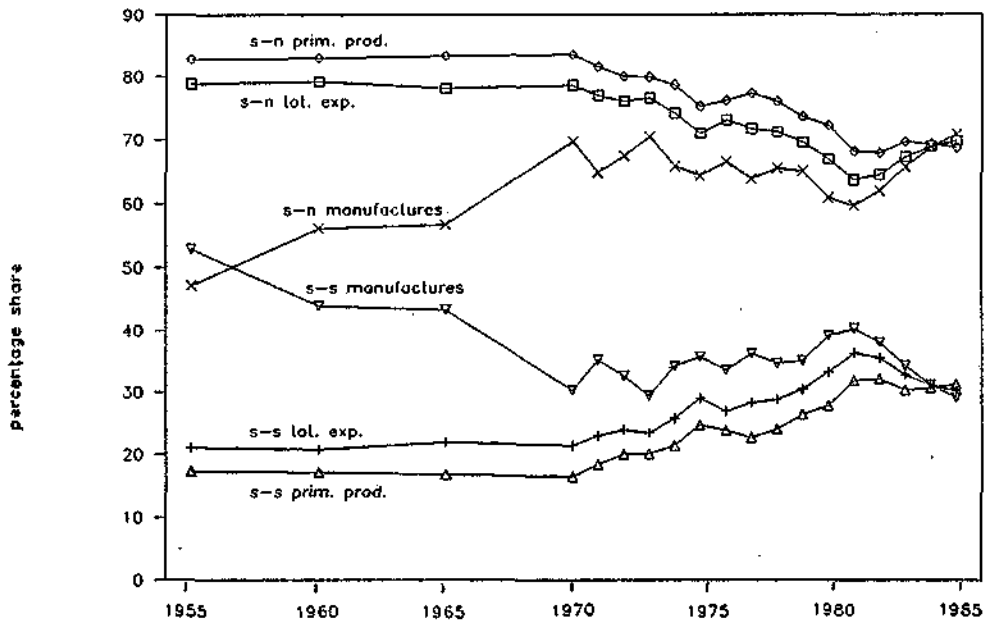


Figure 9 Direction of Trade Flows from the South as Share of Exports from the South, Exclusive of Trade in Fuels, 1955-1985



Since the early 1970s, South-South trade clearly represents another possible direction for expansion of trade in manufactures for the developing countries. This alternative trade option appears to be especially relevant in periods in which the North has to cope with an economic recession. From the finding in the preceding section that manufactured exports from the South are among the most dynamic trade flows of the 1970s and 1980s, it can be inferred that it is not a mere question of a "relative upswing" in South-South trade in manufactures. This trade has become of structurally higher importance in developing countries' trade performance.

##### 5. The Regional Concentration of South-South Trade

One aspect in which colonial relationships have proven to be very persistent is the regional, i.e. within the same (sub)continent, concentration of trade among developing countries. Trade channels and ancillary services like transport, communication, marketing and financial services are relatively well developed between the North and the South, whereas South-South trading ties are still underdeveloped. The intra-South trade relations that could be accomplished in spite of these institutional barriers are therefore largely confined to neighbouring countries. The many efforts at economic co-operation and integration between developing countries since the 1960s, which were usually established on a regional basis and mostly included a trade liberalization programme expanding the joint market, most likely strengthened the intra-regional bias in South-South trade.

Table 1 The Intra-Regional Components of South-South Trade, 1955-85 (percentages).

	<u>1955</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1985</u>
A. Total South-South Trade					
Intra-regional trade	76.4	73.5	68.8	48.1	51.3
Intra-regional trade, excl. fuels	74.8	73.2	74.0	65.6	62.6
B. South-South Trade in Manufactures					
Intra-regional trade	70.7	69.3	74.8	67.1	67.0

Thus, as Table 1 shows, the bulk of trade among developing countries is intra-regional trade. However, also this aspect of South-South trade relations witnessed marked changes during the 1970s and early 1980s. The combined share of intra-regional exports in South-South exports, exclusive of fuels, stayed almost constant at some three-quarters during the 1950s and 1960s, but started gradually to decline thereafter to 62.6 per cent in 1985. Intra-regional South-South trade in manufactures is of the same relative importance as intra-regional trade in total. It increased from 70.7 per cent in 1955 to 74.8 per cent in 1970. In the period 1970-1985, this rising trend was reversed into a slightly downward moving trend and by 1985 the intra-regional component of South-South trade in manufactures amounted to 67.0 per cent. The trends depicted in Table 1 reveal that the share of intra-regional trade in both primary commodities and manufactures is gradually decreasing since 1970. The marked decrease in intra-regional trade flows in total South-South trade inclusive of fuels reflects the increasing value share of fuels that are to a large extent traded outside the region.

Table 2 shows that the importance of intra-regional trade varies per region and that, moreover, the regions experienced opposite trends in intra-regional trade. The data provided by this table can be generalized as follows. During the period 1955-70, the intra-regional component of South-South trade in manufactures increased for Africa and the Middle East, whereas this component slightly decreased for Developing America and South and Southeast Asia. After 1970, the decreasing trend in intra-regional trade in Developing America carried through. From that year onwards, manufacturing trade among African countries started to decrease significantly. Thus, for both Developing America and Africa, interregional trade in manufactures expanded faster than intra-regional trade. Table 2 shows that the American developing countries expanded their manufactured exports to Africa, the Middle East and South and Southeast Asia. African countries recorded a trade expansion to the Middle East and South and Southeast Asia. The countries of the Middle East, by contrast, expanded their intra-regional trade in manufactures since 1970, while the intra-regional component in South-South trade in manufactures remained more or less stable for South and Southeast Asian countries.



Table 2 Direction of South-South Trade in Manufactures by Region as Share of a Region's Total South-South Trade in Manufactures, 1955-85

To From	Developing America					Africa					Middle East					South and Southeast Asia				
	'55	'60	'70	'80	'85	'55	'60	'70	'80	'85	'55	'60	'70	'80	'85	'55	'60	'70	'80	'85
Developing America	98.5	88.0	95.8	84.3	68.7	-	1.3	1.1	8.0	13.0	-	-	0.1	4.7	12.1	1.5	10.7	2.8	2.9	6.2
Africa	-	3.1	1.1	6.2	4.3	79.5	63.5	87.7	60.2	50.0	8.4	26.0	8.1	11.2	19.2	12.1	7.3	2.8	22.5	20.0
Middle East	4.0	2.6	0.9	0.5	0.2	20.0	27.6	16.6	9.4	9.9	68.0	56.5	74.9	81.5	81.2	8.0	13.2	7.6	8.6	8.7
South and Southeast Asia	11.2	8.9	6.2	8.9	7.7	15.9	15.5	19.0	12.9	9.0	5.7	5.9	9.2	19.7	18.0	67.1	69.8	63.1	57.9	64.6

The countries of the Middle East and South and Southeast Asia were clearly the most dynamic market outlets for developing countries' manufactured exports to other developing countries during the period 1970-85. This is also evident from the rising share of these two developing regions in total South-South trade in manufactures since 1970, see Table 3.

Table 3 Share of the Major Developing Regions in Total South-South Export Trade in Manufactures, 1970-85 (percentages).

<u>Region</u>	<u>1970</u>	<u>1980</u>	<u>1985</u>
Developing America	24.0	22.9	18.0
Africa	12.1	2.8	4.0
Middle East	7.5	10.0	17.5
South and South-east Asia	56.5	64.3	60.6

The slightly increasing inter-regionalization of South-South trade in manufactures during the last 15 years can thus largely be attributed to the rapidly growing economies, and hence import capacity, of the countries in the Middle East and South and Southeast Asia, a market expansion by which Developing America and Africa have also profited.

#### 6. Changing Structure of South-South Trade in Manufactures

As to the structure of total exports from the South during the period under review, there was a pronounced increase in the share of manufactured products. This change also took place in South-South export flows. As shown in Figure 7, the increase in the share of manufactures in South-South trade was moderate from 1955 to 1970, but accelerated in the period thereafter. Table 4 seeks to answer which of the SITC manufacturing product groups have shown the most rapid increase since 1970, both in South-South and South-North trade in manufactures. The trends outlined in this table clearly indicate that the major part of the increase in both South-North and South-South trade in manufactures was accounted for by rapidly increasing trade in machinery and transport equipment (SITC 7). The share of this product group in South-North trade amounted to one-third in 1985, while it was only 13.7 per cent in 1970. Between 1970 and 1985, the share of machinery and transport equipment in South-South trade in manufactures recorded a doubling from 21.3 to 40.1 per cent. It is of interest to see that machinery and transport equipment have always been of more importance in South-South than in South-North trade in manufactures. Table 5 shows that South and Southeast Asia dominate South-South trade in machinery and transport equipment, and that this region even strengthened its position during the 1970s and early 1980s. By 1985, no less than two-thirds of South-South trade in machinery and transport equipment originated in South and Southeast Asia. This region is followed, in order of importance, at considerable distance by Developing America; moreover, exporters of machinery and transport equipment from Developing America are losing their market share that fell from 30.2

Table 4 Product Composition of South-North and South-South Trade in Manufactures, 1970-85 (percentages).

A. South-North Trade in Manufactures

	<u>1970</u>	<u>1980</u>	<u>1985</u>
SITC 5	9.4	7.0	5.3
SITC 6+8 (excl. 67+68)	76.9	67.5	61.1
SITC 7	13.7	25.4	33.6

B. South-South Trade in Manufactures

	<u>1970</u>	<u>1980</u>	<u>1985</u>
SITC 5	13.9	12.5	14.5
SITC 6+8 (excl. 67+68)	64.8	51.6	45.5
SITC 7	21.3	35.9	40.1

Note: SITC 5 - chemical products  
 SITC 6+8 (excl. 67+68) - other manufactured goods, excluding iron and steel and non-ferrous metals  
 SITC 7 - machinery and transport equipment

per cent in 1970 to 17.6 per cent in 1985. The Middle East is a growing exporter of machinery and transport equipment to other developing countries and reached a market share of 13,7 per cent in 1985. Finally, with a market share of 1.3 per cent in 1985, Africa is of hardly any importance anymore as supplier of machinery and transport equipment to other developing countries.

Table 5 Share of the Major Developing Regions in Total South-South Trade in Machinery and Transport Equipment (SITC 7), 1970-85 (percentages).

<u>Region</u>	<u>1970</u>	<u>1980</u>	<u>1985</u>
Developing America	30.2	25.7	17.6
Africa	5.1	0.8	1.3
Middle East	7.5	11.3	13.7
South and South-east Asia	57.3	62.3	67.4

In comparing Tables 3 and 5, it is seen that South-South trade in machinery and transport equipment is distributed more unevenly among the exporting regions, in favour of the Middle East and South and Southeast Asia, than total South-South trade in manufactures. These substantial differences in the contribution of the various regions to South-South trade in machinery and transport equipment must be kept in mind when Table 6 is examined. This table provides insight into changes in the intra-regional component of South-South in machinery and transport equipment from 1970 onwards. During the period 1970-85, the exporters

from Developing America, in particular, diverted their South-South export of machinery and transport equipment from their own region to Africa and the Middle East. The rapidly growing exports of machinery and transport equipment from South and Southeast Asia are also ever more sold to the other developing regions. Exporters in the Middle East, by contrast, realize their exports of this product group exclusively on an intra-regional basis. Viewed from the import side, the following two developments stand out. First, the exporters of South and Southeast Asia have captured half the market of Developing America. Second, Developing America has partially made up for its loss of the home market by capturing the African market. Thus, South-South trade in machinery and transport equipment has increasingly become a matter of South and Southeast Asia. The slightly increasing inter-regionalization of this South-South trade flow during the period 1970-85 is also accounted for by this region in particular, followed by Developing America.

#### 7. Composition and Major Exporters of Developing Countries' Exports of Machinery and Transport Equipment

The product group machinery and transport equipment comprises various types of capital goods. For the years 1970 and 1982-83, Table 7 provides a breakdown of South exports of machinery and transport equipment to the world at the 3-digit SITC level. Telecommunications apparatus, electrical machinery and road motor vehicles were the leading exportables in 1970. During the period from 1970 to 1982-83, the export shares of telecommunications apparatus and electrical machinery even slightly increased, whereas the export of road motor vehicles lost ground. Other exportables that gained in importance are electric power machinery, office machines and domestic electrical equipment, but most notably ships and boats. By 1982-83, developing countries' exports of capital goods were for 57.3 per cent accounted for by the following four product groups, in descending order of importance: telecommunications apparatus, other electrical machinery, ships and boats, and road motor vehicles.

South exports of capital goods originate from only a limited number of countries. As Table 8 shows, the nine largest exporters among the developing countries of capital goods are the same for 1970 and for 1980-84, albeit in very different positions. Taiwan has been added pro memoria, as it is well-known that this island, not specified in UN statistics, is one of the major exporters of manufactures among the developing countries. Exports of machinery and transport equipment were more concentrated in 1970 than in the early 1980s. In 1970, the nine largest exporters accounted for almost 90 per cent of the value of these exports. The share of the three largest exporters, Yugoslavia, Hong Kong and Singapore, was 55.3 per cent in that year. The combined market share of the nine exporters was reduced to about 75 per cent during the early 1980s, and the three largest exporters among them, South Korea, Singapore and Hong Kong, accounted for 45.4 per cent of South exports of capital goods. At distant, South Korea and Singapore have become the two major exporters during the period under review,

Table 6 Direction of South-South Trade in Machinery and Transport Equipment by Region as Share of a Region's Total South-South Exports and Imports of Machinery and Transport Equipment, 1970-85

To From	Developing America			Africa			Middle East			South and Southeast Asia		
	'70	'80	'85	'70	'80	'85	'70	'80	'85	'70	'80	'85
	<u>Exports</u>											
Developing America	96.3	79.7	53.5	2.1	13.3	21.5	-	4.0	20.3	1.6	2.9	4.7
Africa	-	4.0	0.6	81.3	87.9	92.1	18.8	6.1	4.5	-	2.0	2.8
Middle East	-	0.1	1.2	8.5	10.3	8.9	87.2	87.4	86.0	4.3	2.2	4.9
South and Southeast Asia	4.2	9.0	11.7	15.5	22.5	8.9	6.0	12.0	9.5	74.2	64.7	69.9
	<u>Imports</u>											
Developing America	92.4	78.3	54.4	4.4	24.2	30.9	-	5.6	16.4	1.1	1.8	1.7
Africa	-	0.1	-	28.9	4.8	9.9	8.7	0.3	0.3	-	-	0.1
Middle East	-	0.1	0.1	4.4	8.2	10.0	59.4	53.5	54.1	0.7	0.6	1.4
South and Southeast Asia	7.6	21.6	45.5	62.2	62.8	49.2	31.9	40.6	29.3	98.2	97.6	96.8

Table 7 Product Composition at the 3-digit SITC Level of Developing Countries' Exports of Machinery and Transport Equipment, 1970 and 1982-83 (percentage shares).

SITC group	<u>1970</u>	<u>1982-83</u>
724 Telecommunications	17.6	18.2
729 Other electrical machinery	15.6	17.3
735 Ships and boats	9.9	13.3
732 Road motor vehicles	11.1	8.5
722 Electric power machinery	5.5	7.9
719 Non-electric machines n.e.s.	10.0	7.7
714 Office machines	5.6	5.9
711 Non-electric power machinery	4.8	4.5
725 Domestic electrical equipment	2.0	3.8
718 Machines for special industries	4.1	2.7
723 Electric distributing equipment	3.5	2.2
734 Aircraft	2.6	2.0
733 Non-motor road vehicles	1.6	1.4
731 Railway vehicles	0.9	1.4
715 Metalworking machinery	1.4	1.3
717 Textile, leather machinery	2.2	1.1
712 Agricultural machinery	1.3	0.9
726 Medical apparatus	0.1	0.1
Total Exports of SITC 7 (10 <sup>6</sup> US\$)	1,797.3	38,034.0

Source: UNCTAD, Handbook of International Trade and Development Statistics, 1986 Supplement, UN, New York, 1987, Table 4.3

whereas the rise of Malaysia is marked as well. Brazil more than succeeded in keeping its market share. The remaining five countries all lost ground as exporters of capital goods. Generally, a shift can be observed in the regional concentration of South capital goods exports from Developing America to Southeast Asia.

#### 8. Changes in the Composition and Direction of South-South Trade in Capital Goods: Major Product Groups and Exporters

It was seen in the foregoing sections that a major part of the increase in the export of manufactures from the South was accounted for by increased trade in capital goods, both with the South and the North. It was also noted that this trade flow from the South is dominated by only four product groups and that the bulk of the exports originates in only nine countries. The South-South and the South-North export flows of capital goods, broken down in non-electrical machinery, office machines, telecommunications equipment, other electrical machinery,

Table 8 Market Shares of the Largest Exporters of Machinery and Transport Equipment (SITC 7) among Developing Countries, 1970-1984 (percentages)

	<u>1970</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
Argentina	4.6	1.9	1.4	1.6	0.7	0.8
Brazil	6.8	12.3	12.6	10.8	7.8	n.a.
Hong Kong	16.8	8.7	8.5	7.4	7.9	8.4
India	6.6	2.3	2.1	n.a.	n.a.	n.a.
Malaysia	2.6	5.4	4.5	5.8	6.2	n.a.
Mexico	9.0	2.4	1.6	2.4	3.7	3.7
Singapore	11.9	18.5	17.3	20.3	17.5	15.9
South Korea	4.2	12.5	14.8	18.9	20.2	21.1
Taiwan	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.
Yugoslavia	26.6	9.2	9.8	10.4	7.9	6.5

Total exports  
of Developing  
Countries  
(10<sup>6</sup> US\$)

1,431	27,541	31,680	32,019	39,050	48,812
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Source: UNCTAD, Handbook of International Trade and Development Statistics, 1986 Supplement, UN, New York, 1987, Tables 4.1 and A.10.

road vehicles; and ships and boats, from eight developing countries (Yugoslavia is excluded) will therefore be examined in more detail in this section. The definitions in SITC terms of the product groups as distinguished here are given in the Appendix. Per country and per product group, Tables 9-16 summarize the relevant trade flow data for 1970 and the latest year available.

Confining ourselves first to the upper parts of the country tables where the direction of total machinery and transport equipment exports is shown, it is immediately clear that the relative importance of either the North or the South as market outlet for these exports varies widely per country. Wide differences are also observed in the reliance on regional markets. Moreover, some countries experienced marked changes in the direction in their machinery and transport equipment exports during the period under review.

As shown in Figure 7, the intra-South share of South total exports of manufactures fluctuated between 30 and 40 per cent during the early 1980s. As regards exports of machinery and transport equipment from the eight sample countries, Argentina, Brazil and India show a relatively high reliance on South markets in the 1980s, whereas the share of these exports from Hong Kong, Malaysia, Mexico, Singapore and South Korea that went to other developing countries was substantially lower. The

extremes range between a 74.0 per cent share of India's exports of capital goods that went to the South and values of 26.3, 22.7 and 9.9 per cent for the corresponding shares of Malaysia, Mexico and Hong Kong. It should be noted that Hong Kong substantially increased its exports of machinery and transport equipment to China in recent years, reaching a share of almost 20 per cent by 1985. In the trade statistics, however, China is headed under the country group of centrally planned economies.

As with South-South trade in general, the intra-regional component in South-South trade in machinery and transport equipment is also relatively high, although the differences between the eight countries are too substantial to be overlooked. It is remarkable to find that the countries for which machinery and transport equipment exports are directed more towards other developing countries than to the North, also carry out this trade relatively more on an interregional basis. The two extremes in this respect are India and Malaysia. By 1980, no less than about three-quarters of India's export of machinery and transport equipment were directed towards other developing countries, of which about 37 per cent went outside the region, most notably to Africa. If the Middle East is considered as a separate region, this interregional component increases even to about 60 per cent. Malaysian export of machinery and transport equipment in 1982, by contrast, went for about one quarter to other developing countries and this export showed an almost exclusive reliance on intra-regional markets.

Changes in the market orientation of these eight countries' exports of machinery and transport equipment are yet another factor in which differences arise. During the period under review, Hong Kong, India, Mexico and South Korea reduced their reliance on the markets of developed countries, whereas an opposite trend is observed in the export orientation of Argentina, Brazil, Singapore and, most strongly so, Malaysia. Likewise, the interregional component in South-South exports from the three sample countries in Developing America, as well as from Singapore and South Korea, expanded faster than the intra-regional component. By contrast, Hong Kong, India and Malaysia increased the intra-regional trade in their total exports of machinery and transport equipment to the South.

A closer examination, at the level of the distinguished product groups, of the above-depicted trends in exports of capital goods reveals three noteworthy findings. First, exports of non-electrical machinery, inclusive of the more traditional items of the product group office machines, such as typewriters, are generally relatively more directed towards other developing countries than to the North. This relatively high South orientation is especially true of exports of the product group machines for special industries. However, except in Hong Kong and India, the share of non-electrical machinery exclusive of office machines in total exports of machinery and transport equipment decreased in the sample countries during the period under review. Second, those countries which, during the period under review, have specialized in the production and export of telecommunications equipment and other electrical machinery generally increased their



reliance on the markets of the North, and as far as this trade is directed to the South, it is carried out on an intra-regional basis to a relatively large extent. A similar trend is observed for exports of the more advanced items of the product group office machines, such as automatic data processing equipment and parts and accessories thereof. Third, those countries which, on the contrary, increased their production and export of transport equipment generally reduced their reliance on the markets of both the North and their regional partners. This development is especially observed for the export of ships and boats from the eight sample countries.

The widely divergent trends in the directions of exports of capital goods from the sample countries become more comprehensible if these three underlying trends are considered. Thus, exports of capital goods in five out of the eight sample countries, viz. Argentina, Brazil, Mexico, India and South Korea, largely consist of non-electrical machinery and transport equipment: road vehicles and/or ships and boats. Mexico, India and South Korea expanded their South-South trade, and the interregional component thereof, faster than their South-North trade in machinery and transport equipment. Mexico's exports of telecommunications equipment, other electrical machinery and office machines, largely typewriters, show in this connection a deviating market orientation, on the understanding that a relatively large share of these exports goes to other developing countries. The increase in South-North orientation of Argentina's and Brazil's exports of capital goods, which resulted notwithstanding these countries' specialization in transport equipment, is due to a shift in market orientation from the South to the North of their exports of telecommunications equipment, other electrical machinery and office machines. As regards office machines' exports, this shift is for both countries explained by a changing composition in favour of automatic data processing items. It is remarkable to find that the South-South component of these exports is directed to the Asian market to a relatively large extent.

Two of the three remaining sample countries, Malaysia and Singapore, fit in with above second finding: a clear specialization in telecommunications equipment and other electrical machinery, and as regards Singapore also in advanced office machine items, and a Northern and intra-regional bias in the direction of their exports. Only Hong Kong's exports of capital goods, which is for over 40 per cent accounted for by telecommunications equipment and other electrical machinery, show a deviating trend: both the North and the South have become of lesser importance as export market, due to the recent opening up of trade with China.

The three above-treated underlying trends in market orientation of different categories of capital goods could be transposed to the level of differences in production characteristics. Exports from the more traditional segments of the capital goods sector in developing countries find their market outlet in other developing countries to a relatively large extent, whereas exports from the more advanced segments are predominantly directed towards developed market economies. The former type of export production originates in the import-

substitution sector in developing countries. It can be seen as the result of a change-over from import substitution to manufactured export expansion. Production in the South of the latter type of exports is, per country to a varying degree, induced by the process of international relocation of industrial production. This process is based on foreign investors, or subcontractors for foreign companies, in developing countries mainly producing standardized electronics and electronic components and parts for developed economies. This export production, usually located in so called export-processing free zones, is characterized by labour-intensive, low-wage and skill-intensive labour-value-added processing activities. The Asian developing countries, in particular, have been successful in expanding this specific type of manufactured export production, given the large labour cost advantage of these countries, at least during the 1970s (Verbruggen, 1987, Chapters 11-17). In the 1980s, a number of Asian newly industrializing countries, most notably Singapore, South Korea, Hong Kong and Taiwan, are adjusting to a situation of relative labour scarcity and rising wages by upgrading and diversifying their manufactured exports. Capital goods receive special attention in these policies.

To what extent do the above trends in exports of capital goods from the South meet the aims of the proponents of intensified South-South trade? Both Nugent (Nugent, 1985) and Lall (Lall, 1985) argue that intensified South-South co-operation and trade in capital goods would appear especially promising for strengthening and broadening the process of industrial development in the South. By embarking on a process of import substitution for capital goods in the South, the capital goods sector is expected to act as a generator and transmitter of skills and technology among developing countries. This expectation is warranted by studies indicating that the South-South trade flow in capital goods embodies greater skills and technology than the South-North trade flow. In addition, the more advanced developing countries are expected to provide technologies and products more appropriate to the relative factor endowments and small-scale conditions of developing countries. The learning-by-doing benefits of capital goods production in the South are seen as particularly important.

The trends in South capital goods trade depicted in this study show that non-electric machinery (machines for special industries in particular), the traditional office machine items, road vehicles, and ships and boats best come up to the expectations of intensified South-South trade. Unfortunately, South-South trade in these product groups - ships and boats clearly being a positive exception - could not keep pace with the rapid increase in exports of electrical machinery from the South since 1970.

Table 9 Argentina's Composition and Direction of Exports of SITC 7, Machinery and Transport Equipment, 1970 and 1983 (percentage shares)

	<u>1970</u>	<u>1983</u>
<u>Total SITC 7</u>		
World	100.0	100.0
North	22.9	46.6
South	76.7	53.3
- Developing America	97.4	74.0
- Africa	2.0	7.2
- Asia	0.6	18.2
<u>Non-electric machinery, excl. office machines</u>		
Share in SITC 7	41.6	27.1
North	16.7	26.1
South	83.3	73.9
- Developing America	95.4	92.8
- Africa	4.4	2.2
- Asia	0.2	4.9
<u>Office machines</u>		
Share in SITC 7	30.8	28.2
North	47.0	89.4
South	52.9	10.5
- Developing America	98.1	44.9
- Africa	-	1.4
- Asia	1.6	53.2
<u>Telecommunications equipment</u>		
Share in SITC 7	1.8	3.6
North	-	59.8
South	98.3	40.2
- Developing America	98.1	88.3
- Africa	-	-
- Asia	-	-
<u>Other electrical machinery</u>		
Share in SITC 7	4.2	4.0
North	9.6	43.7
South	90.4	56.3
- Developing America	100.0	91.8
- Africa	-	1.3
- Asia	-	6.9
<u>Road Vehicles</u>		
Share in SITC 7	14.9	25.0
North	6.1	38.1
South	91.5	61.8
- Developing America	100.0	83.9
- Africa	-	16.0
- Asia	-	-
<u>Ships and boats</u>		
Share in SITC 7	-	8.5
North	-	4.5
South	-	95.5
- Developing America	-	2.6
- Africa	-	8.2
- Asia	-	89.3

Table 10 Brazil's Composition and Direction of Exports of SITC 7, Machinery and Transport Equipment, 1970 and 1982 (percentage shares)

	<u>1970</u>	<u>1982</u>
<u>Total SITC 7</u>		
World	100.0	100.0
North	30.1	44.5
South	69.9	55.4
- Developing America	95.7	61.5
- Africa	0.8	20.3
- Asia	3.5	18.0
<u>Non-electric machinery, excl. office machines</u>		
Share in SITC 7	36.8	31.0
North	14.9	45.7
South	85.1	54.7
- Developing America	97.9	67.1
- Africa	0.7	19.9
- Asia	1.5	12.9
<u>Office machines</u>		
Share in SITC 7	29.0	7.8
North	45.3	57.2
South	54.7	41.0
- Developing America	99.3	52.1
- Africa	-	3.8
- Asia	-	43.9
<u>Telecommunications equipment</u>		
Share in SITC 7	5.3	5.2
North	17.4	64.9
South	82.6	35.1
- Developing America	96.0	92.6
- Africa	2.6	2.9
- Asia	-	4.5
<u>Other electrical machinery</u>		
Share in SITC 7	7.5	4.7
North	19.4	69.3
South	80.6	30.6
- Developing America	99.8	87.7
- Africa	-	5.2
- Asia	-	7.1
<u>Road Vehicles</u>		
Share in SITC 7	9.8	32.6
North	46.5	42.5
South	53.5	57.5
- Developing America	99.4	62.7
- Africa	-	25.0
- Asia	-	12.3
<u>Ships and boats</u>		
Share in SITC 7	4.6	9.3
North	51.9	11.7
South	48.1	88.3
- Developing America	21.3	36.1
- Africa	-	26.2
- Asia	78.7	37.6

Table 11 Hong Kong's Composition and Direction of Exports of SITC 7, Machinery and Transport Equipment, 1970 and 1985 (percentage shares)

	<u>1970</u>	<u>1985</u>
<u>Total SITC 7</u>		
World	100.0	100.0
North	83.8	70.6
South	16.2	9.9
- Developing America	15.5	12.0
- Africa	14.7	6.9
- Asia	67.0	80.7
<u>Non-electric machinery, excl. office machines</u>		
Share in SITC 7	4.9	8.4
North	10.3	36.0
South	89.7	17.9
- Developing America	4.3	8.9
- Africa	22.9	10.5
- Asia	71.6	80.0
<u>Office machines</u>		
Share in SITC 7	1.5	24.4
North	100.0	77.1
South	-	7.5
- Developing America	-	2.2
- Africa	-	1.0
- Asia	-	96.4
<u>Telecommunications equipment</u>		
Share in SITC 7	43.0	31.5
North	88.6	65.1
South	11.4	9.1
- Developing America	35.8	29.3
- Africa	20.9	8.4
- Asia	42.5	61.9
<u>Other electrical machinery</u>		
Share in SITC 7	42.9	9.6
North	90.4	73.2
South	9.6	14.6
- Developing America	3.4	2.9
- Africa	5.9	1.1
- Asia	87.7	95.9
<u>Road Vehicles</u>		
Share in SITC 7	-	0.1
North	-	81.5
South	-	9.9
- Developing America	-	-
- Africa	-	-
- Asia	-	80.2
<u>Ships and boats</u>		
Share in SITC 7	4.8	0.4
North	77.4	84.9
South	22.6	10.0
- Developing America	-	-
- Africa	-	43.6
- Asia	78.2	56.4

Table 12 India's Composition and Direction of Exports of SITC 7, Machinery and Transport Equipment, 1970 and 1980 (percentage shares)

	<u>1970</u>	<u>1980</u>
<u>Total SITC 7</u>		
World	100.0	100.0
North	19.6	13.6
South	75.7	74.0
- Developing America	0.6	0.9
- Africa	54.1	36.4
- Asia	45.2	62.7
<u>Non-electric machinery, excl. office machines</u>		
Share in SITC 7	36.1	40.7
North	22.7	16.8
South	75.4	76.9
- Developing America	0.6	0.8
- Africa	64.2	39.5
- Asia	35.2	59.6
<u>Office machines</u>		
Share in SITC 7	2.8	0.3
North	62.2	39.6
South	34.1	58.4
- Developing America	-	-
- Africa	-	-
- Asia	95.6	91.7
<u>Telecommunications equipment</u>		
Share in SITC 7	4.1	1.7
North	23.7	22.4
South	75.5	68.7
- Developing America	-	3.4
- Africa	83.8	33.7
- Asia	15.9	62.7
<u>Other electrical machinery</u>		
Share in SITC 7	5.3	7.0
North	21.2	17.4
South	62.1	40.1
- Developing America	-	-
- Africa	50.0	37.0
- Asia	49.7	62.6
<u>Road Vehicles</u>		
Share in SITC 7	34.5	33.5
North	15.1	9.3
South	84.3	89.9
- Developing America	-	0.9
- Africa	55.7	33.5
- Asia	44.1	65.5
<u>Ships and boats</u>		
Share in SITC 7	-	0.3
North	-	23.6
South	-	71.2
- Developing America	-	-
- Africa	-	-
- Asia	-	98.3

Table 13 Malaysia's Composition and Direction of Exports of SITC 7, Machinery and Transport Equipment, 1971 and 1982 (percentage shares)

	<u>1971</u>	<u>1982</u>
<u>Total SITC 7</u>		
World	100.0	100.0
North	4.3	73.6
South	95.6	26.3
- Developing America	-	0.5
- Africa	2.4	0.8
- Asia	96.3	98.3
<u>Non-electric machinery, excl. office machines</u>		
Share in SITC 7	44.2	9.4
North	3.4	41.5
South	96.7	57.9
- Developing America	-	2.8
- Africa	3.5	2.8
- Asia	95.0	94.1
<u>Office machines</u>		
Share in SITC 7	1.3	0.3
North	-	41.6
South	96.0	58.4
- Developing America	-	-
- Africa	-	-
- Asia	100.0	99.9
<u>Telecommunications equipment</u>		
Share in SITC 7	3.7	8.2
North	-	76.6
South	93.1	23.2
- Developing America	-	0.6
- Africa	-	1.1
- Asia	99.9	98.2
<u>Other electrical machinery</u>		
Share in SITC 7	4.8	74.3
North	-	79.0
South	95.5	21.0
- Developing America	-	0.2
- Africa	-	-
- Asia	96.0	99.8
<u>Road Vehicles</u>		
Share in SITC 7	29.7	0.8
North	3.8	13.1
South	96.1	86.6
- Developing America	-	-
- Africa	-	-
- Asia	98.5	99.3
<u>Ships and boats</u>		
Share in SITC 7	0.7	0.3
North	-	2.4
South	100.0	97.6
- Developing America	-	-
- Africa	-	-
- Asia	100.0	100.0

Table 14 Mexico's Composition and Direction of Exports of SITC 7, Machinery and Transport Equipment, 1970 and 1979 (percentage shares)

	<u>1970</u>	<u>1979</u>
<u>Total SITC 7</u>		
World	100.0	100.0
North	79.2	77.1
South	20.8	22.7
- Developing America	99.6	92.6
- Africa	-	0.1
- Asia	-	6.9
<u>Non-electric machinery, excl. office machines</u>		
Share in SITC 7	36.7	27.4
North	61.9	75.8
South	38.0	24.2
- Developing America	99.8	96.2
- Africa	-	0.4
- Asia	-	3.4
<u>Office machines</u>		
Share in SITC 7	2.1	3.5
North	4.1	47.9
South	95.9	47.9
- Developing America	99.7	70.7
- Africa	-	-
- Asia	-	29.1
<u>Telecommunications equipment</u>		
Share in SITC 7	18.9	0.8
North	91.6	45.2
South	8.4	54.8
- Developing America	99.8	99.9
- Africa	-	-
- Asia	-	-
<u>Other electrical machinery</u>		
Share in SITC 7	1.6	7.7
North	69.7	30.5
South	30.3	69.5
- Developing America	96.7	99.3
- Africa	-	-
- Asia	-	0.5
<u>Road Vehicles</u>		
Share in SITC 7	12.9	44.3
North	92.0	86.3
South	7.2	13.6
- Developing America	99.9	96.2
- Africa	-	-
- Asia	-	3.7
<u>Ships and boats</u>		
Share in SITC 7	1.0	0.2
North	29.9	-
South	70.2	95.7
- Developing America	100.0	100.0
- Africa	-	-
- Asia	-	-



Table 15 Singapore's Composition and Direction of Exports of SITC 7, Machinery and Transport Equipment, 1970 and 1985 (percentage shares)

	<u>1970</u>	<u>1985</u>
<u>Total SITC 7</u>		
World	100.0	100.0
North	31.7	63.8
South	68.3	34.7
- Developing America	1.2	5.5
- Africa	3.2	3.1
- Asia	94.8	90.6
<u>Non-electric machinery, excl. office machines</u>		
Share in SITC 7	28.6	18.1
North	4.8	35.1
South	95.2	62.3
- Developing America	-	0.4
- Africa	0.5	4.0
- Asia	98.2	94.0
<u>Office machines</u>		
Share in SITC 7	7.8	18.4
North	83.7	86.7
South	15.9	12.4
- Developing America	-	4.2
- Africa	-	0.3
- Asia	99.8	95.3
<u>Telecommunications equipment</u>		
Share in SITC 7	6.9	19.0
North	54.3	70.0
South	45.6	26.5
- Developing America	-	4.0
- Africa	-	4.8
- Asia	96.5	90.7
<u>Other electrical machinery</u>		
Share in SITC 7	24.9	20.9
North	63.4	58.4
South	36.6	41.3
- Developing America	7.1	0.8
- Africa	20.8	1.5
- Asia	71.6	97.4
<u>Road Vehicles</u>		
Share in SITC 7	23.5	2.0
North	5.1	22.3
South	94.9	75.9
- Developing America	-	0.1
- Africa	-	4.1
- Asia	99.0	94.9
<u>Ships and boats</u>		
Share in SITC 7	3.0	2.6
North	47.8	27.1
South	52.2	70.0
- Developing America	8.3	61.7
- Africa	-	2.5
- Asia	91.5	34.9

Table 16 South Korea's Composition and Direction of Exports of SITC 7, Machinery and Transport Equipment, 1970 and 1985 (percentage shares)

	<u>1970</u>	<u>1985</u>
<u>Total SITC 7</u>		
World	100.0	100.0
North	86.0	65.0
South	14.0	31.7
- Developing America	-	22.6
- Africa	2.0	17.0
- Asia	97.3	60.3
<u>Non-electric machinery, excl. office machines</u>		
Share in SITC 7	7.9	5.3
North	84.0	59.3
South	16.0	35.6
- Developing America	-	5.4
- Africa	15.0	11.0
- Asia	84.5	83.1
<u>Office machines</u>		
Share in SITC 7	5.6	5.2
North	99.9	94.0
South	-	5.9
- Developing America	-	3.2
- Africa	-	2.7
- Asia	-	94.0
<u>Telecommunications equipment</u>		
Share in SITC 7	9.7	17.3
North	92.7	85.7
South	7.3	13.4
- Developing America	-	28.8
- Africa	-	4.8
- Asia	96.7	66.1
<u>Other electrical machinery</u>		
Share in SITC 7	54.9	11.6
North	82.3	77.4
South	17.7	22.2
- Developing America	-	0.8
- Africa	-	1.5
- Asia	98.9	97.5
<u>Road Vehicles</u>		
Share in SITC 7	0.5	8.5
North	44.3	88.2
South	55.9	8.5
- Developing America	-	17.5
- Africa	-	18.0
- Asia	97.4	62.9
<u>Ships and boats</u>		
Share in SITC 7	4.2	44.3
North	82.4	45.1
South	17.6	49.6
- Developing America	-	28.1
- Africa	-	21.8
- Asia	100.0	50.1

## 9. Summary and Conclusions

Analysis of the patterns of South-South trade indicates that from the early 1970s onwards there were marked changes in relative importance, in direction as well as in product composition of this trade as compared to the postwar period up to 1970. First, notwithstanding an undeniably cyclical pattern that can be discerned over time, the increases in the relative importance of both South-South and South-North trade flows, exclusive of fuels, during the 1970s and early 1980s seem to be structural trend reversals at the expense of the trading position of the North. This recovery of the world trade share of the South is attributable to its increasing role in world trade in manufactures, directed both to the North and the South. Second, in line with the increased participation of the South in world trade, the South redirected its exports from the North to the South. Further market diversification took place in consequence of a slightly increasing inter-regionalization of South-South trade, also with respect to manufactures. Thus, South-South trade in manufactures appeared to be an alternative option for the expansion of trade in manufactures for the developing countries, especially so in recession periods of the North. Third, the major part of the increase in both South-North and South-South trade in manufactures was accounted for by rapidly increasing trade in capital goods. This trade flow from the South is dominated by only a limited number of product groups. Moreover, the bulk of South exports of capital goods originates in only a limited number of newly industrializing developing countries.

A detailed examination of the composition and direction of capital goods exports from the major eight exporting countries revealed that non-electrical machinery (machines for special industries in particular), road vehicles, and ships and boats better meet the objectives of intensified South-South trade than telecommunications equipment and other electrical machinery. The former product groups show a relatively high South orientation and seem to be better suited to diffuse appropriate skills and technology as well as appropriate capital goods among developing countries. With the exception of ships and boats, however, these specific types of capital goods lost ground to electronics in the total export package. A reduction of the dependence on the North for electrical machinery production and exports, and hence on intensified South-South trade in these capital goods, would seem to be not feasible until the major exporters have successfully gone through a process of upgrading of and technology acquisition for this export line of production.

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## APPENDIX

### Definitions

Primary products are defined as SITC 0, 1, 2, 3, 4 and 67 and 68. SITC 3 refers to mineral fuels, lubricants and related materials. Manufactured products are defined as SITC 5 to 8, less 67 and 68.

Non-electrical machinery comprises SITC 71 or SITC Rev.2 71, 72, 73 and 74.

Office machines comprise SITC 714 or SITC Rev.2 75.

Telecommunication equipment comprises SITC 724 or SITC Rev.2 76.

Other electric machinery comprises SITC 729 or SITC Rev.2 776 and 778.

Road vehicles comprise SITC 732 and 733 or SITC Rev.2 78.

Ships and boats comprise SITC 735 or SITC Rev. 793.

### Sources

Unless otherwise indicated, data on world trade flows for 1955-1980 are taken from UNCTAD, Handbook of International Trade and Development Statistics, various issues, Tables A.1 to A.10. For 1985, these data are derived from United Nations, Monthly Bulletin of Statistics, Vol. XLI, No. 5, May 1987, Special Table C. Data on exports of SITC 7, machinery and transport equipment, from the eight sample countries presented in Tables 9-16 are derived from United Nations, Commodity Trade Statistics, Statistical Papers, Series D, various issues.

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