The East Asian experience examined in the two previous chapters offers some interesting lessons on how poor economies dependent on natural resources can make an effective transition to labour-intensive manufacturing, and then to more complex manufacturing industries essential for the attainment of high standards of living. Export orientation has played an important role in this process. In their early stages of industrialization, the first-tier NIEs of the region depended crucially on rapid growth of exports of labour-intensive manufactures to major industrial countries. This allowed them to make full use of their relatively abundant unskilled and semi-skilled labour, and to move to skill- and capital-intensive sectors without the balance-of-payments constraint on capital accumulation and technology transfer. Implementation of such an export-oriented development strategy required considerable government intervention in the context of a long-term industrial strategy.

However, it is often argued that the East Asian experience cannot easily be replicated by other developing countries because of changes that have taken place in the global trading environment. Such arguments generally take two forms. The first is the fallacy of composition argument. This argument maintains that the export success of East Asian countries has been predicated on the failure of other developing countries to compete effectively in the markets of industrialized countries, where the bulk of their exports were directed. With increased emphasis on export-led growth, the question arises of whether a simultaneous export push by a great number of developing countries, including in particular those with large economies, could lead to success for all. On its own, a small developing country can substantially increase its exports to industrialized countries without flooding the market and seriously reducing world prices of the products concerned. However, this may not be true for developing countries as a whole. If all developing countries become successful exporters of labour-intensive manufactures, there is the risk that the terms of trade will decline to such an extent that the benefits of any increased volume of exports may be more than offset by losses due to lower export prices; i.e. risk of “immiserizing growth”, to use the term coined by Bhagwati many years ago. Some studies have even suggested that a decline in the terms of trade is already taking place, without, however, having yet reached the point of immiserizing growth.

Two additional features are pointed to in support of this thesis. The first is that growth in the developed world has slowed down considerably during the past two decades. Whereas the economies of OECD countries grew at an annual rate of almost 5 per cent during 1960-1973, in the past two decades growth has averaged 2.5 per cent. The second is that many labour-intensive industries have already been phased out in the developed
countries as East Asian NIEs have successfully penetrated these markets. Further penetration of these markets may be resisted in view of their growing labour market problems, including widespread unemployment and low wages for unskilled labour.

The second argument against the replicability of the East Asian export success is more straightforward and relates to national policy autonomy. It is often argued that the intensification of multilateral trade disciplines and the extension of their scope as a result of the Uruguay Round prohibit the use of some key policy tools to support and protect industries that were central to the export success of these countries. On this view, the only viable option is to actively and fully integrate into the global economy, rather than try to pursue a more selective strategy along East Asian lines.

This chapter addresses these issues. There can be little doubt that the global economy has been going through significant changes, some of which may pose difficulties for replicating the successful experience of East Asian NIEs. A proper understanding of possible new constraints is indispensable for avoiding pitfalls in the outward-oriented development strategy that is now being adopted by many developing countries. However, this does not mean that the East Asian experience of export-oriented industrialization has no relevance. The very same changes in the global trading environment also offer new opportunities, which were not open to the first-tier NIEs in their initial stages of industrialization. Developing countries today are less dependent on trade with the developed market-economy countries than were the East Asian NIEs by virtue of the fact that the very success of the latter has opened new trading opportunities for other developing countries. More generally, as discussed in chapter I, the increased diversity in their extent of industrialization provides much greater scope for expanding trade among developing countries, providing the potential for a mutually reinforcing process of industrialization along “flying geese” lines. Again, partly because of a more rapid dissemination of technology and greater flexibility and divisibility of production processes, the opportunities to diversify and upgrade are considerably greater today than they were for the first-tier NIEs.

Furthermore, many developing countries differ significantly from the first-tier NIEs in the size of their economies and resource endowments, and these differences themselves call for a different approach to determining how much they need to depend on exports, what kind of industries to promote and what markets to target. As already noted, such differences exist both between the first- and second-tier NIEs and among the first-tier NIEs themselves. For instance, while the initial export industries have generally tended to be labour-intensive, there have been considerable differences in the product composition of such exports. Again, there are considerable differences among the first-tier NIEs in their degree of export orientation.

Together, these factors suggest that there is considerable scope for developing countries to formulate export-oriented industrialization strategies along the lines of East Asian NIEs without necessarily having the same degree of export orientation, exporting the same products, developing the same industries with the same speed or in the same sequence, or targeting the same markets abroad. However, avoiding potential pitfalls in formulating and implementing an export strategy requires constant monitoring of developments in markets for various manufactured products, projecting the possible evolution of global supply and demand, and paying close attention to the trade policies of the major trading countries. For many developing countries this may not be an easy task because of lack of information and resources. It may thus be worthwhile to explore the possibility of establishing, in an international body such as UNCTAD, a marketing-cum-information service (such as exists at the national level in Japan and the Republic of Korea - JETRO and KOTRA), to help developing countries formulate their export strategies so as to minimize the risk of fallacy of composition in labour-intensive manufacturing.

Similarly, while the Uruguay Round obligations reduce policy autonomy in developing countries, they also bring new opportunities. The discipline that the new multilateral trading system imposes on the industrial countries means improved security of market access for the exports of developing countries. Such security is vital for the latter if they are to avoid the fallacy of composition and immiserizing growth in their attempts to achieve export-oriented industrialization. Furthermore, strengthened multilateral disciplines can also encourage a more effective use of policy instruments in developing countries themselves, thereby helping to reduce some of the possible inefficiencies and waste associated with policy intervention.
1. What is meant by replication?

As discussed in previous chapters, the industrialization of East Asia has involved a dynamic interaction of manufactured exports with capital formation and growth whereby export ratios rose along with per capita income. However, this was not a linear process, and the growth of manufactured exports varied over time relative to that of GDP. During the early stages, exports of manufactures were negligible and primary goods accounted for the bulk of exports. Following the successful import-substitution phase, which was particularly short in the first-tier NIEs, labour-intensive manufacturing exports shot up, growing much faster than income. Over time, however, as the share of exports in GDP rose, export expansion slowed down. In the Republic of Korea, for instance, from the mid-1960s to the late 1970s the annual growth of manufactured exports was about twice that of GDP, but in the 1980s exports rose only moderately faster than GDP. The same also holds for Taiwan Province of China. It follows that the replication of the experience of the first-tier NIEs does not necessarily imply that developing countries at different levels of industrialization must have an equivalent export performance.

Moreover, there are considerable differences among the first-tier NIEs with respect to their manufactured exports in relation to GDP. Currently the proportion (excluding re-exports) is around 24 per cent in the Republic of Korea and Hong Kong, 36 per cent in Taiwan Province of China, and 70 per cent in Singapore. Indeed, the evidence clearly shows that the relation between per capita income and the share of manufactured exports in GDP is not linear; that is, two countries at similar levels of per capita income will have different ratios of manufacturing exports to GDP depending on a number of other factors. One such factor is natural resource endowment. As already discussed, the second-tier NIEs have taken much longer to move from resource-based products to labour-intensive manufacturing because of their abundant natural resources. This is likely to be the case for many other developing countries too, including in particular for those LDCs that are rich in natural resources, where priority in export promotion is accorded to diversification into resource-based products.

Another factor influencing export-orientation is population. Experience shows that trade orientation is in general inversely correlated with the size of the country; of two countries with the same per capita income, the country with the larger population can be expected to have smaller trade ratios (i.e. exports per capita or in relation to GDP). As already noted, since the division of labour is limited by the extent of the market, less populous countries need to rely on external markets to ensure an efficient scale of production and benefit from economies of scale. China and India, for example, do not need and will never achieve the same per capita exports or imports as the first-tier NIEs. The degree of export orientation that the latter achieved was attainable (and necessary) because the economies are all relatively small, with a combined population of only 74 million. It is thus not much larger than the population of Guangdong Province of China (around 65 million), and well below that of Indonesia (around 184 million) or the Chang Jian Delta around Shanghai (some 125 million). China alone has a population of 1.2 billion, and developing countries well over 4 billion.

The replication of East Asian industrialization thus implies different degrees of export-orientation in manufactures for different developing countries with different levels of per capita income, industrialization and resource endowment and varying sizes of population. Poor countries will have a low level of manufactured exports relative to GDP, no matter what kind of trade strategy they follow, but those without adequate natural resources would need to raise their export ratio rapidly in order to lift growth while
those rich in natural resources would take much longer to do so. Major exporters of manufactures outside East Asia (such as Brazil, Mexico and Turkey) would need to attain a relatively fast expansion of exports of manufactures in order to be able to sustain a growth of GDP similar to that of East Asian countries, but they do not need the kind of export growth that the first-tier NIEs achieved in their early stages of industrialization. Again, countries such as China and India can be expected to have much smaller per capita exports and export/GDP ratios than the first-tier NIEs because of both the size of their populations and their per capita income levels. Although in recent years in these two countries, and in particular China, exports have grown much faster than GDP, the initial momentum cannot be expected to continue for long and the differential can be expected to diminish over the coming years.

The question of replicability is often posed in terms of expansion of exports to the North. The South needs to export to the North primarily in order to purchase capital and intermediate goods and to gain access to technology. While the first-tier NIEs depended almost entirely on the North in this respect, this need no longer be the case for today’s NIEs because a number of them in East Asia have already established domestic capital goods industries, as have also some other middle-income countries. Similarly, while the North constituted the single most important market for manufactured consumer goods exports of the first-tier NIEs during the past decades, this is no longer true for the developing countries today. Although the markets in the South are still small compared to the North, they are growing much faster. In other words, there is considerable scope for increased trade among developing countries. This trade is likely to be hierarchical, with more advanced countries, notably the first-tier NIEs, exporting capital-intensive and skill-intensive products to less advanced ones in return for products with a high resource or unskilled labour content. The outcome will be a “flying geese” pattern of the type discussed in chapter I above. While the overall pattern and speed of the formation is greatly influenced by the growth and openness of markets in the North, developing countries can also provide considerable autonomous impetus to each other in the process of export-oriented industrialization.

Finally, while many developing countries would have to rely on exports of resource- or labour-intensive manufactures, some, including the non-East Asian major exporters of manufactures, second-tier NIEs and China, have capabilities to upgrade and move to more diversified products. For such products, market opportunities in the North are certainly much greater than for labour-intensive manufactures. These countries, particularly the large ones, can also move into some capital goods industries at earlier stages of development than were able to the first-tier NIEs. To the extent that the more advanced developing countries can produce the capital goods needed by the less advanced ones, the reliance by the South as a whole on exports to the North will be diminished.

2. Recent trends in the terms of trade for manufactures

Since the celebrated works of Prebisch and Singer it has been frequently argued that the terms of trade between primary products and manufactures are on a downward trend. Developing countries wishing to boost their export earnings should, therefore, diversify away from primary products into manufactures, for which income and price elasticities in the advanced economies are relatively high.

Such a diversification has to a considerable extent taken place, and the composition of exports of developing countries has undergone a rapid transformation since the early 1980s. In 1980 exports of commodities (excluding fuel) from developing to developed countries exceeded those of manufactures. As a result of rapid expansion of manufactured exports, by the early 1990s the latter were three times the value of exports of commodities. While this rapid increase in the share of manufactured exports has been partly due to the increase in the prices of manufactured exports of developing countries relative to commodities, much of it was the result of volume changes.

However, recent empirical work has suggested that this expansion of manufactured exports from developing countries has also been associated with a downward trend in their terms of trade. According to a recent estimate based on a time-series regression of the ratio of unit values of manufactured exports from developing and developed countries, over the period 1970-1987, prices of manufactured exports of developing countries fell by an average of 1.0 per cent per annum relative
RATIO OF DEVELOPING COUNTRIES’ EXPORT PRICES OF MANUFACTURES TO DEVELOPED COUNTRIES’ EXPORT PRICES OF MACHINERY AND TRANSPORT EQUIPMENT AND SERVICES, 1970-1991

Per cent

120 — 110 — 100 — 90 — 80 — 70


It has been suggested that this result is biased by the inclusion in the definition of manufactured products used in the estimates (namely, that of the United Nations in its index of unit values of manufactured exports) of non-ferrous metals. These are not normally considered as manufactures in the analysis of trade, because their value-added component is small and variations in their price mainly reflect the behaviour of prices of metalliferous ores. Indeed, if non-ferrous metals are excluded, there is no deterioration in the manufacturing terms of trade of developing countries over the period in question. However, closer examination reveals that while the two series (with and without non-ferrous metals) behave very differently prior to 1975, their movements are virtually identical thereafter. Thus, from 1975 onwards it makes no difference to the outcome whether or not these metals are included in the calculations. This conclusion supported by research based on the use of an alternative export price series for developed countries; namely, export prices of machinery and equipment, and services. This latter measure (see chart 7) indeed indicates a somewhat larger deterioration in the terms of trade of developing countries than the first measure.

These results, however, do not provide an adequate test of the Prebisch-Singer thesis as it applies to manufactures, because they are based on aggregate data for manufactured exports from all developing countries, including both labour- and technology-intensive products, which, according to this thesis, should be subject to different price dynamics. A more recent study attempts to provide an additional empirical test of the deterioration thesis by analysing trends in the manufacturing terms of trade of the various developing regions in their trade with developed countries. These estimates are based on EUROSTAT unit value series for 1979-1994 for trade of the European Union with five groups of countries: least developed countries (LDCs), ACP, Latin American and Mediterranean Basin countries and East Asian NIEs (see table 39).
Table 39

(Percentage change per annum)

<table>
<thead>
<tr>
<th>All developing countries</th>
<th>of which:</th>
<th></th>
<th>LDCs</th>
<th>ACP</th>
<th>Latin America</th>
<th>Mediterr. Basin</th>
<th>East Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit value of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU imports</td>
<td>2.0</td>
<td>-1.3</td>
<td>-0.1</td>
<td>1.3</td>
<td>2.1</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>EU exports</td>
<td>4.2</td>
<td>4.4</td>
<td>4.6</td>
<td>4.9</td>
<td>4.4</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>Terms of trade of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>developing countriesa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net barter terms of trade</td>
<td>-2.2</td>
<td>-5.7</td>
<td>-4.7</td>
<td>-3.6</td>
<td>-2.3</td>
<td>-1.2</td>
<td></td>
</tr>
<tr>
<td>Income terms of trade</td>
<td>5.5</td>
<td>..</td>
<td>0.4</td>
<td>1.0</td>
<td>4.1</td>
<td>6.8</td>
<td></td>
</tr>
</tbody>
</table>


a Excluding China.
b Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Tunisia, Turkey and former Yugoslavia.
c Including also Brunei Darussalam and Macao.

According to this study, while the manufacturing net barter terms of trade (NBTT) of developing countries as a whole with EU declined at an average rate of 2.2 per cent per annum from 1979 to 1994, the increase in export volume was more than enough to offset the price decline, so that the income terms of trade rose strongly. However, there are significant differences among developing countries. The decline in NBTT was largest for LDCs, followed by ACP, Latin American and Mediterranean countries, while it was significantly smaller for the East Asian NIEs. Income terms of trade rose for all groups of countries for which data are available. However, the increase was considerably smaller for the ACP and Latin American countries, where much of the gains from growth of export volumes were wiped out by the deterioration in NBTT. By contrast, in the Mediterranean countries, and even much more in East Asian NIEs, where growth of export volumes was higher and NBTT deterioration lower, the increases in income terms of trade were much greater.

As can be seen from table 39, the main reason for the different rates of decline in NBTT among these groups of countries was differences in the unit values of their exports to EU rather than in the unit values of their imports. The authors explain these differences in terms of the technology intensity of exports of manufactures:

... while for the NICs and ASEAN countries there was a deterioration but at a modest rate of little more than 1 per cent per annum. This is in sharp contrast with relatively high rates of deterioration of the NBTT of the least developed and ACP countries, the two groups with almost certainly the lowest proportion of technology-intensive manufactures and the greatest proportion of unskilled or semi-skilled labour-intensive exports. The Latin American region and the countries of the Mediterranean Basin are intermediate between these two extremes as regards the rate of deterioration in their NBTT and very probably also as regards their general level of scientific and technological development.

This conclusion is largely in accordance with the discussions in the previous chapter. An addi-
tional reason for the relatively sharp decline in the terms of trade of LDCs, ACP and Latin American countries is the debt crisis. For instance, as discussed in TDR 1995, export growth in most of Latin America during the 1980s was driven by the distress caused by the debt crisis. Sharp drops in real wages in manufacturing that were associated with rising exports most probably contributed to declines in the terms of trade by allowing export prices of these products to be reduced without affecting profitability.13

Within East Asia it could also be expected that there would be considerable variation between the first- and second-tier NIEs with respect to the movements in their manufacturing terms of trade with the developed countries since the skill intensity of their exports differs considerably. Information in this regard by country is limited. However, according to one study, while for the Republic of Korea the manufacturing terms of trade moved favourably during the 1980s, the movement was “slightly adverse” for Indonesia.14

Thus, there is evidence that the relative price of manufactured exports from developing countries has fallen during the past two decades alongside the rapid expansion of their volume. However, there appears to be much variation by product category with significant declines for resource- and labour-intensive exports, but little evidence of a downward trend for more skill- and technology-intensive goods.

To what extent the behaviour of the manufacturing terms of trade of developing countries reflects global productivity and price trends is not easy to determine. As discussed in greater detail in TDR 1995, although the findings of a number of studies suggested that world prices of skill-intensive goods have fallen over the past decade or so relative to those of labour-intensive goods, this result appears to be quite sensitive to the products chosen as well as the way in which the skill content of goods is measured. On the other hand, while the evidence suggested a faster productivity growth for skill-intensive manufacturing, it was concluded that the findings for both Europe and the United States that prices of both high-skill and low-skill manufactures had fallen relative to prices of those embodying a medium level of skills could not rule out the predicted price effect of import competition from the South.15 This conclusion is consistent with the independent evidence on manufacturing terms of trade of developing countries examined above.

3. Labour-intensive exports and fallacy of composition

The above findings suggest that either income and price elasticities for the type of manufactures which most developing countries currently export are low or that demand for these exports is constrained by protection in the advanced economies. They also raise the possibility that the prices of labour-intensive manufactured exports could come under significant pressure if supply increases much faster as a result of a widespread attempt to replicate the successful experience of first-tier NIEs.

The question of fallacy of composition with respect to labour-intensive manufactures can be highlighted by examining the case of clothing, which has been the major labour-intensive export item from East Asia. Despite their rapid growth, imports of clothing from developing countries still account for only one third of apparent consumption (gross production plus net imports) of clothing in the North (see table 40). Most clothing expenditure is thus still on domestically produced goods. Under the Multi-Fibre Arrangement (MFA), to be phased out by January 2005, domestic clothing producers in most Northern economies enjoy protection against imports from developing countries. As a result, the output of clothing in some important instances has remained roughly constant over the past 20 years (chart 8), although employment has fallen everywhere because of rising labour productivity. Whilst protection has served to stabilize or contain the fall in domestic output, demand for clothing in these countries has been rising, and a widening gap has emerged between output and expenditure, which has been filled by imports from developing countries.

What would the situation have been like in the absence of protection? Some indication is provided by the example of Sweden, which has virtually eliminated protection for the clothing industry. Over the past 30 years, the output of clothing has dropped by 90 per cent in Sweden. This suggests that under free trade, the production of clothing and similar labour-intensive goods would fall dramatically in most advanced countries, although perhaps not as much as in Sweden, where an egalitarian wages policy has meant very high labour costs for the producers of such goods.

The Agreement on Textiles and Clothing concluded in the Uruguay Round provides for the
phasing out of the MFA, leading to the “integration” of this sector into GATT at the end of a 10-year transition period, when the same rules will apply to trade in textiles and clothing as to trade in other goods. The figures in table 40 show that there may be considerable scope for developing countries to increase their exports of clothing to the North if the Uruguay Round obligations are implemented as envisaged. In the table it is assumed that consumption of domestically produced clothing in the North will fall by 60 per cent by the end of the transition period. It is also assumed that expenditure in the North on clothing will grow by 3.25 per cent per annum during this period.\textsuperscript{16} Thus, developing country exporters are assumed to enjoy the twin gain of increased access to expanding markets in the North and reduced output by their northern rivals. The result of these assumptions is a 200 per cent increase in their clothing exports to the North. Assuming that the MFA is phased out steadily during the 10-year period, this gives an average of about 12 per cent growth per annum in the clothing exports for all developing countries taken together. These figures are obviously very crude and their purpose is purely illustrative. Even so, they do indicate the orders of magnitude involved and the potential for developing countries to increase their exports of clothing provided that they are no longer faced by protectionism. Should growth in the North be faster, these opportunities would certainly be greater.

An average growth of 12 per cent per annum in clothing exports is lower certainly than that achieved by the first-tier NIEs in their earlier stages of their labour-intensive manufacturing export drive. However, as discussed above, not all countries have reached the point of being able to launch a massive export expansion in labour-intensive manufactures; nor do countries at relatively higher levels of industrialization need to rely on such exports to the same degree. Similarly, the first-tier NIEs have already began moving out of such labour-intensive manufacturing, which should create room for other developing countries in the northern markets as well as in their own domestic markets.

There can be little doubt that some large countries, such as China and India, are among those that are likely to constitute the next generation of (third-tier) NIEs with considerable advantage in labour-intensive manufacturing. Exports of these countries to the North are relatively small compared to the potential market there.\textsuperscript{17} Thus, even if these countries could increase their clothing exports by 20 per cent per annum, their combined exports would reach only $175 billion at the end of 10 years, about one-half the estimated market size of the North. This would still leave considerable room for other developing countries to increase their clothing exports to the North (and to the first-tier NIEs) without flooding the markets.

There is thus considerable scope for a new generation of NIEs to expand their exports of clothing to northern markets over the next decade or so without facing a supply-induced terms-of-trade deterioration, provided that protectionist barriers in the North are dismantled. Opening of the northern markets can also be expected to slow or halt the downward trend in the manufacturing terms of trade of countries exporting mainly labour-inten-

### Table 40

| PROSPECTS FOR CLOTHING EXPORTS FROM THE SOUTH TO THE NORTH$^a$  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>1993 (actual)</td>
<td>Post-MFA\textsuperscript{b}</td>
</tr>
<tr>
<td>Apparent consumption in the North</td>
<td>258.0</td>
<td>355.2</td>
</tr>
<tr>
<td>Production in the North</td>
<td>160.3</td>
<td>64.1</td>
</tr>
<tr>
<td>Northern imports from developing countries\textsuperscript{c}</td>
<td>88.8</td>
<td>264.6</td>
</tr>
<tr>
<td>First-tier NIEs</td>
<td>22.7</td>
<td>..</td>
</tr>
<tr>
<td>ASEAN-4</td>
<td>11.5</td>
<td>..</td>
</tr>
<tr>
<td>China</td>
<td>24.8</td>
<td>..</td>
</tr>
<tr>
<td>India</td>
<td>3.4</td>
<td>..</td>
</tr>
<tr>
<td>Other</td>
<td>26.4</td>
<td>..</td>
</tr>
<tr>
<td>Other external imports\textsuperscript{d}</td>
<td>8.9</td>
<td>26.5</td>
</tr>
</tbody>
</table>

\textbf{Source:} UNCTAD secretariat calculations based on UNIDO data and United Nations Commodity Trade Statistics tapes.

\textsuperscript{a} Canada, EU, Japan and United States only.

\textsuperscript{b} Projections for 2006 (in constant 1993 prices), based on the assumptions described in the text.

\textsuperscript{c} Derived from data (f.o.b.) of the exporting countries, including re-exports via Hong Kong.

\textsuperscript{d} Mainly from the transition economies.
sive products. However, such high export growth rates cannot be maintained simultaneously by a large number of countries. Nor could they be maintained indefinitely; for once the market protected by MFA is fully penetrated by southern producers, it will no longer be possible for the South to increase exports faster than the rate of growth of demand in the North (i.e. around 3 per cent per annum).

The above discussion implies that if southern producers were enabled to enter northern markets in products where there is still substantial local production, they would not necessarily encounter the fallacy of composition problem. Under these conditions exports from the South would be highly substitutable for the northern products, and no matter how much the South has already exported, the price elasticity of demand in the North for the exports of developing countries as a whole would remain high. Thus, no matter how much the South exported to the North, only a modest reduction in prices would be required to achieve a further substantial increase in exports.18

However, when southern exports of manufactures expand considerably in products in which there is no significant production in the North and for which demand there is growing slowly due to slow income growth and/or a low income elasticity, the fallacy of composition would be a much more likely result. This can be illustrated with the help of the North-South trade model of UNCTAD cited in note 18. The model is used to simulate the effects of increased exports of labour-intensive manufactures by the South on the terms of trade and incomes. It is assumed that North and South are completely specialized in the skill- and labour-intensive manufactures respectively, so that southern exporters do not compete with the northern producers, that wages are fully flexible in the North and that full employment always prevails. The simulations are carried out by increasing the size (population and employment) of the South by 20 per cent compared to the baseline while keeping the size of the North unchanged. This is equivalent to increasing the supply of labour-intensive exports faster than demand. The result is to lower their prices relative to the prices of north-

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**Chart 8**

**PRODUCTION OF CLOTHING IN SELECTED INDUSTRIAL COUNTRIES, 1960-1994**

*(Index numbers, 1963 = 100)*

Source: UNIDO data base.
ern manufactures, with the extent of the decline depending on their substitutability with skill-intensive manufactures.

The results are summarized in table 41. Export volumes from the South increase by more than 80 per cent, but the terms of trade for their manufactures drop to less than one half of their previous level. Thus, real export earnings of the South (i.e. in terms of the imports they can procure from the North) fall considerably. Similarly, aggregate national income rises much less than population, and hence per capita income declines. In the North, real wages of both unskilled and skilled workers are higher when the South is larger. However, since the model assumes balanced trade between the South and the North, and since the purchasing power of exports of the South declines, the volume of northern exports to the South also declines. Consequently, manufacturing employment as a proportion of the total labour force (and employment) falls in the North.

There can be little doubt that results obtained from such simulations are highly sensitive to the assumptions made with respect to consumption substitution elasticities; with a higher elasticity of substitution, the terms of trade would certainly fall less, and would probably be more than compensated by volume increases. However, these results show that any widespread attempt to increase exports of labour-intensive, low-elasticity manufactures to northern markets may lead to a collapse in their terms of trade with the North. The danger of immiserization is widely recognized in the case of primary products, but it is no less for labour-intensive manufactures.

4. Diversification and market penetration

While fallacy of composition and immiserizing growth are potential dangers for the exporters of labour-intensive manufactures, they are by no means inevitable since there is considerable scope to move to other manufactured exports. A number of manufactures exported by developing countries to the North are produced in much larger quantities in the latter countries; for example, their imports from the South of machinery, wood products, paper and printing materials, chemicals and transport equipment account for only a very small proportion of apparent consumption (see chart 9), even though for some of these products southern exports have been growing very fast, particularly from the first-tier NIEs. Consequently, if a number of relatively large and more advanced developing countries could upgrade and diversify their exports into these products through appropriate industrial policies, the danger could be avoided of an unfavourable turn of the terms of trade through a simultaneous export expansion in labour-intensive manufactures.

Even if demand for manufactures grows only slowly in the North because of slow income growth, southern producers could still expand such skill-intensive exports by replacing northern producers. However, this could entail serious dislocations in the North, and a smooth adjustment would depend on the overall macroeconomic conditions, including their growth and unemployment rates. If adjustment in the North is rendered difficult by sluggish growth and high unemployment, protectionist pressures could mount.

In sum, replicability of the East Asian experience in this sense depends very much on the

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<thead>
<tr>
<th>Table 41</th>
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</table>
| **SIMULATION OF TRADE AND INCOME EFFECTS OF EXPANSION OF LABOUR-INTENSITIVE EXPORTS BY THE SOUTH**  
(Percentage change due to a 20 per cent increase in the size of the South*) |

<table>
<thead>
<tr>
<th>NORTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real wages (unskilled)</td>
</tr>
<tr>
<td>Real wages (skilled)</td>
</tr>
<tr>
<td>Manufacturing employment</td>
</tr>
<tr>
<td>Export volume (good 1)</td>
</tr>
<tr>
<td>Per capita income</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOUTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terms of trade</td>
</tr>
<tr>
<td>Real wages (unskilled)</td>
</tr>
<tr>
<td>Real wages (skilled)</td>
</tr>
<tr>
<td>Export volume (good 2)</td>
</tr>
<tr>
<td>Per capita income</td>
</tr>
</tbody>
</table>

*Please note: Calculations by the UNCTAD secretariat. For the simulation model used see TDR 1995, Annex I to Part Three.  
a I.e. an increase of 20 per cent in population and employment.
success of industrial policies in the South in upgrading and diversifying, and on the success of macroeconomic policies in the North in accelerating growth and reducing unemployment.

In table 42 the consequences are explored for the North of a simultaneous expansion of exports of manufactures by developing countries on the basis of alternative scenarios. In the low growth scenarios, northern demand for manufactures is assumed to grow by 2.5 per cent per annum in real terms over the next decade - i.e. in line with the trend growth rate of the major industrial countries. In the high growth scenario, demand in the North is assumed to grow by 4 per cent per annum. In projecting market penetration by developing countries in the North within the next 10 years on the basis of two alternative scenarios, an estimate is first made for import penetration for 1996.

In both scenarios the growth of manufacturing exports of the first-tier NIEs is assumed to keep pace with the increase in demand in the North. This is a reasonable assumption, given that their exports of manufactures to the North have increased by around 4 per cent per annum since the beginning of the decade. Certainly, this is a considerably lower rate than that achieved during the 1970s and 1980s, but it is consistent with their tendency to supply the northern markets increasingly through FDI, and to expand manufacturing exports to developing countries. In scenario I, it is assumed that ASEAN-4 and China will also maintain the recent growth rates of their manufacturing exports to the North during the next 10 years, at 20 per cent per annum. Other developing countries, on the other hand, including large countries such as India, are assumed to double their export growth rates to the North immediately, maintaining them at 20 per cent per annum. Thus, scenario I assumes that, while the recent pace of manufacturing exports of the East Asian developing countries (first-tier NIEs, ASEAN-4 and China) to the North will continue, other developing countries will significantly increase their rate of export expansion.19

For a number of reasons the increases in market penetration projected in scenario I can be considered to be much higher than is implied by the replication of the East Asian export performance. First, as noted above, many developing countries have not yet reached the stage of indus-
trialization needed to launch a massive expansion of manufactured exports. Second, this projection does not take into account the recent trend in the growth of South-South trade relative to that between North and South. Finally, as discussed above, large countries such as China and India do not need and cannot be expected to maintain such high export growth rates for a long period. Scenario II takes these considerations into account and assumes a growth rate of 15 per cent per annum for the export of manufactures from ASEAN-4, China and other developing countries to the North over the next 10 years.

The results in both scenarios have some common features that are independent of how fast the North grows. In all cases, at the end of the 10 years import penetration in the North by ASEAN-4 will exceed that of the first-tier NIEs, but their per capita exports will still be smaller; the population of ASEAN-4 is about 4.5 times that of the first-tier NIEs, while their manufactured exports to the North are higher by 1.5-2.5 times, depending on the scenario. China will catch up with ASEAN-4 in import penetration in the North, but again its per capita exports will be considerably lower. Similarly, although market penetration by the remaining developing countries will rise at the same rate as for ASEAN-4 and China, average per capita exports for those countries will be considerably less than, and about one-half of, respectively, that of those two regions.

### Table 42

<table>
<thead>
<tr>
<th>Year</th>
<th>All developing countries</th>
<th>of which:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>First-tier NIEs</td>
</tr>
<tr>
<td>1990</td>
<td>3.9</td>
<td>1.8</td>
</tr>
<tr>
<td>1991</td>
<td>4.1</td>
<td>1.8</td>
</tr>
<tr>
<td>1992</td>
<td>4.5</td>
<td>1.8</td>
</tr>
<tr>
<td>1993</td>
<td>5.1</td>
<td>1.8</td>
</tr>
<tr>
<td>1996d</td>
<td>6.6</td>
<td>1.9</td>
</tr>
</tbody>
</table>

#### Projections for 2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Low growth in the North</th>
<th>High growth in the North</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scenario I</td>
<td>Scenario II</td>
</tr>
<tr>
<td>1990-1996</td>
<td>20.7</td>
<td>14.1</td>
</tr>
<tr>
<td></td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>4.8</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>6.8</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>7.2</td>
<td>4.7</td>
</tr>
</tbody>
</table>

#### Source:
See table 40.

a Canada, EU, Japan and United States only.
b Imports of manufactures (SITC 5-8, less 67 and 68) as a percentage of apparent consumption (gross output plus net imports).
c Derived from data (f.o.b.) of the exporting countries, including re-exports via Hong Kong.
d Forecast.
To achieve the average degree of penetration of northern markets envisaged in these scenarios, the South would need to make massive inroads into many sectors at present dominated by northern producers and simultaneously to replace northern producers in sectors such as clothing and household electrical goods, where they still retain a significant presence. However, not all developing countries can be expected to perform equally well in all these areas. For a number of countries, particularly the second-tier NIEs and China, a rapid shift to technology- and skill-intensive products would be necessary to maintain a relatively high rate of growth of manufactured exports. In countries at earlier stages of industrialization, much of the expansion can be expected to take place in traditional labour-intensive manufacturing, replacing exports by more advanced developing countries. In both cases success will continue to depend, as in the East Asian NIEs, on government policy in animating the investment-export nexus.

What does this imply for the North? Taking the low-growth scenario II, the rate of market penetration roughly doubles from an estimated 6.6 per cent in 1996. Such increases are not unprecedented, although in the past they were from relatively low levels (generally under 1 per cent). For instance, import penetration by the developing countries tripled from 1970 to 1980, and then doubled over the following 10 years. Italian and Japanese penetration in the (then) EEC market of six and in the United States showed similar increases during the 1960s and 1970s. Total southern exports, 10 years from now, amounting to 14 per cent of apparent consumption of manufactures in the North, will correspond to less than 6 per cent of northern GDP. In terms of employment, they affect about 3.5 per cent of the total labour force. Moreover, the counterpart to massive imports of manufactured goods from the South would be the export of other types of manufactured goods, particularly capital goods, together with modern services, thereby creating new jobs.

However, such a development would still have major implications for the economic structure of the North, necessitating considerable restructuring of industries and redeployment of labour. Jobs created by increased exports to the South are not always in the same sectors as those lost as a result of increased imports; nor are they necessarily of the same quality. Shortages may occur for skilled labour while the overall demand for unskilled workers will decline as a result of labour-intensive imports from the South. The feasibility of such a structural adjustment in the North would depend to a large extent on macroeconomic circumstances. As discussed in TDR 1995, in an expansionary environment, with high investment and rising output in the North, there would be plenty of new jobs available to replace those destroyed by increased southern penetration in certain sectors, and the structural changes involved could be absorbed fairly smoothly. As may be seen from a comparison of the low- and high-growth scenarios in table 4, faster growth in the North would also imply lower import penetration for any given rate of export expansion by the South. These were indeed the conditions prevailing in the 1960s, when rapid penetration by Japan and Italy in the European and United States markets was not associated with serious labour market problems and protectionist pressures.

Conversely, with the depressed demand conditions and growing labour market problems which have characterized the North over the past 20 years, the scale of import penetration envisaged here could cause serious problems of adjustment, and might trigger an intensification of protectionist pressures. As discussed in greater detail in TDR 1995, unless the twin problems of high unemployment and low wages in the North are tackled, additional hurdles to maintaining present trends towards more open markets could emerge. Thus, whether or not a large number of developing countries can simultaneously replicate the successful export-oriented industrialization experience of the first-tier NIEs will depend very much on the evolution of the global trading system, and particularly on maintaining open markets in the North.

There can be little doubt that if the size of and access to northern markets do not increase rapidly, prospects for developing countries to achieve rapid export-oriented industrialization will be limited. However, with the rapid industrialization already achieved by a number of East Asian countries and other major exporters of manufactures, and the associated increase in South-South trade, the dependence of growth in the South on the North has weakened considerably. Moreover, should the South as a whole find it difficult to raise imports from the North because of the balance-of-payments constraint, it could cut imports unrelated to capital accumulation and growth. The more consumer goods the South imports from the North, the more goods it needs to export, and if that is not possible because of economic conditions and trade policies in the North, the higher imports for consumption.
can only be at the expense of imports for investment. However, unlike most capital goods, most of the consumer goods produced in the North are also produced in the South. Hence it is possible for the South to maintain rising imports of capital goods from the North by increasing its output of mutual trade in consumer goods. In other words, greater South-South cooperation in trade could help overcome the problems associated with inadequate growth of and access to markets in the North.

C. Export promotion after the Uruguay Round

The conclusion of the Uruguay Round and the establishment of the World Trade Organization (WTO) have cast a new light over the experience of East Asia. In many respects the international disciplines consolidate the export-oriented approach adopted by East Asia. But, at the same time, there is concern that the selective promotion of exports pursued by those countries will no longer be a permissible option.

Certainly, the new trading regime under the WTO has reduced the scope for general forms of tariff protection, many trade-related subsidies and performance standards and lax enforcement of intellectual property rights. However, much of the current discussion tends to highlight extremes: on the one hand, it emphasizes the constraints of WTO obligations, while on the other it tends to exaggerate their impact in narrowing the scope for policy options. Policy-makers need to make an objective analysis of the options which remain open to other developing countries for emulating the experience of the East Asian economies.

The Uruguay Round has clearly opened up new export opportunities for developing countries and improved their security of market access, thereby improving on the conditions faced by many East Asian NIEs during their early stages of industrialization. Although the tariff reductions made in some low-skill industries, such as textiles and clothing, that are critical to developing countries were relatively small, the elimination of non-tariff barriers and voluntary export restraints provides some offset. However, the danger of new forms of protectionism in these industries cannot be ruled out. Moreover, while the restrictions built into the various Agreements shorten the time available to policy-makers to enhance the organizational and technological assets of their domestic firms, the disciplines they introduce will help to make for a more purposive and focused pattern of industrial policy in the time allowed, encourage the better provision of traditional public goods needed to compete internationally as well as widen the scope of policies to include measures which can strengthen domestic savings and investment.

Certainly the kind of lengthy protection - which for the automobile industry in the Republic of Korea, for example, lasted three decades - used to promote industrial upgrading in the first-tier NIEs will no longer be possible. However, with respect to infant industry protection, it should be noted that none of the East Asian NIEs ever had resort to the “infant industry” provisions of section C of GATT article XVIII. Section B of that article allows developing countries to apply quantitative restrictions for balance-of-payments reasons. Although the understanding relating to this article strongly discourages resort to quantitative measures and provides for stricter multilateral surveillance, it remains a possibility for developing countries. Moreover, to the extent that tariff rates remain unbound or are bound at levels above currently applied rates, they can be increased to protect “infant industries”.

The Agreement on Subsidies and Countervailing Measures defines “subsidies” for the first time, tightens the disciplines on subsidies, and extends them to all WTO members. It also contains the most important provisions on differential and more favourable treatment, some of which are not subject to any precise limits. For example, the least developed countries, together
with 20 other countries with GDP per capita of less than $1,000, are exempt from the prohibition of export subsidies so long as they retain this status, and are also exempt from thresholds based on shares of world markets for products benefiting from export subsidies. Although specific subsidies (i.e. those limited to certain enterprises and not granted on the basis of objective criteria) are “actionable”, remedies may be applied against actionable subsidies of developing countries only if injury to the domestic industry of another member, serious prejudice to its interests or nullification of concessions can be demonstrated. In addition, there are a set of non-actionable subsidies, including those which are intended to promote basic research, agriculture, and regional development. The last of these played a particularly important role in the first-tier NIEs in supporting efforts at technological development and industrial diversification, including through science parks and special industrial estates. Similar efforts to link infrastructure investment to technological upgrading will remain possible under the current Agreement.

Strictly speaking, the TRIMs Agreement did not modify GATT obligations but simply identified with greater clarity those investment measures which were incompatible with GATT articles. These include local content requirements (which can still be applied by countries invoking article XVIII.B), but leave a wide range of measures untouched. For example, export performance requirements are still permitted (but if they involve payments to exporters, they fall under the disciplines on export subsidies). However, while Governments in East Asia did exact formal agreements from both domestic and foreign firms in these areas, it should be noted that many of the arrangements were of a more informal nature and were mediated through such practices as “administrative guidance” which can act as a powerful constraint over business behaviour. These areas of institution building and reform are critical to strengthening development prospects in many developing countries and to a large extent lie outside WTO jurisdiction.

The General Agreement on Trade in Services involves binding commitments on market access and national treatment only when these have been specifically negotiated on a sectoral and sub-sectoral basis and included in the schedules of commitments. Most of these commitments relate to investment (i.e. “commercial presence”), and market access for foreign service suppliers can be made conditional on access to networks and technology. Perhaps the most dramatic extension of the multilateral trading system was through the TRIPs Agreement, which establishes the basic intellectual property norms of WIPO as multilateral trade obligations. Certain key policy tools, such as compulsory licensing, are still permitted, but are confined to exceptional cases. However, the real impact of the TRIPs Agreement’s will only become evident with the experience of implementation.

In sum, while the WTO multilateral Agreements have reduced the scope of policy options, policy measures comparable to those employed by the East Asian NIEs can still be applied, particularly by the least developed countries. It is also worth noting that in two key sectors, agriculture and textiles, there is still room for selective government intervention by developing countries. Moreover, many of the policies to establish a dynamic profit-investment nexus will not be affected and might be brought into sharper focus. Given that these measures have a considerable influence on exports by promoting technological upgrading, resort to such measures will become increasingly important for developing countries. However, it has to be recognized that many of the important challenges, in such areas as FDI and the transfer of technology, lie ahead.

Lastly and importantly, the WTO Agreement may facilitate efforts by developing countries to strengthen trade and FDI among themselves. Regional integration has been of growing importance in East Asia, in particular through the growing trade and FDI links between the first- and second-tier NIEs. As discussed in the previous chapter, this has not been the outcome of unregulated market forces but very much the outcome of the interaction of industrial policies. More recently, growth triangles in South-East Asia have widened the search for economies of proximity and agglomeration, and more formal regional ties through ASEAN are beginning to receive greater attention. Whether similar arrangements elsewhere would represent obstacles to global integration appears to be a less important question than whether they could stimulate the kind of regional growth pattern that was established in East Asia. In this context, the fact that regional trade and FDI flows have led to closer integration among developing countries does suggest that the kinds of policies that encouraged these links need to be carefully considered by other developing countries as a possible means of intensifying South-South cooperation.

Responding to the New Global Environment


3 The terms “developed market-economy countries” and “North” are used interchangeably in this chapter. It should be noted that the countries composed by this group (see the Explanatory Notes) include certain countries that are industrially less advanced than some of the East Asian NIEs.

4 It is not easy to determine norms for the degree of export orientation needed at each level of income and population to replicate the East Asian export performance. An attempt to do so has been made through a cross-country regression of export/GDP ratios on population and per capita income, but problems of estimation are involved on account of large differences of size among countries. For a similar attempt and the problems involved, see also Cline, *op. cit.*

5 Developing countries that are major exporters of manufactures comprise: Brazil, Hong Kong, Malaysia, Mexico, Republic of Korea, Singapore, Taiwan Province of China, Thailand, Turkey and the former constituent republics of Yugoslavia.


9 On the basis of the United Nations index the regression analysis reveals that the relative price of developing country manufactured exports fell by 0.48 per cent a year during 1975-1993. If non-ferrous metals are excluded, the decline is 0.46 per cent. This is partly because the relative price of non-ferrous metals varied less after 1975, and partly because their relative importance in total manufactured exports from developing countries declined. Whilst in 1970 non-ferrous metals accounted for one quarter of such exports, their share had fallen to 12 per cent by 1975 and is now around 4 per cent. Consequently trends based on regression analysis are dominated by the effects of an unusually large fall in the relative price of non-ferrous metals in the early 1970s, when these metals were of great importance in developing country exports. See P. Minford, J. Riley and E. Nowell, ‘The Elixir of Growth: Trade, Non-traded Goods and Development’, *CEPR Discussion Paper* No.1165, London, May 1995.


12 See *TDR 1995*, table 34.


14 This assumption is in conformity with the income elasticity of demand for these goods in the G-7 countries (estimated at about 1.3 for the G-7 countries for the period 1981-1992) and their trend growth rate of 2.5 per cent. It should be noted that for lack of data, the initial year of the calculations in table 40 does not coincide with the date of entry into force of the Uruguay Round Agreements. Since the purpose is to illustrate rather than to project, no adjustment has been made to account for this difference.

15 The figure in table 40 for exports from China to the North of $24.8 billion is based on imports (c.i.f.) from China as reported by the countries concerned. It is greater than the figure for exports reported by
China because it includes goods exported to and reexported from Hong Kong.

For a model built on such assumptions see W. Martin, “The Fallacy of Composition and Developing Country Exports of Manufactures”, World Economy, Vol. 16, 1993. Similar results were obtained from the simulations of a North-South trade model in TDR 1995 which showed that the opening up of trade between the South (exporting labour-intensive goods) and the North (exporting skill-intensive goods) resulted in considerable gains for the South as well as the North; see TDR 1995, annex I to Part Three. For a more detailed explanation of the model used, see R. Rowthorn, “A simulation model of North-South trade”, UNCTAD Review 1995 (United Nations publication, Sales No. E.95.II.D.23).

These assumed rates of expansion are in terms of current values. In calculating the increases in market penetration in table 42 the real growth rates of demand for manufactures have accordingly been adjusted for price increases, assumed to be 2 per cent per annum, in line with the recent behaviour of the United States consumer price index (excluding services).

In China, for instance, exports have recently grown at more than double the planned GDP growth rate of 8 per cent for the next five years (see Part One, chap. I).

TDR 1995, tables 30 and 32.