Proceedings of the United Nations Conference on TRADE AND DEVELOPMENT

Geneva, 23 March—16 June 1964

Volume IV

TRADE IN MANUFACTURES

UNITED NATIONS

New York, 1964

NOTE

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E/CONF.46/141, Vol. IV

UNITED NATIONS PUBLICATION

Sales No.: 64. II.B. 14

Price: $US 2.00
(or equivalent in other currencies)

Manufactured in the United Kingdom of Great Britain and Northern Ireland

FOREWORD

The United Nations Conference on Trade and Development held in Geneva in the spring of 1964 ushered in a new chapter in the history of United Nations endeavours to accelerate the economic development of developing countries. The Conference has shown the way towards a more just and rational international economic order in which the poor nations, which make up the great majority of mankind, will at long last be able to have an adequate share in the fruits of economic and technological progress.

The Conference has taken the first steps towards the establishment of a new trade policy for development. It has, moreover, recognized that if the acceptance of broad principles and policies for the conduct of international trade is to have real meaning, those principles and policies must be translated into practical action through effective international machinery.

The results of the Conference are an eloquent tribute to the wisdom of its participants. Despite differences of opinion on many problems, they laboured unremittingly to achieve the greatest possible degree of agreement on a number of urgent measures which should be taken by both developed and developing countries. They also decided to study further a number of other measures on which agreement had not yet been reached.

Publication of the Conference proceedings is intended in the first instance to furnish Governments and the General Assembly with a full account of what has been accomplished and what remains to be done. It should also help to meet the wider public interest in questions of development and trade which the Conference has stimulated.

It is my hope that the work begun in Geneva will move forward with vigour and imagination.

U THANT
Secretary-General of the United Nations

PREFATORY NOTE

This eight volume series attempts to provide a self-contained reference to the Proceedings of the United Nations Conference on Trade and Development. Apart from the actual Proceedings of the Conference, and the reports of the five Main Committees, it contains most of the background material prepared for the Conference and other documents referred to in the proceedings. Only papers of a more limited character, such as country studies or special commodity studies have, for technical reasons, been excluded.

The Final Act adopted by the Conference (including the thirty-five Principles and fifty-seven Recommendations) together with the Report of the Conference are published in volume I. This volume also contains a complete check list of all documents used during the Conference.

The report "Towards a New Trade Policy" submitted by the Secretary-General of the Conference prior to the opening of the Conference is published in volume II. This volume also contains the opening addresses delivered by the President of the Swiss Confederation, the Secretary-General of the United Nations and the President and Secretary-General of the Conference together with the opening and closing policy statements of the heads of delegations, and representatives of specialized agencies and GATT, regional economic groupings, non-governmental organizations, etc.

The pre-Conference documents are published in volumes III to VII inclusive. For the sake of convenience the material has been divided into five parts according to the agenda items for the five Main Committees:

First Committee: International commodity problems
Second Committee: Trade in manufactures and semi-manufactures
Third Committee: Improvement of the invisible trade of developing countries and financing for expansion of international trade
Fourth Committee: Institutional arrangements
Fifth Committee: Expansion of international trade and its significance for economic development and implications of regional economic groupings

The allocation of the papers is of necessity somewhat arbitrary since some of these apply to more than one Committee. The texts of the pre-Conference documents are here presented in the form in which they were originally submitted to the Conference, with no editorial changes as regards references. However, where references have been made to documents bearing E/CONF.46... symbols and which have been reprinted in this series, the number of the volume in which they appear has been inserted.

Volume VIII contains those documents of the Conference on Trade and Development which, it was felt, should be published for reference purposes, but which did not fall obviously into any of the categories covered by the other volumes of the series. These documents consist of the reports of the three sessions of the Preparatory Committee, followed by a letter from the Secretary-General of the Conference containing a list of the questions that were brought up in preliminary discussions on the various topics of the agenda, as had been promised at the Third Session of the Preparatory Committee; a number of letters and memoranda concerning some of the other issues raised during the meetings, five draft recommendations which could not be discussed for lack of time, but which the Conference felt were of sufficient interest to warrant their transmission to the "continuing machinery", the relevant extract from a booklet published by the FAO which is now difficult to obtain but which was frequently referred to during the Conference, memoranda from two of the non-governmental organizations and finally the list of members of delegations attending the Conference, of observers sent by various organizations, and also of the secretariat of the Conference.

The titles of the eight volumes of the series are as follows:

I. Final Act and Report
II. Policy statements
III. Commodity trade
IV. Trade in manufactures
V. Financing and invisibles
Institutional arrangements
VI. Trade expansion
Part 1. Regional groupings
VII. Trade expansion
Part 2. Regional groupings
VIII. Miscellaneous papers

EXPLANATORY NOTE

The following symbols have been used in the tables throughout the series:

Three dots (...) in some studies or two dots (..) in others indicate that data are not available or are not separately reported.

A dash (—) indicates that the amount is nil or negligible.

A blank in a table indicates that the item is not applicable.

A minus sign (—) indicates a deficit or decrease, except as indicated.

A full stop (.) is used to indicate decimals.

A slash (/) indicates a crop year or financial year, e.g., 1960/61

Spaces are used in the tables to distinguish thousands and millions.

Use of a hyphen (-) between dates representing years, e.g., 1961-1963, signifies the full period involved, including the beginning and end years.

Reference to "tons" indicates metric tons, and to "dollars" United States dollars, unless otherwise stated.

The term "billion" signifies a thousand million.

Annual rates of growth or change, unless otherwise stated, refer to annual compound rates.

Details and percentages in tables do not necessarily add to totals, because of rounding.

Certain abbreviations have been used:

AID	Agency for International Development (United States).
CICT	Commission on International Commodity Trade.
CMEA	Council of Mutual Economic Assistance.
DAC	Development Assistance Committee (of the Organization for Economic Co-operation and Development).
EDF	European Development Fund (of the European Economic Community).
EEC	European Economic Community.
EFTA	European Free Trade Association.
EPTA	Expanded Programme of Technical Assistance (of the United Nations).
FAO	Food and Agriculture Organization of the United Nations.
GATT	General Agreement on Tariffs and Trade.
IBRD	International Bank for Reconstruction and Development.
ICCICA	Interim Co-ordinating Committee for International Commodity Arrangements.
ICICI	Industrial Credit and Investment Corporation of India.
IDA	International Development Association.
IDB	Inter-American Development Bank.
IFC	International Finance Corporation.
OAS	Organization of American States.
OECD	Organization for Economic Co-operation and Development.
OEEC	Organization for European Economic Co-operation.
OPEC	Organization of Petroleum Exporting Countries.
SITC	Standard International Trade Classification.
UNICEF	United Nations International Children's Emergency Fund.
UNRWA	United Nations Relief and Works Agency for Palestine Refugees.
UNSF	United Nations Special Fund.

"Rhodesia and Nyasaland" stands for the Federation of Rhodesia and Nyasaland.

The Republic of South Africa is so designated even where the material covers the period prior to 31 May 1961, when the country was known as the Union of South Africa.

Where statistical presentation has rendered it necessary, "Malaya" has been used to designate the Federation of Malaya and Singapore; "South Africa", the Republic of South Africa, South West Africa and the High Commission territories of Basutoland, Bechuanaland and Swaziland; and "UAR" the United Arab Republic.

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MEASURES FOR THE EXPANSION OF MARKETS OF THE DEVELOPED COUNTRIES FOR EXPORTS OF MANUFACTURES AND SEMI-MANUFACTURES OF DEVELOPING COUNTRIES *

1. It has come to be widely recognized that the rate of growth in export earnings of the developing countries is of strategic importance for their internal development; and in view of the limited prospects for the substantial expansion of traditional exports of primary commodities, attention has been increasingly turning to exploration of the possibilities for the rapid enlargement of exports of manufactures.

2. At present, as described in more detail below, the volume of exports of manufactures from the developing countries is small. This is so whether the comparison is made with total exports from these countries or with world trade in manufactures. Of course, it is quite certain that, in the course of time, the exports of most developing countries will be increasingly dominated by manufactures rather than, as at present, by primary commodities. Such a transformation of the export structure has been a familiar characteristic of the economic history of most countries which have advanced from low-income, primary producing economies to high-income, industrial economies. The significant question, however, is whether this transformation will take place at a pace sufficient to ensure an adequate rate of domestic growth in the developing countries.

3. Economic growth and the expansion of exports of manufactures are, to some extent, interrelated issues. On the one hand, an adequate rate of expansion in exports of manufactures depends partly on the pace of industrial growth in developing countries; for exports can be continuously expanded only if industrial capacity is steadily enlarged. On the other hand, the pace of industrial growth depends partly on the dynamism achieved in export earnings; for the ability to expand industrial capacity is related to the ability to import capital equipment. But this interrelation is flexible and, at many points, it may be considerably modified by the nature of the policies pursued in both developing and developed countries.

4. Among the developing countries, industrial policies during the earlier post-war years tended to concentrate heavily upon the development of import-substituting industries and to neglect the question of production for export. The mounting awareness of the need for a sustained expansion in export earnings, however, has contributed to a modification in attitude. Further, it has been borne in upon many of these countries that, in view of the limited size of their domestic markets, the enlargement of the market through exports is a condition for the achievement of optimum levels of production in some important branches of industry. Interest both in the expansion of exports of manufactures to developed countries and in the formation of economic groupings with other developing countries has therefore grown.

5. There is no doubt that the difficulties confronting the developing countries, in the enlargement of their exportable supplies of manufactures and in the creation of conditions more favourable to the expansion of intra-regional trade, are formidable. These difficulties and the means by which they may be overcome are discussed at length elsewhere in the present report. However, the possibilities for a substantial acceleration in the growth of exports of manufactures from the developing countries also depend heavily on the commercial policies pursued by the developed countries. The nature of the obstacles at present posed by these policies and the measures which might be taken to overcome them constitute the main subject of the present chapter.

* This study is part of a series of papers which was prepared in the Bureau of General Economic Research and Policies of the Department of Economic and Social Affairs for the use of the Conference. This series of papers consists of (*a*) "International trade and its significance for economic development", (*b*) "International commodity problems", (*c*) "Trade in manufactures and semi-manufactures", (*d*) "Finance in international trade". The papers are to be found in Vol. VI, III, IV, and V respectively.

SALIENT FEATURES OF EXPORTS OF MANUFACTURES FROM THE DEVELOPING COUNTRIES

6. By far the most obvious feature of the recent export trade of developing countries in manufactures is, of course, that its magnitude is small. In 1961, total exports of manufactures[1] from all the developing countries amounted to $2.6 billion. This may be compared with a value of world trade in manufactures during the same year of $62.3 billion (see table 1). Exports from the developing countries thus accounted for only about 4 per cent of world trade in manufactures. Being overshadowed by the growth in trade of the developed market economies and of the centrally-planned economies, the share in world trade of the developing countries has actually declined somewhat in recent years. By 1961, world exports of manufactures were about $25 billion greater than they had been in 1955; only about $0.8 billion of this increase was accountable for by greater exports from the developing countries. Still, by virtue of the small initial size of exports, this increase between 1955 and 1961 marked an annual rate of growth of 6.5 per cent. While this was less dynamic than the growth in world exports of manufactures, it was certainly a better performance than that recorded by exports of primary commodities from the developing countries; over the same period, these exports increased annually by only 2.2 per cent.[2]

7. The small value of exports from the developing countries as a whole broadly reflects the relatively unindustrialized state of their economies. By the same token, it could be expected that the more industrialized among these countries would account for the greater part of such exports. As a rough generalization, this is true. But the more striking point as regards the origin of exports is the degree of their concentration in a few sources. Some hint of this is evident at the regional level. In 1961, for example, Asia alone accounted for almost three-quarters of the total exports of manufactures from all the developing areas; the remainder originated in about equal proportions in Africa and Latin America (see table 2).

8. The point, however, emerges much more sharply when data for individual countries are examined. In 1962, for example, 47 per cent of the total value of manufactured goods supplied from the developing countries to the developed market economies originated in two Asian members of the former group—namely, Hong Kong and India (see table 3).[3] Even though there is a huge difference in the economic size of these two developing economies, supplies of manufactures from the former were roughly equal to $400 million[4] and from the latter to $370 million. The third and fourth largest suppliers, Israel and Mexico, each provided manufactured goods valued at about $100 million. Two other Asian countries, Iran and the Philippines, together supplied about $110 million. Next in importance were Pakistan, China (Taiwan), Argentina and Brazil—in that order—which supplied manufactured goods amounting in total to about $130 million. Altogether, these ten countries accounted for three-fourths of the supplies of manufactured goods from the developing countries to the developed market economies. Even more telling is the fact that seventy-nine of the other developing countries together provided only 6 per cent of the supplies, the contribution in no single case equalling even $5 million.

9. This analysis bears out that the bulk of the exports of manufactures of the developing countries come from those with more industrialized economies. The volume of exports of manufactures from individual countries, however, is obviously not related in any simple fashion to the degree of industrialization.

[1] Unless otherwise stated, exports of manufactures as defined for purposes of this chapter exclude processed food-stuffs and base metals. For details on items included, see footnote *a* to table 1.

[2] See chapter 1 of the present report.

[3] It should be noted that the data in table 3 are not strictly comparable to those in the preceding tables. They pertain to 1962 because only for this year are the necessary details available. Furthermore, they are based on c.i.f. import values of the developed market economies which are usually about one-tenth higher than f.o.b. values. These factors do not, however, affect the broad conclusions in any way.

[4] Re-exports are usually a significant part of total exports from Hong Kong. For example, of the total exports of manufactures from the territory to the rest of the world in 1962, nearly 21 per cent were re-exports. See Hong Kong, *Trade Statistics*, December 1962.

TABLE 1

World: Exports of manufactures, by origin, 1955 and 1961[a]

Exporting group[b]	*Amount (billions of dollars)*		*Index, 1961 (1955 = 100)*	*Percentage distribution*	
	1955	*1961*		*1955*	*1961*
World	37.8	62.3	165	100	100
Developed market economies	32.0	52.0	162	85	83
Developing market economies	1.8	2.6	146	5	4
Centrally planned economies	3.9	7.7	196	10	12

Source: United Nations, "Handbook of International Trade Statistics" (mimeographed document E/CONF.46/12/Add.1).

[a] Data refer to f.o.b. values for the following items. Numbers in parentheses represent the code of the Standard International Trade Classification (SITC): Chemicals (5); Machinery and transport equipment (7); Other manufactures excluding base metals (6 and 8, excluding 67 and 68 but including 681).

"Special category" exports of the United States are excluded. Components do not always add up to totals because of rounding.

[b] *Developed market economies:* North America, western Europe, Australia, Japan, New Zealand and South Africa. *Centrally-planned economies:* Union of Soviet Socialist Republics, eastern Europe, Yugoslavia, mainland China, Mongolia, North Korea and North Viet-Nam. *Developing market economies:* rest of the world.

TABLE 2

Developing market economies: Geographical distribution of exports of manufactures, 1961[a]

Exporting group	Importing group: World	Developed market economies: Total	Western Europe: Total	Western Europe: EEC	Western Europe: EFTA	North America	Other	Developing market economies	Centrally-planned economies
Amount in millions of dollars									
Developing market economies . . .	2 640	1 350	710	270	415	500	135	1 150	82
Asia	1 945	905	412	122	283	369	113	928	59
Africa	325	200	180	63	110	7	15	105	18
Latin America	325	220	96	83	12	110	3	75	4
Percentage distribution									
Developing market economies . . .	100	51	27	10	16	19	5	44	3
Asia	100	47	21	6	15	19	6	48	3
Africa	100	62	55	19	34	2	5	32	6
Latin America	100	68	30	26	4	34	1	23	1

Source: See table 1.

[a] See footnotes *a* and *b* to table 1 for definitions. Totals include "unallocated" trade which is not shown separately. The abbreviations EEC and EFTA refer to the European Economic Community and the European Free Trade Association respectively.

The development of an export trade in manufactures has usually been initiated on the basis of a very limited range of products, and success in establishing export markets for specific products has generally been related to the existence of favourable local circumstances, such as the existence of particular natural resources or of a local tradition of certain skills. The sizable exports of manufactures from Iran and the Philippines, for example, are largely the outcome of such special circumstances; this is indicated by the fact that most of the exports from the former country consist of carpets and from the latter of wood veneers and special textile products. In addition, the relation between the stage of industrialization and the relative importance of exports of manufactures has been influenced, in differing degrees, by governmental economic policies.

TABLE 3

Developing market economies: Country distribution according to value of manufactures supplied to developed market economies, 1962[a]

Amount supplied (millions of dollars)	Number of developing market economies	Group total (millions of dollars)	Percentage distribution: Number of developing market economies	Percentage distribution: Group total
350 and more .	2	774	2	47
100-350	2	203	2	12
50-100	2	114	2	7
25-50	4	132	3	8
5-25	29	330	25	20
Less than 5 . .	79	91	67	6
TOTAL	118	1 643	100	100

Source: Bureau of General Economic Research and Policies of the United Nations Secretariat, based on data from official sources.

[a] See footnotes *a* and *b* to table 1 for definitions of manufactures and of developing countries. It should be noted that the data in the present table are based on c.i.f. import values of developed market economies. Components do not always add up to totals because of rounding.

10. Though less striking than the fact that the bulk of the exports originate in relatively few countries, there is also some tendency towards the concentration of these exports in relatively few foreign markets. This only becomes apparent when trade flows at a broad level of aggregation are analysed in greater detail. At the broad level, the destination of exports appears to be quite widely distributed. In 1961, for instance, about 51 per cent of total exports from the developing countries went to the developed market economies, about 44 per cent was absorbed in intra-trade among the developing economies and about 3 per cent was exported to the centrally-planned economies (see table 4). However, when these trade flows are scrutinized in greater detail, the evidence of concentration becomes stronger. Thus, of the total exports of $1,350 million exported to the developed market economies in 1961, about $915 million was shipped to the EFTA countries and North America; and by far the greater part of the exports of these two areas was absorbed by the United Kingdom and the United States. Again, of the $1,150 million of manufactures exported by developing countries to each other, over $900 million originated in Asian countries and the bulk of these exports were destined for other countries within the region (see table 2).

11. With one important exception, the structure of the trade flows of manufactures from the developing countries has not altered markedly in recent years. Of the total increase in exports to the developed market economies between 1955 and 1961, North America absorbed about $195 million, the EFTA countries about $175 million and the EEC countries about $110 million. The increase in exports to the centrally-planned economies over the same period was about $33 million. The main change in trade flows over the period came in the decline in relative importance of trade among the developing countries themselves. The share of intra-trade in total exports of these countries fell from 50 per cent in 1955 to

TABLE 4

World: Expansion of exports of manufactures, by origin and destination, 1955 and 1961[a]

Exporting group	*Importing group*			
	World	*Developed market economies*	*Developing market economies*	*Centrally-planned economies*
Index, 1961 (1955 = 100)				
World	165	179	139	193
Developed market economies	162	180	134	239
Developing market economies	146	161	126	167
Centrally-planned economies	196	188	335	182
Percentage distribution				
World				
1955	100	53	33	10
1961	100	58	27	12
Developed market economies				
1955	100	59	34	2
1961	100	65	29	3
Developing market economies				
1955	100	46	50	3
1961	100	51	44	3
Centrally-planned economies				
1955	100	11	8	80
1961	100	10	14	74

Source: See table 1.

[a] See footnotes *a* and *b* to table 1 for definitions.

44 per cent in 1961. The sluggishness of trade in manufactures among the developing countries was, in fact, the main reason why total exports of these countries increased more slowly between 1955 and 1961 than did world trade in manufactures. It was not intra-trade but exports to the developed market economies that constituted the main dynamic element in total exports of manufactures from the developing countries. However, it should also be noted that the rate of growth in their exports to the developed market economies was substantially below the rate of growth in trade among the developed economies themselves (see table 4).

12. These trends in trade flows of the developing countries have been closely related to another outstanding characteristic of their exports of manufactures. This is the preponderance in their export trade of a limited range of products, notably, textiles and various products of light industry usually classified as miscellaneous manufactures. As is evident from table 5, manufactured goods other than chemicals, machinery and transport equipment [5] have accounted for more than four-fifths of total exports of manufactures to the developed market economies.[6] Much of the increase in recent years, in fact, has been contributed by the most traditional item of manufactured exports, namely, textiles. Since these traditional items

COMPOSITION OF TOTAL EXPORTS OF MANUFACTURES FROM THE DEVELOPING MARKET ECONOMIES[a]

(*Percentage*)

Year	*Total manufactures*	*Chemicals*	*Machinery and transport equipment*	*Other manufactures, excluding base metals*
1955	100	13	7	80
1961	100	12	9	79

Source: See table 1.

[a] See footnotes *a* and *b* to table 1.

are so predominant, it is obviously their rate of expansion which governs the rate of increase of total manufactured exports from the developing countries. Even though exports of machinery and transport equipment [7] have registered the highest rate of increase, their share in the total is too small to contribute a significant part of the total increase. By and large, this category consists of simple types of power machinery.[8] Exports of chemicals, also of simple types, have shown no dynamism at all; their share in the total exports of manufactures from the developing countries declined from 15 per cent in 1955 to 13 per cent in 1961.

13. By itself, this analysis at the level of broad groups of products is suggestive but not conclusive. Each broad group comprises a wide range of products. However, the conclusion that a very limited range of products is actually exported finds ample support

[5] Sections 6 and 8 of SITC, with some exceptions.

[6] The composition of exports of manufactures from the developing countries to the developed market economies is not very different from the composition of their total exports of manufactures. A point of interest, however, which emerges from a comparison of the following data with those in table 5, is that machinery and equipment are more important in total exports of manufactures than in the exports to the developed market economies alone.

[7] Section 7 of SITC.

[8] This category includes ships and boats, the total value of which is quite large. It should be noted, however, that most of this trade consists of re-exports.

TABLE 5

Developing market economies: Pattern of exports of manufactures to developed market economies compared with latter group's pattern of import demand, 1955 and 1961[a]

Item	*Total manufactures*	*Chemicals*	*Machinery and transport equipment*	*Other manufactures excluding base metals (6 and 8, excluding 67 and 68 but including 681)*		
				Total	*Textiles*	*Other*
Exports of manufactures from developing market economies to developed market economies						
Index, 1961 (1955 = 100) .	161	136	232	162	176	153
Composition (percentage)						
1955	100	15	3	82	33	49
1961	100	13	4	83	36	47
World exports of manufactures to developed market economies						
Index, 1961 (1955 = 100) .	179	177	201	162	146	167
Composition (percentage)						
1955	100	13	40	46	13	34
1961	100	13	45	42	10	31

Source: See table 1.

[a] See footnotes *a* and *b* to table 1 for definitions.

from more detailed analysis. By comparison with table 5, the data contained in tables 6 and 7 refer to much more specific classes of products.[9] It is readily evident that two-fifths of manufactured goods imported by the developed market economies from the developing countries in 1962 consisted of only four items; three of these items were different types of textiles, and the fourth item comprised pearls and precious stones which could be characterized only marginally as industrial products. Floor coverings—mostly carpets—and tapestries were the fifth largest item, accounting for 6 per cent of exports. The ten largest items, whose individual values equalled or exceeded $50 million, formed the content of nearly two-thirds of total exports. And if the list is enlarged to include items whose value amounted to $20 million or more—altogether twenty-one items—nearly nine-tenths of the trade is accounted for. The dominance of various textile goods, wood products, leather and other equally traditional products is evident throughout this list. At the other end of the scale are as many as fifty-one items—or two-thirds of all the items covered—which contributed a mere one-tenth of total imports of manufactures of the developed market economies from the developing countries. Indeed, if the data were examined for the developing countries individually rather than as a group, the lack of diversification would appear even more forcefully. With the exception of Hong Kong and India, manufactured exports of the developing countries are confined to an extremely narrow range of products.

14. The predominance of textiles and other light manufactures has clearly been important in determining the past performance of total exports of manufactures from the developing countries. In the import demand of the developed market economies, the greatest expansion has been taking place in demand for machinery and equipment, while the relative importance of textiles and miscellaneous manufactures has been declining (see table 5). Thus, the principal classes of products exported by the developing countries have been among the least dynamic elements in import demand of developed countries. Between 1955 and 1961, the rate of increase

TABLE 6

Developed market economies: Distribution of imports of manufactures from developing market economies, 1962[a]

Value (millions of dollars)	*Number of items*	*Total value (millions of dollars)*	*Percentage distribution*	
			Number of items	*Total value*
100 or more . .	4	653	5	40
90-100	1	93	1	6
80-90	—	—	—	—
70-80	—	—	—	—
60-70	3	197	4	12
50-60	2	109	3	7
40-50	2	94	3	6
30-40	3	106	4	6
20-30	6	161	8	10
10-20	5	74	6	5
0-10	51	157	66	10
Of which:				
5-10 . . .	15	113	19	7
1-5	16	33	21	2
Less than 1 .	20	11	26	1
TOTAL	77	1 643	100	100

Source: See table 3.

[a] Data based on three-digit SITC code. See also footnote *a* to table 3.

[9] These tables are derived from the import returns of the developed market economies. See footnote 3.

TABLE 7

Developed market economies: Imports of manufactures from developing market economies, 1962[a]

SITC code	*Item*	*Value of imports from developing countries (millions of dollars)*	*Percentage distribution of imports from developing countries*	*Imports from developing countries as percentage of total imports*
841	Clothing, except fur clothing	233	14.2	18
653	Textile fabrics other than cotton[b]	190	11.6	14
652	Cotton fabrics	123	7.5	17
667	Pearls and precious and semi-precious stones	107	6.5	20
657	Floor coverings, tapestries, etc.	93	5.7	29
631	Veneers, plywood boards, etc.	68	4.1	18
656	Miscellaneous textile products	66	4.0	27
611	Leather	63	3.8	21
513	Inorganic chemicals	58	3.5	15
899	Miscellaneous manufactured goods	51	3.1	15
651	Textile yarn and thread	48	2.9	5
551	Essential oils, perfume and flavour materials	46	2.8	31
735	Ships and boats	37	2.3	5
681	Silver, platinum, etc.	36	2.2	14
711	Power machinery, non-electric	33	2.0	3
521	Mineral tar and crude chemicals from coal, petroleum and natural gas	29	1.8	29
512	Organic chemicals	28	1.7	3
599	Miscellaneous chemicals	28	1.7	4
655	Special textile products	27	1.7	10
894	Perambulators, toys, sporting goods, etc.	25	1.5	8
851	Footwear	24	1.4	6
[c]	Other manufactures	231	14.1	1
	TOTAL	1 643	100	4

Source: See table 3.

[a] Data based on three-digit SITC code. See also footnote *a* to table 3.

[b] Of this item, jute fabrics amounted to $173 million. They constituted 87 per cent of the total imports of jute fabrics into the developed market economies.

[c] All other components of SITC sections 5, 6, 7 and 8 except 67 and 682-689.

in imports of textiles by the developed countries from the developing countries was none the less quite rapid; it substantially exceeded the rate of increase in imports from all sources, indicating a gain in the competitive strength of the developing countries. The response evoked by this growth in terms of more restrictive commercial policies in developed countries is well known and is described in some detail in a later section. It should also be added that the present composition of exports of the developing countries similarly goes far towards explaining the relatively sluggish growth of trade in manufactures among these countries; for, it is with the domestic production of non-durable consumer goods that most of these countries have initiated their industrial development programmes.[10]

15. The discussion thus far has not included trade in processed food-stuffs. It can be questioned whether processed food-stuffs should be classified as manufactured goods. The value added in processing these edible products is often very small, and therefore even after processing they remain usually akin to primary commodities. This is particularly true of the processed food-stuffs exported by the developing countries which are generally in a cruder state than those exported by the developed countries. However, since these products are of some importance in the export trade of a number of developing countries, such as is the case for tinned meat from Argentina, the data for the principal processed food-stuffs exported by the developing countries to the developed market economies are shown below. Between 1955 and 1961, the exports of processed food-stuffs increased by only 30 per cent, or at about half the rate of expansion of manufactured goods covered in table 5. If, for instance, processed food-stuffs are included in total exports of manufactured goods, their share appears to be rather less than one-fourth in 1961.[11]

16. Whether or not processed foods were included in manufactures, however, the main conclusions that emerge from this description of the export trade of developing countries would remain unaltered. While total exports of manufactures from the developing to the developed countries expanded quite rapidly between 1955 and 1961, the rate of growth was somewhat below that of trade among the developed countries. The principal dynamic element consisted in exports of textiles, and the bulk of the expansion, moreover, was concentrated in the markets of a few of the developed countries. It is because of these features that trends in exports of manufactures since

[10] For a more detailed discussion, see "Industrialization and economic development" in United Nations, *World Economic Survey, 1961* (Sales No.: 62.II.C.1).

[11] Processed foods are valued on a c.i.f. basis while other manufactures are valued on an f.o.b. basis. This difference does not, however, significantly affect the broad magnitudes indicated in the text.

PROCESSED FOOD-STUFFS EXPORTED BY DEVELOPING COUNTRIES TO DEVELOPED MARKET ECONOMIES [a]

(Millions of dollars)

SITC code	*Item*	*1955*	*1961*
013	Meat, canned or prepared . . .	113	123
032	Fish, canned or prepared	32	38
048	Cereal preparations	5	3
053	Fruit, preserved or prepared . .	52	93
055	Vegetables, preserved or prepared	30	54
062	Sugar preparations, non-chocolate	1	1
073	Chocolate and products	12	8
099	Miscellaneous food preparations.	1	2
122	Tobacco manufactures	8	8
	TOTAL	253	329

Source: See table 3.

[a] Data are derived from trade returns of developed market economies and therefore relate to imports valued on a c.i.f. basis.

1961 have been much less buoyant than in the preceding years. The particular countries, principally the United Kingdom and the United States, into which the main part of the increase in exports of textiles had been directed, responded to the greater inflow by negotiating arrangements for the limitation of exports, and their rate of growth has accordingly declined. In the United States, for example, agreements to limit exports were reached with a number of countries in the course of 1962 and 1963 and, while exports increased appreciably in 1962, they showed hardly any gain at all in 1963.[12]

17. For the developing countries, one lesson to be learned from post-war experience is the importance of diversifying exports to include products for which world import demand is growing rapidly. There are some hopeful signs that such diversification of exports is mounting. While still very small in absolute terms, receipts of developing countries from sales of machinery and transport equipment have been increasing quite sharply. New markets have been acquired in the developed countries, not so much in consumer durable and non-durable goods as in the less complex types of producer goods and machine parts, such as electric generators, diesel engines, locomotives and steel frames for furniture. It may be noted that these products embody a relatively high labour component, giving the developing countries a cost advantage in these lines. In addition, less elaborate marketing facilities are required than in the case of many types of consumer goods, especially consumer durables.

18. It is obvious, however, that the diversification of exports cannot be quickly achieved and that exports of textiles and other light manufactures will continue to predominate for some time. There is also no doubt that these light industries can continue to contribute heavily to the growth of total export earnings, playing the same role of a leading export industry that they did in certain of the countries which are now developed. But for any early and substantial expansion of exports to take place, it is clearly a condition that the obstacles to imports in the developed countries should be reduced or removed.

[12] United States Department of Agriculture, *Cotton Situation* (Washington, D.C.), November 1963, page 10.

TABLE 8

Developed market economies: Share of developing market economies in total imports of manufactures, 1962[a]

Country	*Percentage*
United Kingdom	12.3
United States	11.3
Norway	4.6
Australia	3.9
Japan	3.8
Germany (Federal Republic)	3.8
France	3.2
Switzerland	1.9
Belgium-Luxembourg	1.5
Denmark	1.5
Canada	1.5
Sweden	1.4
Italy	1.2
Netherlands	1.1
Portugal	1.0
Austria	0.8
TOTAL, developed market economies	4.4

Source: See table 3.

[a] See footnote *a* to table 3.

19. In this context, it can hardly be stressed too strongly that the share of the developing countries in the total imports of manufactures of the developed countries is at present very small. Even the principal exports of textiles from the developing countries still account for no more than one-fifth or one-fourth of the total imports of such products into the developed countries. Taking manufactures as a whole, the developing countries supplied only 4 per cent of the total imports of the developed market economies (see table 8). Only in the United Kingdom and the United States, largely because of the important part played by textiles, did the share of the developing countries in the total amount to over one-tenth. On the other hand, more than half of the developed market economies obtained less than 2 per cent of their imports of manufactures from the developing countries. Even modest increases in the small percentage share of the developing countries in this trade would add significant sums to their foreign exchange receipts, and would thus make an important contribution to speeding their economic advance. It is in the light of these circumstances that the existing obstacles to trade, and the measures for their removal, should be reviewed.

OBSTACLES TO TRADE [13]

20. The sale of manufactures produced by developing countries in the markets of the developed countries is hampered by a number of obstacles erected by commercial policies. These obstacles can be classified into the two groups of tariff and non-tariff barriers. The broad economic difference between these two groups is that tariff barriers restrict entry into the

[13] See "Survey of Progress in the Reduction and Elimination of Barriers affecting Products Exported by Less Developed Countries", in Vol. IV of this series.

TABLE 9

Selected developed countries: Average *ad valorem* tariffs on imports of manufactures, 1963[a]

Country	Percentage rate				
	All manufactures	*Chemicals*	*Manufactured goods classified by material*	*Machinery and transport equipment*	*Miscellaneous manufactures*
United States	20	17	21	12	24
United Kingdom	20	16	19	19	23
Japan	18	11	17	17	27
Italy	15	12	15	16	17
Canada	15	8	16	12	21
France	14	11	14	14	18
Benelux	11	5	12	9	15
Germany (Federal Republic)	10	7	10	8	12
TOTAL	15	11	16	13	20

Source: Bureau of General Economic Research and Policies of the United Nations Secretariat, based on data from official sources.

[a] Tariffs in this table refer to import duties at the general rate. Where duties are specific, they have been converted into their *ad valorem* equivalents. For this table, manufactures have been defined to comprise the thirty-seven groups of the Standard International Trade Classification listed in appendix table A-1. In computing the data shown above, the initial step was to take simple averages of all the rates within each SITC group, groups 893-896 and 899 being combined for this purpose. Then, for all manufactures, a simple average of the rates so derived for each group was taken. For the broader SITC categories shown in the table, the rates were similarly calculated by taking simple averages of the rates for the SITC groups appropriate to each category. For calculating averages for the group of countries listed in the table, Benelux is treated as comprising two units—namely, Belgium-Luxembourg and the Netherlands. Data for Japan, the United Kingdom and the United States refer to 1962.

market through their influence on prices whereas non-tariff barriers generally exert their protective effect through limitations on the freedom of choice of purchasers between domestic and imported products. This distinction is not entirely watertight since a few non-tariff barriers do work partly through the price mechanism, but it does hold for the more important obstacles to trade.

TARIFF BARRIERS

21. Tariffs have a long tradition as an instrument of protection for domestic industry. It is true that they have also invariably served as an element of fiscal policy. At the present time, import duties constitute a major source of government revenue in the developing countries; and it is only in the last few decades that they have ceased to be used extensively in developed countries for the same purpose. In the present context, however, it is the protective aspect of tariffs which is of interest.

22. Among most of the developed countries, two principal tariff scales are currently in force. The member countries of both EEC and EFTA apply tariffs at a preferential rate to imports from other member countries and tariffs at the general or most favoured nation rate to imports from the rest of the world. For certain of these countries, the situation is also complicated by their participation in preferential tariff areas that extend outside of Europe. For the moment, however, attention may be limited to the general tariffs applied by the developed countries.

23. If a simple, unweighted average of tariffs on imports of manufactures is calculated, it is found that the average level of general tariffs of the major developed countries amounts to about 15 per cent *ad valorem*[14] (see table 9). However, the level varies appreciably among the different countries. The highest rates are recorded by the United States and the United Kingdom, where the average tariff levels are around 20 per cent *ad valorem*. These two countries are followed closely by Japan. At the other end of the scale are the Federal Republic of Germany and the countries that are members of the Benelux Union, with average tariffs only about half as high as those of the United States and the United Kingdom.[15]

24. It is a familiar feature of the tariff systems of developed countries that tariffs on manufactures and semi-manufactures tend to be appreciably higher than tariffs on the raw materials used in their production. In fact, on raw materials not produced in the importing country, tariffs have frequently been zero. This combination of policies to provide supplies of cheap, imported materials and to protect domestic industries processing these materials has long been characteristic of developed countries. Indeed, its

[14] It has to be recognized that there is no way of measuring the tariff levels of different countries which is both simple and entirely satisfactory. Tariff schedules invariably list many thousands of tariffs, and some crude method of summarization has to be devised. The procedure adopted in the present chapter has been to take simple averages of the itemized tariffs (see footnote *a* to table 9). This is open to the objection that it gives equal weight to each tariff item and thus takes no account of the relative importance in foreign trade of the different products to which the tariffs apply. An alternative procedure would be to give a different weight to each tariff in proportion to the relative importance of the product in total imports of a country. This might appear to be a way of circumventing the objection raised to the first procedure. But, in fact, it is equally unsatisfactory; for, in this measure, the more effective a tariff is in restricting imports, the lower would be its weight.

As a broad rule, the simple arithmetic mean yields a higher average rate than does the weighted arithmetic mean. This spread between the two types of calculations is particularly large for the United States where there are some very high and low tariff items. Because imports are low for the high tariff items in the United States, the weighted arithmetic mean yields a relatively lower figure than does the simple arithmetic mean. By contrast, in a number of other countries where various tariff items are close to the average and extreme values are relatively few, the two methods of computing the average rate of tariffs do not yield much difference in results.

[15] In these inter-country comparisons, it should be borne in mind that the calculations for the United States are based on f.o.b. import values while those for other developed countries are derived from c.i.f. values. Average tariffs in the United States are, consequently, overstated to the extent that the c.i.f. values are higher than the corresponding f.o.b. values.

origins can be traced back to earlier periods of industrial development in these countries; and it is not surprising that a similar pattern is emerging in the tariff structures of the countries which are now developing.

25. The persistence of this pattern of tariffs in the developed countries, however, obviously adds to the difficulties confronting the developing countries in expanding their exports of manufactures. Manufacturing costs in these countries tend to be high relatively to costs of primary production; and an important task in these countries is to bring down costs of manufacturing production relatively to costs of primary production in order to render their manufactures internationally competitive at prevailing exchange rates. The existence of higher tariffs on manufactures than on primary products in importing countries only compounds this difficulty.

TABLE 10

Selected developed countries: *Ad valorem* tariffs on selected imports, by item and stage of processing, 1963[a]

Item[b]	*European Economic Community*	*United Kingdom*	*United States*
Cotton			
Raw	—	—	—
Yarn	8	8	14
Woven fabrics	17	18	20
Jute			
Raw	—	—	—
Yarn	10	13	20
Woven fabrics	23	20	6
Leather and leather goods			
Hides and skins, raw	—	—	—
Finished leather	7	13	10
Leather footwear	16	15	13
Wood			
Wood in the rough and roughly square[c]	—	—	—
Wood sawn lengthwise[c]	—	—	4
Veneer sheets	10	10	10
Plywood, hardboard, etc.	15	20	25
Iron and steel			
Iron ore	—	—	—
Ingots and other primary forms of iron and steel	7	11	9
Finished articles of iron and steel	9	14	10
Pipes and fittings of iron or steel	14	18	10
Coir			
Raw	—	—	—
Yarn	—	10	—
Woven fabrics	20	20	12

Source: General Agreement on Tariffs and Trade "Survey of Progress in the Reduction and Elimination of Barriers Affecting Products Examined by Committee III" (Committee III/119, 21 October 1963); Political and Economic Planning, *Atlantic Tariffs and Trade* (London, 1962); and national sources.

[a] Where duties are specific, they have been converted with their *ad valorem* equivalents. Data refer to the common external tariff in the European Economic Community and to most favoured nation rates in the United Kingdom.

[b] The classes of manufactures have been ranked by their order of importance in exports from developing to developed countries.

[c] Tropical timber. In the European Economic Community and the United Kingdom, duties to be suspended from 1 January 1964 to 31 December 1965.

26. In addition to the higher tariffs on manufactures than on imported raw materials, there is also some evidence to suggest that—at least in certain classes of products—the tariff tends to be higher on the finished than on the semi-manufactured product. The barrier to exports, in other words, may tend to increase as industrial development advances from the simple processing of materials to the production of final manufactures. Such escalation is quite clearly evident in the case of cotton textiles; in the EEC countries, for example, the import duty on raw cotton is nil but on yarn it is 8 per cent and on cotton woven fabrics it amounts to 17 per cent. In other products, a similar tendency can sometimes be detected in the tariff schedules of particular countries (see table 10). However, while such escalation is important when the comparison is between raw materials and manufactures or semi-manufactures, it need be of much significance when the same product at different stages of manufacturing is being considered; for, a low tariff applied to a product at an early stage of processing may sometimes have a greater protective effect than a higher tariff at a later stage.[16]

27. When attention is turned to a comparison of the tariffs on different classes of manufactures, the feature of greatest significance for the developing countries is that tariffs on products of particular interest to these countries tend to be relatively high. It is, in fact, quite striking that the types of manufactures which the newly industrializing nations are able to export at the present stage of their development—namely, the items covered under the SITC sections "manufactured goods classified by material" and "miscellaneous manufactures"—encounter relatively high tariff barriers, the rate on these products being above the average on imports of all manufactures (see table 9).

28. This emerges still more sharply when the data are examined in greater detail. The tariffs imposed by the same developed countries as are listed in table 9 on thirty-seven groups of manufactures are shown in appendix table A-1. It is readily evident from these

[16] This is because the value added in processing of certain articles is quite small in comparison with the value added in manufacturing finished goods out of the same imported materials. For such comparisons, a more relevant measure can be obtained by relating the *ad valorem* rates to the value added in processing. In the United States, for example, the *ad valorem* import duty on steel in primary forms is slightly lower than that on finished articles of steel (see table 10); but, as the following data show, when this duty is expressed as a percentage of value added, its protective effect appears to be much higher:

Item	*Tariff as percentage of value added in processing*
Iron ore, scraps and waste	—
Steel in primary forms	44
Finished articles of iron and steel	28
Pipe and fittings cast, whether grey iron or malleable iron	17

TABLE 11

United Kingdom and United States: Number of manufactures subject to *ad valorem* or specific duties, 1963[a]

SITC section	*United Kingdom*		*United States*	
	Ad valorem	*Specific*	Ad valorem	*Specific*
Chemicals	532	35	436	428
Manufactured goods classified by material	391	105	654	279
Machinery and transport equipment . .	281	3	618	44
Miscellaneous manufactured articles . .	512	18	1 073	258
TOTAL	1 716	161	2 781	1 009

Source: United Kingdom, *H.M. Customs and Excise Tariff Amendment No. 45* (London, 1962), and United States Tariff Commission, *United States Import Duties—1963* (Washington, D.C.).

[a] Data refer to general tariffs only. Items subject to mixed *ad valorem* and specific duties are counted in the *ad valorem* as well as in the specific category.

data that some of the highest tariffs levied by the developed countries relate to the products of light industry. Thus, such important items of export as textiles, floor coverings, tapestries, footwear, travel goods, handbags, plastic articles and sports goods generally attract tariffs of 20 per cent *ad valorem* or more. In some cases, the rates are as high as 35 or even 40 per cent.

29. There are also other elements in the tariff systems of developed countries which may tend to have a particularly protective effect in regard to imports from developing countries. One such is the practice of charging specific, rather than *ad valorem*, duties on certain classes of imports. Specific duties were introduced during the nineteen-thirties by many developed countries with a view to discouraging cheap, low-quality imports. They tend to be an effective barrier to low-priced varieties of any particular class of product since the lower the unit value of the imported product, the higher is the *ad valorem* equivalent of a specific duty. Thus, in so far as developing countries rely on exports of lower quality and cheaper products, such specific duties tend to discriminate against them.

30. It is of course true that there has been a marked shift away from the use of specific duties in more recent years, and most developed countries now levy tariffs on an *ad valorem* basis. But, in the United Kingdom and the United States, specific duties are still common. In a number of instances, such duties are used together with *ad valorem* duties, often as a minimum. As may be seen from table 11, more than one-fourth of the manufactures itemized in the tariff schedule of the United States are subject to specific duties. In the case of chemicals, these duties are almost as numerous as *ad valorem* tariffs. Manufactured goods classified by material, especially textiles —which are particularly important in the exports of the developing countries—also frequently encounter specific duties in both the United States and the United Kingdom.

31. Another way in which imports of low-priced products into the developed countries are discouraged is through the levy of tariffs on the basis of either assumed norms or domestic retail values rather than invoice unit values. Where tariffs are levied on the basis of assumed norms determined by the customs authorities for tariff purposes, *ad valorem* rates are, in effect, converted into specific rates and the true incidence of duties becomes higher. Likewise, when tariffs are levied on the basis of retail values in importing countries, the true rate is much higher than the reported *ad valorem* rate. Furthermore, the effective rates may actually be still higher because the retail prices are sometimes based on domestic products of much higher quality than the imported articles. In the United States, for example, the "American price" rates apply to a number of items, such as rubber boots and knitted gloves, which figure significantly in the exports of the developing countries.

32. It is worth noting in this connexion that, although low prices do not in themselves constitute dumping, the operation of anti-dumping laws may affect many cheap products suspected of being dumped. Of course, in recent years, dumping has not proved to be of great significance. In the United States, for example, less than one-tenth of the complaints lodged in recent years have proved to be actual violations of anti-dumping regulations. But the mere fact of complaint and investigation introduces an element of uncertainty and acts as a threat to the normal development of international trade.[17]

33. The foregoing discussion has dealt exclusively with the structure of general tariffs in the developed countries. However, account must also be taken of the existence of discriminatory tariffs. Wherever discriminatory tariffs are employed, exports from non-preferential countries have to overcome a competitive disadvantage in relation not only to domestic products in importing countries but also to exports from countries treated preferentially. This point has assumed considerable importance with the establishment of the EEC and EFTA which have introduced preferential rates for intra-trade as well as for their trade with the associated overseas States and territories and the Commonwealth. As the implications of these regional groupings for the trade of the developing countries have been analysed in considerable detail in

[17] For further comments on this point, see the discussion on non-tariff barriers below.

another document,[18] only a few summary remarks touching on the main conclusions need be presented here.

34. In the EEC, tariffs on intra-trade in industrial products had, by July 1963, been reduced by 60 per cent. The schedule of tariff reductions in EFTA on intra-trade has by and large kept pace with that in the EEC. This implies that tariffs currently applicable to intra-trade in the western European regional groupings are on the average about half those levied on imports of manufactures from the non-preferential countries.[19]

35. Since the exports of manufactures from the developing countries as a group to the EEC are relatively small, it may be argued that the EEC preferential arrangements are not likely to have much of a detrimental effect. However, this would be a very short-term point of view. Expansion of exports of manufactures to the EEC is of great potential interest to the developing countries. The very fact that the EEC has in the past imported a relatively small volume of manufactures from the developing countries suggests that such imports could be increased provided barriers to their entry were removed.

36. With regard to EFTA, the situation is somewhat different, since the United Kingdom already provides an important market for exports of manufactures from some of the developing countries which are members of the Commonwealth preferential system. In the future, these developing countries will have to compete in the United Kingdom market on equal terms with other EFTA countries. Other developing countries which are outside of this system are in the same disadvantageous position in relation to EFTA as they are in relation to EEC.

37. For the developing countries not accorded preferential treatment, the formation of regional groupings in western Europe clearly creates an additional element of discrimination.[20] It appears, moreover, that the degree of discrimination arising from regional groupings will increase as the current schedules for progressively greater economic integration are realized. These schedules call for complete elimination of internal tariffs within the EFTA as well as within the EEC by the end of 1966.

RECENT CHANGES IN TARIFFS

38. Concurrently with the emergence of these regional groupings, there has been a trend during the post-war years towards the liberalization of general tariffs. Since the end of the war, there have been five major rounds of negotiations under the General Agreement on Tariffs and Trade (GATT) for the reduction of general tariffs,[21] and the sixth round is scheduled to take place this year. In view of the formation of regional groupings, such measures of liberalization assume particular importance for the developing countries since they not only reduce the absolute height of tariffs but also help to limit the size of the preferential margins.

39. Despite the trend towards tariff reductions, there is some doubt as to how far the developing countries have benefited. Many of the developing countries are not members of the GATT. In addition, many products exported by the developing countries have not been affected by tariff reductions; either they are subject to regulation by means other than tariffs —as with textiles or agricultural commodities—or, as with many mineral raw materials, they are already exempt from import duties or attract duties only at very low rates. A further factor, as noted later, has been that the negotiation of reciprocal tariff reductions among the developed countries has naturally tended to concentrate on items of special importance in trade among these countries.[22]

40. Thus, the post-war tariff reductions in the developed countries have not necessarily yielded much benefit to the developing countries. In the United States, for example, as may be seen from table 12, some of the manufactured goods for which imports from the developing countries bulk large, have been comparatively neglected in the tariff reductions of recent years.[23] This is particularly true of crude chemicals from coal, certain textile fabrics and plywood veneers. In contrast, among many of the commodities whose tariffs have been subject to significant reductions, the share of the developing countries in the imports of the United States is either nil or very small. In the EEC, apart from the discriminatory features discussed earlier, the general trend towards tariff reductions has been complicated by virtue of certain special factors. Most important among these is the fact that the common external tariff is somewhat higher than the effective rate prevailing at the beginning of 1958. Although the common external tariff originally specified in the Rome Treaty was an arithmetic average of the national tariff rates prevailing in January 1958 (treating Benelux as a single unit), the national rates actually employed for calculating the average for the common external tariff were somewhat higher than those actually in force. For example, the rates for the Federal Republic of Germany did not take into account the 25 per cent reduction of 1957, and those for Italy excluded the tariff cuts of 1951. Certain tariffs, notably those on a number of chemicals in Benelux, which entered into the calculation of the common external tariff, were suspended at the end of 1957. As far as the national

[18] See "Implications for trade and development of developing countries of economic groupings of developed countries and/or preferential trading arrangements", chapter III, in Vol. VI of this series.

[19] Account has been taken of the fact that the initial 10 per cent reduction in tariffs on imports of industrial products was extended to all GATT members.

[20] For further details, see Vol. VI of this series.

[21] These five rounds of negotiations were: Geneva, 1947; Annecy, 1949; Torquay, 1951-1952; Geneva, 1956; Geneva, 1960-1961.

[22] In the round of negotiations which took place in Geneva in 1960-1961, although it was indicated that the developed countries would be willing to take a flexible position with regard to the degree of reciprocity to be provided by the developing countries, most of the developing countries found that they were not in a position to offer concessions which would provide an adequate *quid pro quo*. In the GATT negotiations, linear or across the board reductions are contemplated; the significance of such reductions is examined in a later section.

[23] Not all tariff changes are a result of deliberate policy. Where specific rates are important, as in the case of the United States, the effective rate (in terms of *ad valorem* equivalent) has been reduced in the post-war years owing to the general tendency of prices to rise.

TABLE 12

United States: Tariff changes[a] on imports of selected manufactures and share of such imports from developing countries

(Percentage)

SITC group	*Share of imports from developing countries, 1962*	*Tariff change, 1952-1962*	*SITC group*	*Share of imports from developing countries, 1962*	*Tariff change, 1952-1962*
Mineral tar and crude chemicals from coal, petroleum and natural gas . .	61	—	Organic chemicals	8	−14
Essential oils, perfume and flavour materials	51	−15	Jewellery and goldsmiths' and silversmiths' wares	7	−18
Special textile fabrics and related products	45	−8	Footwear	5	−15
Textile fabrics, woven, other than cotton fabrics	42	+5	Fertilizers, manufactured	3	—
Cotton fabrics, woven	32	−13	Cork manufactures	3	−15
Veneers, plywood boards, etc.	32	−7	Iron and steel	2	−5
Clothing (except fur clothing)	31	−20	Electrical machinery, apparatus and appliances	2	−5
Pearls and precious and semi-precious stones	25	−16	Pottery	1	−10
Miscellaneous made-up textile articles.	20	−17	Scientific, medical, optical, measuring and controlling instruments and apparatus	1	−13
Plastic materials, regenerated cellulose and miscellaneous chemical materials and products	19	−3	Agricultural machinery and implements	—	−19
Leather	19	−6	Textile and leather machinery, machines for special industries and miscellaneous machinery and appliances other than electric	—	−14
Floor coverings, tapestries, etc.. . . .	19	−7	Fur skins, tanned or dressed (including dyed)	—	−7
Miscellaneous manufactured articles, n.e.s.[b].	14	−22	Materials of rubber	—	−13
Textile yarn and thread	12	−4	Power generating machinery, other than electric	—	−12
Furniture	11	−24	Office machines	—	−12
Inorganic chemicals and radioactive materials	10	−5	Fur clothing (excluding headgear) and other articles made of fur skins, etc..	—	−7
Travel goods, handbags and similar articles	9	−17	TOTAL	15	−11

Source: Bureau of General Economic Research and Policies of the United Nations Secretariat, based on data from United Nations, *Commodity Trade Statistics, 1963*, Statistical Papers, series D, and from national sources.

[a] Changes have been calculated as the simple arithmetic means of the changes in all tariffs on the products within each of thirty-three groups.

[b] SITC groups 893-896 and 899.

tariff rates in the transitional period are concerned, the rates of the low-tariff countries, namely Benelux and the Federal Republic of Germany, have been raised while those of the high-tariff countries, namely France and Italy, have been lowered. These disparate movements will be continued as the alignment of national tariffs progresses further. All these considerations suggest that much work still remains to be done in the developed countries to lower tariff barriers on imports of manufactures from the developing countries.

41. A liberal commercial policy must also encompass the dismantling of non-tariff barriers in order to achieve an orderly expansion in world trade; and, it is to an examination of the non-tariff barriers on imports in the developed countries that attention is now turned.

NON-TARIFF BARRIERS [24]

42. In addition to the tariff barriers discussed above, certain quantitative restrictions on imports and other measures which in effect restrain imports are also applied by most developed countries. Non-tariff barriers in developed countries, in fact, often tend to be a more serious impediment to exports of manufactures from developing countries than do tariff barriers. While a moderate tariff wall can be scaled by an increase in efficiency, many of the non-tariff barriers cannot be surmounted at all, or can be overcome only with great difficulty, through the action of exporters. A further disadvantage for the developing countries is the fact that non-tariff barriers have in practice discriminated against them to a considerably greater extent than have tariffs.

43. Since the early nineteen-fifties, extensive trade liberalization with regard to quantitative restrictions has taken place among developed countries. Early in 1959 over-all Organization for European Economic Co-operation (OEEC) liberalization percentages were estimated at 90 per cent for intra-OEEC imports and 73 per cent for dollar area imports.[25] Following the introduction of convertibility for most western European currencies, a further liberalization of

[24] A non-tariff import barrier is here defined as any law, regulation, policy or practice of public authorities, other than import duties, which has a restrictive effect on imports. The definition here employed does not include impediments to trade arising from the operation of foreign cartels, private monopolistic or other non-governmental business practices. However, the exclusion of such impediments in the present context is not meant to imply that they are necessarily insignificant.

[25] Organization for European Economic Co-operation, *Twelfth Annual Economic Review* (Paris, 1961), page 34.

OEEC imports took place, particularly with regard to imports from the dollar area. By mid-1961, approximately 95 per cent of intra-OEEC imports and well over 90 per cent of dollar area imports had been liberalized.[26] The developing countries as a group, however, have not benefited significantly from this progress. Exporters of manufactured goods in developing countries, therefore, have reason to be especially concerned with the problem of non-tariff import barriers.

44. The analysis of non-tariff import restrictions encounters major difficulties. Sometimes systematic information is lacking even about formal import restraints. It is also virtually impossible to identify all conceivable non-tariff obstacles to trade. Some of the unidentified obstacles may, however, be as important as the barriers which are amply documented. Even when detailed information on various non-tariff import restrictions is available, it is difficult to assess their restrictiveness. Import control regulations, for example, may or may not have an effect on the flow of trade. What counts is how the controls are administered in practice; and, except in the case of strictly enforced quotas, information on the criteria used in the administration of restrictions is in general unobtainable. In the long run, moreover, the mere existence of protective measures makes sales prospects uncertain and may thus be a deterrent to the expansion of production for export in the developing countries. The discussion in the present section of the non-tariff import restrictions applied by a number of developed countries necessarily suffers from these limitations.[27]

45. In the following illustrative list, non-tariff import barriers are classified into four categories according to their original purpose. It will be noticed that not all these barriers have been specifically designed to insulate segments of the domestic economy from the full impact of foreign competition; some affect imports without being protective in intent. Those listed under foreign trade policies are by far the most important as protective measures and are dealt with at greater length than the numerous other restraints.

- Foreign trade policies
  - Licensing requirements
  - Quota restrictions
  - Negotiated export limitations
  - Foreign exchange restrictions
  - State trading
  - Procurement policies favouring domestic products
  - Anti-dumping and similar regulations
  - Subsidies to exports
- Administrative practices
  - Classification of goods for customs purposes
  - Documentary, marking and packaging requirements
  - Incomplete or delayed publication of customs information
- Internal economic policies affecting imports
  - Internal taxes for revenue purposes
  - Taxes applied to imports to compensate for indirect taxes borne by comparable domestic goods
  - Pricing policies and price control regulations
  - Restrictions on advertising of goods
- Internal health and safety regulations affecting imports
  - Sanitary regulations
  - Technical specification requirements
  - Regulations applied for national security reasons.

General licensing and quota arrangements

46. Quantitative import restrictions, usually coupled with licensing requirements, are probably the most frequently used non-tariff barrier to imports. In the early post-war period, the use of licensing and quotas in the western European countries and Japan was motivated by balance-of-payments considerations. In recent years the balance-of-payments position of most of these countries has improved considerably, and this has led to a gradual liberalization of imports. Those Governments which have retained quantitative restrictions have usually done so for internal reasons. The imports still subject to quotas are, by and large, those which could be restrained effectively by tariffs, unless these were established at very high rates.

47. As an instrument of foreign trade policy, quotas have important advantages over tariffs. Quotas permit a desired change in imports to be achieved swiftly and with considerable certainty, whereas the quasi-institutional nature of tariff structures and trade treaties makes it difficult to introduce unilateral changes on short notice. If necessary, quotas can also be applied selectively. Because of this flexibility, Governments have often retained licensing and quota arrangements even though they are not applied to restrict imports. For example, in France, the Federal Republic of Germany, Italy and Japan, licences are granted automatically for a number of items, and the stipulated quotas are in excess of any likely volume of imports.

48. The extent of existing licensing and quota restrictions in selected developed countries is outlined in table 13.[28] Owing to the incommensurability of various trade restraining measures and to differences in the classification of commodities for import control purposes, only very general observations can be made on the basis of the data presented. The Benelux countries, the United Kingdom and the United States seem to have few quantitative restrictions on imports from any source. The Federal Republic of Germany, Italy and Japan apply restrictions to a considerably wider range of imports, but even in these countries, the restricted items are few by comparison with the number that can be freely imported. From the viewpoint of developing countries there appear to be

[26] *Ibid.*

[27] The countries examined are Belgium-Luxembourg, France, the Federal Republic of Germany, Italy, Japan, the Netherlands, the United Kingdom and the United States.

[28] It should be recalled that the discussion here relates only to manufactures and semi-manufactures as defined in this chapter; restrictions on other products not included here are treated in the items mentioned in footnote 13.

TABLE 13

Selected developed countries: Number of manufactured articles subject to total or partial licensing or quota restrictions, June 1963[a]

Commodity group	*Benelux*	*Germany (Federal Republic)*	*Italy*	*Japan*[b]	*United Kingdom*	*United States*
Processed foods	—	17	6	22	5	2
Beverages and tobacco	—	—	2	8	2	—
Chemicals	5	1	5	33	3	—
Leather and rubber products	—	1	—	5	—	—
Wood, cork and paper products	—	—	—	6	—	—
Textiles	[c]	24	5	9	3[d]	1[d]
Iron and steel	—	—	—	4	—	—
Metal manufactures	—	—	—	4	—	—
Machinery, other than electric	—	1	4	22	—	—
Electrical machinery	—	2	—	11	—	—
Transport equipment	—	—	11	8	1	—
Clothing and footwear	[c]	8	3	4	[d]	[d]
Other manufactures	—	10	3	18	2	—

Source: Bureau of General Economic Research and Policies of the United Nations Secretariat, based on data from various GATT documents and from official national sources.

[a] Number of articles refers to number of items distinguished in the sources used.

[b] Articles subject to import licensing under the Foreign Exchange Fund Allocation System.

[c] Imports of several items from Japan are subject to quota restriction.

[d] Exports of a varying number of items are limited by exporting countries (see discussion of negotiated limitations of exports from developing countries).

differences in the kinds of commodities that are restricted by the Federal Republic of Germany on the one hand and by Italy and Japan on the other. In the Federal Republic of Germany, the restricted articles are concentrated within those categories which generally are of the greatest importance in the exports of manufactures from developing countries. In the case of Italy and Japan, most articles under restraint are those that are typically exported from developed countries. An examination of individual items subject to restriction confirms the impression that licensing requirements and quotas in the Federal Republic of Germany are directed chiefly against consumer goods from "low-wage countries" (including Japan), whereas in Italy and Japan they are used mostly against producer goods from developed countries. On the basis of incomplete data, it also appears that France maintains a large number of restrictions on imports from developing countries outside the franc area.[29]

49. Among exports from developing countries, textiles and clothing are on the whole much more affected by quantitative restrictions than are other manufactures. Since the share of textiles and clothing in total exports of manufactures by these countries is large, restraints on trade in such products significantly limit their export earnings. In the case of other manufactures, the level of exports from developing countries is generally low despite a comparatively liberal import policy in developed countries. Of course, when imports are small in relation to domestic production there is less pressure to apply restraints.

50. All of the western European countries surveyed apply their quantitative restrictions in a manner which discriminates in favour of Organization for Economic Co-operation and Development (OECD) countries. Frequently, other countries receive the same preferential treatment, but these seldom include developing countries. Present or former dependent territories, however, as a rule enjoy relatively free access to the markets of the present or former metropolitan countries. In the Federal Republic of Germany and, it is believed, also in France, imports from countries favoured by the discriminatory practices are restricted in considerably fewer instances than imports from other countries. For example, of the sixty-four articles enumerated in table 13 as subject to restraint in the Federal Republic of Germany, only imports of the seventeen processed food items are restricted when these originate in such countries.

51. In continental western Europe and Japan, import licences are not always allocated only according to country of origin or consignment, but other considerations, such as the quality and the price of the goods, are also frequently taken into account. This practice introduces an element of administrative discretion into the control of imports which may be used for protective purposes. The possibility of such use probably increases when the allocation of licences to individual importers is delegated to trade or professional associations, a practice which is not uncommon in France.

52. Table 14 summarizes non-tariff import restrictions on sixteen categories of products in developed countries. These are manufactures and semi-manufactures which have been examined by GATT Committee III as of importance in the export trade of individual developing countries. It can again be seen that textile products[30] are subject to some kind of import restriction in more countries than any of the other items listed. The other products are restricted in only a few of the countries under review. As stated

[29] Published lists of French import restrictions refer only to imports from OECD countries, Canada and the United States.

[30] Divisions 65 and 84 of SITC.

TABLE 14

Selected developed countries: Non-tariff import restrictions on manufactures and semi-manufactures of importance in the export trade of developing countries, October 1963[a]

Country	Canned fish	Tobacco manufactures	Leather	Leather goods	Cotton textiles	Jute manufactures	Coir manufactures	Cement	Internal combustion engines[b]	Sewing machines	Electric motors	Electric fans	Bicycles	Steel furniture	Leather footwear	Sporting goods
Australia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Austria	—	S	—	—	Q*	Q	Q*	—	—	—	Q*	—	Q*	—	Q	—
Benelux	—	—	—	—	[c]	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	[c]	R*	—	—	—	—	—	—	—	—	—	—
Finland[d]	Q*	—	Q*	Q*	Q*	Q*	R*	Q	Q	—	Q*	—	Q	—	Q	—
France	q*	S	—	q*	q*	Q*	q*	—	—	—	—	—	—	—	—	q*
Germany (Federal Republic)	—	—	q*	—	q*	q*	q*	—	—	r*	—	—	—	—	—	—
Italy	—	S	—	—	[c]	—	—	—	—	—	—	—	—	—	—	—
Japan	R*	S	R*	—	—	—	—	—	R*	—	—	—	—	—	R	—
New Zealand	Q	R	Q	R	Q*	Q*	Q*	Q	Q	L	Q	R	Q	Q	R	Q
Norway	—	—	—	—	[c]	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Switzerland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	q*	—	—	q	S*[e]	[f]	—	—	—	—	—	—	—	—	—
United States	—	—	—	—	q[g]	—	—	—	—	—	—	—	—	—	—	—

Source: General Agreement on Tariffs and Trade "Quantitative restrictions affecting exports of less-developed countries" (documents COM.III/72, 12 April 1962, revised by GATT as of 1 July 1963, and COM.III/116 17 October 1963); and official national sources.

Note: The symbols indicate the nature of the quantitative restriction used:
Q = global quota;
q = bilateral quota;
L = licensing requirement;
R = import restriction, unspecified, applied to imports from all sources;
r = import restriction, unspecified, applied to imports from some sources only;
S = State trading or trading by an authorized monopoly;
* = restriction is applicable only to part of item in question.

[a] The table refers to trade between GATT CONTRACTING PARTIES and associated countries. The products surveyed are among those examined by GATT Committee III.

[b] Engines under 50 h.p. only.

[c] Quota restrictions applied to imports from Japan.

[d] Import permit required for most imports from countries not on the "multilateral treatment list". The list includes all GATT countries except Cuba, Czechoslovakia, Greece, Israel, Poland, Turkey and the United Arab Republic.

[e] For a description of United Kingdom import restraints, see the section "Other foreign trade policies" on page 19.

[f] Various items restricted from Czechoslovakia, Poland and Japan.

[g] Restraints applied in accordance with the provisions of the long-term cotton textiles arrangement.

earlier, the comparatively more liberal treatment of imports of other manufactures should be evaluated in the light of the fact that the value of their trade is generally small.

53. The recent tendency in general licensing and quota arrangements has been towards the withdrawal of restrictions. At the first examinations of the products listed in table 14 by GATT Committee III in the course of the years 1959-1961, 154 of the 256 items were free from restrictions. In the period between the first GATT examinations and October 1963, imports of forty-five of the 102 originally restricted items were completely liberalized.[31] Thus, by late 1963, of the 256 items, no restrictions were applied in 199 instances. However, when account is taken of the value of trade in the different commodities, the record of liberalization becomes considerably less favourable. Cotton textiles and jute manufactures, whose trade is much larger than the combined value of trade in all other products listed in table 14, have been extensively restricted throughout the period of the GATT review. Furthermore, in the case of cotton textiles, resort to measures to avoid situations of "market disruption" has even brought about a reversal in the trend towards freer imports.

54. It would appear from discussions held within the framework of GATT that Governments of most developed countries foresee fewer barriers to imports of manufactured goods from developing countries in the future. However, unless this were to include substantial reductions in restrictions on cotton textile imports, the effect on flows of trade in the immediate future might not be very significant.

NEGOTIATED LIMITATIONS OF EXPORTS FROM DEVELOPING COUNTRIES

55. Governments are frequently reluctant to impose quantitative import restrictions unilaterally. Such measures may be in contradiction to pursuit of a liberal trade policy or may damage established political or economic interests in countries which would be affected by the restraints. In this situation, Governments have at times sought and achieved limitations on exports of certain products from a trade partner. The exporting countries' motive for acquiescing in such export limitations has presumably been the prospect of less-favourable terms in case of refusal. Negotiations to determine the export limits have often been conducted on one or both sides directly by representatives of the affected industries.

56. During the past decade Japan has undertaken to limit exports of a substantial number of so-called "sensitive" items to the United States and several western European countries. Some developing countries have also agreed to control their exports of cotton textiles, first bilaterally and more recently under the auspices of the short-term and long-term cotton textiles arrangements.

57. During the post-war years, some developing countries, particularly India and Pakistan as well as Hong Kong, began to export cotton textiles to developed countries in increasing quantities. While tariff barriers and quota restrictions were obstacles to their entry into the major markets on the European continent, historical ties with the United Kingdom facilitated exports to that country. The United States policy of refraining from quantitative import restrictions also helped to accelerate shipments from new suppliers.

58. In order to slow down the growth of imports, the United Kingdom entered into bilateral agreements to limit cotton textiles exports with Hong Kong in 1958 and with India and Pakistan in 1959. These agreements have since been renewed and are still in force. Imports from China (Taiwan) and centrally-planned economies (excluding Yugoslavia) are under licensing control. Imports of cotton yarn from Pakistan were also subjected to quota restrictions after negotiations to establish a voluntary export limit failed.[32] Recently, the United Kingdom has been willing to accept a somewhat higher level of imports from Asian Commonwealth suppliers, while the policy towards imports from new sources has, on the whole, become more restrictive. The current ceilings for manufactures of woven cotton textiles from India, Pakistan and Hong Kong, effective from the beginning of 1962, are about 12 per cent higher than the ceilings which were in effect in 1960 and 1961. On the other hand, shipments of yarn from these three countries and of miscellaneous articles from Malaya, Portugal and Yugoslavia were limited for the first time in December 1962 and in the course of 1963 with some retroactive effect. Furthermore, effective 1 January 1963, the quota for imports of woven cotton manufactures from China (Taiwan) was reduced by 80 per cent.

59. A sudden upsurge in imports in the late nineteen-fifties prompted the United States Government to initiate consultations under GATT, which resulted in the international cotton textiles arrangements of 1961 and 1962. A short-term arrangement was drawn up in July 1961 and remained in force for one year beginning 1 October 1961. The short-term arrangement was converted into a five-year long-term arrangement, which became effective on 1 October 1962 and has been acceded to by Governments of twenty-three developed and developing countries.

60. Under the long-term arrangement, as well as under the short-term plan, participating countries are permitted to request exporting countries to restrain exports in order to prevent disruption or threatened disruption [33] of their domestic cotton textile industries

[31] General Agreement on Tariffs and Trade, "Survey of Progress in the Reduction and Elimination of Barriers Affecting Products Examined by Committee III" (document COM.III/119), 21 October 1963.

[32] United Kingdom Board of Trade, *Board of Trade Journal* (London), various issues.

[33] The term "market disruption" was used by the United States delegation at the fifth session of GATT in Tokyo in 1959. The term was later defined by GATT to be applicable under the following conditions: (*a*) a sharp and substantial increase (or potential increase) of imports of particular products from particular sources; (*b*) the price of these products to be substantially below the price prevailing for similar goods of comparable quality in the market of the importing country; (*c*) serious damage, or threat of damage, to domestic producers; (*d*) the difference in price not to be due to governmental intervention in fixing of prices or to dumping practices. *Cf.* General Agreement on Tariffs and Trade, *The Activities of GATT, 1960/61* (Geneva, 1961), pages 25 and 26.

by unrestricted imports. At the same time, the long-term arrangement stipulated that countries maintaining import restrictions inconsistent with the GATT should progressively relax these restrictions in order to eliminate them as soon as possible. Moreover, the long-term arrangement in theory provides for an automatic increase of imports into countries which are applying measures to deal with a situation of "market disruption". However, in practice, this proviso is of little consequence, since, where bilateral arrangements exist, the annual increases may be determined within the framework of bilateral negotiations.

61. Subsequently, a number of countries applying restrictions to imports of cotton textiles announced increases in quotas over the five-year life of the arrangement. Canada and the United Kingdom, however, in accordance with an escape clause in the arrangement for countries already importing a large quantity of cotton textiles from developing countries, exempted themselves from any obligation to admit increasing imports.[34] The United States, claiming a condition of market disruption, negotiated restraints on exports of cotton textiles with several countries in the course of 1962-1963. By mid-1963 agreements had been reached or negotiations were under way with twenty countries or territories.[35] It has been estimated that more than 90 per cent of cotton textile imports from sources other than Japan were under control in mid-1963.[36]

62. The cotton textiles arrangements have introduced a new concept into world trade that has been applied to discriminate against imports from developing countries. The definition of the term "market disruption", which is of central importance in the arrangements, is applicable mainly to foreign sales of new and expanding textile industries, which in fact means that it is directed mainly against Japan and developing countries.[37] The determination of when market disruption exists can be made unilaterally by the importing countries without international review. According to previous international practice in parallel cases, importing countries threatened by market disruption would have applied for a waiver from GATT authorizing them to use import restrictions for a limited period, at the end of which the restrictions would have had to be removed. Under the terms of the long-term cotton textiles arrangement, there appears little reason to expect that all restraints will have been removed when the arrangement expires in 1967.

63. It is too early to assess conclusively the effects of the short-term and long-term cotton textiles arrangements. The value of yarns and fabrics[38] entering international trade rose by almost 5 per cent in 1962 and the value of clothing[39] by about 12 per cent. The higher level of trade was mainly due to an expansion in textiles based on man-made fibres and in ready-made garments. Cotton textiles showed little growth.

64. Up to the latter half of 1963 the restraints under the provisions of the short-term and long-term cotton textiles arrangements had been mainly applied by the United States. Despite a possible hampering of imports of certain products, and difficulties for some exporters, the long-term arrangement did not prevent 1962 from being a year of considerable gains in shipments to the United States for the majority of the exporting countries.[40] However, agreements to limit exports were signed with several countries in the course of 1962 and 1963 and United States imports in 1963 showed hardly any increase at all.

OTHER FOREIGN TRADE POLICIES

65. State trading or trading by a public monopoly is unusual in the countries covered in this study. Of the products listed in table 14 only tobacco manufactures in Austria, France, Italy and Japan and jute manufactures in the United Kingdom are State traded. In the Federal Republic of Germany, State trading enterprises have the sole right to deal in processed meats and certain spirits. While the operation of such monopolies may have a restrictive effect in some cases, State monopoly operation should not be equated with quantitative restrictions.

66. In the United Kingdom, the jute industry is protected by a unique arrangement under which the Board of Trade Jute Control is the sole importer of jute goods from India and Pakistan. The greater part of these imports is resold at prices above the import prices; the amount of the mark up is equivalent to a protective customs duty. The Jute Control imports only certain specifications of jute goods and the import of other specifications from India and Pakistan is prohibited. Imports of jute goods from other countries are subject to licensing control and for the most part are restricted to those types of goods which the Jute Control does not import from India and Pakistan. In the case of these regulations the trend in recent years has been towards reduced protection.[41]

67. Many Governments follow public procurement policies favouring domestic products even if comparable foreign goods can be obtained at lower prices. Frequently this is done informally, and for that reason there exists little information on this kind of protection for most countries. The rule for United States government procurement of civilian goods is to buy foreign commodities only when the price of the same domestic goods is more than 6 per cent higher, with the exception that if the domestic product comes from an area designated as depressed, the differential may be as high as 12 per cent. In

[34] General Agreement on Tariffs and Trade, "Long-Term Arrangement Regarding Trade in Cotton Textiles, Annex A and Protocols" (document L/1813/Add.1, 2 November 1962).

[35] China (Taiwan), Colombia, Greece, Hong Kong, India, Israel, Jamaica, Japan, Mexico, Pakistan, Philippines, Poland, Portugal, Republic of Korea, Ryukyu Islands, Spain, Trinidad and Tobago, Turkey, United Arab Republic and Yugoslavia.

[36] *Far Eastern Economic Review* (Hong Kong), 18 July 1963, page 161.

[37] See footnote 33.

[38] Division 65 of SITC.

[39] Division 84 of SITC.

[40] General Agreement on Tariffs and Trade, *International Trade 1962* (Geneva, 1963), page 74.

[41] United Kingdom Board of Trade, *Board of Trade Journal*, 16 August 1963.

United States defence procurement, the allowed price spread is greater and may be as much as 50 per cent. On the other hand, overseas procurement in connexion with United States foreign aid administered by the Agency for International Development, while discriminating against other developed countries, is open to developing countries. Since 1959, procurement restrictions have been instituted on all new aid commitments for balance-of-payments reasons, but while nineteen industrial countries have been excluded from bidding, procurement in developing countries is allowed for programmes which in the fiscal year 1961/62 covered three-fourths of all commodity expenditure.[42]

68. Most developed countries apply anti-dumping duties to imports in cases which can be characterized as dumping according to national legislation. Some countries also apply compensatory duties to imports which directly or indirectly benefit from export subsidies or premiums. Little is known about the actual implementation of these measures. It is likely that they are unimportant for most developing countries. The legal procedures involved in anti-dumping charges are in themselves more of a deterrent to trade than the actual barring of imports in the few cases where the charges have been substantiated. In the United States, such procedural impediments have been described as a significant restriction on imports, going far beyond the intention of the Anti-dumping Act.[43]

69. Regulations against "abnormally priced" imports, which in several respects are similar to anti-dumping practices, are frequently directed against developing countries. These regulations can be implemented even if the price of the imported article is no lower than the price charged by the exporter in his home market, a condition which excludes the use of the term dumping.

70. In some countries customs officials are authorized to raise the invoice value of a consignment if, in their judgement, it is too low. For example, in Canada textiles are valued at the highest price at which they have been sold in the six months prior to final customs clearance, which effectively excludes low-priced mill ends. Imports of several textile products into Belgium-Luxembourg are subject to control to avoid the entrance of "abnormally priced" textiles from Spanish sources. In the United States, duties on a few products, such as certain chemicals, knitted gloves and rubber footwear, are determined not on the basis of the actual import price, but according to a higher "American selling price". Furthermore, it has been claimed by western European suppliers that the prices used do not reflect average retail prices in the United States market, but rather unrealistically high prices listed by manufacturers.

71. In 1956, cotton textile producers in the EEC member States, Austria and Switzerland formed the so-called Club of Noordwijk, which is concerned with imports for re-export of "abnormally low-priced" cotton textiles from Asian countries. In order to prevent disruption of markets in western Europe and in African countries subsequently associated with EEC, the members of the Club agreed to seek legislation against re-exportation to other participating countries of finished goods processed from grey fabrics imported from Asian sources. The Noordwijk agreement could thus constitute an effective impediment to trade of potentially quite significant proportions.

ADMINISTRATIVE PRACTICES

72. Administrative implementation of existing laws and regulations concerning imports may at times make these more restrictive than the written directives require. The classification of goods for customs purposes and the enforcement of documentary, marking, labelling, packaging and other requirements give much room for administrative interpretation. Customs officials frequently receive little guidance in the application of a regulation and are left to exercise their own judgement. For instance, in Belgium, the retail price of any product imported ready for sale may not exceed the retail price in the country of origin by more than 23 per cent; if imported duty-free, the maximum mark-up permitted is 14 per cent. Unless prices are fixed by the authorities or the producers, application of such a regulation necessarily involves an element of judgement.

73. Incomplete or delayed publication of customs information is a substantial obstacle to imports in some countries with a complicated customs system. Difficulties in identifying accurately all the regulations concerning the importation of an item are likely to be experienced particularly by exporters in developing countries, since they are less experienced traders and have fewer established market contacts.[44]

INTERNAL POLICIES AND REGULATIONS AFFECTING IMPORTS

74. Internal taxes in developed countries are a less significant impediment to imports of manufactures than is the case with such primary commodities as tea, cocoa and tobacco. Since tax rates on manufactures are generally much lower than the charges on primary products, they can also be reduced or removed without substantially affecting government revenue in developed countries. Furthermore, since the demand for such products as a rule is fairly responsive to price changes, a cut in tax rates may induce a significant expansion in the export earnings of developing countries.

75. It is not easy to determine whether, in any developed country, foreign manufactures, including those from developing countries, are subject to higher internal taxes and fiscal fees than domestic products.[45] It is true that several continental western European

[42] United States Agency for International Development, *Operations Report, 1962* (Washington, D.C.).

[43] United States Congress, Senate Committee on Commerce, *The United States and World Trade, Challenges and Opportunities*, 87th Congress, 1st Session, Senate Report, 447 (Washington, D.C., 1961).

[44] It may also be noted that customs formalities are frequently made more complicated by the collection of various minor fees in addition to customs duties. In the case of certain commodities the sum total of such fees may produce a slight protective effect.

[45] With the exception of charges and fees dealt with in the preceding section, in so far as these are considered fiscal.

countries impose a turnover tax surcharge [46] on imports when competing domestic products are subject to turnover tax, excise duties or other similar taxes. These surcharges do not, however, appear to discriminate effectively against imports; [47] they are low, being commonly less than 5 per cent,[48] and, in any case, do not discriminate between commodities of importance to developing countries and imports in general.

76. It is commonly believed that regulations designed originally to safeguard national health and safety are at times used for protective purposes. This can take the form of imposing much more stringent regulations on imported than on home-produced goods. In some instances, existing regulations may be used as an excuse for excluding even eligible goods from certain sources. Technical specification requirements may theoretically also serve protective purposes, as may regulations applied ostensibly for national security reasons. Most of these restrictions refer to food products, but in several countries, such as France and Italy, machinery and other equipment are also subject to detailed safety regulations.

MEASURES FOR THE REMOVAL OF OBSTACLES

77. The review of trade in manufactures and semi-manufactures presented in the opening section of this chapter has clearly indicated that the exports of the developing countries to the developed countries are, at present, exceedingly small. In view of the need of the developing countries for an expanding flow of foreign exchange to support their development programmes and of the limited prospects for a sufficient expansion of trade in primary commodities, it is apparent that vigorous efforts should be made to achieve substantial increases in exports of manufactures.

78. The realization of an increasing flow of manufactures from the developing countries necessarily depends primarily on the ability of these countries to produce a rising volume of products suitable for export; and this is no easy task. It is not enough, however, that these countries seek to enlarge their industrial capacity. It is also necessary that they adapt their products to the specifications demanded in foreign markets, that they increase their industrial efficiency in order to bring their costs and prices more into line with those in developed countries, and that they establish effective commercial channels for their products in importing countries. For countries with only brief past experience in industrial production and in the external marketing of manufactures, these are formidable requirements. But even the most vigorous efforts on the part of the developing countries can be thwarted, or substantially impeded, if these countries do not enjoy access to the markets of developed countries on favourable terms. And there are unfortunately grounds for maintaining that the access which is currently granted to the exports of these countries fails to meet this stipulation. This is apparent from the description of obstacles to trade presented in the preceding section of this chapter.

79. In view of the need to maintain or achieve an accelerated pace of economic development, particularly in the light of the targets set for the Development Decade, there is strong cause for a reconsideration of the commercial policies of developed countries in relation to imports of manufactures from the developing areas. Such a reconsideration at the present time, moreover, would be particularly opportune from another point of view. For, in a large number of developed countries commercial policies as a whole are at present undergoing fundamental re-examination and reformulation. The formation of the regional economic groupings in Europe and the enactment of the Trade Expansion Bill in the United States have set the stage for important changes in trade relations. These actions, moreover, have been accompanied by a greater readiness to accept and facilitate adjustments in domestic production in order to accommodate an expanded flow of imports. The present fluidity in current positions with regard to commercial policies thus encourages the hope that new policies may be forged which will more adequately take into account the needs and interests of developing countries.

80. Measures for the reformulation of commercial policies in the developed countries have, of course, already been under active discussion in international bodies. Attention should be drawn to the recent discussions within GATT which have put new emphasis on the trade problems of developing countries. This new emphasis has found expression in the Programme of Action which was originally put forward by a large group of developing countries and to which a number of developed countries have agreed —subject to certain understandings.[49] It is also important to recall that, both within the United Nations and the GATT, it has been generally accepted that, in future tariff negotiations, the principle of reciprocity should not necessarily apply to tariff negotiations between developed and developing countries.[50]

81. Such steps give rise to the hope that more decisive forms of action could be agreed upon. It is the purpose of the sections that follow to consider some of the principal measures which have been proposed to facilitate imports of manufactures and semi-manufactures from developing countries.

82. Before these measures are considered in detail, however, it has to be recognized at the outset that the possible effects of the removal or reduction of trade barriers on the flow of exports of manufactures

[46] This term is used in the Netherlands. The corresponding term is "transmission tax surcharge" in Belgium, "turnover equalization tax" in the Federal Republic of Germany and "compensatory tax" in Italy.

[47] United Nations, *Economic Survey of Europe in 1960* (Sales No.: 61.II.E.1), page V-36.

[48] However, in France, the average ratei s as high as 20 per cent.

[49] See United Nations, "Trade Problems Between Countries at Different Stages of Development" (mimeographed document E/CONF.46/PC/14); and "Submission by GATT" (E/CONF.46/PC/34).

[50] See The Ministerial Declaration of GATT of 30 November 1961 in General Agreement on Tariffs and Trade, *Programme for Expansion of International Trade: Trade of Less Developed Countries*, Special Report of Committee III (Geneva, 1962), page 24; and resolution 1707 (XVI) of the General Assembly of the United Nations.

from the developing countries are uncertain. There can be little doubt that the elimination of quantitative restrictions would be followed quite quickly by an increase in the flow of exports of certain classes of products which have already proved themselves to be highly competitive with domestic products. This would apply most notably to cotton textiles, though it should be noted that, even among these products, the competitive advantage of developing countries has not been general but has been limited to certain categories. Indeed, it is exactly for this kind of reason that an assessment of the extent to which the removal of quantitative restrictions would increase total exports cannot be reached by means of any general analysis, but would have to be based on detailed studies of demand and supply conditions in the markets for specific products.

83. The same consideration necessarily applies to evaluation of the effects of tariff reductions on trade. It is probable that, by comparison with the removal of quantitative restrictions, a longer period would have to elapse before the full effect of tariff reductions on the volume of trade took hold. But, as with quantitative restrictions, it is extremely difficult to assess the magnitude of this effect in the absence of studies on a product-by-product basis.

84. Such specific studies would almost certainly indicate that the whole set of market conditions determining the response of import demand and export supply to a tariff reduction varies widely among the different products exported by developing countries. Even assuming that output of all the different products could be readily expanded to permit enlarged flows of exports, the actual changes in trade would vary greatly in accordance with the response of import demand to the reduction in tariffs. For one thing, the extent to which a tariff reduction is translated into lower prices to purchases of imported products depends on the specific market structure for each product. Tariffs are usually levied on the landed cost of the product and, even if the whole cost of a tariff reduction is passed on to the purchaser, the percentage decline in price to the purchaser is necessarily lower than the percentage fall in landed cost; for, the final price has to cover additional internal costs, such as the costs of distribution. The response of purchasers will also be conditioned, not only by the amount of the price decline, but also by the extent to which the imported product is, in fact, a close substitute for domestic products. In many classes of manufactures, products differ not only in price, but also in quality and specifications, and it is the sum of these attributes, rather than the price alone, which determines the decision to purchase. The importance of factors other than price in influencing demand for imported products—sometimes adversely, sometimes beneficially—need hardly be stressed. Further, even if imported and domestic products are close substitutes, the effect of a tariff reduction on demand for imports will also depend on the response of domestic producers to the intensified price competition; if domestic producers were able to reduce their prices in line with the lower import prices, while maintaining their level of output, the share of imports in total domestic supplies might not increase at all. On the other hand, the lower price of the imported product might conceivably encourage consumers to expand their total purchases so that imports increased without any significant change in domestic output. Finally, it has to be remembered that, even if lower tariffs gave exporters a decisive price advantage over domestic producers, the former could only take full advantage of this situation if they could readily expand their own output without incurring higher costs of production.

85. Even if studies of these factors on a product-by-product basis were conducted for all the exports currently shipped by developing countries, these might still not yield a fair picture of the total potential effect of a general tariff reduction. For, such a reduction may also be of value in opening up markets for new products not previously exported. In fact, the importance of the removal or reduction of trade barriers may not lie so much in its effects on current trade as in its longer-run effects. It is possible, for example, to entertain serious doubts as to whether the current response of purchasers in developed countries or of producers in developing countries to a general reduction in tariffs of the order of magnitude at present being considered by developed countries would be very strong. But there are imponderables in any major revision of commercial policies which may give rise to consequences that only become evident in the longer run. If the developed countries took decisive action now to remove or reduce the barriers to exports of developing countries, this could be interpreted as evidence of an intent to maintain easier access to their markets in the future. The intent being substantiated by the evidence of action, the developing countries themselves would surely be more inclined to take account of the advantages of international specialization in the plans for economic development and would be encouraged to press forward their programmes for export promotion with much greater vigour. The long-term effect of these changes in policies upon the flows of trade between the two groups of countries might be substantially greater than any analysis of demand and supply responses would give reason to expect.

REMOVAL OF QUANTITATIVE RESTRICTIONS

86. As described in an earlier section, the general trend in commercial policies of the developed countries throughout the last decade or so has been towards the dismantling of those quantitative import restrictions which impede their exchange of exports of manufactures. Throughout this process of progressive dismantling of import controls, however, there has been a hard core of import restrictions which have been persistently maintained. These are applied mainly by some western European countries and bear heavily on certain manufactures—most notably, textiles—which are exported by the developing countries; these restrictions, moreover, tend to be applied in a discriminatory manner against imports from non-OECD countries. Additionally, in the field of textiles, the agreements recently reached under bilateral arrangements and under the international

cotton textiles arrangements have introduced new restrictions in the form of negotiated limitations on exports by the exporting countries. Thus, the principal class of manufacture exported by the developing countries has not benefited from the trend among developed countries towards the elimination of quantitative restrictions but has been subject to greater quantitative regulation.

87. If recommendations for the alleviation of this situation are to be realistically founded, it is obviously important that the motives behind such restrictions and regulations should be appreciated. In this regard, some influence undoubtedly has to be ascribed to the view, still held by many, that low-income countries, by virtue of their low wages, can gain an "unfair" competitive advantage in world markets for manufactures. It is evident, for example, that this view has tended to affect the attitude of a number of developed countries towards their trade relations with Japan. When Japan acceded to the General Agreement on Tariffs and Trade, a number of the other Contracting Parties—mostly countries in western Europe—invoked article XXXV of the Agreement; by so doing, they withheld their consent to apply the Agreement to their trade relations with Japan and thereby retained their freedom to restrict or regulate Japanese imports.

88. It need hardly be said that the identification of low wages with a competitive advantage in world trade in manufactures constitutes a grossly oversimplified and misleading interpretation of reality. It is certainly true that, in an industry in which wages are a large element in costs, a low-income country may possibly enjoy a competitive advantage by virtue of its low wages. But wages are only one element in costs and the competitive advantage of different industries depends as much on such other determinants of costs as the state of their technological advance, their capital stock, the benefits which they derive from economies of scale and external economies, and the cheapness of their raw materials. It is only a statement of the most obvious fact that developing countries generally suffer from a serious competitive disadvantage in most branches of industry. Further, as is very well understood, even if wages were the main determinant of costs, it would still be to the advantage of a high-income country to trade with a low-income country, importing products which the latter could produce relatively cheaply in return for exports of its own relatively cheaper products. Still, though it is widely appreciated that the cheap labour argument has no general validity for trade relations as a whole, there are, none the less, times when the imagined fear of extensive competition from cheap labour countries colours the political climate and becomes an excuse for the pursuit of discriminatory commercial policies. Since policies towards Japan have been symptomatic of this general attitude, it is somewhat encouraging that, in the very recent past, a number of the developed countries which previously invoked article XXXV of the GATT against that country have ceased to do so. It has to be added, however, that the revocation of article XXXV against Japan has usually been accompanied by the negotiations with Japan of export or import quotas on a number of "sensitive" products besides textiles.[51]

89. While the influence of vague and indeterminate fears about cheap labour competition should not be discounted, it has to be recognized that the resistance to imports of manufactures from developing countries also has more tangible origins. The principal manufacturing industries in which these countries currently enjoy a competitive advantage, notably, the textile industries, are generally among the low-growth or stagnant industries in the developed countries.[52] Accordingly, the burden of adjustment to a substantial expansion in imports from these countries would tend to fall upon the less viable industries in the economies of the developed countries. Particularly if imports expand sharply over a short period of time, they may be viewed as aggravating the relatively depressed condition in which domestic industry may find itself. It is, however, very easy to exaggerate the difficulties that are generated by increased imports. Imports from developing countries do not necessarily constitute more than a small fraction of total domestic supplies;[53] and the difficulties experienced by a domestic industry as a result of effective competition from imports are often small in comparison with the more fundamental difficulties that arise from technological progress and changing consumers' tastes within the domestic economy itself. But it is also true that the difficulties originating in increased imports can be quite easily alleviated by protective action while the difficulties arising from the latter causes cannot.

90. A lesson to be drawn from this situation is that, as a corollary to the adoption of more liberal trade policies with regard to imports which compete with low-growth domestic industries, there is need for conditions within the developed countries which facilitate the transfer of resources from the less to the more competitive industries. Thus, it is essential for the pursuit of liberal trade policies that high and rising levels of employment and output be maintained within the economies of these countries. But this may not be enough. If a rising volume of imports entails the displacement of current domestic output, structural adaptation may still prove difficult of achievement; and, in these circumstances, some form of direct public assistance to the affected industries may be necessary if resistance to more liberal commercial policies is to be overcome and the burden of adjustment is not to be borne wholly by particular industries and their employees. It is encouraging that, as noted elsewhere, this need for trade adjustment

[51] Among the restricted products are sewing machines, toys, pottery, alloyed steels, radio and television receivers, photographic equipment, precision tools, and medical apparatus. Some of these products are of actual or potential interest to exporters among developing countries.

[52] Between 1950 and 1962, for example, output of the textile industry in the countries of EFTA declined at an annual rate of 0.5 per cent, mainly because of the continued contraction of the industry in the United Kingdom. In the United States, the annual rate of increase in output was about 1.5 per cent and in the EEC countries about 3 per cent.

[53] In the United States, for example, which is a principal importer of textile products from the developing areas, the share of imports from these areas in total domestic supplies of textile mill products in 1960 was only 1.5 per cent.

assistance has recently gained wide recognition and has led to legislative action in a number of developed countries.

91. But, if there is need within the developed countries to spread the burden of adaptation to rising imports, it is also important that the burden be shared among developed countries. It is not to be forgotten that in the field of textiles, imports from developing countries are heavily concentrated in a few developed countries, particularly the United Kingdom and the United States. A number of western European countries continue to apply severe, quantitative import restrictions—restrictions which, moreover, discriminate against imports from outside the area. The cotton textiles arrangements provided for a limited relaxation of restrictions by such countries, but a more substantial relaxation could be wished. If access to markets in these countries were easier, moreover, the principal importing countries might feel less compelled to take defensive action to protect their own industries.

92. The national policies pursued by developed countries with regard to quantitative restrictions on manufactures exported by developing countries clearly fall far short of the principles enunciated in the GATT. To some extent, the difficulty lies in the concentration of developing countries on exports which compete with low-growth or stagnant industries in the developed countries; and this offers yet another reason why developing countries should seek to diversify their exports of manufactures. Still, there are solid grounds for the claim by developing countries that the policies of developed countries are both discriminatory in effect and are subject to change by unilateral action; both are features which run counter to the principles accepted in trade in manufactures among developed countries. There is clearly room for formulation of more internationally acceptable rules of conduct to govern commercial policies affecting imports of manufactures from developing countries. This, moreover, could go some way towards allaying the fears of developing countries that past practice with regard to imports of textiles may, on the pretext of unfair competition from low-wage countries, be extended to other classes of manufactures.

93. The GATT Programme of Action constitutes a step in this direction. The standstill measure contained in the Programme stipulated that no new quantitative restrictions affecting imports from the developing countries should be imposed. As a further measure, the Programme recommended that existing quantitative restrictions which are inconsistent with the provisions of the GATT should be eliminated within the period of one year. Where, on consultation between the developed and developing countries concerned, it was established that special problems prevented such action being taken within this period, the Programme recommended that restrictions on the affected items should be progressively reduced and eliminated by the end of 1965. However, not all the developed countries expressed agreement with this Programme, and its acceptance by those which did so was subject to a number of understandings. It was stipulated, for example, that acceptance was without prejudice to the rights and obligations of Contracting Parties under arrangements negotiated within the framework of the GATT.

REDUCTION OF GENERAL TARIFF BARRIERS

Linear tariff reductions

94. While quantitative restrictions have persisted as a major barrier to manufactures exported by the developing countries, their significance as an impediment to the greater part of world trade has diminished over the post-war years. With the general dismantling of these barriers in trade among the developed countries, increased attention has been given by those countries to the reduction of tariff barriers. As has been pointed out in an earlier section, such barriers have been considerable; and it is a fair presumption that the protective effect of tariffs has fallen at least as heavily on exports from developing countries as on exports from other sources. In fact, some of the highest rates in the tariff schedules of developed countries apply to light manufactures, such as textiles, floor coverings and footwear, which are of particular importance to developing countries.

95. Over the post-war years, a series of tariff reductions have been negotiated under the General Agreement on Tariffs and Trade, and there is no question that, partly as a result of these negotiations but also because of the erosion of the protective incidence of specific rates consequent upon the general upward trend in prices, effective tariff levels have been appreciably lowered. Developing countries have no doubt benefited to a degree from these reductions in tariff barriers. However, it is true that past tariff reductions have tended to be concentrated on products traded among the developed countries. In the item-by-item negotiations conducted under the General Agreement, the products on which tariff reductions have been subject to negotiation have been selected on the initiative of the principal suppliers; and the principal suppliers have generally been developed countries. In addition, the bargaining position of the developing countries in such negotiations has been weakened by the fact that they have not been able to offer appreciable, reciprocal concessions.

96. From the point of view of the developing countries, the forthcoming round of tariff negotiations gives promise of being distinctly more advantageous, since it has been proposed that these negotiations should aim at achieving across the board, rather than item-by-item, reductions in tariffs. Uniform, percentage reductions applying to tariff schedules as a whole would automatically bring down tariffs on products of particular interest to the developing countries even though the main parties to the negotiations would be the developed countries. The negotiation of across the board or linear reductions in tariffs is, of course, not without its difficulties; extreme disparities among countries in tariff levels on particular products, for example, may necessitate special arrangements. But the experience of the European Economic Community and the European Free Trade Area with linear tariff cuts indicates that the technique can be successfully applied.

97. It is obviously in the interest of the developing countries that the list of items which might be excepted from the linear tariff reductions should be held to a minimum. Were the list to become lengthy, it is quite possible that items of particular interest to these countries might be included. Since few developing countries are in a position to take an active part in bargaining for tariff concessions, it would be difficult for them to ensure that the list of exceptions was not weighted against them. Their interests are thus best safeguarded by minimization of the exceptions. It is, therefore, encouraging to note that a number of developed countries have already indicated that they regard most of their tariffs as negotiable and that they wish to keep the number of excepted items to a minimum.[54]

98. The developing countries also have, in general, an interest in maximization of the amount of the negotiated tariff reductions. In so far as the prices of their export products are an important element in determining the volume of their foreign sales, the greater the reduction in tariffs the more would the competitive position of these countries *vis-à-vis* domestic producers in importing countries be strengthened. Their position in relation to producers within preferential tariff areas would also be improved through a narrowing of the margin between general and preferential tariffs. This, of course, would not constitute an unqualified gain for those developing countries which are currently members of preferential tariff areas; but against the possible disadvantage of intensified competition within the area, these countries would have to weigh the advantage of easier access to markets outside the area. It may also be noted that in the light of their general interest in maximization of the amount of the tariff reductions, it would be natural for developing countries to support the notion of phased reductions. For, phased reductions, by allowing time for the planning of adjustment by domestic producers to changes in tariffs, can improve the prospects for negotiation of larger tariff reductions.

Selective tariff reductions

99. Negotiations among developed countries intended to reach agreement on a linear reduction in tariffs do not preclude the possibility that, at the same time, additional reductions on items of particular interest to developing countries might be introduced. On the grounds that the adoption of a particularly liberal trade policy towards the developing countries would constitute an important contribution to their economic development, the developed countries might agree to go beyond the linear tariff reductions in regard to products of special interest to the other group.

100. If this approach of selective tariff reductions were taken, some difficulty would certainly arise in drawing up a list of products which might be deemed to be of particular interest to the developing countries. One possible criterion might be the relative importance for current export earnings of the developing countries of the different products exported to the developed countries. The list might, for example, be confined to products which each accounted for, say, at least 1 or 1.5 per cent of total earnings derived by these countries from exports of manufactures to the developed countries. Such a criterion, however, would limit the list to quite a small number of products. If, for example, the criterion was that each product should account for 1.5 per cent or more of total exports of manufactures to the developed countries, no more than a handful of items would appear on the list (see table 7); and selective tariff reductions on items in such a short list would accordingly be of benefit to the exports of a correspondingly small group of developing countries. On the other hand, if the list were lengthened sufficiently to become of interest to developing countries generally, the number of included products might become very large.

101. Alternatively, it could be argued that a list based on the more important of the currently exported products would not be sufficiently forward-looking and that it would be more valuable to make selective tariff reductions on new exports which show promise of becoming important. Such selective reductions would have the advantage of encouraging the diversification of exports; they might also help to lessen the danger that further concentration of the export drive on a few items of current importance would stiffen demands in the importing countries for the retention or intensification of quantitative restrictions. As has been pointed out in an earlier section, some of the manufactures which have enjoyed high rates of growth in exports to developed countries—most notably, textiles—have been particularly vulnerable to demands for quantitative restrictions in the importing countries since they have been competing with domestic industries which are among the least viable in these countries. There are, however, other manufactured exports, such as certain simple types of machinery, which have been showing promise of rapid growth and which not only account for a very small proportion of the total imports of such manufactures by developed countries but are also confronted with a dynamic growth in demand. Of course, it has to be recognized that, since the value of such exports is extremely small at present, the immediate benefit to developing countries of selective tariff reductions would not be considerable.

102. Either of the above criteria provides a possible basis for the preparation of a selected list of products on which tariff reductions over and above the agreed linear reductions might be negotiated. However, whatever the basis of the list, there is a major difficulty that would arise in the application of selective tariff reductions to which reference has not so far been made. It is that, unless there were agreement to introduce a preferential tariff system for the listed products imported from developing countries,

[54] The United States Government has, for example, expressed its intention to put forward the entire tariff list except those explicitly reserved by law. Only ten items fall under this heading, of which nine are subject to "escape clause" actions. The ten are carpets, glass, lead, zinc, watch movements, stainless steel table flatware, clinical thermometers, safety pins, cloth typewriter ribbons and petroleum. In contrast, at the Dillon round of negotiations, the United States excluded 75 per cent of the items in the tariff list from negotiation. The EFTA, at a ministerial meeting, also declared that exceptions should be kept to a minimum.

the selective tariff reductions would apply as much to trade among the developed countries as to imports from the developing countries. Consequently, unless the developing countries were the dominant suppliers of the listed products, the negotiation of selective reductions would necessarily become a matter of bargaining on an item-by-item basis among the developed countries. That it would be possible to undertake such negotiations is obvious; but it is also plain that if they embraced more than a relatively small number of products, they would be difficult to reconcile with the principle of linear reductions envisaged as the basis of the forthcoming tariff negotiations.

103. If the developing countries were the dominant suppliers of the selected products, this difficulty would be considerably lessened. It is a fact, however, that even if the term "dominant supplier" is very liberally defined, there are very few products exported by the developing countries which might qualify for such a description. For example, at the three-digit level of the SITC, there are currently only about fourteen products imported by the developed countries from the developing countries which account for 10 per cent or more of total imports of each of these products (see table 7).

104. These arguments do not necessarily mean that, as a means of supplementing linear tariff reductions, there is no scope at all for selective tariff reductions on certain products of particular interest to some developing countries; but they do point to the existence of serious obstacles to a comprehensive approach based on general criteria of selection. Consideration of obstacles on an item-by-item basis perhaps offers a more practical, if also more limited, approach to selective tariff reductions; this might reveal specific possibilities for the selective reduction of barriers which could be negotiated without encountering serious objections.

105. To an extent, Committee III of the GATT has been undertaking work along these lines for a number of manufactures as well as primary commodities (see appendix table A-2). The main activity of the Committee has consisted in identification of the range and magnitude of the obstacles to exports, attention having been given to both non-tariff and tariff barriers. The function of the Committee, however, has been advisory and it has not been in a position to initiate negotiations on specific items. A measure to realize a reduction in tariffs on the items contained in the lists studied by Committee III was recommended in the GATT Programme of Action. This proposed an across the board tariff reduction on these items of 50 per cent, phased over three years. Since the proposal was understood to be without prejudice to the General Agreement, it would appear that it did not imply the introduction of preferential tariffs for developing countries; as a basis for negotiation, it would therefore run into the difficulties mentioned above in regard to selective tariff reductions. Moreover, if the linear tariff reductions agreed upon in the forthcoming tariff negotiations were to reach 50 per cent, the proposal would lose its special significance for the developing countries.

PREFERENTIAL MEASURES

General considerations

106. The discussion in the preceding section has suggested that, within the existing framework of tariff arrangements, the scope for measures designed specifically to enhance the export prospects of developing countries appears limited. Linear and selective reductions in tariffs would generally tend to strengthen the competitive position of exporters in developed and developing countries alike. If, however, preferential treatment were accorded to exports from developing countries, the relatively weak position of these countries as competing producers in world markets for manufactures could, to some extent, be improved. Over the past decade or so, substantial advances have been made in the application of this idea to trade among groups of developing countries. More recently, however, considerable interest has also been expressed in the possibility of introducing preferential tariffs for the exports of developing countries in their trade with developed countries.[55]

107. An immediate question that arises in regard to this proposal is its relation to the most favoured nation principle. Governments may entertain serious misgivings about the introduction of any such preferential system on the grounds that it would conflict with this principle. There can be no doubt that the general recognition of the most favoured nation clause has, through the years, played a crucial role in containing forces that might tend to fragment the world trading system. Without the restraint provided by broad acceptance of this relatively simple rule, discriminatory practices and retaliatory actions might readily multiply—to the common disadvantage of all trade countries. Strong justification is, therefore, required for international acceptance of deviations from a principle that is of proved value in furthering non-discriminatory trading policies.

108. It has, however, come to be increasingly recognized in post-war years that the international rules of conduct drawn up to govern trade relations are mainly relevant for trade among developed countries and cannot be applied rigidly to trade between countries at widely different stages of economic development. Only recently, as noted earlier, it was officially recognized that the principle of reciprocity in tariff negotiations need not apply in regard to negotiations with developing countries. It has long been accepted that tariffs were a justifiable instrument for the protection of infant industries in individual countries; and the particular importance of such protection for the economic growth of developing countries has been obvious. But with enunciation of

[55] This possibility was raised at a meeting of the GATT Committee III in March 1963; and at a ministerial meeting two months later it was concluded that a working group to study the proposal should be established. The working group held its first two meetings from 7 to 11 October 1963 and from 11 to 18 December 1963. See General Agreement on Tariffs and Trade, "Measures for the Expansion of Trade of Developing Countries as a Means of Furthering Their Economic Development" (document MIN (63) 7), and "Summary of Points Raised at the Working Party on Preferences in October 1963" (document L/2073). The proposal was also discussed at the second session of the Preparatory Committee of the United Nations Conference on Trade and Development. See "Report of the Preparatory Committee", in Vol. VIII of this series.

the view that reciprocity need not apply to developing countries, it has now been recognized that the need to use protective tariffs for economic development should not exclude developing countries from the benefits of tariff reductions in the developed parts of the world.

109. It is now being argued that the introduction of a preferential tariff system would only carry this recognition of the necessity for asymmetry in the commercial policies of developed and developing countries one step further. If the nascent industries producing for the domestic market in developing countries require protection from foreign competition, it is no less true that the new industries producing for export require special measures of support to render them competitive in foreign markets. The provision of relatively low tariffs by developed countries on competing exports from developing countries may be considered as a corollary to acceptance of relatively high tariffs for import-competing industries within developing countries.

110. The pursuit of commercial policies which discriminated in favour of a particular group of countries would, of course, not be a novel event in international trade. Arrangements of this nature have often been, and still are, widely practised and tolerated. As will be recalled, during the earlier post-war years, the western European countries were allowed to discriminate in favour of each other under the liberalization code of the Organization for European Economic Co-operation. The scarce currency provision contained in the Articles of the International Monetary Fund also permitted these countries to discriminate against imports from the dollar area. With the later establishment of the European Economic Community and the European Free Trade Area, the differentiation in commercial policies between member and non-member countries has since been introduced into the area of tariff schedules. And it need also hardly be recalled that trade between some developed and developing countries has long been conducted within the framework of accepted preferential tariff arrangements.

111. International agreements drawn up to establish rules for the conduct of trade relations among nations have, of course, recognized that, under certain circumstances, exceptions to the most favoured nation principle are permissible. The Havana Charter provided for exceptions, first, to ensure that certain existing preferential arrangements, chiefly those between the Commonwealth countries, might continue, and secondly, to remove any bar to the creation of free trade areas and customs unions between countries desirous of promoting these arrangements among themselves. In addition, however, article 15 of the Havana Charter permitted the introduction of new preferential arrangements between two or more countries belonging to the same region if it could be shown that these arrangements were designed to further their programmes of economic development. Proposals for the establishment of such arrangements could be approved by the International Trade Organization, subject to the submission of satisfactory evidence that the arrangements would lead to the development of an industry on a sound economic basis and that they would not cause undue injury to the interests of other countries. The Articles of the GATT embodied the first pair of exceptions contained in the Havana Charter. It did not, however, include the third. A proposal to insert the provisions of article 15 of the Havana Charter relating to the establishment of preferences for economic development was rejected when the GATT was revised in 1955. The main grounds for rejection were that further departures from the most favoured nation clause in addition to those explicitly permitted under GATT could be considered under article XXV. This article provides that the Contracting Parties may, if agreed by a two-thirds majority, suspend the obligation to adhere to the conditions of the Agreement for a limited period.[56]

112. The criticism has been voiced that the exceptions to the most favoured nation principle thus far included in international agreements have referred to circumstances which are of particular interest or relevance for developed countries. The preferential systems specifically sanctioned by GATT were inherited from colonial arrangements; and mention has already been made of discriminatory measures under the OEEC liberalization of quantitative restrictions. The exceptions relating to free trade areas and customs unions, while applicable to both developed and developing countries, have been of particular interest to developed European countries.[57]

113. The case for a preferential tariff system to be applied by the developed countries to imports of manufactures and semi-manufactures from the developing countries derives its strength from the manifest need of the latter to accelerate the rate of growth in their total export earnings. Such a system could accordingly in no sense be regarded as a substitute for the reduction or removal of the existing barriers to exports from the developing countries which have been described earlier; it could only supplement action on these barriers. Acceptance of the principle of preferential treatment, however, would denote a major reorientation in attitudes towards the use of commercial policies for economic development and this, in itself, could hasten the reduction of other obstacles. For such acceptance to be meaningful, some positions would have had to be reached with regard to the broad form which a system of preferential tariffs might take. In the following paragraphs, some of the main issues that would arise in devising a system and some of the alternative systems which have been proposed are discussed.

Principal features of a preferential tariff system

114. The primary feature of any system of preferential tariffs is the flows of world trade to which it applies. Before a system of preferential tariffs can be introduced, there are many other questions which also have to be settled, but none is so basic as this

[56] Thus far, actions under article XXV have been limited to very exceptional and relatively minor cases. It is also open to question whether the article could be invoked in regard to the obligations of the developing countries when taken as a group.

[57] All the legal issues raised by these arrangements have not, of course, yet been resolved. This is true particularly of the preferential treatment accorded to the associated countries of OEEC.

characteristic. This means that, in drawing up any proposal for a preferential tariff system, the primary issues that arise are, first, the question of the countries between which trade is to be treated preferentially and, secondly, the question of whether such preferential treatment is to apply to all or part of the trade between these countries. Hardly less important, however, is the question of the extent and duration of the preferences to be accorded to trade. While, for ease of exposition, these issues are discussed separately below, it will become apparent that they must finally be considered together.

The choice of countries

115. Establishment of a single international system of preferential tariffs such as might gain broad acceptance within the United Nations would presuppose widespread participation on the part of both developed and developing countries. While the interests of developing countries in alternative preferential systems need not coincide and may give rise to disagreement on particulars, there is little question of their general support for the principle of preferential treatment for their exports. The doubt arises in the case of the developed countries. And it would obviously be crucial to the acceptance of a common preferential system that most, if not all, of these countries expressed willingness to participate. It could be expected that the consent of each would be conditional on the consent of others; otherwise, each would be restrained from participation by the fear that it would suffer a disproportionate burden in accommodating its economy to an increase in exports from the developing countries. The widespread participation of developed countries would not only be needed on economic grounds but would also carry an important non-economic advantage. By investing the preferential system with a broad international character, it would provide for participation of all developing countries without regard to any ties with particular developed countries.

116. The classification of countries into those which are to extend preferential treatment and those which are to benefit from it, would no doubt give rise to certain difficulties. It may be postulated that, since the underlying purpose of a preferential system would be to facilitate economic development, the differentiation should depend on the stage of development. The *per capita* income or output levels, the share of manufactures in the gross national product, the degree of diversification of industrial production and export and the long-term structural balance-of-payments problems associated with economic development might, for example, be accepted as rough guides to the stage of development. Still, it will be evident that the mechanical application of these or any other statistical measures—even if sufficiently accurate from a technical viewpoint—would not resolve the issue. This is so, first, because any measure or combination of measures which might be accepted as indicating the stage of development would inevitably contain some element of arbitrariness and, secondly, because economic development is in any case a relative concept. An element of judgement would therefore necessarily enter into the classification. This would not be a source of difficulty as regards the classification of most countries. The main practical difficulty would arise with regard to a small group of border-line countries which may be regarded by some as relatively developed and by others as developing; provision might therefore have to be made for an intermediate group or groups of countries which though not sufficiently developed to accord preferential treatment to developing countries would nevertheless either receive a more limited degree of preferential treatment than other developing countries or none at all.

117. It could be argued that some of the developing countries, since they are industrially more advanced and enjoy at least some competitive advantage in international trade, have less need than others of preferential treatment to stimulate the growth of their export trade in manufactures and semi-manufactures. If the industry of these countries is still in a weak position when it has to meet the competition of industry in developed countries, it may none the less enjoy greater competitive strength than industry in other developing countries. On these grounds, a case could perhaps be advanced either for the exclusion of the industrially more advanced countries from the preferential system or for the provision of a greater margin of preference for the industrially less advanced countries. The latter solution would imply a dual scale of preferential tariffs, though even more than two scales could be justified by this line of argument. Quite apart from other considerations, however, a practical limitation on the number of scales would be imposed by the height of the general tariffs prevailing in developed countries. Since the present average tariff level of developed countries amounts to 15 per cent *ad valorem* and since there is the prospect of an early reduction in this level, the scope for introduction of significant differences among developing countries in the size of the preferential margin accorded to them would clearly be restricted.

118. The case for a preferential system based on the stage of industrial development or degree of competitive strength can be assessed only in terms of the purposes which such a system is conceived to serve. If the aim is specifically to encourage the growth of an export trade in manufactures in each of the developing countries, then some differentiation among these countries might appear to be warranted. On the other hand, the purpose of a preferential system can be more broadly conceived as one of a number of international measures intended to assist the economic development of the developing countries. It would contribute to this aim by helping to stimulate the growth of export earnings of these countries. And it is obvious that such growth is as much needed by the industrially more advanced of the developing countries—some of which number among the lowest *per capita* income countries in the world—as by the industrially less advanced of these countries.

119. It has also to be borne in mind that the criterion by which countries might be selected for preferential treatment would, in practice, probably be much influenced by views with regard to the extent of the preferences to be accorded. Were the extent of the preferential treatment accorded to each developing

country to be limited by some system of export quotas—as described below—the issue of whether there should be some differentiation among developing countries in the size of the preferential margin would lose some of its practical significance.

The choice of products

120. Very similar considerations arise when attention is turned to the second question of whether preferential treatment should be extended to all or part of the manufactures and semi-manufactures originating in the developing countries. As with countries at different stages of industrial development, it may be maintained that industries in developing countries are not all equally in need of preferential treatment for their exports. It has been noted earlier that a system of preferential tariffs can be justified as a necessary support for young export industries on the same grounds as protective tariffs can be defended as necessary for infant domestic industries; and the corollary of this argument is that, once the export industry has acquired competitive strength, preferential treatment should be withdrawn in the same way as protection should be removed from a mature domestic industry. Thus, it may be contended that the system of preferential tariffs should apply only to infant export industries and not to industries which are already competitive.

121. Like the argument with regard to the differentiation of countries at different stages of industrial development, this view may be contested by reference to the underlying purpose of a system of preferential tariffs. It can be asserted that the aim of such a system would not simply be to lessen the inequalities in competitive strength between developed and developing countries or among developing countries; it would be to contribute to the growth in export earnings of the developing countries. This aim might be partially defeated if the products of industries which had acquired some competitive strength were to be excluded from preferential treatment. For, rigorous application of this criterion would mean that it would be particular industries in particular countries which might be deemed to be competitive and therefore subject to exclusion from the preferential system. The same industries in other countries, however, would continue to enjoy preferential treatment. Thus, exclusion of the output of some industries in some countries could give rise to exactly the same objections as exclusion of some countries on the grounds that they were industrially more competitive.

122. As a possible way of avoiding the need to differentiate between developing countries in regard to their relative competitive strength in the same lines of production, it could be suggested that there should be established a common list of manufactures and semi-manufactures on which all developing countries would be accorded the same preferential treatment. This list might consist of products which are of particular interest to developing countries and on which tariff reductions would be generally acceptable to developed countries.

123. This proposal resembles the suggestion discussed earlier that selective tariff reductions might be made on a list of those products of particular interest to developing countries. It has the advantage, however, that it overcomes one of the major obstacles to such selective reductions. It will be recalled from the earlier discussion that a practical difficulty in the selective reduction of general tariffs is the fact that most products of particular interest to developing countries bulk still larger in trade among the developed countries. Negotiations for reductions in selected tariffs could therefore not be readily separated from general tariff negotiations among developed countries. If, however, the selective reductions took the form of the introduction of preferential tariffs for developing countries, the question of the effect of these reductions on trade among the developed countries would become less important.

124. As in the case of selective tariff reductions, however, the preparation of a generally acceptable list of items to which preferential tariffs would apply, would be likely to present considerable difficulties. If, for example, it were decided to extend preferences only to those products which currently did not enjoy a strong competitive advantage in international trade, there would obviously be room for considerable differences of opinion as to which products fulfilled this condition and which did not; and the same would apply to other possible criteria. Whatever the criterion, an item-by-item approach would be essential; and, if past international experience of tariff negotiations on an item-by-item basis is any guide, the degree of tariff preference agreed upon by the developed countries for each item would generally tend to be close to the smallest concession proposed by any one of these countries. Moreover, there would be a strong temptation to offer the least concessions on these items in which the developing countries have begun to demonstrate some ability to compete with the developed countries.

125. Of course, the establishment of a system of preferential tariffs not for all actual or possible exports from developing countries but for only a limited list of items would undoubtedly encounter less opposition within the developed countries. It would certainly be claimed that, at the present time, there are a number of products being exported by developing countries which enjoy a strong competitive position in the developed countries; and there would be a decided reluctance to extend preferential treatment to such products. Indeed, as has been discussed earlier, the main problem confronting developing countries in regard to certain products—notably, various textiles—is to secure greater access to the markets of developed countries through the reduction or removal of import restrictions. Thus, although it might be more fruitful to adopt an across the board, rather than an item-by-item, approach in the establishment of a preferential tariff system, the adoption of the former method might be feasible only if certain products were excepted from the preferential schedule.

Extent and duration of preferences

126. If it can be assumed that certain developed countries would be unwilling to extend any preferential

treatment to certain manufactures now being exported by developing countries, it is also likely that such preferences as they might be willing to accord to other possible imports of manufactures would not be unlimited in extent or duration. A preferential tariff system would, after all, be equivalent in effect to the indirect subsidization of exports from developing countries; and the developed countries might be unwilling to commit themselves to provide an indirect subsidy to these exports to an unknown degree. However, the proposal for a preferential tariff system could be rendered more acceptable to these countries if known limits were set to their obligation to extend preferences. These limits could be defined in terms both of the amount of imports to be accorded preferences and the duration of the preferential arrangement. Such limits would have the added advantage of making more acceptable preferential arrangements which applied to all developing countries and products.

127. A factor influencing the volume of imports flowing in under the preferential arrangement would obviously be the size of the *preferential margin* itself. The larger the margin, the more might the preferential system provide developing countries with a price advantage in competition with producers in developed countries and the greater might the effect of the system consequently be on the volume of trade. The level at which the preferential margin was set would not in itself remove uncertainty about the possible volume of preferential trade, but it would influence views as to whether such uncertainty was actually a cause for concern.

128. In this context, it is worth noting the size of the possible preferential margin that would be at issue. The current level of general tariffs applied by the developed countries to manufactures stands at about 15 per cent, calculated as a simple average of the tariffs on all individual items. Were this level to be reduced by one-third to one-half at the forthcoming GATT tariff negotiations, the future average level would range between 10 and 7.5 per cent. Thus, even if preferential duties were all fixed at zero rates, the maximum possible margin of preference which developing countries could enjoy on the average would be between 10 and 7.5 per cent. For comparison, it may be noted that the present margin of preference extended to manufactures imported by the United Kingdom from other Commonwealth countries amounts, when calculated in the same way, to about 15 per cent.

129. A preferential system offering zero rates of duty on all items would imply that high-tariff countries would have to offer a greater margin of preference than low-tariff countries. Similarly, it would provide a greater margin of preference on high-tariff items, though these are usually the items on which protection is deemed to be most necessary. Less drastic methods might be to reduce the general tariff by a given percentage, say 50 per cent, or by a fixed number of percentage points, say, ten. The former method would be similar to the linear reductions envisaged for the forthcoming GATT tariff negotiations. The method can be applied generally to all tariffs, with the possible exception that tariffs below a certain point, say, 2 per cent *ad valorem*, might be waived altogether to avoid nuisance.[58] The latter method has sometimes been used for calculating the margin of preference in existing preferential arrangements. Difficulties are encountered in the application of this method, however, when extreme disparities between high and low rates exist; a 10 point margin would, for example, yield a zero preferential rate when the general rate was 10 per cent or lower, and a 90 per cent rate when the original rate was 100 per cent. A third possible method for determining the preferential margin would be to combine both percentage and percentage point reductions in a more complicated automatic formula.[59]

130. In addition to varying the preferential margin, it has also been suggested that the extent of the preferential treatment extended to exports from the developing countries could be limited by the introduction of *preferential quotas*. Under this proposal, exports from these countries up to the amount of the quota would be accorded preferential treatment; exports in excess of the quota would attract duties at the rates specified in the general tariff schedules. Thus, it should be understood that the quotas would set limits only to the volume of preferential trade and would in no way imply any restriction of non-preferential trade.

131. The most general system of quotas which might be regarded as feasible would be the assignment of a global quota to each of the developed countries. Under this arrangement, each of these countries would agree to accord preferential treatment to all exports from the developing areas up to the value of the quota; thus, within the limit of the global quota, preferential treatment would be applied in a non-discriminatory manner to all exports from all developing countries. To ensure that all developing countries would have the opportunity to benefit from these quotas, some system of export quotas might also be established for these countries. Finally, as a means of limiting the volume of preferential trade in the few possible products whose exports might be deemed to give rise to situations of market disruption, the system of quotas could be elaborated to include specific import and export quotas in these particular instances. These various proposals are discussed in greater detail in the next section.

132. The third form of limitation which might be placed on a preferential system is a definition of the period during which preferential treatment is to be accorded. It would be generally agreed that preferential arrangements should be a temporary measure which should be terminated when conditions no longer warranted its continuance. The exact *duration* could be made to depend on the criteria of eligibility. If, for example, eligibility were determined by the general level of *per capita* income, a country might cease to

[58] The Trade Expansion Act of the United States, for example, authorizes the President to negotiate complete elimination of duties for any article for which the *ad valorem* duty is not more than 5 per cent. It also authorizes the rounding off of duties up to one-half of one per cent.

[59] An example is the automatic formula being considered at GATT for the general purpose of reducing disparities in tariff rates of different countries.

enjoy preferential treatment for its exports once its *per capita* income had surpassed a certain level. This would mean that the duration of preferential treatment would vary with the selected criterion. Choice of the competitiveness of industries as the criterion, for example, will yield a different duration from that of *per capita* income.

133. Alternatively, the duration might be decided upon independently of the initial criteria of eligibility. For instance, the preferential arrangement might be arbitrarily fixed for a period of, say, ten years subject to renewal or it might be phased out gradually. This could mean that problems of consistency with the criteria of eligibility might arise; for example, a preferential arrangement could come to an end before countries had attained, say, the critical level of *per capita* income. On the other hand, the automatic termination of phasing out of the system would, at least, give an opportunity for experimentation and reconsideration of the criteria.

Other considerations

134. There are certain other issues which would also have to be resolved before a preferential system could be established. One such would be the question of the relation between the new system and existing preferential areas of which some developing countries are members. Were the developed and developing countries in these areas to become members of the larger system, some programme for the phased unification of the preferential tariffs in the different areas would have to be worked out. Depending on the preferential margin established for the larger system, such unification might entail some loss in the degree of preference which some developing countries at present enjoy in particular markets; and, to the extent to which such loss was not offset by gains from the extension of preferences to the markets of other developed countries, this would raise the question of appropriate compensation through other measures.

135. Some important technical definitions would also have to be agreed upon. Assuming, for instance, that preferential treatment was to be limited to manufactures and semi-manufactures, a problem of defining such products would arise. The definition of manufactures and semi-manufactures commonly used for statistical and analytical purposes might not be adequate. Some arbitrary decisions would have to be made; and these decisions would inevitably affect particular groups of countries.

136. A related problem would be the establishment of rules of origin. For the purpose of applying tariffs at the preferential rate, it would not be sufficient to ascertain that the imported products had been shipped from a developing country. The condition would also have to be met that the products had undergone a degree of manufacturing or processing in the developing countries. In the absence of such a stipulation, exports from one developed country to another might be diverted through a developing country and thereby attract import duties only at the preferential rate. Further, if the rules required that only a relatively small proportion of the total value of a product need be created within the country of origin, this might encourage exporters in developed countries to establish subsidiary companies in developing countries solely for the purpose of securing preferential status for their products. Plants might be established, for instance, which did no more than assemble imported parts and re-export the finished product. On the other hand, if the rules required that a relatively large proportion of the total value of a product be created within the country, many products made within developing countries from imported materials and semi-finished products would be disqualified. Many semi-processed goods would also fail to qualify under these rules, since their value added generally constitutes a small proportion of the total value—frequently not more than 15 or 20 per cent.

Alternative preferential arrangements

137. In the preceding section, the main issues that arise in consideration of any preferential system have been briefly discussed. As a way of exploring these issues further, it would seem helpful to review some of the proposals for particular kinds of preferential arrangement which have actually been put forward. It will be apparent by now, however, that there is not, in fact, a fixed number of alternative preferential arrangements, each of which can be rigidly contrasted with the others as essentially different. There is rather a range of possible arrangements among which major differences only become apparent when the extremes of the range are compared. The two extremes of the range, however, can be regarded as alternative points of departure from which the formulation of a preferential arrangement could be approached. In this section, these two alternatives are first described and, thereafter, some intermediate possibilities are mentioned.

One-way free trade [60]

138. The simplest proposal for a preferential tariff arrangement is a system of outright, one-way free trade for the exports of developing countries. Put in its most extreme form, such a system would imply that all imports from developing countries into developed countries would be excepted from the most favoured nation clause; that all developing countries would have unlimited free access to markets in all developed countries; that all commodities would be included in the scheme; that the margin of preference in each developed country would be equal to the general tariff, and that no duration would be specified.

139. When expressed in this extreme form, both the advantages of, and the obstacles to, the one-way free trade proposal become very easily identifiable. For the developing countries, this proposal would, of course, provide the maximum possible preferential

[60] *Cf.* Alfred C. Neal, "New Economic Policies for the West", *Foreign Affairs* (New York), January 1961, p. 252. See also William Butler, "Trade with Less Developed Areas", *Foreign Affairs*, January 1963, p. 382; Lord Franks, "Co-operation is Not Enough", *Foreign Affairs*, October 1962, p. 29, and Raymond F. Mikesell, "Problems of International Harmony: Economic Policy for a Lasting Peace", *American Economic Review*, Papers and Proceedings (Manasha, Wisconsin, May 1960), p. 266.

treatment which the developed countries could conceivably accord. But, even though qualifications were introduced as regards the margin of preference and the duration of the scheme, it would still carry the great advantage that it would be non-discriminatory among developing countries; each developed country would extend the same preferential treatment to each developing country, and preferential status would likewise be accorded to all the manufactures exported by the developing countries.

140. It is exactly this latter feature, however, that would probably also constitute the principal obstacle to acceptance of the proposal. Every developed country would be committed to extend unlimited preferential treatment to all manufactures imported from any country which had been classified as developing. A developed country would have to abide by the general classification of countries though it might have disagreed with the inclusion of certain border-line countries in the developing group. While a solution to this difficulty might be found, still greater objections would be made to the obligation to import any manufacture from the developing countries in unlimited quantities. Since it is already claimed that trade in some products exported by developing countries gives rise to a situation of actual or threatened market disruption, it would undoubtedly be contended that participation in an unqualified, one-way free-trade system would not only aggravate the present situation but would also give rise to fresh instances of disruption. Even if this attitude were not shared generally by the developed countries, its adoption by a few of these countries would probably be sufficient to cause general rejection of the proposal; for, participation by the other countries would mean that they would be compelled to accept the whole of the burden of adjustment to the possible expansion in trade.

Selected countries and selected commodities

141. As a way of avoiding such objections to a preferential tariff system, it has been proposed that preferential treatment might be accorded to particular developing countries for particular commodities by particular developed countries. It has been suggested that the role of tariff preferences is to facilitate the creation in developing countries of viable industries which can participate in international trade. To this end, developing countries, acting singly or after consultation on a regional basis, might indicate the industries for which preferential assistance would be desired. The request might be examined by a mixed committee of importing and exporting countries. The former would agree to the establishment of preferences for a limited period in favour of such industries as appear to give promise of becoming viable in the long run. In order to ensure that the necessary efforts were made in this direction, the developing country might be required gradually to reduce its own import tariffs on the products of such industries.[61]

[61] See General Agreement on Tariffs and Trade, statement by Mr Brasseur, Belgian Minister for External Trade and Technical Assistance at the Ministerial Meeting on 17 May 1963. Press release GATT/750, 17 May 1963.

142. If this approach were taken, practically all the difficulties that might stand in the way of introduction of a one-way free-trade system would be avoided. The introduction of preferential tariffs would not necessarily be conditional upon the consent of most or all the developed countries; individual countries could extend preferential treatment to selected products or selected developing countries without committing themselves to any general introduction of preferential tariffs. Individual countries could also withhold preference from products which, if imported in larger quantities, would be deemed to engender a situation of market disruption. Border-line countries which are difficult to classify as developed or developing, could be dealt with on an *ad hoc* basis.

143. There are, however, certain implications of this proposal which have been viewed with concern, especially by the developing countries. It has been noted that this approach would fragment the system of world trade. If preferences were negotiated by individual developed countries on individual products, literally scores of new preferential régimes might be created under this scheme. The preferential tariff of a particular country would not only discriminate between developed and developing countries but also between different developing countries. As a result, it would be impossible to anticipate how the trade of a particular country would be affected by all the new preferential arrangements; and a general waiver of claims under the most favoured nation clause would probably be difficult to obtain. Further, the choice of industries by the developed countries to be favoured with preferential treatment might be strongly influenced by considerations of domestic competition; and industrial priorities which are important from the point of view of development strategy in the developing countries might be neglected. There could, for example, be a tendency to exclude large sectors of industry on the grounds that these were already well established or that they could not be viable. As a result, industrial diversification in the developing countries might be impeded.

Preferential quotas

144. Between the two extremes of the one-way free-trade proposal and the proposal for the establishment of preferential tariffs on selected products in trade between pairs or small groups of countries, there lies a wide range of intermediate choices. It should be understood, however, that the main difference between the various alternative schemes lies in the extent to which the principle of preferential treatment for all exports of all developing countries is qualified in order to allay the fear of developed countries that the extension of unlimited preferences would damage their domestic economies. Thus, the choice of one proposal over another would depend very heavily on views regarding the potential effect of tariff preferences on the change in competitiveness of imports from developing countries.

145. The most pragmatic way of meeting this problem would be for countries to reach a general understanding that, if a situation of market disruption actually emerged or became imminent, some *ad hoc*

measures might have to be taken to limit the volume of preferential imports. An alternative or additional measure which might also be considered as a means of dealing with the problem of market disruption, would be the establishment of an international Trade Adjustment Fund to provide compensation and assistance to industries adversely affected by preferential imports.

146. Acceptance of a provision for the possible limitation of imports of specific products on an *ad hoc* basis, however, might not be sufficient to allay fears of the consequences of a general extension of preferential treatment to all imports. It might then become necessary to introduce into the agreement establishing a preferential tariff system certain measures which would set maximum limits to the value of trade to be accorded preferential treatment. If events proved that the fear of market disruption was generally unfounded, such measures would simply remain inoperative and could eventually be withdrawn.

147. These measures would necessarily take the form of preferential quotas. Under the quota systems, the value of trade receiving preferential treatment would be limited by the amount of the quota; trade in excess of the quota would be dutiable at the rates specified in the general tariff schedules.

148. Perhaps the most general system of preferential quotas that might be applied would be the establishment, for each developed country, of a limit on the aggregate value of all preferential imports to be accepted from the developing countries as a group. Such a quota would permit all the developing countries to enjoy preferential treatment on any products exported to any developed country so long as the aggregate quota of total preferential imports in each developed country was not exceeded.

149. The size of the quota to be granted by each developed country might be determined on an entirely voluntary basis, as in the case of contributions to certain international agencies providing assistance to developing countries. This method might be the least objectionable from the point of view of individual developed countries. But it would raise the question of equity among countries and, so long as the quotas to be established by some countries were uncertain or considered to be too small, other countries might be discouraged from setting generous quotas.

150. An alternative method would be to establish an over-all quota for all developed countries and to distribute it among countries on the basis of some agreed criterion as is done in the assessments for the budgets of international agencies. The value of total preferential imports into all developed countries might be determined by reference to the trade needs of the developing countries for accelerated economic development, account also being taken of the effect of other measures. While it is not suggested that such a figure could be precisely determined, an approximate figure might be sufficient for the purpose. The proportion which each developed country would contribute to the aggregate quota might be determined by reference to such economic aggregates as national income, total imports, total consumption of manufactures or imports of manufactures from developing countries. A distribution on the basis of any one of these aggregates, taken alone, would, however, be open to objections. If the distribution were in accordance with national income or consumption of manufactures alone, no account would be taken of the relative importance of trade in the economy of each country or of the share of its trade with the developing countries. A distribution related to the size of total imports would take into account the importance of trade in each economy but not the importance of trade with developing countries. Again, if the distribution were proportional to the volume of imports of manufactures from developing countries, the developed countries which are currently importing a relatively large share would have to grant a relatively large preferential quota. While this share may be largely determined by economic factors, it may also be, to some extent, the consequence of a relatively liberal commercial policy towards imports from these countries. In view of such considerations, a compromise solution might have to be devised which, on the one hand, would recognize the existing pattern of trade and, on the other hand, would open up markets which have hitherto been relatively less important to developing countries. One possibility might be a formula in which the total consumption of manufactures of each country and its imports of manufactures from the developing countries were weighted together. Another might, for example, be a formula whereby the size of each country's quota was based on the present share of its import of manufactures from developing countries in total imports increased by a standard number of percentage points.[62]

151. An advantage of such a system of global quotas is that it would be relatively easy to administer. Objections to the system, however, may be raised on two scores. First, the less industrialized of the developing countries might fear that, since imports into developing countries would be accorded preferential treatment on a first-come basis and since the more industrialized countries would be better placed to expand their exports of manufactures quickly, they would not enjoy a fair share of the preferential import quotas. Individual countries, moreover, would have no certainty that, if they established new export industries to take advantage of the preferential system, the exports of these industries would in fact be assured of preferential treatment; in other words, they would not know in advance whether exports would be dutiable at the general or preferential rate. Secondly, the developed countries might consider that global quotas embracing all imports would still not offer them sufficient assurance that domestic markets for particular products would not be threatened with disruption.

152. If a measure were required to ensure that the preferential quotas granted by the developed countries were of benefit to all developing countries, some limitation might be placed on the aggregate value of

[62] Many variations of the formula would be possible. In place of assigning a standard number of percentage points to each country, for example, a scale of points could be established, the number of points assigned to each country declining in inverse proportion to the share of imports from developing countries in its total imports.

TABLE 15

Principal decisions required for establishment of a preferential tariff system and some main alternative choices

Decision with regard to:	*Main alternative choices*			
Countries extending and receiving preferences	All developed economies to all other economies	All developed economies to all developing economies, intermediate countries being excluded from preferential area	Some developed economies to all or some developing economies (e.g., similar to EEC and associated members)	Individual developed economies to individual or groups of developing economies (e.g., similar to United Kingdom and Commonwealth countries)
Products receiving preferences	All manufactures, semi-manufactures and primary products	All manufactures and semi-manufactures	All manufactures and semi-manufactures with occasional exceptions made on an *ad hoc* basis to prevent market disruption	Specific manufactures and semi-manufactures selected on the basis of an agreed criterion (e.g., products other than those now deemed competitive or products of infant industries)
Extent of preferences:				
(*a*) Amount of trade accorded preferences	Unlimited amount	Amount limited by global quotas on total preferential imports of each developed country, the quotas depending, for example, on a weighted average of total consumption of manufactures and their imports from developing countries or on current share of total imports of manufactures and semi-manufactures derived from developing countries increased by standard number of percentage points	Amount limited by global quotas on total preferential imports of each developed country and by quotas on total preferential exports of developing countries with a single maximum quota being set for total exports from any one country, or with aggregate quotas being set for groups of countries classified by stage of industrialization or with a quota being set for each country on the basis of population, income, trade or some combination thereof	Amount limited by specific quotas on individual products exported by each developing country and imported by each developed country
(*b*) Margin of preference	Standard preferential schedule with zero tariffs	Standard preferential schedule with tariffs below general tariffs by fixed percentage, fixed number of percentage points or by an amount based on some automatic formula combining these two methods	Dual or multiple tariff schedules, different preferential tariffs being applied to imports from different countries, rate depending on stage of development or stage of industrialization	
(*c*) Duration of preferential system	Unlimited period	Fixed period of, say, ten years, but subject to renegotiation	Preferences subject to withdrawal from individual countries once their stage of development or *per capita* income has passed beyond a certain point, or from individual products once they cease to satisfy criterion for preference	

exports from each developing country which would be accorded preferential treatment. This could take the form of a stipulation that total preferential imports from any one developing country should not exceed a certain proportion of the aggregate quota established by developed countries as a whole. Or, developing countries might be grouped into categories, say, by their stage of industrialization, and an aggre-

gate quota assigned to each group. Another and more far-reaching possibility would be to accord a preferential quota to each developing country, some criterion for determining the size of the quota being devised on the basis of population, income or trade—or some combination thereof. Of course, if any such system of quotas were introduced, this would not necessarily ensure an equitable distribution of the actual benefit to be derived from preferential treatment, since some countries at least would be unable to take full advantage of their quotas; but it would accord similar opportunities to all these countries.

153. In order to counter the fear of market disruption, an alternative to the proposal to establish global quotas for each developing country subject to certain limited exceptions on particular commodities, would be to extend the system so as to include the establishment of quotas for specific classes of commodities exported from each country. This alone, however, might not be quite sufficient to allay fears in developed countries since each developed country would be less concerned about the total volume of preferential exports of a product from developing countries than about the volume of its own imports. This would lead logically to the setting of import quotas by each developed country for each class of product.[63] If, however, such a complex set of interrelated quotas were the necessary condition of a preferential arrangement, the negotiations might become too difficult at the international level and the commodity quotas might be too complex to administer. The negotiation of such a set of quotas would clearly be similar to the negotiation of tariff reductions on a country-by-country and commodity-by-commodity basis; and attention has already been drawn to the limited results that have generally ensued from such a form of tariff negotiation. As regards quotas, moreover, there would be the added complication that their negotiation would be superimposed upon the negotiation of an arrangement for preferential tariffs as such. Thus, the negotiation of such a preferential arrangement would certainly be lengthy and difficult and the results might prove to be disappointing. These objections would be avoided if individual developed countries were independently to negotiate quotas with individual developing countries for particular products. But, like the bilateral negotiation of preferential tariffs, this would largely empty the preferential system of its international character and expose it to the introduction of discriminatory arrangements.

Concluding note

154. The foregoing discussion has made it quite apparent that a number of alternative preferential arrangements can be quite readily envisaged. Many variations can be introduced in regard to the countries according and receiving preferences, the products treated preferentially and the extent and duration of the preferential arrangement. By way of summary, the main alternative choices which might be considered are presented schematically in table 15.

[63] A possible criterion for the establishment of such quotas was discussed in United Nations, *Economic Survey of Europe in 1960* (Sales No.: 61.II.E.1), chapter V, p. 50.

STRUCTURAL ADJUSTMENT IN THE DEVELOPED COUNTRIES

THE MAGNITUDE OF THE PROBLEM

155. Throughout the above discussion of measures which the developed countries might take to ease access to their markets for imports from developing countries, repeated reference has been made to the fear that, if such measures were introduced, the increased imports would adversely affect domestic industries. This fear, though sometimes warranted in specific circumstances, is frequently very much exaggerated. But it does constitute a principal source of opposition to the introduction of more liberal policies and it is therefore important to place the problem in perspective and to outline the range of domestic measures which are available to facilitate its solution.[64]

156. It is to be recalled at the outset that the volume of manufactures imported by the developed countries from the developing countries has recently amounted to about $1.4 billion. By comparison, the developed countries have been importing manufactures from each other to the value of $33.8 billion. Thus, even if imports from the developing countries were to be instantaneously doubled, they would still amount to less than one-twelfth of current trade among developed countries in manufactures. The significance of this comparison is obvious. Imports of manufactures from the developing countries are clearly a marginal element in the total trade of the developed countries. At least when aggregate flows of trade are considered, the problem of domestic adjustment to an expansion of imports from developing countries could only be minor by comparison with that which might be engendered by the enlargement of trade among the developed countries.

157. It is pertinent to observe also that, in the developed countries, the task of adjusting the domestic economy to a general expansion in foreign trade has not been regarded as an insurmountable obstacle to the reduction of general trade barriers on manufactures. These countries have, in recent years, introduced substantial reductions in trade restraints among themselves, particularly with the European Economic Community and the European Free Trade Area; and they have undertaken to consider further reductions in barriers to their trade at the forthcoming round of tariff negotiations.

158. It could almost be inferred from these past and proposed reductions in trade barriers that no major difficulties in the adjustment of the domestic economy to changes in commercial policies have been expected. Such concrete evidence as exists, in fact, indicates that the likely magnitude of the necessary adjustment is small. In the United States, for example, it has been estimated that an increase of one billion dollars in the imports of commodities of a type produced by seventy-two major protected industries and distributed in proportion to their output in 1953 would displace between 51,000 and 224,000

[64] See "Structural Employment Problems in the Industrialized Countries caused by Higher Imports of Manufactured Goods from the Developing Countries", in Vol. IV of this series.

workers. These workers would constitute only 0.1 to 0.3 per cent of total civilian employment in 1959.[65] This estimate has to be taken along with the fact that any increase in imports which is induced by a general reduction in trade barriers is likely to be matched by a parallel increase in exports. Thus, once sufficient time has been allowed for full adjustment to the change in commercial policies, the net effect of any reduction in trade barriers is not likely to consist in a displacement of labour but in its reallocation from import-competing to export industries.[66]

159. It thus appears that, even if the total imports of each developed country from all sources are considered, the scale of domestic adjustment required to accommodate sizable increases in these imports cannot be considered as large. Consequently, when considered as an aggregate, greater imports from the developing countries would hardly constitute anything more than a very marginal problem of adjustment for the developed countries. The concrete form in which the problem of adjustment presents itself, however, is at the level of specific industries. If imports from developing countries already accounted for a substantial share of the domestic market for particular products, there could be a sizable, though highly localized and transitional, problem of adjustment to a reduction in trade barriers. But the instances in which this might be true are probably very few and confined to highly specific products imported into one or two developed countries. Reference need only be made to table 7, presented earlier, to confirm this. Even in terms of total imported supplies of each class of manufactures, the products which constitute the principal manufactures exported by the developing countries generally do not account for a major share. And the same necessarily holds, *a fortiori*, for their share of total domestic supplies. This is well illustrated for the United States by the following data:

Commodity	*Ratio of imports of selected manufactures from developing countries into the United States to domestic supply, 1960* (*Percentage*)
Textile mill products	1.4
Veneer, plywood board	1.4
Leather and leather products	0.7
Chemicals	0.4
Footwear	0.1
Electrical machinery, equipment and supplies	[a]
Machinery other than electrical	[a]

Source: United States Department of Commerce, *Commodity Exports and Imports as Related to Output, 1960 and 1961* (Washington, D.C., 1963); Organization for European Economic Co-operation, *Foreign Trade Statistical Bulletins*, Series C, "Trade by Commodities" (Paris), January-December 1960. Domestic supply refers to the sum of production and imports less exports.

[a] Negligible.

[65] Walter S. Salant and Beatrice N. Vaccara, *Import Liberalization and Employment* (Washington, D.C., 1961), p. 215.

[66] In this context, it is of incidental interest that protected import-competing industries generally pay lower wages than unprotected industries. In the United States, for example, hourly earnings in seventy-two protected industries in 1953 averaged $1.45 while in forty-four unprotected industries the average was $1.78. See Beatrice N. Vaccara, *Employment and Output in Protected Manufacturing Industries* (Washington, D.C., 1960), p. 62.

160. Of course, it would not be reasonable to deny that localized problems of adjustment might have to be confronted as a consequence of the reduction of barriers to imports of manufactures from the developing countries. But it can be readily inferred from the evidence mentioned above, that such problems would certainly be marginal in comparison with the structural adjustments necessitated both by technical progress and by the expansion of trade among developed countries. It would therefore appear that solutions to such problems could be quite readily found within the framework of general policies for easing the process of structural adaptation.

MEASURES FOR STRUCTURAL READJUSTMENT IN DEVELOPED COUNTRIES

161. The need for adaptation to economic change is not a new phenomenon, and Governments of developed countries have not as a rule been indifferent to problems arising from such change. In recent years, however, the response of public authorities to the economic and social problems resulting from structural change has generally taken a more active form than before. Just as, in earlier years, the prevention of widespread unemployment became a cornerstone of public policy in all countries, the problem of economic dislocation attendant upon structural change has today come to be recognized as a problem demanding corrective public action. Besides taking a more purposeful attitude towards the problem of structural adjustment in general, several Governments have significantly modified their approach to maladjustments originating in the foreign trade sector. While the alternative to a policy of increased protection for domestic industries against an upsurge of imports used to be mostly seen as economic dislocation unaccompanied by corrective public action, there has recently been a greater readiness to take the view that difficulties resulting from a decline in the competitive position of domestic manufactures should be met through readjustment in the affected industries rather than through import restrictions.

162. A number of developed countries have adopted measures to ease the adjustment of industries and their employees to the possible difficulties which might be created by changes in commercial policies. Legislation providing assistance has usually been designed to serve several purposes. One aim has sometimes been to provide an element of temporary compensation to affected industries for losses in income and employment. Public assistance has sometimes also been designed to facilitate the reorganization and modernization of an industry in order to raise its efficiency and, perhaps simultaneously, to bring about an orderly contraction in its total size. A further aim has commonly been to improve the mobility of resources in order to facilitate the absorption of displaced workers in expanding industries.

163. In western Europe, there are some important instances of multi-national action to lessen the problems arising from trade liberalization. Thus, with the formation of Benelux, the European Economic Community, and the European Coal and Steel

Community, adjustment programmes were introduced to ease industrial adaptation to the process of economic integration. In Benelux, a joint readaptation fund was set up in 1953 to provide temporary financial help to enterprises experiencing difficulties as a result of the implementation of the Benelux treaty. Assistance is available in the form of special readaptation credits at low interest. The fund also finances studies and research with a view to increasing productivity. The Social Fund of the European Economic Community was established under the Treaty of Rome. Its scope was defined in a regulation adopted by the member Governments in 1960. The purpose of the fund is to ensure employment and guarantee the income of wage earners against the risks of the integration of national economies, and also to promote action against structural unemployment in general. Assistance is given for both retraining and resettlement purposes.[67]

164. The adjustment plan adopted by the High Authority of the European Coal and Steel Community for the high-cost Belgian coal mines provided for closing down marginal pits and renovating others, reducing the capacity of the industry by over 7 million tons, or more than a fourth of actual production in 1958. In order to enable the mines to clear the coal already accumulated at the pit-heads, a temporary subsidy was given to the operators.[68]

165. One example of a national programme for adjustment assistance is that contained in the Trade Expansion Act of the United States, adopted in 1962. This provides for federal assistance to firms and workers suffering losses caused by import competition. The adjustment assistance for firms is of three types. First, provision is made for technical assistance to an affected firm. Such assistance includes information, market and other economic research, managerial advice and counselling, training and assistance in research and development. Second, provision is made for direct loans or guarantees of loans to provide financial assistance which otherwise might not be available. Third, provision is made for tax assistance through a special carryback of operating losses. As regards workers, the Act also provides for three types of assistance. First, it provides for readjustment allowances in the form of compensation for partial or complete unemployment. Second, it provides for retraining of workers so that they can shift into other types of employment. Third, it provides for relocation allowances to assist a family in moving from an area where employment may be lacking to an area where employment is available. These facilities are in addition to those which may already be available to firms, workers and communities under other legislation.

166. Another important instance of national legislation to provide adjustment assistance, though less comprehensive in coverage than the United States programme, is the Cotton Industry Act passed in the United Kingdom in 1959. The cotton textile industry in the United Kingdom has long been a declining industry, partly because of the gradual loss of export markets but also because of increasing imports in recent years. Excess capacity remained a persistent feature of the industry for many years. The Act of 1959 empowered the Government to offer compensation to the industry if the latter agreed to scrap a sufficient amount of its old machinery and if it also undertook to compensate workers who might be displaced. Since the introduction of the Act, about 50 per cent of the spindles in the industry, 36 per cent of the doubling spindles and 40 per cent of the looms have been scrapped.

167. In addition to such measures intended specifically to assist particular industries adversely affected by changes in commercial policies, other measures have been adopted by some countries to alleviate structural unemployment in particular geographical areas within the economy. However, being more general, they may also contribute to the adaptation of industries to import competition. Their main economic purpose has usually been to improve the mobility of resources through measures to attract new industries into the depressed areas, to retrain workers or to ease their transfer to other areas.

168. In the United States, an Area Redevelopment Act has been enacted to deal with the problem of depressed areas. The Act, adopted in 1961, provides loans to commercial and industrial enterprises as well as loans and grants for community facilities and urban renewal, designed to increase employment in those localities which are designated as redevelopment areas. Comparable legislation in the United Kingdom was contained in the Distribution of Industry Act. Under this Act, as amended in 1959, the Government may designate areas as in need of public assistance. The criterion is the existence, or imminence, of unemployment, which appears likely to persist. Once an area is qualified for governmental assistance, the Board of Trade is authorized to purchase land and establish plants in order to attract new factories to the area. Alternatively, the Board can make grants and loans to firms entering the area. Similar policies have been pursued by the Government of Italy to foster the development of southern Italy. The emphasis has been on making capital more easily and more cheaply available in order to encourage firms to establish factories in the depressed area.[69] In addition, reduced railway rates and exemption from import duties have been granted in the case of construction materials and equipment to be used in the South in order to lower the costs of new investment.

CONCLUSION

169. From a long-run viewpoint, the development of an export trade in manufactures must increasingly become the main dynamic element in expanding the export earnings of the developing countries. While such trade is still small, during recent years it has

[67] European Economic Community Commission, *The First Stage of the Common Market* (Brussels, 1962).

[68] The subsidy had to be continued, however, beyond the period originally contemplated, because the industry could not withstand the competition of imported coal from the other EEC countries. *Bulletin from the European Community* (Washington, D.C.), June-July 1962, p. 12; European Coal and Steel Community High Authority, *General Report on the Activities of the Community*, various issues (Brussels).

[69] Small and medium-sized firms may obtain loans at 3 per cent, and larger corporations at 4 to 5 per cent. The loans may run for terms up to fifteen years, with amortization beginning only after the fifth year.

exhibited a substantially higher rate of growth than that recorded by exports of primary commodities. Exports of manufactures, however, have been dominated by a few developing countries exporting relatively few products; and in trade with developed countries, moreover, these exports have been concentrated in a few markets. It is thus apparent that if the past performance of the developing countries with regard to their rate of growth in exports is to be bettered in the future, these countries need to pay greater attention, not only to the establishment and expansion of export industries, but also to the diversification of both their export products and their export markets.

170. Such efforts to increase and diversify exports, however, can hardly meet with success if these countries do not enjoy access to the markets of developed countries on favourable terms. At present, the sale of manufactures in the markets of developed countries is hampered by a number of obstacles consisting of both non-tariff and tariff barriers which have been erected by commercial policies.

171. While the general trend in commercial policies of developed countries during the last decade or so has been towards the elimination of quantitative import restrictions, a number of countries—mainly in western Europe—have persistently maintained certain "hard-core" restrictions. Such restrictions bear heavily on important manufactures exported by developing countries and are in some cases, moreover, applied in a discriminatory manner against these countries. At the same time, in the field of cotton textiles, the agreements recently negotiated bilaterally and under the international cotton textiles arrangements have introduced a new form of restriction in the shape of negotiated limitations on exports. In the face of such measures, the developing countries have fairly claimed that the commercial policies of developed countries are both discriminatory in effect and subject to change by unilateral action. The GATT Programme of Action has recommended steps for the elimination of quantitative restrictions, but it has not received the unqualified support of developed countries.

172. The difficulties confronting developing countries that arise out of non-tariff obstacles to trade are reinforced by the existence of tariff barriers. While the general tariffs of developed countries apply equally to imports from all sources, it is a fact that some of the highest rates of duty in their tariff schedules apply to light manufactures of particular importance in the export trade of developing countries. The post-war trend in policies of developed countries has been towards the reduction of these barriers, and a series of negotiations have been conducted to this end. However, the rules by which past negotiations have been conducted combined with the relatively weak bargaining position of the developing countries have together tended to limit the reductions on products of particular interest to these countries. For such reasons, the proposal to negotiate linear reductions in tariffs at the forthcoming round of tariff negotiations offers greater assurance that the interests of the developing countries will not be neglected. As a way of increasing the benefit that might accrue to the developing countries from the negotiation of general tariff reductions, a possibility would be to supplement the linear reductions with selective reductions on products of particular interest to these countries. Conceived as a general measure to assist all developing countries, however, this form of supplementary action presents major difficulties primarily because it would have to embrace a relatively wide range of products.

173. While reductions in general tariffs would obviously be valuable, serious doubts have been expressed as to whether these would be sufficient as an appropriate international measure for encouraging the expansion of exports of manufactures from developing countries. The competitive position of developing countries in international trade is clearly weak and general tariff reductions would obviously do nothing to strengthen their position *vis-à-vis* exporters in developed countries. It has therefore been proposed that the developed countries should accord preferential treatment to imports of manufactures from the developing countries. While such a measure would encounter objections on the score that it conflicted with the most favoured nation principle, it can be supported on the grounds that it would constitute only an extension of a principle already recognized, namely, the granting of non-reciprocal tariff concessions to the exports of developing countries as a means of promoting their industrialization.

174. Many different preferential arrangements are possible, ranging from a one-way free-trade system for all manufactures exported by developing countries to an arrangement providing preferential treatment for specific products from specific countries. The criteria for eligibility would thus be a principal element determining the broad character of a preferential system. Selection of the criteria for eligibility, however, could not be dissociated from consideration of the extent and duration of the preferences to be accorded. A system of preferential tariffs which was broad in its coverage as regards both countries and products might be rendered more acceptable if it were accompanied by certain limitations on the volume and duration of the trade to be accorded preferential treatment. Besides such general points, there are many other issues which would have to be resolved before a preferential system could be introduced. These, however, are subsidiary to the broad questions of principle.

175. Action by the developed countries to lessen the various obstacles to exports of manufactures from the developing countries could possibly give rise to localized problems of adjustment within their domestic economies. Fear of the emergence of such problems has been an important source of opposition to the adoption of more liberal policies. There is, however, strong evidence to suggest that any problems of adjustment created by expanding exports from the developing countries would be slight by comparison with those which are continuously necessitated by technical progress and the growth of trade among developed countries. Solutions to these problems could be readily found within the framework of general policies to ease structural adjustments.

TABLE A-1

Selected developed market economies: *Ad valorem* tariffs on imports of manufactures, 1963[a]

(*Percentages*)

SITC group	North America			Western Europe											Japan
	United States	Canada		Benelux		France		Federal Republic of Germany		Italy		United Kingdom			
	General	General	Preferential	General	Preferential	General	Preferential	General	Preferential	General	Preferential	General	Commonwealth preferential	EFTA preferential	General
Organic chemicals	40.5	9.7	3.0	5.6	1.3	17.0	8.8	10.9	6.1	16.5	9.0	27.4	6.1	18.2	17.1
Inorganic chemicals and radioactive materials	14.7	10.7	2.4	3.8	0.8	12.7	7.6	7.3	4.5	13.2	7.6	13.9	—	8.3	13.9
Mineral tar and crude chemicals from coal, petroleum and natural gas	—	8.2	2.5	5.8	1.4	4.0	2.2	0.8	—	6.8	4.4	10.1	4.1	7.7	7.1
Essential oils, perfume and flavour materials	22.9	3.8	—	7.7	3.8	8.4	3.8	7.2	4.8	10.1	5.1	14.1	3.4	10.5	12.9
Plastic materials, regenerated cellulose, and miscellaneous chemical materials and products	22.1	9.4	5.9	8.6	3.3	16.5	8.8	12.1	7.6	17.4	9.7	12.9	1.0	8.1	14.3
Fertilizers, manufactured	—	3.8	—	1.3	—	4.8	1.6	6.4	5.2	6.3	3.6	15.9	—	9.6	—
Leather	10.4	15.6	4.3	6.8	3.4	8.9	4.2	5.4	2.7	11.7	6.7	13.3	—	8.0	19.0
Fur skins, tanned or dressed (including dyed)	18.4	15.0	9.0	5.3	3.0	4.8	1.3	6.6	4.3	13.3	8.1	20.0	—	12.0	20.0
Materials of rubber	10.0	16.6	9.6	11.0	5.7	12.5	5.6	12.4	9.0	14.0	7.5	14.8	5.6	8.9	8.0
Veneers, plywood board, etc.	13.9	13.0	7.7	8.0	3.9	10.5	5.2	8.0	6.2	11.0	6.4	14.5	—	8.7	16.0
Cork manufactures	19.7	9.0	—	11.8	5.0	21.2	11.5	10.6	4.9	25.8	15.0	11.7	—	7.0	15.0
Textile yarn and thread	21.7	13.6	6.9	9.4	4.1	10.6	5.6	7.7	4.6	12.7	7.6	18.6	10.4	16.8	20.8
Cotton fabric, woven	24.6	17.0	7.5	15.2	8.0	17.2	9.0	13.6	7.5	15.7	7.8	22.7	16.6	14.1	10.0
Textile fabrics, woven, other than cotton fabrics	34.7	18.4	10.0	16.7	8.5	17.5	10.2	14.9	8.5	17.4	9.3	23.2	16.8	14.3	25.0
Special textile fabrics and related products	23.9	19.8	12.1	12.8	6.5	14.6	7.4	11.7	6.6	14.1	7.5	24.4	15.7	14.6	18.0
Miscellaneous made-up textile articles	30.4	21.1	14.2	18.0	9.7	19.5	8.8	15.4	9.3	16.8	8.7	25.6	14.6	15.4	19.0
Floor coverings, tapestries, etc.	21.2	22.1	17.7	19.0	10.8	23.6	11.0	15.0	8.8	19.4	9.7	31.7	11.4	18.9	25.0
Pottery	33.5	22.0	10.0	20.0	11.2	19.8	8.2	15.4	8.3	22.1	12.1	24.8	—	14.9	15.0
Pearls and precious and semi-precious stones	13.8	4.6	1.5	1.0	—	7.1	5.3	1.0	—	2.8	1.4	4.0	—	2.4	8.3
Iron and steel	12.0	13.8	—	6.5	1.8	9.8	3.9	7.7	3.4	12.7	5.0	13.6	—	8.2	13.8
Power generating machinery, other than electric	12.9	10.2	1.1	8.7	3.9	13.3	6.3	6.8	2.5	16.9	9.4	23.9	6.3	14.3	19.4
Agricultural machinery and implements	2.1	6.0	2.0	7.0	3.2	11.6	6.0	6.6	2.6	12.3	8.5	15.0	—	9.9	17.5

TABLE A-1 (*continued*)

SITC group	North America			Western Europe											Japan
	United States	Canada		Benelux		France		Federal Republic of Germany		Italy		United Kingdom			
	General	General	Preferential	General	Preferential	General	Preferential	General	Preferential	General	Preferential	General	Commonwealth preferential	EFTA preferential	General
Office machines	13.0	15.9	5.3	9.3	4.2	14.0	7.3	8.8	3.8	15.7	9.0	16.1	—	9.6	13.9
Textile and leather machinery, machines for special industries and miscellaneous machinery and appliances other than electric	13.6	10.9	3.7	8.8	3.7	13.2	6.6	7.4	2.9	16.5	9.6	17.1	0.2	10.3	15.9
Electric machinery, apparatus and appliances	20.9	16.5	6.8	11.6	5.4	16.1	7.9	9.9	4.6	20.6	11.8	21.6	1.5	13.0	18.3
Furniture	16.7	25.2	17.7	14.9	7.7	17.3	8.8	12.0	6.6	17.2	9.3	20.6	4.1	12.4	25.6
Travel goods, handbags, etc.	20.0	23.8	11.3	18.8	10.0	18.1	8.6	14.9	8.0	19.3	10.2	18.3	—	11.0	25.0
Clothing, except fur clothing	32.4	21.7	14.3	18.8	10.2	19.4	9.0	14.1	7.9	17.0	8.5	25.9	15.6	15.6	23.9
Fur clothing (excluding headgear) and other articles made of fur skins, etc.	22.3	22.5	15.0	18.6	9.3	21.8	11.2	15.5	8.5	24.9	14.0	25.0	—	15.0	40.0
Footwear	13.7	23.4	13.8	18.7	10.6	19.1	8.6	14.4	8.2	18.3	9.4	24.5	7.0	14.7	26.8
Scientific, medical, optical, measuring and controlling instruments and apparatus	25.6	9.6	3.2	12.6	5.9	17.1	8.8	9.5	4.4	16.9	9.2	33.0	0.6	19.8	23.3
Miscellaneous manufactured articles, n.e.s.[b]	23.5	18.8	10.8	13.2	6.8	16.5	8.2	11.4	6.8	15.3	7.9	19.5	2.7	12.1	18.6
Jewellery and goldsmiths' and silversmiths' wares	33.3	20.8	11.9	8.3	4.4	11.0	5.4	8.1	4.3	8.5	4.6	19.1	—	11.3	32.5

Source: Bureau of General Economic Research and Policies of the United Nations Secretariat, based on data from national sources.

[a] Rates are the simple arithmetic means of the tariffs on all products within each SITC group. Data for Japan, and the United States refer to 1962.

[b] SITC groups 893-896 and 899.

TABLE A-2

List of semi-manufactures and manufactures of importance in the export trade of developing countries examined by GATT, Committee III

Asbestos products
Bicycles
Bromine and bromine compounds
Casein
Chlorine and derivatives (plastics, solvents, etc.)
Coir products
Cotton textiles
Cutlery
Electric motors
Electric fans
Essential oils
Ferro-chrome and ferro-manganese
Flax yarn and fabrics
Glass and glassware
Hardboard, chipboard
Hard fibre manufactures
Hides and skins, tanned
Internal combustion engines (under 50 horsepower)
Iron, pig
Iron and steel, semi-processed goods
Jute manufactures
Leather
Leather footwear
Leather goods
Linoleum
Machine tools
Mercury
Metals, wrought and worked and manufactures of metals
Nitrogen compound
Phosphates
Plywood
Polyethylene and polypropylene (from natural gas)
Pulp, paper and paperboards
Quebracho and other tanning materials
Radio receivers
Rubber manufactures (e.g., shoes, tyres and tubes)
Rubber, articles of sponge rubber and foam rubber
Rugs and carpets, commercial quality handicraft
Sewing machines
Silk manufactures
Soap
Sporting goods
Steel furniture
Sulphur
Sulphuric acid
Timber, processed
Wooden furniture
Woollen and worsted yarn and textiles

Source: General Agreement on Tariffs and Trade, "Comprehensive List of Products of Importance in the Export Trade of Less Developed Countries", Committee III/105 (25 March 1963); also, document L/1989 (10 April 1963) and "Report of Committee III on the Meeting of 21 to 31 October 1963", document L/2080 (7 November 1963).

GENERAL STUDY OF EXPORTS OF MANUFACTURES AND SEMI-MANUFACTURES FROM DEVELOPING COUNTRIES AND THEIR ROLE IN DEVELOPMENT *

TABLE OF CONTENTS

CHAPTER I

INTRODUCTION

1. The external imbalance in the process of development of the developing countries is a problem of increasing concern since it threatens to interfere seriously with the economic growth of the majority of the world's countries.

2. The pattern of international division of labour, under which the less-industrialized countries have historically concentrated on exports of primary goods, has not led to relieving the inequality of wealth among the developed and the developing countries of the world. The economic advance of the more affluent countries has not only resulted in an increasing share of manufacturing in consumption, output and trade among themselves and reduced the share of the primary producer countries in world trade; technological progress of these countries has also been reflected in rising productivity in their own agriculture and in increasing substitution of synthetic materials for natural products which reduced their demand for primary products from the developing countries.

* The attached paper was prepared by the Centre for Industrial Development in connexion with the sub-item on "Measures and action for diversification and expansion of the exports of manufactures and semi-manufactures by developing countries with a view to increasing their share in world trade" (item III.1 of the list of main topics). See Interim Report of the Preparatory Committee (first session, in Vol. VIII of this series).

Protectionist policies have aggravated these effects to the extent that the flow of international aid in the last decade has barely been able to offset the loss in the purchasing power of the exports of primary goods.

3. At the same time, the drive for industrialization by Governments of the developing countries which springs from the necessity to raise the standards of living of their populations and in some cases, only to maintain them in the face of a rapidly growing population, results in ever-increasing requirements of foreign resources for essential imports.

4. Many aspects of this situation, which is present in varying forms in the great majority of the developing countries, are common knowledge and need not be further elaborated here. The deterioration of the balance-of-payments position of the primary producing countries results from the operation of a number of basic structural factors; while its effects can be mitigated by various measures, no basic solution can be achieved if the present-day international division of labour is maintained. A structural change in the latter is required if the process of economic growth of the developing countries is not to be impaired. Such structural change includes an emphasis on industrialization in the context of international co-operation and a new pattern of international specialization.

5. Industrialization in the developing countries has been carried out so far predominantly through substitution of domestic production for imports. Understandably, this was, and continues to be, the path of least resistance. However, in the majority of countries domestic markets are small and the process of import substitution has in many cases reached the limits of feasibility.

6. Further advances in the process of industrialization depend on expansion into foreign markets. However, industries oriented primarily towards a small domestic market, and frequently established behind the shelter of protection, will generally have a high level of costs. At the same time, restrictions on trade in manufactured goods confine industrial initiative in the developing countries to their national markets. A vicious circle is thus created where the smallness of domestic markets leads to high costs, and high costs prevent entry into the foreign markets. That circle can only be broken by a concerted national and international effort of continuing national development and international trade policies.

7. The required policies touch in fact upon all aspects of the social and economic system, from problems of health and education to fiscal and financial matters. The present paper confines itself to a selected number of aspects of this very wide problem. Thus, the disregard, in the present paper, of such highly relevant topics as the appropriate monetary policies does not mean that they are being considered of secondary importance. The related problems of appropriate economic policies in the field of industrial development and foreign trade have, however, been discussed frequently in the professional literature and in the reports and surveys of various bodies. By comparison, the directions of the structural changes necessary to facilitate an international division of labour which will permit a self-sustained growth of the developing countries, rather than the increasing development gap, have received less attention.

8. The purpose of this paper is to focus attention on the directions which industrial development will have to take if it is to break out of the narrow confines of small domestic markets and to lead to a new international division of labour, and on the relevant measures at the national and international levels which would make such development possible.

9. The external payments gap which will have to be covered by exports of manufactured goods by 1970 has been estimated at $12,000 million, compared with a present level of such exports of some $2,000 million. Evidently, it will be possible to provide only part of the required additional exports out of existing industrial capacity. The developing countries therefore face a major task of expanding their industrial development, with a specific orientation towards exports. The problem of industrial development is therefore intimately linked to that of improving the external balance.

10. An attempt is made to show that, while the removal of trade restrictions is an essential precondition for the development of export-oriented industries in the developing countries, this is a necessary but not a sufficient condition. Liberalization of trade in manufactures through the granting of preferences, while indispensable, does not by itself assure that manufactures for exports will be developed, nor that they will be competitive in the world markets. The major burden of carrying out the necessary development effort will fall upon the developing countries themselves, although they will not be able to do so without far-reaching international collaboration and assistance.

11. The paper further tries to indicate the directions which these new developments would have to take. In attempts to show that the further expansion of the so-called traditional exports of manufactures is likely to meet with increasing difficulties on the demand side, not dissimilar to those faced by primary commodities. An examination of the comparative advantages generally found in the developing countries, which takes account also of the apparent trends in demand conditions, shows that the developing countries would have to orient their new export industries much more towards new sectors in the area of producers' goods, particularly production of intermediate goods. The experience of a number of developing countries in promoting exports of their manufactures strongly suggests that, to the extent that markets can be made accessible, they may have good export prospects in a wide range of engineering and chemical products, as well as industrial primarily based on their domestic natural resources.

12. The development of the new industries is required not only to improve the external balance; since the process of import substitution is, in many countries, about to reach an economic impasse, while in other countries such a situation is bound to arise in the not too distant future, the development of

export industries is also a pre-condition for the continuation of the industrialization process itself.

13. The development of these new industries can only come about if markets for their product are made accessible, and if international assistance in investment capital and "know-how", which so far has often flowed by preference into infra-structure projects, is mobilized for this purpose. An argument is put forward in this paper in this connexion that it should be possible to utilize the flow of international aid funds, through triangular or broader arrangements, to promote a more balanced flow of trade involving not only exports from the donor countries of international aid, but also exports of industrial goods from third, themselves developing, countries.

14. It is further argued that the establishment of new export industries will require a large-scale industrial development effort by the developing countries. Furthermore, the development programmes of the developing countries will orient the effort of expansion of exports towards the more dynamic industries, instead of concentrating on the areas of traditional exports which are characterized by relatively stagnant demand and are therefore much more sensitive to foreign competition. By applying the principle of complementarity, the necessary structural adjustments in the importing countries would be minimized.

CHAPTER II

TRENDS IN EXPORTS OF MANUFACTURED GOODS FROM THE DEVELOPING COUNTRIES

The declining share of the developing countries in total world trade

15. One of the striking features of post-war world trade is the declining share of the developing countries in total world exports, from 30 per cent in 1950 to 20.4 per cent in 1960 in current prices. While the mutual trade of the industrially advanced countries has risen rapidly, that of the developing countries has been slow, both among themselves and with the developed countries. The share of imports from the developing countries in the total imports of the developed countries fell from 32.2 to 22.8 per cent—a relative decrease of 29 per cent; their mutual trade declined from 27.3 to 19 per cent, which represents an even slightly greater relative contraction. The reduction of the developing countries' share in the total imports of the centrally-planned economies was, in relative terms, the greatest—from 12.3 per cent in 1950 to 8 per cent in 1960—a decrease of 35 per cent. The reduced share of the developing countries' exports in the total imports of both the developed and the centrally-planned countries reflected the increase in the mutual trade of each of these groups of countries, whereas trade between the two groups remained stable. (See Table 1.[1])

16. This decline, for the period covered, is mainly due to the slower increase in the volume of exports from the developing as compared with the developed countries. The exports of the latter grew at a compound annual rate of 6.9 per cent, and those of the centrally-planned countries at 10.7 per cent, while the average growth of the exports of the former was only 3.6 per cent.[2] The breakdown of exports by region of origin and destination and by major commodity groups shows (see Table 2) that out of a total increment of exports from the developing countries between 1955 and 1961, of $3,930 million, $2,200 million or 56 per cent, were accounted for by fuels. Exports of primary goods other than fuels increased by only $730 million during this period—$15,370 million in 1961 as against $14,640 million in 1955; over the same period the centrally-planned economies increased their imports of primary commodities, except fuels, from developing countries by $851 million, imports by the developed countries stagnated and trade among the developing countries decreased by about $160 million. The rest of the increase of $945 million was in exports of manufactured goods, of which the developed countries absorbed two-thirds. Despite the relatively rapid increase of exports of manufactured goods, which became particularly conspicuous since 1959, their share in the total exports of the developing countries is still very small—14.4 per cent in 1961, as against 12.8 per cent in 1955.

TABLE 1

Distribution of world trade, by country group, 1950 and 1960[a]

(Percentage of world trade in current prices)

Exporting country group	*Importing country group*				
	Total world	*Developed countries*	*Planned economies*	*Developing countries*	*Unclassified trade*
Total world					
1950 . . .	100.0	100.0	100.0	100.0	100.0
1960 . . .	100.0	100.0	100.0	100.0	100.0
Developed countries					
1950 . . .	59.8	62.6	21.2	68.8	34.6
1960 . . .	66.0	72.1	20.9	75.3	55.9
Centrally-planned economies					
1950 . . .	8.4	3.4	66.5	2.7	4.1
1960 . . .	12.4	3.6	71.1	4.7	5.3
Developing countries					
1950 . . .	30.0	32.2	12.3	27.3	52.5
1960 . . .	20.4	22.8	8.0	19.0	34.5
Unclassified trade					
1950 . . .	1.7	1.8	—	1.2	8.8
1960 . . .	1.3	1.5	—	1.0	4.3

Source: See table 1.1 in *World Economic Survey, 1962*, Part I.

[a] Excluding special category exports of the United States of America.

[1] Reproduced from *World Economic Survey 1962*, Part I, table 1.3.

[2] *World Economic Survey 1962*, Part I, Table 1.1.

TABLE 2

Exports from developing countries

(Value in millions of US dollars)

SITC Code No.	Commodities		1955	1956	1957	1958	1959	1960	1961
0 to 9	Total exports[a]	Value. . . .	23 670	24 860	25 440	24 760	25 750	27 350	27 600
0 and 1	Food, beverages, tobacco	Value. . . .	7 680	8 000	8 250	8 160	7 830	8 070	8 010
		Percentage[b] .	32.4	32.2	32.4	33.0	30.4	29.5	29.0
2 and 4	Crude materials, except fuels, oils and fats	Value. . . .	6 960	7 010	6 890	6 240	7 180	7 630	7 360
		Percentage[b] .	29.4	28.2	27.1	25.2	27.9	27.9	26.7
3	Mineral fuels	Value. . . .	5 900	6 430	7 000	7 430	7 360	7 650	8 100
		Percentage[b] .	24.9	25.9	27.5	30.0	28.6	28.0	29.3
0 to 4	Primary commodities	Value. . . .	20 540	21 440	22 140	21 830	22 370	23 350	23 470
		Percentage[b] .	86.8	86.2	87.0	88.2	86.9	85.4	85.0
5	Chemicals	Value. . . .	240	235	240	230	230	290	320
7	Machinery and transport equipment	Value. . . .	120	135	145	150	155	190	225
6 to 8	Textiles	Value. . . .	660	690	770	710	790	890	930
	Base metals	Value. . . .	1 220	1 420	1 160	890	1 170	1 350	1 360
	Other light manufactures	Value. . . .	790	810	840	800	890	1 120	1 140
5 to 8	Manufactures	Value. . . .	3 030	3 290	3 155	2 780	3 235	3 840	3 975
		Percentage[b] .	12.8	13.2	12.4	11.2	12.6	14.0	14.4

Source: United Nations *Monthly Bulletin of Statistics*, March 1961 and 1963, April 1961 and 1963.

[a] Includes special category exports not shown by destination.

[b] Percentage share in exports in each year.

The pattern of commodity structure of trade

17. This unequal increase in exports, resulting in the conspicuous change in the distribution of world trade which is illustrated in Chart 1 reflects the differences in the commodity structure of trade among the different groups of countries. Table 1 shows that whereas the trade between developed and developing countries was largely complementary, that of the industrialized countries among themselves consisted for the greater part of goods originating in broadly competitive industries. In the case of the former, primary goods and light manufactures from the developing countries were traded for more highly processed manufactured goods from the developed countries. In the case of the latter, commodities belonging to similar industries were exchanged for each other. As is noted, it is the latter kind which accounted for the greater part of the expansion in world trade. The causes for the slow expansion of exports from the developing countries must be sought in their lower level of industrialization itself, and the relative income elasticities of import demand for the various groups of commodities. These structural changes can be considered as resulting from the characteristics of economic growth itself.[3]

[3] Alfred Maizels, (*Industrial Growth and World Trade*, Cambridge University Press 1963—p. 83 ff) analyses these developments as follows: "A shift in the balance of world demand towards manufactured goods seems to be an inevitable accompaniment of economic growth . . . the more important developments have occurred within the industrial countries themselves . . . the balance of demand has shifted towards the 'growth' sectors of engineering and chemicals; and it is precisely in these that the raw material content per unit of output is lower than in other major industries, such as textiles, clothing and food processing. Consequently, the shift in the pattern of output has resulted in the demand for raw materials in total lagging behind industrial growth."

18. It is reasonable to assume that within the manufactured goods, the elasticity of demand tends to be higher, the further the commodity is removed from the area of basic consumer demand (food, textiles). The income elasticity of output (which corresponds roughly to the income elasticity of demand) as calculated from a sample of fifty-three countries, is shown in Table 3. Exports from the developing countries are mainly concentrated in those commodity groups which have an income elasticity of output below the average for total manufacturing.

TABLE 3

Income elasticity of output in manufacturing

	All countries	High income countries	Low income countries
Paper and paper products	2.04	1.86	2.36
Basic metals	1.99	1.16	2.98
Metal products	1.98	1.87	2.23
Other manufacturing	1.85	1.85	2.05
Printing and publishing	1.72	1.64	1.24
Rubber products	1.58	1.46	1.94
Chemicals and petroleum products	1.55	1.12	1.80
Wood products	1.53	1.51	1.71
Clothing and footwear	1.36	1.25	1.95
Textiles	1.21	0.75	2.12
Non-metallic mineral products. .	1.16	1.14	2.37
Food, beverages, tobacco	0.98	0.97	1.72
Leather products	0.89	0.91	2.01
Total manufacturing	1.37	1.30	1.89

Source: A Study of Industrial Growth, United Nations publication, Sales No.: 63.11.B.2. pp. 7 and 40.

In the period 1955-1961, exports of foodstuffs and primary goods except fuel were, on the average, 58.7 per cent of their total exports. Fuel exports accounted for another 27.8 per cent, and exports of base metals were another 4.8 per cent. Of the remaining 8.2 per cent of manufactured goods proper, 6.6 per cent, or about four-fifths, were textiles and other light manufactures. In general, these represent the lower end of the range of income elasticities of output. This becomes even more striking when the income elasticities of the high-income countries are considered: the lowest income elasticities were for basic metals, chemicals and petroleum products, clothing and footwear, textiles, non-metallic mineral products, food, and leather products. The developing countries' exports were overwhelmingly concentrated in these commodity groups for which the demand in the developed countries is likely to increase only slowly, relative to income. The expansion of exports of light manufactures and textiles between 1955 and 1961 was higher than that of all other exports, with the exception of machinery (see table 4). The latter were, for the greater part, exported to other developing countries, and their share in the total was still insignificant—0.8 per cent of total exports in 1961, or 5.7 per cent of all manufactured exports. The past tendency has therefore been predominantly an expansion in relatively unpromising directions from the point of view of the structure of demand.

19. When the expansion of exports from developing to other developing countries is compared with that of exports to developed countries, it is seen that whatever increase there was, was mainly due to increased imports by the developed countries. In current values, the exports of all primary goods to other developing countries remained practically unchanged between 1955 and 1961; the increase of these exports to the developed countries during this period was no more than 13.5 per cent which was mostly accounted for by increased exports of fuels. The more rapid increase in the exports of manufactured goods was only sufficient, because of their small share in the total, to raise the over-all increase of exports to 17 per cent representing an average annual rate of increase of 2.7 per cent. Within the category of manufactured goods, the expansion of exports to other developing countries was 29.6 per cent, compared with 29.3 per cent to developed countries (see tables 5, 6 and 7). It is reasonable to assume that the better part of these exports is an outgrowth of the process of industrialization based on import substitution in the exporting country. Since the pattern of import substitution in the developing countries tends to be similar, the expansion of mutual trade in these commodities is likely to meet with increasing resistance as import substitution proceeds. This may be one explanation for the low income elasticity of the demand for imports of manufactured goods other than capital goods in the developing countries, which has been estimated at 0.32.[4] Exports of machinery were a conspicuous exception; two-thirds of whatever increase there was found an outlet in other developing countries, the remaining third going to the developed countries. The over-all picture that emerges has the following

TABLE 4

Rate of increase of exports from developing countries

(In percentage)

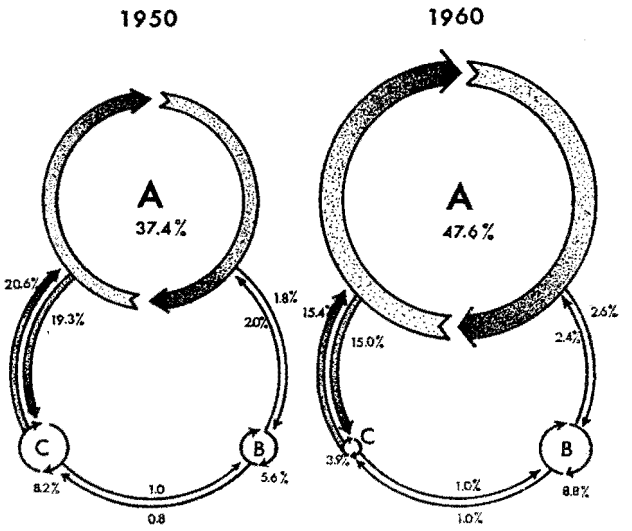
SITC code No.		Increase between 1955-1958	1958-1961	1955-1961
0 to 9	Total exports from developing countries	5	11	17
1 to 4	Total of primary goods	6	8	14
0 and 1	Food, beverages and tobacco	6	−2	4
2 and 4	Crude materials, each; fuels, oils and fats	−10	18	6
3	Mineral fuels, etc	26	9	37
5 to 8	Total of manufactured goods	−8	43	31
5	Chemicals	−4	39	33
7	Machinery and transport equipment	25	50	88
67, 68 (less 681)	Base metals	−27	53	11
	Light manufactures	4	37	43
65	Textiles	8	31	41

Source: Calculated from Table 2.

Chart 1

Distribution of world Trade, by region, 1950 and 1960

(per cent, current prices)



A: Developed Countries—North America, western Europe, Australia, Japan, New Zealand and South Africa.

B: Centrally-planned economies—eastern Europe, mainland China, Mongolian People's Republic, North Korea and North Viet-Nam.

C: Developing countries—Rest of world.

Calculated from 'World Economic Survey 1962', Part I, The Developing Countries in World Trade, 1963, p. 3.

(Unclassified trade, amounting to 1.7% and 1.3% in 1950 and 1960 respectively, i omitted in this chart.)s

[4] *World Economic Survey 1962*, United Nations, Part I, page 6.

TABLE 5

Exports from developing countries to developed countries

(Value in millions of US dollars)

A = Rate of Increase Index 1955 = 100. B = Percentage share in total exports in each year.

SITC Code No.	Commodities		1955	1956	1957	1958	1959	1960	1961
0 to 9	Total	Value. . . .	17 080	18 250	18 210	17 900	18 750	19 780	19 730
		A	100.0	106.9	106.6	104.8	109.8	115.8	115.5
0 and 1	Food, beverages, tobacco	Value. . . .	6 050	6 420	6 450	6 490	6 220	6 230	5 880
		A	100.0	106.1	106.6	107.3	102.8	103.0	97.2
2 and 4	Crude materials, etc.	Value. . . .	5 440	5 610	5 330	4 760	5 400	5 750	5 620
		A	100.0	103.1	98.0	87.5	99.3	105.7	103.3
3	Mineral fuels, etc.	Value. . . .	3 520	3 920	4 320	4 820	4 850	5 160	5 530
		A	100.0	111.4	122.7	136.9	137.8	146.6	157.1
0 to 4	Primary commodities	Value. . . .	15 010	15 950	16 100	16 070	16 470	17 140	17 030
		A	100.0	106.3	107.3	107.1	109.7	114.2	113.5
		B	87.9	87.4	88.4	89.8	87.8	86.7	86.3
5	Chemicals	Value. . . .	130	130	130	125	125	175	175
		A	100.0	100.0	100.0	96.2	96.2	134.6	134.6
7	Machinery and transport equipment	Value. . . .	27	28	34	43	46	50	61
		A	100.0	103.7	125.9	159.3	170.4	185.2	225.9
6 and 8	Textiles	Value. . . .	275	280	330	320	395	465	485
		A	100.0	101.8	120.0	116.4	143.6	169.1	176.4
	Base metals	Value. . . .	1 160	1 330	1 050	810	1 050	1 230	1 240
		A	100.0	114.7	90.5	69.8	90.5	106.0	106.9
	Other light manufactures	Value. . . .	415	430	484	470	565	645	635
		A	100.0	103.6	116.6	113.3	136.1	155.4	153.0
5 to 8	Manufactures	Value. . . .	2 007	2 198	2 034	1 768	2 181	2 565	2 596
		A	100.9	109.5	101.3	88.1	108.7	127.8	129.3
		B	11.8	12.0	11.2	9.9	11.6	13.0	13.2

Source: See Table 2.

TABLE 6

Exports of developing to other developing countries

(Value in millions of US dollars)

A = Rate of Increase Index 1955 = 100. B = Percentage share in total in each year.

SITC Code No.	Commodities		1955	1956	1957	1958	1959	1960	1961
0 to 9	Total	Value. . . .	5 780	5 800	6 190	5 700	5 760	6 020	6 080
		A	100.0	100.3	107.1	98.6	99.7	104.2	105.2
0 and 1	Food, beverages and tobacco	Value. . . .	1 440	1 420	1 580	1 480	1 420	1 460	1 450
		A	100.0	98.6	109.7	102.8	98.6	101.4	100.7
2 and 4	Crude materials	Value. . . .	1 140	990	1 020	840	1 010	1 100	970
		A	100.0	86.8	89.5	73.7	88.6	96.5	85.1
3	Mineral fuels	Value. . . .	2 170	2 300	2 450	2 330	2 290	2 270	2 330
		A	100.0	106.0	112.9	107.4	105.5	104.6	107.4
0 to 4	Primary commodities	Value. . . .	4 750	4 710	5 050	4 650	4 720	4 830	4 750
		A	100.0	99.2	106.3	97.9	99.4	101.7	100.0
		B	82.2	81.2	81.6	81.6	81.9	80.2	78.1
5	Chemicals	Value. . . .	78	90	95	88	90	105	125
		A	100.0	115.4	121.8	112.8	115.4	134.6	160.3
7	Machinery and transport equipment	Value. . . .	90	105	105	97	105	135	160
		A	100.0	116.7	116.7	107.8	116.7	150.0	177.8
6 and 8	Textiles	Value. . . .	375	390	420	370	370	380	395
		A	100.0	104.0	112.0	98.7	98.7	101.3	105.3
	Base metals	Value. . . .	64	78	105	78	89	99	96
		A	100.0	121.9	100.1	121.9	139.1	154.7	150.0
	Other light manufactures	Value. . . .	361	382	335	312	301	421	479
		A	100.0	105.8	92.8	86.4	83.4	116.6	132.7
5 to 8	Manufactures	Value. . . .	968	1 045	1 060	945	955	1 140	1 255
		A	100.0	108.0	109.5	97.6	98.7	117.8	129.6
		B	16.7	18.0	17.1	16.6	16.6	18.9	20.6

Source: See Table 2.

TABLE 7

Exports among developed countries, between developing and developed countries, and among developing countries

(*Value in millions of US dollars, f.o.b.*)

A = Rate of Increase Index 1955 = 100

SITC Code No.			1955	1956	1957	1958	1959	1960	1961
	A. *Exports among developed countries*								
0 to 9	Total trade	Value. . . .	40 040	45 060	49 560	46 410	51 250	58 750	62 760
		A	100	113	124	116	128	147	157
0 to 2, 4	Primary goods, excluding fuels	Value. . . .	14 210	15 680	16 910	15 110	16 510	18 240	19 240
		A	100	110	119	106	116	128	135
3	Mineral fuels and related materials	Value. . . .	2 390	2 920	3 460	2 660	2 410	2 660	2 820
		A	100	122	145	111	101	111	118
0 to 4	Primary goods, including fuels	Value. . . .	16 600	18 600	20 370	17 770	18 920	20 900	22 060
		A	100	112	123	107	114	126	133
5 to 8	Manufactured goods	Value. . . .	22 960	25 950	28 550	28 120	31 780	37 360	40 190
		A	100	113	124	122	138	163	175
	B. *Exports from developing countries to developed countries*								
0 to 9	Total trade	Value. . . .	17 080	18 250	18 210	17 900	18 750	19 780	19 730
		A	100	107	107	105	110	116	116
0 to 2, 4	Primary goods, excluding fuels	Value. . . .	11 490	12 030	11 780	11 250	11 620	11 980	11 500
		A	100	105	103	98	101	104	100
3	Mineral fuels and related materials	Value. . . .	3 520	3 920	4 320	4 820	4 850	5 160	5 530
		A	100	111	123	137	138	147	157
0 to 4	Primary goods, including fuels	Value. . . .	15 010	15 950	16 100	16 070	16 470	17 140	17 030
		A	100	106	107	107	110	114	113
5 to 8	Manufactured goods	Value. . . .	2 007	2 198	2 034	1 768	2 181	2 565	2 596
		A	100	110	101	88	109	128	129
	C. *Exports among developing countries*								
0 to 9	Total trade	Value. . . .	5 780	5 800	6 190	5 700	5 760	6 020	6 080
		A	100	100	107	99	100	104	105
0 to 2, 4	Primary goods, excluding fuels	Value. . . .	2 580	2 410	2 600	2 320	2 430	2 560	2 420
		A	100	93	101	90	94	99	94
3	Mineral fuels and related materials	Value. . . .	2 170	2 300	2 450	2 330	2 290	2 270	2 330
		A	100	106	113	107	106	105	107
0 to 4	Primary goods, including fuels	Value. . . .	4 750	4 710	5 050	4 650	4 720	4 770	4 750
		A	100	99	106	98	99	100	100
5 to 8	Manufactured goods	Value. . . .	968	1 045	1 060	945	955	1 140	1 255
		A	100	108	110	98	99	118	130

Source: United Nations *Monthly Bulletin of Statistics*, March 1961 and March 1963.

features: (*a*) a practically stagnant revenue from exports of primary goods apart from fuels, despite increased physical volume; (*b*) a low elasticity of demand for these commodities, holding out promise for only a slow rate of expansion; (*c*) a concentration of present exports of manufactures in those commodity groups for which demand is inelastic, particularly in the developed countries; (*d*) rapid expansion in the mutual trade of the highly industrialized countries, the increase being mainly concentrated in manufactured goods; (*e*) indications of a relatively rapid increase in exports of more advanced types of goods to other developing countries.

The effects of commodity structure on the balance of payments and on export prospects

20. The result of these developments has been that despite an increase of 28 per cent in the physical volume of exports from the developing countries between 1955 and 1960, their revenue from exports has increased by only 17 per cent. The volume of primary goods exported grew by 23 per cent, while export receipts increased by only 5 per cent. The deterioration in the terms of trade of the developing countries has resulted, during the period 1951-1961, in a loss of claims over external resources which has been estimated at $15 billion.[5] This loss is equivalent to over one-third of the net inflow of long-term funds, including government donations, to the developing countries during this period. It is also probably roughly comparable with the total net foreign exchange earnings from exports for one year. The implications of this for the development of the less-industrialized countries are obvious: the further expansion

[5] *World Economic Survey 1962*, United Nations, Part I, p. 114.

of the bulk of their traditional exports will require an increasing expenditure in real resources, without a commensurate addition to foreign exchange earnings. To the extent that the increase in the volume of primary goods' exports is a result of new investments, which often have a high import coefficient, the result of such an expansion may even result, in some cases, in a net loss of foreign exchange. Even if the expansion of exports is from existing productive capacity, the increased expenditure of domestic resources is likely to generate some additional demand for imports, thus exerting further pressure on the balance of payments. The over-all decrease in the "capacity to import" is, in the final account, likely to have its greatest impact on the investment sector. Investments may be slowed down or curtailed even for import-substituting industries and an improvement of the balance-of-payments will thus be weakened also from this side. The continuation of these trends is likely to result in a precarious balance if not in actual deterioration of the economic position of the developing countries.

21. The further expansion of "traditional" exports —in the first place, those of primary goods, but also of those manufactured goods which have so far formed the bulk of manufactured exports—thus appears as a very doubtful instrument for improving the balance of trade in the long run. Some relief may be provided by a rise in exports from what may be designated as transitional excess capacity of industries which have been established for the domestic market ahead of the present volume of domestic demand. In such cases, which may apply particularly to some of the larger developing countries, there is a case for expanding exports as long as receipts exceed marginal costs. Another source may be provided by the expansion of exports under bilateral agreements, such as have been carried out with the centrally-planned economies. Bilateral trade of this type, either with centrally-planned countries or among the developing countries themselves, may result in an improvement of the balance-of-payments to the extent that the counterpart imports do effectively free foreign exchange resources, and also that such transactions do not affect the average export prices.

22. Most of the exports of the developing to centrally-planned countries have apparently been of this kind, and have consisted predominantly of primary goods (see table 8). Despite their small share in the total exports of the developing countries (5.3 per cent in 1961) such exports may contribute to their balance-of-payments position; they have not however provided any significant stimulus for a change in the structure of their industrial production. The amount of manufactured goods absorbed by the centrally-planned countries was insignificant, and composed mainly of light manufactures. Although the increase in imports by the centrally-planned economies from the developing countries was very rapid—156 per cent between 1955 and 1961—the share of the developing countries in total imports of the centrally-planned countries rose only from 6.5 per cent to 9.6 per cent.

23. The preponderance of primary goods in the exports of the developing to the developed and particularly to the centrally-planned countries is of

TABLE 8

Exports of developing countries to centrally-planned economies

(Value in millions of US dollars)

A = Rate of Increase Index 1955 = 100.
B = Percentage share in total exports in each year.

SITC Code No.	*Commodities*		*1955*	*1956*	*1957*	*1958*	*1959*	*1960*	*1961*
0 to 9	Total	Value. . . .	575	565	760	850	975	1 220	1 470
		A	100.0	98.3	132.2	147.8	169.6	212.2	255.7
0 and 1	Food, beverages and tobacco	Value . . .	179	133	181	163	167	349	640
		A	100.0	74.3	101.1	91.1	93.3	195.0	357.5
2 and 4	Crude materials, etc.	Value. . . .	350	385	525	630	725	775	740
		A	100.0	110.0	150.0	180.0	207.1	221.4	211.4
3	Mineral fuels	Value. . . .	—	1	—	2	2	2	3
0 to 4	Primary commodities	Value. . . .	529	519	706	795	894	1 126	1 383
		A	100.0	98.1	133.5	150.3	169.0	212.9	261.4
		B	92.0	91.9	92.9	93.5	91.7	92.3	94.1
5	Chemicals	Value. . . .	29	15	10	17	10	9	11
7	Machinery and transport equipment	Value. . . .	1	1	1	4	2	3	2
6 and 8	Textiles	Value. . . .	12	18	21	23	34	37	32
	Base metals	Value. . . .	—	4	4	4	17	25	12
	Other light manufactures	Value. . . .	6	4	9	9	14	23	32
5 to 8	Manufactures	Value. . . .	48	42	45	57	77	97	89
		A	100.0	87.5	93.8	118.8	160.4	202.1	185.4
		B	8.3	7.4	5.9	6.7	7.9	8.0	6.1

Source: See table 2.

TABLE 9

Imports of developed countries by provenance

SITC 65: Textile yarn and fabrics[a]

(Value in millions of US dollars)

A = Percentage share in total imports in each year.

Provenance		*1955*	*1956*	*1957*	*1958*	*1959*	*1960*	*1961*
World	Value. .	2 560	2 650	2 910	2 670	3 070	3 660	3 750
Developed countries	Value. .	2 240	2 320	2 510	2 290	2 610	3 120	3 180
	A . . .	87.5	87.5	86.3	85.8	85.0	85.2	84.8
Centrally-planned countries	Value. .	46	50	66	63	72	81	78
	A . . .	1.8	1.9	2.3	2.4	2.3	2.2	2.1
Developing countries	Value. .	275	280	330	320	395	465	485
	A . . .	10.7	10.6	11.3	12.0	12.9	12.7	12.9

Source: See table 2.

[a] Includes jute bags, linens, ribbons, carpets, etc.; excluding clothings.

course in itself related to the structure of output in the developing countries. The centrally-planned countries have tended to give priority to imports of producers' goods; of these, again, imports of advanced types of equipment have taken precedence, while light manufactures of consumers' goods were last on the list of priorities. Thus, the developing countries, in which light manufactures are more developed than producers' goods industries, are confronted with a reverse order of priority in demand. Yet it seems that the centrally-planned economies could provide substantial outlets not only for primary goods, but also for manufactured commodities from the developing countries even from the existing capacity. This is particularly so if the present low level of these exports, the rapid rate of growth of the centrally-planned economies, and their rising levels of consumption are taken into account.

24. Although some developing countries have sufficient industrial capacity to enable them to expand their exports of manufactured goods considerably if the trade restrictions were relaxed, it still appears that the major reason for the slow rate of growth of industrial exports is to be sought in the direction which their industrial development has taken so far. As may be seen from table 9, the developing countries account for a small share of total imports of the developed countries even in textile yarn and fabrics, which are their most important traditional area of manufactured exports. The intra-regional trade in this commodity class in the developed countries has grown by 42 per cent between 1955 and 1961 and accounts for 85 per cent of their total imports of these textile products. The existing trade barriers tend to discriminate most strongly against the more highly processed goods, thus reinforcing the present commodity structure. Yet, important as the existing tariff and other trade restrictions may be in some specific cases, in general they are probably a secondary factor. The main factors which inhibit the expansion of exports of manufactures of the developing countries are to be sought on the supply side; namely in the structure and directions of their industrial development, and in the scarcity of resources-capital and know-how required for the initial development.

25. The fact that the range of commodities available for exports is restricted to products of the so-called light industry is due to the relatively early stage of industrialization of these countries' exports being often an outgrowth of import substitution. Some of this is however also due to the fact that development of export industries as such has only rarely figured explicitly in the industrial development programmes of the developing countries, with the exception of those industries which are closest to the primary production stage. Import substitution is of course the path of least resistance in industrialization. Compared with exports, it enjoys the natural protection of distance, makes less claims on efficiency of industrial operations and can be sheltered against competition by a protectionist policy. The most severe inhibiting factors of the development of export-oriented industries are, however, the shortage of development resources including foreign exchange, which often push development efforts into directions designed to alleviate difficulties of the most immediate future.

26. Since a programme of export development would require heavy capital investments, a more mature industrial and economic structure, and a considerable gestation period, which is generally longer than that in import substitution industries because of the greater difficulties of breaking into foreign markets, it is likely to result—in the short run—in strong pressures in the balance of payments. The development of export-oriented industries of non-traditional type may thus require the expansion of exports out of existing capacity in order to provide the necessary resources. The importance of measures designed to provide additional markets for exports out of existing industrial capacity, and of other measures of international aid on a much larger scale and in different forms than hitherto, is thus thrown into sharp relief.

The need for diversification and structural change

27. The problem of diversification of exports, which can only be solved through a massive expansion of exports of manufactured goods, affects the individual developing countries in different ways. Differ-

ences in the level of industrial development among the group of countries generally classified as "developing" are probably more pronounced than among the developed countries. Thus, the problems faced by the larger of the developing countries are not only quantitatively, but also qualitatively different from those confronting the smaller countries. What the United States and western Europe are to the semi-industrialized countries, some of these are, or are in the process of becoming, to the less-industrialized countries. In some of the larger among the developing countries, exports are needed to overcome some structural imbalances arising during the development period. Ultimately, their size and endowment in resources will permit them to become much less dependent upon foreign trade. In the smaller countries, a high degree of dependence on foreign trade is likely to remain a permanent feature of their economic structure. A serious problem faced by the more industrialized among the developing countries is that of the balance-of-payments in the short run, whereas in the less-industrialized countries the problem of over-all scarcity of resources may be predominant. Also, while the more industrialized countries will be, in general, more dependent for their imports on the developed countries, whose pattern of demand they are gradually approaching; this is not necessarily so to the same extent for the less-industrialized members of the group. The latter can provide export markets for the manufactured products of the former. A trend in this direction is indicated by the already substantial share of intra-regional trade in manufactured goods among the developing countries and by the directions which exports of more specific non-traditional goods, such as capital goods, light engineering products and other producers' goods, have taken. As long as exports will consist overwhelmingly of commodities which, on the one hand, are first on the list of priorities in most developing countries for import substitution, and on the other hand, correspond to the output of the more or less stagnant industries in the developed countries, intra-regional trade in industrial commodities can be expected to expand only slowly. Exports to the developed countries based on such commodities are unlikely to contribute towards improving the situation in any measure comparable with the magnitude of the problem.

Import substitution and exports

28. A proper evaluation of future prospects for exports in the light of past performance requires a somewhat more detailed analysis of the relationship between the structure of supply and that of demand. Although the statistical data for an exhaustive analysis by detailed commodities are not readily available, it is possible to derive some general conclusions from the existing data and from the general trend and characteristics of demand in the various groups of countries. The general tendency for the developing countries is to take the first step on the road to industrialization through import substitution. With rising incomes and standards of living, demand expands rapidly first for those commodities which are basic necessities. This high-income elasticity of demand in the home market causes, at first, a high elasticity of import demand, and thereby provides a strong stimulus to the substitution of domestic production for imports. Once imports of the final commodities have been supplanted by domestic production, the elasticity of import demand for the semi-manufactures and intermediates required for the final consumers' goods remain high. The same is true for capital goods at all stages of production. With a further rise in income, the income elasticity of demand for the first kind of goods begins to decline and so does the derived demand for their input components.

29. In the process of import substitution, capacity is generally built ahead of the rising demand. While such excess capacity appears, it seeks export outlets. If domestic demand for these goods continues to rise as expected and no structural imbalance between capacity and demand develops, it will begin to compete with exports for the available supplies, and thus cause a deterioration in the balance-of-payments. More often, however, capacity is still expanded while the elasticity of demand already turns downward. As demand shifts increasingly to new commodities, capacity may remain idle for a long period and will seek permanent export outlets. Such exports will meet with increasing resistance in the markets of other developing countries as the latter will themselves wish to substitute domestic production in the industries. The establishment of these industries generally proceeds with protection, which begins as protection of infant industries and often degenerates into protection of stagnant industries. The highest protective barriers tend to be established in the final goods sectors; the barriers will generally be lower—with the exception of certain monopoly situations—against the intermediate goods. Generally speaking, domestically produced industrial commodities which appear in the beginnings of industrialization are those which have been staple consumption items for a long time in the developed countries.

30. The development of exports is likely to meet with relatively few obstacles on the demand side in those industrial intermediates which are either relatively new with regard to other developing countries or which do not predominantly serve as inputs for final commodities with a low elasticity of demand in the more developed countries. This may imply, in many countries, that the export effort cannot be a mere extension of import substitution. Exports may have to become the leading sector in the economy.[6] With regard to exports of equipment, the differences in the level of industrialization among the developing countries may open up considerable possibilities for

[6] A. Maizels (*op. cit.*, p. 111 ff) cites as examples of countries in which exports have provided the dynamic stimulus to growth; the United Kingdom in the nineteenth century, Japan, Sweden, Denmark, Switzerland, the Low Countries and Canada. He states that "in general, small countries, or countries with limited natural resources, are more likely to find that economic growth can be accelerated by export specialization than are large countries or countries with a wide variety of natural resources". The majority of the developing countries are small by any measure, and the result of excessive orientation towards the domestic market has been that growth has become inhibited; "To the extent that (such) payments difficulties have been due to an 'unbalanced' growth, in the sense of over-concentration on development for the home market, at the expense of exports, it can be said that the type of industrialization which has occurred has itself set limits to the rate of economic growth that could be achieved without further external aid". (*Ibid.*, p. 112).

increased intra-regional trade, provided that appropriate techniques are adopted in the production of these commodities, and provided that resources are made available for the less advanced of the developing countries in sufficient amount and in such a way as to enable them to import from their more-advanced fellow countries. This may call for certain international measures which will be further discussed in chapter VI.

31. The data indicate that a certain pattern of trade is beginning to emerge which, if consciously promoted by an appropriate development policy, and international measures and freed from artificial restrictions, may hold out considerable promise. This pattern appears to follow the hierarchical order of level of industrialization. Primary goods are mainly oriented to the highly developed countries, while manufactured goods are for the most part absorbed by other developing countries. This indicates that, at least to some extent, the more advanced among the developing countries are able to compete against complex manufactured goods from the developed countries in "neutral" third markets. Therefore, if access to markets could be extended, they could probably develop those exports, on a competitive basis, also in the markets of the developed countries. If this pattern of trade could be strengthened, it would become possible, in many lines of production, to break the vicious circle of limited home markets and high costs. This again would facilitate trade between countries at a similar level of industrial development on the basis of increased specialization. Thus, the utilization of the existing differences in industrial development can become an important lever for the over-all expansion of trade, and an ever-increasing number of developing countries may reach the stage of self-sustained growth.

32. The magnitude of the problem, although requiring far-reaching and co-ordinated international action and, particularly, efforts in the developing countries which may seem immense in each specific case, is nevertheless not such that it cannot be solved within the foreseeable future. The exports required by 1980 to enable the developing countries to raise their *per capita* incomes at an average rate of 3 per cent per annum have been estimated at some $50 billion, compared with approximately $20 billion (excluding petroleum) in 1961.[7] This estimate assumes that capital aid will increase *pari passu* with the import needs of the developing countries. Even if exports of primary goods should expand relatively rapidly—which, in fact, they have not in the past seven years—this would still require exports of manufactured goods to be increased almost four times, from some $4 billion to $15 billion in 1980. Such a task is undoubtedly immense. If it is, however, taken into account that during the same period the increment of demand for manufactured products is estimated at $370 billion for western Europe alone, it does not seem to be beyond the practical limits of solution. It will, however, require that the addition to exports should be, as far as possible, in those types of commodities, the increased demand for which accounts for most of the increment. This places the major emphasis on the development effort of the developing countries. Such an effort can, however, be expected to succeed only if the short-run export problems are vigorously attacked, so as not to deprive the developing countries of the capacity to effect the needed structural changes. In addition, it will depend on the amount and forms of international aid that will be available to them in the intervening period to make this vast structural change possible.

[7] *Economic Survey of Europe 1960*, ch. V, p. 6 ff.

CHAPTER III

THE ROLE OF EXPORTS IN THE PROCESS OF DEVELOPMENT

Exports as a leading sector in growth

33. The promotion of exports of manufactured goods from developing countries assumes highly varying forms. Each country has an export development problem of its own, depending on its particular balance-of-payments problems, its factor endowment and its level and rate of industrialization. But however varied the problem may be in particular cases, it is possible to find a number of common features so that it is possible to derive a certain number of general conclusions which point to solutions appropriate to each concrete case.

34. The development of exports has a dual function, one of which is related to the structure and the other to the general level of industrial development—both being, of course, closely interrelated.

35. The low level of industrialization which is one of the characteristics of the developing countries implies not only a low general level of economic development but also a different structure of production.[8] While production is confined to a narrow range compared to the industrial structure of the industrialized economies, demand is diversified and as development proceeds tends to approach more closely the structure of demand in the more developed countries. Developing countries are therefore unable to provide out of their own production many of the goods which are essential to their development process. The most conspicuous example of such a structural imbalance between the demand for goods and the structure of domestic production is that of capital goods. Although this structural imbalance is most obvious in this area, it is not confined to it; imports of consumer goods are also frequently necessary for the development process to start. After this initial stage is passed and domestic production is being substituted for such imports, the new industries can rely only to a limited extent on domestic supplies of intermediate products and raw materials. These have to be imported for a considerable time before domestic production is capable of satisfying the industry's needs.

36. The result is that almost all developing countries are generally greatly dependent on imports for a considerable period during its development.

[8] See *A Study of Industrial Growth*, United Nations publication, New York 1963, Sales No.: 63.II.B.2.

For some developing countries such structural dependence on imports may be a temporary development. A few of the larger developing countries may, in the course of time, achieve a level of industrial development which will comprise a more balanced production structure, comprising a full range of commodities demanded in the domestic market. However, even for these countries this is a level of achievement which lies in a more or less distant future. Most of the less-industrialized countries are comparatively small and the achievement of a diversified productive structure is beyond the foreseeable possibilities; indeed this would require an immense rise in their levels of income so as to provide for a volume of domestic demand sufficient to make production an economic proposition by criteria of international competitiveness. Dependence on imports may therefore be considered for these countries as a permanent feature of their process of development.

37. This dependence makes it essential for the developing countries to earn the necessary foreign exchange through exports, since reliance on foreign aid can be considered at best as a temporary and transitional solution.

38. The second function which exports fulfil in development is that of accelerating the process of industrialization both by raising its level and influencing its structure. The first function could conceivably be fulfilled by exports of natural resources, agricultural products, or by exports of "traditional" goods from existing industrial capacity. The second function is of a more basic nature. Exports become the leading sector of the economy. The excessive concentration on a limited number of major exports, which characterizes the foreign trade of most developing countries makes their foreign exchange receipts and, by repercussion, the general level of their economic activity highly sensitive to fluctuations of international trade. The developing countries have few reserves to fall back upon and few effective compensatory measures for counteracting the effects of such fluctuations. Development is also generally highly dependent on the availability of foreign exchange since investment is the first sector of the economy to suffer from adverse changes in foreign trade. Diversification of exports provides for a greater measure of stability in the development process. Moreover, it provides for a growth of industrial structure of much wider scope and depth than the one based exclusively on the domestic market.

The limitations of the size of the markets

39. The expansion of manufacturing industries in the majority of developing countries is faced with difficulties some of which are due to a major structural contradiction between narrow domestic markets and the required scale, and type, of manufacturing operations. These are largely determined by the technologies and the structure of supply developed in response to much larger and more diversified markets in the developed countries. As a result, the developing countries find themselves in a vicious circle with regard to promotion of their export industries. It can almost be said that one of the definitions of an underindustrialized country is that the domestic market for manufactured goods is relatively small. It is true that some of these countries are large in terms of population and area and can be said to have a potentially large domestic market; the present limitation on their markets is due to low levels of income and as economic growth proceeds the size of their domestic markets will in the longer run cease to be an inhibiting factor. However, in the majority of the developing countries the problem of the size of domestic markets is more severe. For in these cases, the small volume of domestic demand is not only due to low income levels but also the small size in terms of population. This is illustrated in table 10 which shows how small, in absolute terms, the domestic markets of the less-industrialized countries are compared with the more-advanced economies.

40. Development requires the establishment of industries of a relatively advanced type. Because of the smallness of the domestic markets the establishment of certain industries is not feasible since the range of the required technology is linked to a scale of production which far exceeds the present, and even any reasonably foreseeable volume of domestic demand. At the same time, it may be necessary to introduce in anticipation of future stages of development production of certain commodities for which no adequate domestic demand exists at the present. Thus while growth may be balanced in the long run in the short run some parts of the industrial structure anticipate others and create imbalances. In other cases, the different gestation periods of the various interconnected sectors of the industrial structure may bring about the same result. Whatever the cause such imbalances seem to be fairly general and in fact an unavoidable feature of the development processes and are reflected in the existence and recurrence of excess capacity. When the establishment of an integrated industrial structure calls for building ahead of domestic demand in certain sectors or the technological requirements are incompatible with a scale of operations based only on the domestic market, exports will provide a way out of the structural dilemma.

41. This poses however a vicious circle which constitutes one of the crucial barriers to entry into foreign markets and affects the process of development itself. For, if an industry requiring a certain technologically acceptable minimum scale is established in response to existing inadequate domestic demand, it will necessarily have a high level of costs in comparison with similar industries in more-developed countries; these higher costs are generally offset only to a limited degree by lower wages or by natural advantages which the developing country may have. Such industries are thus barred from competition in the export markets even in the absence of restrictions such as tariff barriers, quotas, national monopolies, etc. This exclusion from the international markets in turn restricts the development of manufacturing industries to the small domestic markets and perpetuates the high level of costs. While such industries benefit from the home market behind the shelter of protection, the existence of such protection often tends to breed

TABLE 10

Apparent consumption of manufactured goods for selected countries, 1958

Country	Gross value of manufacturing output[a]	Imports of manufactured goods[b]	Exports of manufactured goods[b]	Apparent consumption of manufactured goods	Population	Per capita consumption of manufactured goods	National income[c]	Per capita income
	I	II	III	IV (I + II − III)	V	VI	VII	VIII
	(Million US dollars)				(In thousands)	(US $)	(Million US $)	(US $)
Europe								
Denmark	5 160	995	938	5 217	4 515	1 156	4 009	888
Finland	2 398	506	748	2 156	4 376	493	3 000	686
Germany (Fed. Rep.)	65 549	3 960	8 000	61 510	52 133	1 180	42 484	815
Greece	1 212	496	53	1 655	8 173	203	2 442	299
Ireland	1 684	363	173	1 873	2 853	657	1 313	460
Netherlands	10 991	2 346	2 600	10 738	11 186	960	7 826	700
Portugal	2 180	347	255	2 273	8 981	253	1 785	199
Sweden	8 319	1 861	1 851	8 329	7 415	1 123	9 721	1 311
Africa								
Ghana	69	212	32	249	4 836	52	1 068[d]	221
Morocco	719	182	28	874	10 987	80	1 426	130
Tunisia	233	89	71	252	4 050	62	—	—
Asia								
Burma	389	182	11	560	20 255	28	945	47
India	12 145	1 227	589	12 783	417 071	31	26 360	63
Israel	1 015	315	80	1 250	1 997	626	1 516	759
Japan	37 892	1 167	2 718	36 342	91 540	397	23 168	253
Malaya (Fed.)	1 135	353	140	1 348	6 499	207	1 276	196
Pakistan	1 886	248	28	2 105	89 136	24	4 466[e]	50
Philippines	851	457	142	1 166	26 097	45	4 683	179
Thailand	539	352	19	872	21 474	41	1 759	82
Latin America								
Argentina	5 229	912	586	5 555	20 248	274	15 065	744
Brazil	6 119	1 028	119	7 028	62 725	112	7 553	120
Costa Rica	138	93	3	228	1 076	212	335	312
El Salvador	93	94	5	182	2 434	75	448	184
Guatemala	154	123	1	276	3 546	78	549	155
Mexico	5 236	912	235	5 914	32 895	180	8 144	248
Trinidad and Tobago	195	150	199	145	789	184	329	417
Oceania								
Australia	10 113	1 336	1 308	10 141	9 842	1 030	11 001	1 118
New Zealand	3 625	619	655	3 590	2 282	1 573	2 660	1 166

Source: United Nations Statistical Office. *Yearbook of International Trade Statistics, 1960; Yearbook of National Accounts Statistics, 1962; Monthly Bulletin of Statistics,* April 1963.

[a] *Gross Value of Manufacturing Output:* This was calculated from data supplied by the Statistical Office but which have not been published yet. Both value added and gross value of manufacturing output in national currencies (*usually covering establishments above a certain size* but sometimes covering all establishments) will be published in the next Statistical Year Book. In order to calculate the total Gross Value of Manufacturing Output, the ratio of Value Added and Gross Value of Manufacturing Output was applied to data on the Value Added in US dollars covering all manufacturing activities (ISIC 2-3) in 1958, also made available by the Statistical Office.

[b] *Imports and Exports:* Both imports and exports were reclassified as per ISIC in order to calculate the value of manufactured goods.

In the countries listed below under (A), both imports and exports are given in US dollars in the *Yearbook of International Trade Statistics, 1960*; for the other countries the exchange rates shown in footnote (c) were used.

(A) Japan, Israel, Argentina, Brazil, Costa Rica, West Germany.

[c] *National Income:* The following rates of exchange, national currency per US dollar, were used:

Europe:
- Denmark . . . 6.906 Kroner
- Finland . . . 320.4 Markkaa
- Germany (W) . . . 4.178 D.M.
- Greece . . . 30.00 Drachmae
- Ireland . . . 0.3569 Pound
- Netherlands . . . 3.775 Guilders
- Portugal . . . 28.90 Escudos
- Sweden . . . 5.175 Kroner

Africa:
- Ghana . . . 0.3569 Pound
- Morocco . . . 5.06 Dirhams
- Tunisia . . . 0.420 Dinars

Asia:
- Burma . . . 4.790 Kyat
- India . . . 4.780 Rupees
- Israel . . . 1.80 Pound (I)
- Japan . . . 360.8 Yen
- Malaya (Fed. of) . . . 3.06 Dollar (M)
- Pakistan . . . 4.785 Rupees (P)
- Philippines . . . 2.015 Pesos
- Thailand . . . 21.10 Baht

Latin America:
- Argentina . . . 18.00 Pesos
- Brazil . . . 138.52 Cruzeiros
- Costa Rica . . . 6.16 Colones
- El Salvador . . . 2.50 Colones
- Guatemala . . . 1.00 Quetzales
- Mexico . . . 12.50 Pesos
- Trinidad and Tobago . . . 1.714 Dollar (W.I.)

Oceania:
- Australia . . . 0.4484 Pound (A)
- New Zealand . . . 0.3616 Pound (N.Z.)

[d] Gross National Product at current market prices.

[e] At factor cost of 1949-1952.

inefficiencies and low levels of productivity and ultimately retards their rate of economic growth. This applies both in the case of commodities the domestic consumption of which is limited because of an insufficient level of industrial development (e.g., intermediate goods) and in the case of goods for which a domestic market does exist, but is limited by the size of population and its level of incomes.

42. In discussing the development of export industries it will be borne in mind that such development is designed in response to a limited set of objectives. Thus while many developing countries have severe problems of unemployment, the development of exports will not be necessarily centred on that objective and it may well be necessary to give lower priority to the employment effect of these industries.

43. The technological structure of production in the export industries, that is, the combination of production factors, will be determined in the first place by considerations of high performance and low costs and it is the competitive conditions prevailing in international markets that will determine the factor proportions to be adopted. These factor proportions may differ from those adopted for the structure of production in the economy as a whole. It is likely that export industries would have to adopt the highest and most advanced technological methods of production even if the labour intensity of the investments made in these industries may be very low.

The interaction between exports and import substitution

44. The crucial role which the development of exports of manufactured goods may have to play in the industrialization process of a developing country becomes evident when the development of exports is compared with import substitution. Generally speaking, developing countries will first devote their efforts to industrial activities in which they can rely on a captive domestic market. This enjoys the natural protection of distance and transport costs, makes fewer demands on standards of efficiency, services, and quality; moreover, import substitution is facilitated by the familiarity with the formerly imported products. It will generally cover goods of final demand. Broadly speaking, the early stages of industrialization will be characterized by an extension of the range of final goods produced. But, if industrialization is to proceed at a faster rate than the expansion of domestic demand for final manufactured goods a gradual lengthening of the chain of industrial production will be required.

45. It should be noted that because of the nature of the available statistical data, the analysis of exports is mainly conducted in terms of gross value. Comparisons of gross value however tend to obscure the very considerable qualitative differences which exist between countries of a high and a low level of industrialization, in that any given amount of exports from the former will generally contain more domestic value added than in the latter. The low level of industrialization in developing countries is related, among other things, to a low level of industrial interrelationships. If the domestic market is often insufficient to make possible production at an internationally competitive cost level of final goods, this is even more true with regard to production of intermediates which generally belong to this category of so-called "process industries" where economies of scale play a major role.

46. Since intermediate goods are in most cases less specialized than the final commodities and constitute only part of the inputs in the latter, the lengthening of the chain of production by engaging in import substitution of the intermediates presupposes the existence of a sufficiently large output of final goods. Thus the enlargement of the export markets for final commodities aside from the direct effects described above will also exert an important leverage effect by expanding and deepening the process of import substitution.

47. Both import substitution and development of exports fulfil the same function in improving the balance-of-payments and promoting industrialization. They are therefore often seen as alternatives. The former is by far the easier solution and is the first to be embarked upon by a growing economy. But although exports generally tend to follow import substitution in the sequence of time, it does not necessarily follow that exports need be in all cases a sequel and an outgrowth of import substitution. It was stressed earlier that production which may be economical in terms of import substitution may not be so in terms of foreign markets. The development of exports should be viewed as complementary to import substitution rather than as an alternative to it. It is moreover likely that the types of industries to be developed for exports will be different from those which will respond to the normal incentives for import substitution.

The detrimental effects of autarkic tendencies on export development and growth

48. According to accepted theory whether a given country is large or small it should benefit by specialization based on its particular factor endowment and structure of demand and assuming that there are no barriers to trade. However, trade is not in fact "free"; even when it is not restrained by tariffs and other restrictions, there are often the barriers of monopolies or inequalities of economic opportunity. Countries thus strive to achieve as balanced and comprehensive productive structure as possible in order to protect themselves against adverse changes in international trade over which they have no control. This striving for production of as much as possible of the range of commodities in domestic demand may be carried to excess. Autarkic tendencies, in countries which have no economic basis for a comprehensive productive structure, can ultimately only retard their rate of development. Since many of the import-substituting industries are in their early stages "infant" industries, their establishment is generally carried out under a considerable amount of protection. Such protection can, however, easily degenerate into economic isolation, and over-protected import substitution may be carried to excess, beyond what is justifiable even under conditions of decreasing cost and far from

perfect international markets. Such import substitution, which is almost by definition not internationally competitive, could only rarely develop into economically sound and viable exports.

49. It is often said that exports can be developed only in those industries which also enjoy a substantial domestic market, the latter providing a major share of the outlet for the production envisaged. There is no doubt that in those cases where this is possible the path of export development would be much less thorny on the supply side. However, for the domestic market to be able to absorb the major part of output of an integrated industrial structure the economy of the country would have to be highly developed, and the case for the development of exports would be reduced to the case for trade and international specialization among industrialized countries. Developing countries are, however, precisely characterized by the limitation both in scale and range of their domestic demand. Therefore, any *a priori* reliance on the domestic market is liable, at best, to postpone the development of export industries, and, at worst—to prevent it altogether. For a variety of reasons the developing countries are unable to retrace the historical course of development of the mature economies, both as regards the pace of the industrial development or its actual path.

50. The development of export industries in the new economies must be viewed not merely as a means of obtaining the gains from international specialization, as in the mature economies, but as a major instrument of industrialization itself. For the law of comparative advantage to apply it is necessary that lower factor costs are not offset by lower efficiency. This means that in order to achieve a competitive cost level, technology and scale of production should approach those of the foreign competitors. The disadvantages of small size could be offset by adopting technologies which are better suited to the domestic factor endowment but only in part and not in all cases. The range of available technologies in manufacturing processes is largely determined by the advanced countries. The developing countries have at the present time little ability in adapting and transforming "importer" technologies to their own conditions so that there are, in practice, definite limitations to substitutability of factors in most industries.

51. A case may still be made for promoting export industries which best utilize the existing factor endowment. This would be true if there were no restrictions on the side of export demand. However, if the elasticities of demand for the different goods traded internationally are taken into account there appear to be definite limits to this alternative. There seems to be somewhat of an inverse relationship between the obstacles faced by potential export industries of the developing countries on the supply side and those faced on the demand side: those industries which are easiest of access from the point of view of production and factor endowment face the greatest difficulties in entering the export market.[9] Of the two sets of difficulties, it is obviously the supply side which is more amenable to control by the developing countries. The problem of developing exports of manufactured goods from developing countries is largely one of overcoming by consciously taken initiatives the restrictions imposed by the limitations of the markets open to them. If it were possible to rely largely on the operation of the forces of an "automatic" market mechanism and if economies of scale and demand elasticities for various industrial commodities did not impose definite limits on the possibilities of production of most industrial goods, the problem dealt with in this paper would largely cease to exist. These conditions do not obtain in reality. It is therefore necessary to create, through international action, conditions which will make it possible for the developing countries to utilize whatever cost advantages they may potentially have, within the range of technologies effectively available to them. To command a domestic market which represents a large share of the total market may be an important consideration. Since it will make for less vulnerability, the establishment of the industry would also be facilitated through greater familiarity with the products and processes. However, the pre-existence of a large domestic market will not in all cases be the decisive consideration.

[9] See *Economic Survey of Europe in 1960*, Chapter V, p. 29, United Nations publication, Sales No.: 61.II.E.1.

CHAPTER IV

CRITERIA FOR THE DEVELOPMENT OF EXPORT INDUSTRIES

The principle of comparative advantage

52. Two main obstacles confront the developing countries in the expansion of their exports of manufactured goods. On the one hand, there are the external difficulties created by existing trade restrictions, by barriers to entry of various kinds, and by the unequal positions of economic and commercial strength in the international market. On the other hand, there are the various general internal difficulties of growth, which may be particularly severe in respect of export industries because of their more rigorous requirements.

53. Such external obstacles often have an "all or nothing" effect on the development of export industries: while their existence may bar the way to many industries, their removal, or even the giving of preferential treatment to less-developed countries, will by no means ensure that such export industries will in fact develop. The main burden of development must, therefore, even in the best of cases, fall upon the developing countries themselves. No degree of permissive removal of external obstacles, however inhibitive these may be while they exist, can be a substitute for the will to develop, the capacity to transform, and a recognition of the role of exports as the growth-leading sector of the economy.

54. It is for this reason that any analysis of problems of "Trade and Development", such as is the subject of the forthcoming United Nations Conference, must give considerable weight to the aspects of development, since any improvement in the trade position of the developing countries can only

be permissive, as far as new industries are concerned. The analysis must therefore concern itself extensively with the criteria by which appropriate export industries may be selected for development in the various countries. These criteria can at best be stated only in very general terms, since the concrete situation in any given country, and for any given industry, is unique and each case requires a specific solution. It is only the combination of the various criteria, as appropriate for each individual case, which makes it possible to derive concrete and specific solution.

55. This naturally leads to a consideration of the principle of comparative advantages. Most economists would probably agree that this part of economic theory, widely accepted as it is, is also the one which has been most disregarded by actual economic policy and reality. But, as one writer puts it, "a rule gains sanction from its current effectiveness, not from its antiquity", and the practical guidance provided by the principle of comparative advantages has been singularly ineffective. The assumptions underlying this theory contradict the reality of rapidly growing economies in almost every respect. They ignore demand limitations, and are all static: tastes are fixed, technologies are given and equally accessible to all, supplies of the production factors—natural resources, capital and labour—are unchanging, and the production functions of the trading partners are identical. The analysis is, furthermore, highly aggregative, and assumes homogeneity, mobility and substitutability of factors within any country.

56. These assumptions are so far removed from the reality of developing countries that an unmodified application of this principle will, at best, provide no workable criteria for the selection of export industries, and, at worst, may be sterile and misleading. Thus, according to a static interpretation of the principle of comparative advantages, trade would have to be adapted to the existing over-all factor proportions; but it is the very essence and definition of economic development that these factor proportions are in process of rapid change. Technologies are changing and different in various countries, and—except for the relatively stagnant sectors of industry—are not in fact equally accessible to all. Production functions are far from identical. In conditions of development it is no longer possible to assume that the changes under discussion are marginal and will affect the basic structure of the economy only in the very long run. The process of development is one of rapid structural transformation. Finally, development, like any other process, proceeds into the long run by way of a succession of short runs. The guidance required of some principle has to be valid in the relatively short runs with which development policy in the developing countries is in fact concerned. In the short run, factors are neither very mobile nor is their substitutability great. The development of a specific sub-sector of the economy—the export sector of manufacturing industry—can derive but little guidance from a principle applicable only in the very long run and in terms of broad, homogeneous aggregates, since it is concerned with the establishment of criteria for determining priorities of specific industries. It therefore has to deal with the availability of specific factors of production and with the cost functions resulting from their combination.

The application of the principle of comparative advantage to conditions of growth

57. In the absence of a comprehensive dynamic theory of comparative costs, the only alternative may be to have recourse to a number of empirical generalizations to provide some workable criteria. Some general considerations are indicated before the nature of the comparative advantages, which from a dynamic point of view developing countries are likely to have, can be discussed more specifically. The first assumption that has to be made is that there exists, in the given developing country, a sufficient capacity to transform the economy. Without such capacity, which may consist of no more than the readiness to adopt and absorb transferable technologies from abroad, no amount of permissive removal of obstacles will result in development. The capacity to transform may very well have feed-back effects and may grow upon itself. Indeed, the possibilities inherent in certain industries for becoming such growing points and for increasing, by their very existence, the capacity to transform themselves is one important criterion for the selection of development industries.

58. Given the initial will and capacity to transform, two basic questions arise: firstly, whether the export industries should be adapted to factor proportions, or whether the latter should be changed to fit the possibilities of external trade? And secondly, what is the initial state, the point of reference in respect of factor proportions which should be considered decisive for whatever new industries are to be introduced? The answer to the first question is already contained in the assumption that development implies changing factor proportions, and in particular—an increase in the share of capital and in the application of new technologies. According to a static conception, trade should be adapted to factor proportions; these are assumed to be unchanging. Disregarding the contradiction between this assumption and the assumption of development, the approach may be taken to mean, with regard to developing countries, that they should promote those industries which employ their presently most abundant factors of production. More specifically, this would lead to the conclusion that the developing countries should expand those lines of production which are most labour and/or resource-intensive. In other words, they should expand the production and export of primary commodities and those manufactures which are highly labour-intensive and of an unsophisticated type. The expansion of these exports is, however, likely to meet a demand of low and declining elasticity, even if it is assumed that all artificial external obstacles are removed. Such a specialization would therefore be liable to condemn the developing countries, at best, to a slow rate of growth, and may even result in immiseration. While an improvement of the trade position of the developing countries for their presently available exports of such traditional commodities is no doubt of very great importance, the reliance on

further expansion in the same directions will both be inconducive to rapid growth and will be incompatible with development.

59. Export development therefore requires that factor proportions should be adapted to the possibilities and requirements of the market. This implies that to the extent that different markets—more specifically, the home market and the external market—have a different structure of demand, also the factors engaged in the production for them may have to be differently proportioned. In some of the developing countries internal demand may still be highly income-elastic for commodities for which the external demand is sluggish, and which are relatively labour intensive —for example, food, clothing, or housing. The requirements of the internal market could in such cases lead to intensive utilization of the most abundant factors, and to a proportionately greater weight of such industries in the over-all structure of the economy. The present analysis is, however, not concerned with the over-all structure of developing economies, but with that of a specific sector—the export sector. The choices open in the development of that sector are restricted by the possibilities and requirements of the market to which it is oriented. Since the developing economies have found it increasingly difficult and unprofitable to export those factors of which they generally have an abundance, they are left with the alternative of concentrating scarcer, but exportable, factors in the export sector. It may therefore very well be that a dual structure with different factor proportions will have to develop, in which the export sector will absorb a relatively large proportion of the absolutely more scarce factors, such as capital, skilled labour, managerial talent, etc.

60. It should further be considered that development consists primarily of capital accumulation and the introduction of more-advanced technologies. This will tend, gradually, to increase the comparative advantage in relatively capital-intensive and sophisticated commodities. This means that the factor proportions and the resulting comparative advantages which should guide the selection of industries for development should be viewed as a continuing process. The factor proportions which it is appropriate to consider are those which are likely to result, over the life-span of the industries to be established, by the changes resulting from development itself. Therefore, even if it were to appear that the present comparative advantage of a given country is in labour-intensive industries of a not highly advanced type, it is necessary to take into account the time-horizon and the rate of the development envisaged, since the export industries are directly exposed to international competition and have to conform more closely to the cost patterns determined by the foreign market. This requires that the export sector should be more advanced than the rest of the economy and should build ahead of the existing structure and factor proportions.

61. Summing up the argument so far, the dynamic nature of development points to the possibility that in many cases the factor proportions in the export sector will have to be highly different from those appropriate to the demand structure in the internal market. In addition, similarly to the requirements in the domestic market, the rapid rate of growth and change, relative to the longevity of any industrial structure, requires that later stages of development should be anticipated. Instead of expanding those exports in which their present factor endowment appears to give them the greatest comparative advantage, developing countries should consider the directions and the rates of change of these factor proportions. It is not in the areas where the present comparative advantage seems to be greatest that development efforts should concentrate but in those where these margins can be increased most rapidly. Since the process of development mainly consists of capital accumulation and introduction of new technologies, it follows that the export sector will have to be relatively more capital-intensive and composed of non-traditional industries, utilizing more advanced technologies, than the rest of the economy.

The common characteristics of the major factors of production

62. A more specific discussion of the various factors of production will examine to what extent they possess, as far as the majority of the developing countries are concerned, some general characteristics which may indicate in which areas the greatest comparative advantages are likely to be found from a dynamic point of view. The discussion will be conducted in terms of the classic aggregate factors—labour, capital and natural resources. Whenever the relative capital or labour-intensity of some commodity is referred to, this relates to factor intensities in terms of the general factor and not in terms of some highly specialized factor. Thus, die-cutting in Germany, precision watchmaking in Switzerland, hand-weaving of carpets in Iran or diamond polishing in Belgium and Israel are very labour-intensive. But this labour-intensity relates to highly specialized skills, which are similar to a natural monopoly. Like any other specialized resource, such skills obviously provide an absolute advantage in external trade. But they are not generally readily augmentable by development policy, which must concern itself with an initial state in which they are not yet existent. Also, whether they are suitable for exports cannot be determined from the cost side but depends almost entirely on demand.

(*a*) *Labour*

63. The developing countries are, with few exceptions, characterized by an apparent abundance of labour. The causes for this abundance are well known and require no review here. Being abundant, labour is also generally cheap in terms of wage rates. From this cheapness of labour it has been inferred that the developing countries generally have a comparative advantage in labour-intensive industries. This is held to be true even if the low efficiency of labour offsets the advantage of low wages, since the low efficiency applies equally to labour-intensive and capital-intensive industries. Therefore, the comparative advantage would still lie with the former, which use more of the cheap factor of production. The structural difference between these two types of industry may be disregarded for the moment; they result

—because of the fact that capital-intensive industries are generally more machine-dictated and process-dictated—in the fact that the latter are less subject to the inefficiencies due to the individual skill levels of the labour force.[10] The crucial question then is what are the general characteristics of the labour force in most under-developed countries, and what are their implications for the criteria by which industries may be selected for the development of exports.

64. Perhaps the most general characteristic of the labour force in a developing country is the highly skewed distribution of skills. Being not yet developed means, in effect, that one of the attributes of the country is that the level of literacy is low, that a sizable proportion of the labour force has no industrial skills and no tradition of industrial work discipline, and often also little occupational or geographical mobility. At the same time, being in process of social and economic development, these countries have a small minority of skilled personnel, mainly at the upper end of the range of skills. The actual skill level of that small minority may often be comparable to similar skills in more highly developed countries, but both their total number and their relative proportion is small compared with the more industrialized countries. The greatest shortage in respect of labour is in the middle levels of skill, where on-the-job training is an important and often the major part of the training process. The skill distribution curve differs among the various developing countries, and its characteristics are one indicator of the level of economic development.

65. It follows that labour cannot be treated as a homogeneous factor, and one kind of labour is not substitutable for another. In the case of the developing countries, it would perhaps be more useful to distinguish between industries according to their skill-intensity rather than labour-intensity. A developing country may possess certain highly specialized skills which it may be able to export. Examples of these have been given before. Also, it may have a broader stratum of certain handicraft skills. But the limits to exporting these skills are rather narrow, because it is very difficult to develop sizable exports in non-standardized commodities such as handicrafts products [11]—quite apart from the fact that, with the exception of art products such as Persian rugs (and to some extent even for these) machine-produced substitutes will generally compete the handicraft products out of the market both from a point of view of cost and quality. This is often true even of the domestic market, and much more so of the external, more competitive market. The confusion of an abundance of "labourers" with an abundance of labour can be seriously misleading. "Abundance of labour" has economic meaning only if the labour force has, or can attain quickly, the skill attributes necessary to make it an effectively complementary factor to modern industrial technology. The fact that a country may possess an abundance of under-employed agricultural labourers by no means implies that this labour is actually available, or cheap, for the purpose of developing manufacturing industry.

66. Any development must start from an initial position. Therefore, broadly speaking, a country should be in the most advantageous cost position in developing those commodities which, in the given conditions of external demand, make the best use of the existing skill distribution, and which are likely to contribute most to improving it. From the aspect of demand, the developing country will give priority to those commodities the demand for which is highly elastic. The elasticity of demand tends to vary positively, with the degree of fabrication and inversely with the share of the developing countries' exports in the total consumption of the commodities concerned in the importing countries. Considerations of demand elasticity thus point towards relatively highly processed goods, and where sizable domestic production in the importing countries provides an umbrella under which the volume of exports could, under certain conditions, be expanded without a reduction in price. What then are the requirements made upon the labour force by these characteristics of demand?

67. The export industries to be developed thus have to fulfil two conditions: on the demand side, demand for their products has to be highly elastic; on the supply side they have to economize on those types of skill which are scarcest or most difficult to increase within the time horizon involved. The scarcest type of labour in this sense falls, for most developing countries, in the middle range of industrial skills. Unskilled labour is relatively abundant and cheap. The upper levels of skill are generally also scarce relative to the countries' potential and ultimate requirements. But in some of the developing countries the pace of higher education has apparently outrun the pace of industrialization, so that sometimes there is even unemployment, open or disguised, of skilled personnel, although in absolute numbers they may be few. Alternatively, where the scarcity of highly skilled personnel is such as to inhibit industrial development, it is possible to import the necessary personnel. Highly skilled personnel are generally more mobile internationally than the middle or lower skill ranges. It is easier to import one engineer than five skilled machine operators or, even more important, foremen. Given the limitations on the demand side, the characteristics of the labour force in the developing countries would point towards those industries which rely mainly on a small nucleus of very highly trained personnel together with a main body of labour of which no high skills are required.

68. It goes without saying that development depends on raising the general level of skills, through eradication of illiteracy and the provision of technical and higher general training. Ultimately, it is its skills which a country can export. The development of an export sector can therefore also proceed only within the limits of the efforts which a country can devote to education and training. The higher the skill level achieved, the greater the resources devoted to basic and higher education—the more the developing

[10] See Albert O. Hirshman, *The Strategy of Economic Development*, Chapter 8 (Yale University Press, 1958); particularly the discussion of the effects of the social environment, which here are all subsumed under the term "labour".

[11] Compare Charles P. Kindleberger, *Foreign Trade and the National Economy*, Yale University Press, 1962, p. 63.

country will be able to base its export industries, like all its industry in general, on processes in which the skill and know-how of its labour force play a predominant role.

69. The development of an export sector as such, however, can hardly wait until sufficient progress has been attained in the field of education. Education, even where resources for it are practically unlimited, is a lengthy process. In addition, a most important part of the training of the labour force, although dependent on a prior elementary level of education, can only be provided through experience, by "on-the-job" training. In other words, the raising of the skill levels so as to approach more closely the type of distribution found in the developed countries is itself a function of industrialization. The development of export industries will therefore also have to play an important role in the process of industrial education. The expansion of exports is, however, as compared with other aspects of social and economic development, one of the more immediate requirements. It has to start with the existing skill distribution if it is to begin at all. For this reason it is preferable to promote those industries which at least initially make the least demands upon the middle range of skills. It should not be forgotten that in the rapid development of exports the problem is one of maximizing output from a given amount of resources. Of these resources, skilled labour is probably the scarcest. Consequently, one of the criteria for the selection of export industries must be the volume of output obtainable from the available skills.

70. Will the developing countries have a comparative advantage in industries selected by adopting such a criterion? A fuller treatment of this question must be left for the discussion of capital and technology in a later part of this paper. From the point of view of the factor of labour, however, the low level of wages will give the developing countries a considerable cost advantage, provided that it will not be offset by low efficiency. The tendency for inefficiency to offset the cost advantage can best be neutralized by the adoption of technologies in which the quality and quantity of output is least dependent on the human factor.[12] This does not necessarily imply that technology has to be identical with that of the more developed countries. On the contrary: one of the most important uses which a developing country can make of its small nucleus of highly trained people is in the adaptation of technologies. Given that technologies, imitated or adapted, are chosen which ensure, as far as possible, that the differences in productivity in the developing country as compared with the more developed, price-setting, countries should be substantially smaller than the difference in wage levels, what are the prospects of retaining such labour cost advantages over time? Obviously, the problem of maintaining an initial wage cost advantage is more crucial the greater the capital-intensity. Will wages tend to rise, and wipe out the initial advantage, and if so—under what conditions is the rise likely to be least?

[12] See Hirshman, *op. cit.*, p. 152 (paperback edition).

71. To answer this question, it is necessary to look again at the characteristics of the labour force in the developing countries. The great mass of unskilled labour which is available is largely fed from an agricultural surplus population. The supply of that labour is highly elastic. Even if demand for labour of this category will rise considerably under the impact of development, wages, in terms of foreign exchange, are not likely to rise rapidly. For this category of labour it may therefore be assumed that any initial labour cost advantage is not likely to be wiped out by wage rises. As far as the category of highly skilled personnel is concerned, the situation is more difficult, since their supply cannot be assumed to be as elastic as that of unskilled labour. Two mitigating factors might, however, be mentioned. One is that the initial wage differences for such personnel between developing and developed countries are generally quite great; even if there is a tendency for these wages to rise in the course of time, salaries of the professional classes are nevertheless sticky, and the margin of advantage is not likely to be reduced seriously for a long time. The second factor which is likely to retard the wage rise of skilled personnel is that, as mentioned before, there are indications that in some developing countries the rate of education of this category of the labour force has sometimes outrun the pace of industrialization. The result is that, although in relation to the ultimate requirements there is a shortage of these skills, in relation to the actual present job opportunities there may even be an excess. The supply of skilled personnel may therefore be more elastic than appears at first sight, particularly if it is considered that higher education is not motivated by economic considerations alone. Finally, this category of skills is more mobile than any other. Highly qualified professional personnel can be imported from abroad. The cost of such imported personnel will therefore set the limit to the domestic salary level. Since the cost of that labour is generally only a small fraction of total labour costs, developing countries will retain a competitive advantage as long as wages, in terms of foreign exchange, of unskilled labour do not rise up to the point of wiping out the initial advantage.

72. The situation is likely to be different if technologies are initially adopted which make large demands on the middle range of skills and in which quantity and quality output per man is more sensitive to human effort and skill. The supply of this type of labour, the increase of which depends greatly on the progress of industrialization itself, is likely to be highly inelastic in the relatively short run with which we are concerned. Wages will tend to rise and diminish the initial cost advantage, especially since such industries tend to be highly labour-intensive and wages account for a considerable proportion of total cost. Furthermore, it is probably generally true that this class of labour has a position of leadership wherever labour is organized, as is the tendency in many developing countries. The urban labour class, led by skilled labour, also often has considerable political influence. Wage increases in this category of labour may, as a result of its leadership position and more advanced organization, spill over into the employed unskilled categories, irrespective of the fact

that a large reserve of unemployed unskilled labour may exist at the same time. A dual labour market and a dual wage level may therefore develop.

73. The development of an export sector, although treated here as a specific sub-sector of the economy, nevertheless cannot be artificially divorced from the over-all development process. The implications which one or the other alternatives may have on development in general have to be taken into account, the more so, the more "export-led" the process of growth is likely to be. From the aspect of developing the labour force, which, as said before, is perhaps the most important simultaneous prerequisite and result of development, the question therefore is: to what extent is it likely that industries which rely predominantly on a labour force with a very unequal skill distribution, will themselves contribute to a normalization of that skill distribution? In other words: are such industries likely to provide training grounds for new skills, or are they more likely to remain industrial enclaves?

74. One general characteristic of the type of industries referred to, of which the chemical industries are perhaps the most extreme example, is that the level of skills required for their current operation (excluding maintenance) is not only inversely related to the level of skill required for their management, supervision and control, but is also inversely related to the sophistication of their equipment. This equipment generally requires careful maintenance and adjustment; failures in maintenance may be costly because, affecting highly co-ordinated flow processes, they may have "all or nothing" effects. These characteristics may have two results. One is that the danger of total failure, as a result of inefficient maintenance, may have an important educative influence on management, which in some of the less developed countries often tends to settle for less than perfection in performance. It may provide, in A. O. Hirshman's term, "built-in spurs" to efficiency and success.[13] The other more important result is that the requirements of maintenance, first through reliance on stand-by equipment, on foreign personnel, later through the installation of imported spare parts by local workers and still later through the domestic production of these spare parts, provide an important training ground for new skills. Mistakes may indeed be costly in the initial stages. But in and around such industries, mechanical and electro-mechanical workshops grow up, and experience is gained in the understanding and handling of complex processes and mechanisms. It is by no means inevitable that such industries should remain enclaves in the general industrial structure. The extent to which they can become growing points for an improved labour force in general depends on the general lines of development policy, and on the extent to which their establishment is motivated by the desire to develop the country and is integrated with its policy aims.

75. Nevertheless, it may be a valid objection that export industries based on such a distribution of the labour force engaged in them are not likely to make an immediate outstanding contribution to the raising of the general skill level. Even so, it should be remembered that the development of export industries is itself only an instrumental target of the economy: it is designed to provide additional resources to facilitate the major objective of which it is but a part-development in general. The creation of new skills is no doubt a crucial condition for successful development; in fact, the two proceed together and are but two aspects of the same process. Education and training are, however, costly and lengthy processes, and their current level affects productivity and the quality of output. As far as the competitive export market is concerned, cost and quality levels are given to any developing country. To achieve a competitive position, the country must therefore combine the factors which it possesses initially in such a way that quality and cost be least sensitive to its shortcomings in respect of the available labour force. This means giving priority to such industries which, taken in isolation, are characterized in the developed countries by a skill distribution similar to that found in the developing countries for the whole of the labour force. This is nothing but the application of traditional comparative cost theory to the concrete conditions of developing countries and to conditions of growth. For the identity of technologies and production functions, which in static theory is an assumption for the realization of cost advantages, becomes a condition to be fulfilled in a dynamic view.

76. We may now sum up the foregoing arguments with regard to the criteria for the selection of industries from the aspect of labour. The characteristic distribution of skills in most developing countries is highly skewed. On the one hand there is an abundance of unskilled labour, and on the other hand there is at least a nucleus of highly skilled personnel. Although this nucleus is absolutely small in relation to the country's needs in the long run, there is often a relative abundance in the short run as a result of lagging development and lack of job opportunities. The most severe shortage of labour is in the middle ranges of skill. These are difficult to augment in the short run, for their availability is largely a function of industrialization itself. With respect to these skill levels, development is therefore involved in one of its various vicious circles: industrialization cannot progress without sufficient skills, and skills cannot develop without industrialization. The existence of handicraft skills can provide but little help as far as the export sector is concerned, because handicraft products are not readily exportable, and wherever the export sector is of great quantitative importance, the reserve of skilled labour which can be drawn upon from this source is not likely to be great even if it is occupationally and geographically highly mobile. When the factor "labour" is no longer viewed as homogeneous, but broken down into the specific skill categories relevant to the problem, it is seen that the scarcest factor is skilled and semi-skilled labour. The criterion for the selection of export industries derived from this is that those industries should be given priority which economize on the use of the scarcest factor or production. This points to mechanized, relatively capital-intensive, and/or resource-intensive industries, in which quality and rate of output are

[13] Hirshman, *op. cit.*, p. 133 ff.

largely dictated by the process itself, and are but little subject to the vagaries of human skill *per se*. These industries may, in favourable conditions, themselves become centres of radiation for industrial skills and may facilitate further industrial development in general and the growth of new export industries in particular.

(*b*) *Natural resources*

77. The present paper is not concerned with the exploitation and exports of natural resources in their raw state, but only with the advantages which a developing country may derive from the possession of natural resources as a basis for developing export industries of manufactured and semi-manufactured commodities. A developing country may have a natural advantage in industries in which its own natural resources are an important cost element. This, of course, will depend both on the weight and on the cost of these inputs in the processing industries. The processing of domestic natural resources is generally one of the first steps in the process of industrialization, both in import substitution and in exports. Where a country has traditionally been an exporter of unprocessed raw materials, it will naturally seek to increase the domestic added-value content of its exports by further processing. Since primary products have accounted for a preponderant share of the exports of developing countries, the transition to the export of more highly processed commodities is one of the first possibilities to be explored. Examples of this are the development of textile industries in traditional cotton-exporting countries, such as India or Egypt, meat canning in Argentina, or, in more recent times, the production of soluble coffee in Brazil and the plans for the production of cocoa products in Ghana, diamond cutting and polishing or the projects for producing sawn timber, veneers, and plywood in West Africa.

78. The rationale behind this tendency is not only to shift an additional source of income to the country in which the raw materials originate and thus to increase total revenue from exports. It is also to take advantage of the generally higher price elasticity of demand for the more highly processed product as compared with that of its inputs. The more highly processed products will generally be less subject to extreme fluctuations of price than the raw material; and, containing more domestically added value, will better be able to withstand such fluctuations when they occur.

79. The addition of further processing stages to domestic raw materials can, however, only be worthwhile provided that the advantages conferred upon the producing country by the saving of transportation costs and possibly by the existence of certain rent elements in the natural resources are not wiped out by lower productivity in the processing stage. It is by no means certain that a country possessing abundant raw materials will also be capable of achieving a competitive advantage in the processing of those materials The danger is that although the final product may be competitive, this competitiveness may only hide the fact that the production of the raw materials is in fact subsidizing a high-cost processing stage. Therefore, the profitability of undertaking the processing stage in addition to the production of the raw materials, should be examined by itself, provided that a market exists both for the finished product and for the raw materials that are intended to go into it. Such an examination will, of course, take into account any advantages arising from transportation cost differences as compared with the competing processes of the same raw material. An examination of this kind conducted with the appropriate techniques, may frequently reveal that the development of an alternative industry, not necessarily depending on domestic natural resources, may yield a lower input-output ratio.

80. The situation is of course highly different if the opportunity cost of certain domestic raw materials is zero, if the introduction of the final processing stage will enable an expanded output of the raw materials by utilizing idle factors of production, or if exports of the raw material cannot be expanded without a significant reduction in price while the demand for the more highly processed commodity is more elastic. The latter case may be especially important if the output of the prospective exporting country is expected to be, within the relevant time horizon, only a small fraction of the total demand for the product in the importing countries, whereas its share in the supply of the raw materials is already large. The first case mentioned—when the economic cost of the raw materials tends to be insignificant, or sometimes even to be negative—arises, for example, in the case of waste products or by-products such as natural gas, by-products of agricultural output, or primary products of inferior grade. The abundant reserves of natural gas in some oil-producing countries, for example, which today are often flared off, may under certain conditions provide an advantageous basis for the establishment of a petrochemical industry, or, through their utilization for cheap power-generation, for the establishment of electro-chemical and other power-intensive industries. The existence of organic by-products, waste products and of technically unavoidable inferior grades of primary goods may provide the basis for food-processing, chemical and pharmaceutical industries.

81. The cases described in the preceding paragraphs relate to possible forward linkages in the production of primary goods. It may also be possible that the introduction of a processing industry will have backward linkages and will enable the introduction of new primary products or their expansion. For example, the export of timber may face an inelastic demand, thus making it unprofitable for the timber-producing countries to expand their output, whereas the demand for plywood and other timber products may be more elastic—at least within the proportion of total supplies which the developing countries are likely to attain. This, together with the advantages in transportation costs, may make it profitable to expand timber cutting. In some cases it may even be worthwhile to establish an industry mainly for its indirect effects. The reduction of aluminium, for example, may be worthwhile even if it is only the production

of bauxite, alumina and power which provides net foreign exchange revenue.

82. Perhaps the most important case for the domestic processing of primary products for export arises when it is anticipated that the domestic market will ultimately, with progressive development and industrialization, absorb an increasing share of the output. This is the case of building ahead of domestic demand, and may be most relevant for the larger of the developing countries. The demand for more highly processed intermediates may attain sufficient proportions to justify their domestic production only after industrialization has reached a relatively advanced stage. Where the country possesses the natural resources for the production of the intermediates, and where transportation costs are an important element in the cost of alternative imports, industrialization may be speeded up by anticipating import-substitutions, through orienting the production of the intermediates in the transitional stage towards the export market. The same may hold true for certain categories of finished products, such as processed food, the internal demand for which is likely to grow only with further development and rising incomes. The production of such commodities for the export market may thus provide additional demand for agricultural products, raise income levels in agriculture, and promote the later development of an internal market. Even so, the early establishment of basic manufacturing industries ultimately destined for the domestic market contains the danger that estimates of the ultimate demand may prove excessive. Excess capacity may arise and considerable obsolescence and amortization costs may be incurred before a reasonable rate of utilization can be attained. This may exert a strong pull towards selling abroad at marginal costs. Such a policy may sometimes be justifiable, if initially planned as a transitional stage; but it may prove very costly to the economy if enforced by too optimistic initial demand estimates. It is therefore preferable to expand the final processing industries first, thus defining more closely the extent of the market and thereby the optimal number and size of the more primary processing stages.

83. The processing of primary products into semi-manufactured and manufactured goods is intimately bound up with the problems of capital and technology. The processing of domestic raw materials must of necessity proceed step by step. The possibilities of undertaking the establishment of more completely integrated complexes, especially with reference to the export market, is exceedingly remote. Until a relatively high stage of processing is attained, the processing of raw materials therefore means the production of intermediate goods, with the exception of some agricultural products. These intermediate goods are generally bulk commodities, which it is often economical to produce only on a large scale. Even where production is not, from a technological point of view, characterized by considerable economies of scale as, for example, in many food-processing industries or in the production of leather goods, the requirements of the export trade which demand a standardized product, often necessitate large-scale production. Generally, most processing of natural resources, as indeed the initial exploitation of these resources, requires very heavy investments of capital. Contrariwise, in the later stages of processing, the capital–output ratio tends to decline once more.[14] It may therefore be preferable not only for a better definition of scale in the more primary stages, but also for the sake of capital saving, to "jump" some stage of semi-processing and proceed first to a higher stage of fabrication, and work from there backward through import substitution. The choice of export industries will therefore in most such cases be predominantly influenced by the consideration of the comparative costs of capital and labour and the effects of economies of scale and are likely to outweigh the considerations relating to natural resources as such.

84. In summary, the decisive criterion in the consideration of the addition of manufacturing stages to available natural resources should be the profitability of each stage separately. Even when the cost of natural resources is zero, it may still be preferable to give priority to other industries which do not rely on these natural resources. If the competitiveness of the processed product depends for the greater part on the advantage arising from the possession of the natural resources, an alternative industry which, taken by itself, is more competitive, may have higher priority. Wherever the domestic production of an intermediate product is an important bottle-neck to the expansion of industries ultimately destined for the domestic market, the production for the foreign market, as a transitional stage, may be an important growth-stimulating factor. The same holds true whenever demand for the primary product is inelastic while demand for the processed product is more elastic. In these cases, the development of an export industry may facilitate the utilization of otherwise idle resources. Generally, the processing of natural resources is highly capital-intensive and often requires massive investments. The examination of the worthwhileness of developing such resource-based industries must therefore mainly be guided on the cost side by considerations relating to the anticipated comparative advantages in respect of capital, technology and labour. The criteria for the latter thus apply to resource-based industries as to any other, and the rent element involved in the possession of the natural resources will mainly be a margin of reserve on the cost side. The importance of this should not, in any case, be overstressed.

(c) Capital and technology

85. Of all factors of production, capital, and the form in which it is organized and applied, that is technology, is the most mobile. Growth and development are almost synonymous with the application of capital and technology. The developing countries are characterized by a limited capacity to transform, by a shortage of specialized industrial skills, by lack of technical knowledge, by scarcity of capital and by a restricted domestic market for most manufactured products. How can they, through the application of

[14] United Nations, *Economic Survey of Europe in 1960*, Chapter V, p. 31.

any given amount of capital which is allocated to the development of export industries, best economize on the use of these scarce factors and raise the productivity of whatever amounts of these factors are available to them? How can they derive the greatest advantage from the relative mobility of capital before it is transformed into physical plant, from the fact that they are latecomers to industrial development, and from their abundance of unskilled labour? In its general economic development, the problem of a developing country is that of optimizing its application of capital and choice of technology so as to achieve a whole set of socio-economic objectives. In the case of the export sector, an additional constraint is introduced which sets the upper limit to the permissible cost levels: in the internal market there may be a choice between low-cost and high-cost technologies, which may perhaps better serve some high-priority objective at the expense of more rapid growth or higher standards of living. Thus, the objective of greater regional dispersion of industry may lead a country to prefer the establishment of several small plants rather than a single large one, although this might result in higher costs. In the development of export industries the limit to costs is given by international competition. The cost aspect is therefore more predominant than in the home market, and the choices open to the economy are more limited.

86. From the point of view of the limited capacity to transform it would appear that the greatest demands on this are made by attempts to develop simultaneously on a broad front, whether this means a great variety of industries, or a multitude of undertakings belonging to the same or closely allied industries. The more concentrated the transformation effort—the total capability for which is given at any point of time—the lighter the strain imposed on the capacity of the country to carry out its development projects successfully. The more diversified and dispersed the effort, the greater are the demands made on the capacity to plan, organize and co-ordinate—not only in the field of production and marketing, but also, and perhaps more crucial for the problem with which we are concerned here, in the field of policy-making and over-all co-ordination. It follows that a developing country faced with the choice of applying any given amount of capital to the development of a new export industry should prefer a higher degree of concentration to a lower. This can, of course, be interpreted as merely a special case of economies of scale, but the latter concept has, in its general use, a more restricted technological connotation. If, therefore, there is a choice of establishing with the same amount of capital, say, four textile mills or one integrated combine, or four enterprises in different industries or one larger enterprise in one industry, concentration and integration will economize on the capacity to transform, organize and co-ordinate.

87. A similar argument holds for the other scarce factors apart from capital itself. If the amount of capital allocated to the development of export industries is taken as given, the problem is one of maximizing the output of the complementary factors—technical skill, managerial capability, etc. Put differently, the developing country should avoid the dispersal of whatever scarce factors are at its disposal. The need to maximize output from the given quantity of factors points towards preferability of concentration wherever such a choice exists. Viewed from the availability of the factors complementary to capital the existing scarcities indicate that it is preferable to adopt such a structure and organization which will achieve the greatest feasible degree of economies of scale. The need to economize on capital itself points, as will be seen, to the same order of preference.

88. Since the capacity to transform is limited, it has often been recommended that developing countries should refrain from undertaking the establishment of very sophisticated industries. A record of failures of certain over-ambitious undertakings in some developing countries, and the preponderance of relatively simple technologies in the early stages of industrialization which were oriented towards the home market have given support to that recommendation and lent plausibility to the argument that only comparatively simple technologies are within the capabilities of the developing countries. It has, however, often been overlooked that the history of development of certain countries indicates that the inhibition of certain industries was apparently not so much due to their greater inherent degree of sophistication but to barriers on the demand side or to the existing policies with regard to industrialization. Under certain conditions, for example in times of war, the demand barriers were lifted and government policy encouraged the development of industries which would formerly perhaps have been considered too sophisticated for the country in question.

89. It would of course be absurd to deny that the less industrialized countries have a limited capability of introducing highly advanced technologies, for it is precisely this limitation which is one of their defining characteristics. But it does not necessarily follow that industrialization should only be gradual, proceeding from the most simple available technology to a somewhat more advanced, until a relatively high level of technology is finally in sight. Nor does it follow that such a step-by-step evolution results in the greatest or most rapid growth, or that it minimizes the difficulties of growth. On the contrary, the question to be asked is rather the opposite: a developing country should ask what is the most advanced technology that it is capable of adopting. To see why this is so it will be necessary to examine more closely in what the sophistication of an advanced technology is supposed to lie.

90. The so-called "sophistication" of highly advanced technologies may be thought of as being composed of three main elements: the element of scientific and technical knowledge involved, the element of organization and co-ordination of the process, and the amount and kind of capital goods necessary for the process. Obviously, the developing countries are short on the first two of these elements. This led to the reasoning that the limited available number of people with the requisite capabilities should be employed so as to maximize their output. When capital is considered in its physical aspect, as tools

and equipment, it seems that much of the more advanced technology, much of the scientific and technical knowledge, is physically incorporated in the capital goods. It is in these that the state of technology assumes a tangible form—in which it becomes transferable. The process of technological advance consists, essentially, of increased mechanization and automation of the process of production, of the transfer of physical and mental effort and control from man to machine. The effect of this process is to create, broadly speaking, an inverse relationship between the sophistication of the equipment and complexity of its current operation. This statement must be qualified with regard to two main functions, management and control, and maintenance, to which we shall return further below. In general, the more highly mechanized and automatic the equipment, the less the need for the intervention of human effort and skill and vice versa. A chemical fertilizer plant, for example, is a highly complex assembly of equipment, but its current operation (again, management and maintenance excluded) requires operators of a relatively low level of skill. By contrast, the loom for weaving a Persian rug is a very simple instrument, but the skill of the weaver is of a very high order. Or, to take an example from a modern industrial process: the manual lathe is simpler than the automatic lathe, but the skill involved in its operation is of the highest.

91. The sophistication of industrial processes referred to above is created in the centres of scientific and technological advance, in the most highly industrialized countries of the world. This progress of technology takes place under the impetus of the larger markets of those countries, and their greater and more diversified demands. The lower level of development of the rest of the world consists mainly in that they are as yet incapable of creating that sophistication. They do not invent and but rarely innovate, for both the push of accumulated knowledge and the pull of demand are lacking. Their greatest comparative disadvantage therefore lies in those products in which the application of scientific and technical knowledge in applied research is an important part of the current productive process. The production of new pharmaceuticals, or of new types of machines or of products relying on design, is generally beyond them. But this does not mean that they cannot be imitators. On the contrary, economic history shows that imitation is one of the main roads to success. In adopting the technologies developed by the industrialized countries the less developed countries do not have to match the sophistication achieved there. On the contrary, they can reap the fruit of inventions which are designed to make the current industrial operation more simple, and which tend to make the quality and the quantity of output from a given amount of capital less sensitive to human effort and skill as such. To the extent, then, that the developing countries are short of skilled labour, and have an abundance of unskilled labour, the more advanced technologies, which economize on the former and use more of the latter, seem to be more adapted to their factor endowments when these are viewed not as abstract aggregates but as concrete realities, in the relevant detail.

92. There are, however, two difficulties in deciding on such a clear-cut preference for the more advanced types of technology. The first is that the more complex processes make greater demands on managerial capacity and on the skilled manpower required for the maintenance of highly complex equipment. The availability and level of both set limits to the degree to which development can go into more sophisticated processes. Nevertheless, in reality the choice is rarely between the ends of the spectrum, but rather between a number of different industries, or different technologies within the same industry, none of which is absolutely ruled out by the capacity of the economy concerned. Within this feasible range the problem is one of maximizing output. There can be no question that for certain developing countries some technologies are ruled out, because their current operation, although simplified by mechanization, is still too complex for the level of skills available to them, or because the shortage of managerial capabilities and entrepreneurship is absolutely so great as to put such industries beyond their reach. But, such countries will rarely have reached the stage of development in which a substantial establishment of export industries is already a concrete possibility. For any other but the most rudimentary stages of development, there is always some range of feasible industries and technologies within which choice is possible.

93. From the point of view of management and maintenance it is perhaps realistic to assume that the shortages which handicap the developing countries express themselves more in small numbers of qualified people available to them than in a lower level of skill of whatever personnel there is. To the extent that the level of skill is lower, irrespective of the "density" in which that skill is available, it will of course delimit the upper end of the range of feasible industries and technologies. However, if it is assumed that: (*a*) *some* amount of managerial capability of sufficient quality is available; (*b*) that *some* number of skilled labour which can carry out, or learn relatively quickly, the maintenance operations necessary; (*c*) that the export sector is constrained with regard to the maximum permissible cost level by international competition—then the application of this given amount of skill to the most advanced feasible technology or industry will yield the maximum results in terms of output. The same argument holds for other levels of skill.

94. The choice between industries of a low level of technology and those of a more sophisticated type amounts, in the majority of cases, also to a choice between a lower and higher degree of concentration. The more advanced technologies generally also represent greater aggregates of capital, and the simpler technologies generally also means smaller plants. A technology employing more sophisticated equipment, and thereby requiring fewer skills for its current operation, will therefore also lead to a greater concentration of the capital allocated to the development of export industries in relatively large undertakings. Such undertakings will, for any given amount of capital or aimed-at output, tend to economize on whatever managerial talent or skilled maintenance labour is available, for both of these contain an

element of fixed costs. It is possible that although the quantitative requirements for skilled labour will be relatively smaller, the level of skills needed will be higher. The difference, however, is not likely to be very great, and if the skill level available is sufficient for a simpler technology the raising of that level by additional training should not present insurmountable difficulties.

95. Turning now to the scarcity of capital itself the question is; which type of industries or technology is most likely to economize on capital, or, putting the same question conversely—where the output from a given amount of capital is likely to be greatest. In this connexion, there is in recent times a conspicuous tendency in many industries for technological advance to be not only labour-saving for any given amount of output, but also capital-saving. This feature of much of recent technological innovations is independent of economies of scale as such. As a matter of fact, the range of technologies available to the newly industrializing countries, for any given industry, may often be restricted from the supply side. The producers of equipment in the industrialized countries design and produce their equipment in response to the demand of their major markets, which are the industrialized countries themselves. Thus, a tendency to prefer less sophisticated technologies will in most cases amount to preferring industries of a less sophisticated type rather than a simpler technology within a given industry. Much of the scientific and technological progress of the developed countries is physically embodied in the capital goods they use, so that for any given amount of financial capital available the developing countries can maximize their benefits by adopting those processes (to the extent that they are accessible and within their feasible range) which incorporate the largest amount of such scientific progress. This points towards the dynamic end of the scale of technologies, to those industries and processes which are in a process of growth and development in their countries of origin.

96. This preferability of the growing industries and technologies appears even more important when viewed dynamically. The "international division of labour" in which science and technology emanate almost exclusively from the developed countries, makes the rate of technical progress in the developing countries almost entirely dependent on that of the main industrial centres of the world. In addition to the fact that much of this progress may practically be unadoptable for the less industrialized countries, this leads to a tendency for the lag to be perpetuated. The most important offsetting factor is that structural change in the developing countries can be much more rapid than in the more stable, highly industrialized countries. Innovations and changes which are marginal in the latter, and affect the average only in the long run, can significantly affect the total structure in the former. This is the well-known "advantage of being latecomers". If, however, technologies and industries are preferred which are relatively stagnant in the developed countries, the technological gap will tend to increase over time and the advantage of being latecomers will be dissipated.

97. While much of this applies to the choice of technologies and industries in the broader context of development in general, it assumes crucial importance for industries destined to enter the export markets. The price level of most manufactured goods in the markets of the developed countries is not often determined by the cost level achieved by the most advanced producers. The range of technologies still operating in these markets is sometimes fairly wide. The higher cost level of older technologies affects the price level and may create a protective price umbrella for newcomers, assuming that there are no artificial trade barriers or that they can be removed. For producers in the developed countries, the cost advantages of an advanced technology may yield higher profits; for producers in the developing countries they may provide the margin to offset some of their many cost-increasing factors. In contradistinction, the more stagnant industries are likely to have a narrower range of cost levels, and to be more heavily protected—in which case entry into their markets will be very difficult.

98. Since technical progress is embodied in changes of equipment and of the organization of the productive process, it tends to lead to a greater capital intensity. Generally speaking, preferring a more advanced technology or a more dynamic industry would imply also larger and more capital-intensive plants and processes. This leads to a discussion of the importance of economies of scale. The preceding discussion was in terms of economizing on the scarce factors of production complementary to capital, and of promoting continuous technical progress and preventing an increase in the technological gap between developing and developed countries. This led to the conclusion that within the feasible range of choice, preference should be given to the more advanced methods of production within any given industry and to the more technically progressive industries. These were seen also to parallel, in some cases, an economizing on capital through capital saving inventions. In addition, the concentration of whatever capital is available in larger units will save on capital itself through the achievement of economies of scale. Wherever, therefore, there is a choice between several small plants and one larger plant within a given industry, or between industries characterized by large units and those which rely mainly on smaller units, the greater concentration will tend to be more capital saving.

99. Another aspect of economies of scale has to do with the application of the theory of comparative cost advantages. This means that, for factor cost advantages to be realized in comparative cost advantages, technology has to tend to equality for the commodities compared. To the extent that a country possesses a conspicuous cost advantage in some factor, it should specialize in the production of those commodities which make the most intensive use of that factor. But once this choice is made, the technology used in producing the commodities so preferred should tend to be as efficient as in the competing country. In the measure that the factor cost advantage is great, this may provide some margin for an offsetting lower level

of efficiency, thus making it possible to adopt a less advanced technology.

100. The importance of scale, which was discussed before from the point of view of the limited size of the domestic market, derives from the fact that, apart from the wage level, it is probably the most important single cost determinant. Its importance increases, technology is more advanced and the industry more progressive and complex. Also, the more capital-intensive the industry, the smaller the margin provided by, for example, lower wage levels; and at the same time capital is more expensive not only relatively to other factors in the economy but also relatively to the absolute cost of a given similar investment in the more developed countries.[15] Finally, the more dynamic the industry the more rapid the rate of obsolescence. To counteract these detrimental factors, it may be necessary to provide a significant cost margin by endeavouring to achieve the greatest feasible economies of scale. This does not necessarily imply that size should be preferred for its own sake; all it implies is that in any commodity which it has been decided to produce for export, size and technology should tend to equal those of the competing, price-determining producers.

101. In a discussion of the criteria for the selection of export industries, an important consideration must be the repercussions of various alternatives on growth. The aspect of continued technical progress has already been touched upon above. In addition, two questions arise: (*a*) which type of alternative is most likely to ensure that resources allocated to the development of export industries, to the gaining of essential foreign exchange, will not *ex post* be diverted to domestic uses; and (*b*) which type of alternative will be most conducive to continuous growth. The answer to the first question would seem to be that the more advanced the export industry is relative to the structure of domestic demand, the more it will be secure from the competition of domestic demand for the available output. From the supply side, this building ahead of domestic demand cannot be carried too far. With the exception of largely resource-based industries, the development of a new industry, even if much of the technical knowledge is imported, will probably be very difficult if there is no domestic market at all and no experience at least in similar products and processes. At the same time, the greater the initial ratio of export sales to domestic sales, the more shielded will the foreign exchange revenue be from the rise in domestic consumption. The more sophisticated products—which still have a small share in domestic demand and generally also require more complex processes—are more likely to ensure that the resources allocated to the development of exports will indeed serve that purpose.

102. The answer to the second question stated above is that if long-run growth is aimed at, it is the industries and technologies in which a high rate of accumulation can be anticipated which will be conducive to a greater rate of growth. This again would point to the more capital-intensive and more concentrated of the available alternatives, since it is generally assumed that the propensity to consume profit income is smaller than that of wage income. In addition, the gross returns to capital, including depreciation, are more likely to be available for reinvestment, particularly in new industries, if they are concentrated. This latter point is intimately connected with the industrial structure that is likely to develop under the various alternatives.

103. The industrial structure may in certain circumstances have a retarding effect on industrial development in general and on the export industries in particular. This may most easily occur where import substitution has been carried too far behind excessively protective walls of tariffs and other restrictions. The import-substituting industries which develop, do so in response to the limited domestic demand, and tend to be of small scale. The maintenance of the high costs as a result of the small scale is possible as a result of protection. Although demand may be growing at a rapid rate, the absolute increments—which decide the size of firms—are small. Unless a strong conspicuous policy is adopted which would favour the expansion of existing firms rather than the establishment of new ones, various factors generally tend to bring about the latter situation. In each industry there may be a number of plants which are too small for effective price competition to emerge and all of which are of relatively small size. Whatever competition there is, often takes the form of increased diversification of output within the existing plants and less specialization. In such a situation, the breakthrough into the external market may become extremely difficult. The development of export industries will in these circumstances often depend on strong measures designed to bring about at least a large marginal change in structure, so that new industries should be on a scale sufficient to meet international competition, in far-reaching disregard of the present size of the domestic market. This may require the removal of protective measures to provide a sanction against excessively small-scale production. Even so, the growth of efficient industries out of the existing structure may be very difficult. The capital aggregates required may be beyond the reach of the existing small firms, and the reliance on protection may also have stifled the kind of initiative required for the much more demanding conditions of external competition. Considerable government initiative may therefore be necessary. Whenever possible, the development of export industries should therefore not await the completion of a process of import substitution and should not be made a function of the size and growth of the domestic demand. These retarding effects of small-scale structure, with insufficient concentration, may be less important in the larger of the developing countries, although as a tendency they exist even there.

104. In summary—the barriers for the development of exports due to trade restrictions and unequal

[15] Due to higher transportation costs, requirements of a greater stock of spare parts and standby equipment, etc. See, for example, "Problems of Size of Plant in Industry in Under-developed Countries", *Industrialization and Productivity*, Bulletin No. 2 (United Nations publication, Sales No.: 59.II.B.1), in which the value of invested capital is estimated at 25 per cent higher in Central America, compared with the United States.

positions of economic strength are an impediment of critical importance for the growth of the developing countries. At the same time, their removal is only a necessary, but not sufficient condition for that development. The main burden of development must fall on the developing countries themselves. The development of export industries is among the most difficult and exacting tasks of a developing country, and the effort should be commensurate with the difficulty of the task.

105. The establishment and application of appropriate criteria for the directions which development should take and for the setting up of priorities therefore assumes in this area an even more crucial importance than in any other area of development. Although developing countries differ widely in structure and level of industrialization, they all have, in greater or lesser degree, a limited capacity to transform, a shortage of skills, technical knowledge and capital, and most have an abundance of unskilled labour. The essence of development is that these factor proportions are changing or should be changing rapidly. In their choice of industries and technologies which will make them capable of breaking out of the vicious circle of limited domestic markets into the competitive arena of international trade, the developing countries should therefore not be guided by existing factor proportions, which may be overtaken by development within the lifetime of the industries to be established. They should take into account the new factor proportions which are expected to emerge from development, and should build ahead of domestic demand and existing factor proportions. In the development of their export industries they should endeavour to adapt their factor proportions to the possibilities of foreign trade, in preference to an opposite policy.

106. In doing this, they should give priority to those industries which will economize on the scarcest and least augmentable factors of production. The labour force of developing countries is generally characterized by a skewed skill distribution, the skills of the middle range being scarcest both in the short and in the long run. Priority should therefore be given to industries and technologies which require a labour force with a similar skill distribution, and which are capable of augmenting the scarce skills. At the same time, such industries often require a relatively small number of very highly trained personnel. However, in this range of skills, recourse to foreign experts can be had if domestic personnel is found to be unavailable.

107. Natural resources may provide a basis for the development of more highly processed commodities. The criterion for the priority of such industries should, however, be the profitability of the processing stage as such, taking into account the opportunity costs of the resources themselves and the advantages that may be gained from the more stable prices of processed goods. Even when opportunity costs of natural resources are zero, it may still be more profitable to establish industries which do not rely on these resources. In general, the processing of natural resources is intimately bound up with the problems of capital and technology and should be considered under that heading.

108. The criteria which should guide the choice of technology are probably the most critical of all, since capital is, of all factors of production, the most mobile and the one through the application of which development is effected. It should therefore be applied so as to maximize results, from itself and from its complementary factors. The limited capacity to transform requires the greatest possible concentration of effort. The same principle holds for the other factors complementary to capital—management ability, technical knowledge, skilled labour. In their choice of technology, the developing countries should take the greatest possible advantage from the inverse relationship which exists between the degree of sophistication of equipment and processes and the complexity of their actual current operation.

109. Each country will be confronted with a different horizon of technologies and industries which it can feasibly adopt, according to its stage of development. The removal of quantitative and tariff restrictions of trade, and the pursuing of a dynamic development policy may considerably widen this apparent feasible range. Within any given range, there is always some choice, and preference should be given to the upper end of the feasible scale. Such a priority will generally also imply greater savings on capital itself, since much recent technical progress is of a capital-saving nature and because economies of scale will be achieved. The preference of more advanced and dynamic industries and technologies is necessary also to prevent an increase in the technological gap between the developed and the developing countries, since the latter are almost wholly dependent for their progress on the innovations made in the former. The most important advantage of the developing countries is in their being latecomers. They should therefore maximize that advantage by applying the capital allocated to the development of export industries to the most advanced alternatives which are within their horizon.

110. The preference thus indicated will generally also imply greater concentration and relatively large units of production. This will tend to be conducive to more rapid accumulation. The need to protect the supply of export output from diversion into domestic uses, also points towards more advanced industries, for which domestic demand is still small. Finally, export industries should be developed as such, not as an outgrowth of import substitution. The latter is generally carried out under greater or lesser protection and tends to create an industrial structure which is rarely adapted to the demands of international competition, and which may even retard the development of exports. Export development and continued import substitution should therefore proceed side by side, and it is possible that a dual technology and structure will have to develop.

111. How does this accord with the characteristics of international demand and which groups of industries can be considered as promising? The newer and

more sophisticated a manufactured commodity, the higher is the income elasticity of demand likely to be in both developing and developed countries. An increase in demand, at least above a certain minimal income, is for the greater part an addition of new commodities to the old consumption basket. The major part of any increment of income will therefore be spent on the new goods. This will be true for all developed and for many of the developing countries.[16] These will therefore have an income elasticity of demand higher than one. In time, new goods will also be substituted for old, and the elasticity of demand for the established goods will decline or even become negative. Therefore, the longer a commodity has been an established component of the consumption basket, the more it represents low-income goods, the lower will its income elasticity tend to be and also the greater is the likelihood that it will be replaced by a new commodity. Therefore, the types of industries indicated by cost advantage considerations is also likely to be the types of industries for which the demand prospects are most promising and would tend to approach the pattern of mutual trade among the developed countries. Some of the manufactured products with a very high income elasticity of demand are likely to be beyond the reach of most developing countries. Among these are most entirely novel commodities, the production of advanced capital goods, products dependent on original and novel design, and some products which are protected by patents. However, since the income elasticity of the demand for all manufactured goods is considerably in excess of unity, the income elasticity of demand for industrial intermediate goods is not likely to be much lower than the average. In fact, some of the low elasticity of demand for primary commodities is due to the increasing substitution of manufactured materials for natural products. Excluding many of the more sophisticated final products, what remains is the industrial intermediates. These generally serve as inputs to a wide range of industries, lend themselves to mechanized production, are subject to economies of scale, and are dynamic in their technical progress. At the same time, they are likely to have considerable forward and backward linkage effects. This would include a number of resource-based industries, such as wood, pulp and paper, glass, some ceramic goods, industrial chemicals, petrochemicals, synthetic fibres, etc., rolled metal products and a wide range of components, standard machine parts, tools and equipment parts. It would exclude, in most cases, the production of complex equipment, of consumers' durables and semi-durables, the demand for which mainly depends on differentiation of design, except where joint undertakings make these new designs accessible. It would generally exclude complex assembly industries which depend on a highly developed industrial hinterland.

[16] See *Methods of Analysis and Projection of Demand for Industrial Consumer Goods*, mimeographed, background paper No. 10 for the Seminar on Industrial Programming, prepared by the Research and Evaluation Division, Centre for Industrial Development, United Nations, New York.

CHAPTER V

EXTERNAL OBSTACLES TO EXPORTS OF MANUFACTURES AND INTERNAL MEASURES OF EXPORT PROMOTION

The infant industry argument for exports

112. In the preceding chapter an attempt was made to outline the problems confronting the developing countries in the establishment of primarily export-oriented industries. It was shown that the problem of developing export industries is intimately linked to the broader problem of industrialization in general, but that the greater stringency of the restrictions imposed by international competition limits the choice of industries and technologies much more than is the case for industries intended for the domestic market. The order of preference for new industries which emerged from this analysis pointed towards producer goods industries and towards technologies as far advanced as can feasibly be adopted. The present chapter will try to show that this order of preference, which resulted from an analysis of the factors operating on the supply side, are further supported by a consideration of the difficulties encountered on the demand side. Before going into these problems, however, it seems useful to discuss the general measures of support for export industries which are so widely prevalent not only in the developing countries but also in some highly industrialized countries that they appear to be an almost universal concomitant of exports.

113. Support for new industries, in one form or another, is generally justified by the "infant industry argument". If this argument is accepted for industries destined for domestic markets, then it would seem to apply with even greater force to young export industries. Considering the immense headstart which the developed countries have over the less developed, and the host of obstacles and risks which confront them, it can hardly be expected that the latter will be able to achieve internationally competitive efficiency without a transitional stage of support. For the domestic market industries the most important form of support that has become widely accepted as justified is protection by tariffs or equivalent measures. In fact, there is hardly any industrialized country which has not relied on protection to promote its industrial development and which does not continue to do so. But what protection is to the home industries, subsidies are to the export industries. In both cases, the aim is to assure the profitability of industries which would succumb if exposed prematurely to the full force of competition. In the home industries, this is achieved by assuring higher prices through exclusion of imports; in the case of export industries, revenue is supplemented by subsidies or costs are reduced by subsidies to input factors.[17]

114. The difficulties with which new industries in less industrialized countries have to contend are too

[17] The general measures of exchange rate adjustments will not be discussed here, since our concern is rather with the more specific and selective measures of support, which are also the more prevalent case.

obvious to call for description. The initial cost disadvantages of such industries impose upon the developing countries the necessity to resort to a variety of policy measures designed to offset them in a greater or smaller degree. In the export industries, in contrast to the industries working for a sheltered home market, high costs cannot be passed on to the consumer, except when the export industries can also rely on a substantial home market which makes it possible to practise price discrimination. This is not generally the case to any substantial extent in the developing countries. The corollary is a need for extensive government intervention, because of the role of government as guardian of the country's payments position.

115. In practice there is a variety of forms of support—outright subsidies to output, multiple exchange rates, subsidies to input factors, retention quotas, preferential access to limited resources, provision of overhead facilities by public investment, subsidization of investment, tax remissions, accelerated depreciation allowances, export promotion at government expense, preferential credit and insurance arrangements, and government support and approval open or tacit of discriminatory pricing. The detailed discussion of these various measures is beyond the scope of this paper, and is more fully described in some of the individual country studies. The precise form which these measures of support will take has very important repercussions. In the case of protected home industries, the imposition of tariffs may either result in virtual exclusion of imports and a higher domestic price level with no direct cost to Governments, or, when competing imports still come in over the tariff wall, in the receipt of government revenue. Support for export industries, on the other hand, may often involve actual government expenditure or at least the forgoing of revenue. In practice, most Governments are sensitive to increased budgetary expenditure. There is therefore a strong incentive to resort to such measures of support which would not have direct budgetary effects, and to avoid direct and overt subsidies to output.

116. The support of new export industries is, however, sound and justified only in so far as real infant industries are concerned, that is to say industries which could reasonably be expected to achieve a competitive level of costs as output increases, experience accumulates and productivity rises, among other things because the growth of industrialization brings about greater external economies. As in over-protected home industries, there is of course always the danger that the existence of support may tend to remove much of the incentives for improving efficiency so that the transition from infancy to industrial maturity may be postponed indefinitely. This could be taken care of, however, by a flexible support policy of the type which is sometimes being applied for import substitution industries.

117. The emphasis should be on such forms of subsidies which will be linked to levels of efficiency and preserve the incentives for increased productivity. If this is accepted for measures of support undertaken and administered by national Governments, so as to enable it to exercise control over export industries, it is even more called for if some international scheme of support for export industries is considered.

Difficulties of entry into foreign markets and measures for promotion of exports

118. The difficulties of industrial transformation which are encountered by the developing countries particularly in the field of export industries are compounded by difficulties of entry in foreign markets. Even when the initial developmental hurdles have been overcome, industries established and output physically available, and even in the absence of deliberate restrictions of trade, the export industries face the problem of markets. Foreign markets are unknown to the new producer, and the new producer is unknown to the foreign buyer. If the price is competitive, quality may be questioned. If both price and quality are competitive, the reliability of supply may be questioned. The supply of some single commodity on competitive terms may not be enough, and a sufficient range of closely related goods may have to be available. If exports are competitive in most respects and are not barred by tariffs and other government-imposed restrictions, they may have to break into markets pre-empted by monopolies, cartels or oligopolies. There may be high costs of sales and promotion, lack of commercial knowledge, of trade connexions and markets. The overcoming of many of these difficulties is, again, often beyond the capacity of individual producers. Much of the efforts of Governments have therefore been in the direction of furthering commercial knowledge and trade connexions, as well as undertaking quality supervision and the cost of many sales promotion activities. This appears to be one of the most important areas for government action since countries desiring to promote their exports of manufactured goods would have to devote increasing attention to the commercial and promotional aspects of export development.

119. Some promotional activities may well be beyond the capability of individual Governments. They may require a massed effort or a measure of authoritativeness which could be obtained only through concerted international action. Certification of quality standards, for example, by some international agency may be required to overcome customers' reluctance in the foreign markets. Insurance against risks of supply failures may be another example or the establishment of export credit facilities on a broad scale. These are particularly great in the case of exports of manufactured consumer goods. In contrast to most of the primary export commodities, which are standardized and traded in the great international commodity exchanges or sold to large-scale importers, manufactured consumer goods are characterized by a high degree of product differentiation. The commercial functions in exporting these goods are much more specialized and can rarely rely on centralized services like those supplied by the great trading concerns dealing in the standard primary commodities. The adjustment of supply to ever-changing tastes has to be much more flexible and marketing outlets more varied; sales costs represent

a much larger proportion of total costs, and there are greater risks involved. Much of these costs and efforts are of the nature of fixed costs. The more consumer-oriented the goods are, the greater these difficulties.

120. The difficulties of entry are minimized if priority is given to development of those exports which are of internationally comparable and well-defined quality standards, in which trade is in bulk, least sensitive to shifts in consumer tastes and do not require complex trade arrangements and a multitude of marketing outlets. This points to producer goods industries, and lends further support to the arguments in favour of these industries put forward in the preceding chapter from the supply point of view. The achievement of economies of scale is most difficult when the risk of failure has to be counteracted by greater market diversification. In differentiated products, as most manufactured consumer goods are, each separate market will tend to have specific requirements with respect to design, sizes, assortment, quality, packaging, etc. This will tend to reduce the opportunities for specialization. The developing countries should preferably search for export opportunities in industrial intermediates, which do not present the disadvantages described above. Such exports can be tied in with the production and expansion plans of large-scale producers in the advanced countries, so that changes in the product can be anticipated and planned.

121. The general measures of economic policy which are necessary to promote the development of export industries are beyond the scope of this paper. It is, however, necessary to emphasize that the pressure of certain economic developments and policies—whether these are, by themselves, considered desirable, are adopted *faute de mieux*, or have been considered inevitable—have often unnecessarily checked the development of new or the growth of existing export industries. It should be possible, whatever the specific circumstances of a country may be, to undertake measures designed to isolate exports to a reasonable degree from the effects of such adverse internal developments as wage rises, inflation, shortages of domestic or imported supplies, etc. Such measures should be embodied in more or less automatic and long-run mechanisms, so that prospective exporters may be able to base their decisions on long-run expectations.

122. One of the greatest difficulties which prospective export-oriented industries are likely to face originates in the small size of the markets which will be open to them in the initial steps. Even where exports would be competitive at full capacity utilization, the bridging of the gap between the initial output and the volume at which output becomes truly competitive may be difficult for the individual producer. Exports will tend to rise gradually, as new markets are opened up, and meanwhile the low volume of output will be unable to result in competitive costs. Except for those new industries in which a sufficient volume of outlets can be assured beforehand, or those which are relatively insensitive to rates of capacity utilization, this difficulty may require supporting measures by the Governments. These measures can take various forms: outright subsidies in the transitional period, the underwriting, for a specified time and up to the rated capacity, of fixed costs, government assistance in marketing and promotion, and similar devices which would be adapted to each specific case.

123. The distrust which new exporters frequently have to overcome in foreign markets has already been mentioned. In some products this may relate to quality, in others, to the reliability of supply and servicing. This, again, is a field in which action by individual producers is unlikely to be of much avail. In respect of quality, newly exporting countries might do well to follow the example of longer established exporting countries, both developed and semi-industrialized. In these countries, various official or semi-official agencies were set up to supervise quality standards of exported goods. In the more developed countries, industry organizations may carry sufficient authority to ensure, internally, that the reputation of the industry's exports is not undermined by sub-standard products. They also have greater prestige with prospective foreign importers. In the less developed countries, only a governmental authority may be able to fulfil these functions. It is, however, important that, to supplement such a supervisory function, there should also be incentives for raising quality standards. In countries where exports are an outgrowth of import substitution, the protection of the home market has often corroded quality standards so as to make them unacceptable abroad. One of the devices to provide incentives for raising quality standards is to allow for some imports even if the domestic market is protected fully against foreign price competition. With regard to a wide range of producers' goods, maintenance of quality standards alone may be insufficient, and it may be necessary to insure foreign importers against supply failures. This, again, is a function which can be carried out only at the industry-wide or governmental level.

124. Some of the most serious obstacles to entry into foreign markets may be due not to the existence of government-imposed trade barriers, or the inexperience of the new exporters, but to the existence of patents, monopolies and similar institutional barriers. It has already been mentioned that the developing countries will rarely be able to base any substantial exports on commodities in which technical innovation or applied research is an important element. The experience in a number of countries has been that licences from patent holders can be obtained not only for the domestic market, but also for exports to third countries. It is not impossible that the field of such licence arrangements could be widened considerably, and that it may have particularly fruitful application in the field of production of intermediate products, where the patent holder may also be an important user of these goods. It seems that in this, as in many other areas, ignorance of the available possibilities is more of a hindrance than objective impediments. As far as action by the developing countries is concerned, it seems that clarity in outlining their development programmes and strict adherence to plans and commitments at least in the export sector will contribute to a mapping out of the possible

areas of production in which the developed countries might find interest, and increase the confidence in the fulfilment of commitments which is indispensable for any kind of international co-operation.

125. The measures which will have to be taken by the developing countries themselves to promote their exports of manufactures are, as can be seen from the foregoing outline, highly varied. Many of them can hardly be divorced from parallel action by other countries and their success depends on international action. The problem of exports of manufactures and that of industrialization are in fact, for most developing countries, two aspects of the same problem which require simultaneous solutions.

CHAPTER VI

INTERNATIONAL MEASURES FOR THE PROMOTION OF EXPORTS OF MANUFACTURED GOODS FROM DEVELOPING COUNTRIES

The need for action on an international level

126. No aspect of economic development can be discussed fruitfully in isolation from the problem of international assistance and co-operation. Economic history knows few instances of substantial growth achieved by a country in isolation and without the aid of external resources in one form or another. In the circumstances of the present time, international co-operation has become even more crucial than in the past, for the time-span within which growth must proceed has been condensed, under the pressure of the drive for an accelerated rate of development, into a fraction of the period it took the older established industrial economies to achieve their present level. The awareness of this reality, together with an increased application of principles of equity in the international field, has led to the recognition of the need for substantial external aid to the less developed countries.

127. It has, however, become increasingly clear that the mere augmentation of resources available to an under-developed country may not, by itself, be enough to ensure self-sustained growth, even if the aid given is applied in the best possible way. As long as economic events are left, in a world of unequal economic strength, to the forces of the market, and external aid is not supplemented by other measures of international co-operation, the beneficial effects of aid may peter out without any perceptible lasting result. Instead of being a once-over stimulus leading to a sustained process of development, aid may become a permanent necessity to sustain an absolute level once achieved. If this is to be avoided, external aid will have to be joined with domestic resources to achieve a rapid structural transformation. The preceding chapters have emphasized the internal aspects of the necessary structural changes. It is, however, obvious that mere physical development of productive capacity is not enough. Conditions have to be created so that capacity will not be faced with inadequate demand. Aid is therefore not enough; trade has to be opened up. What the developing countries need is a combination of aid and trade such that the former will facilitate the transformation of the latter, and in the process become, after a time, superfluous.

128. The access to external markets means that the developed countries will have to yield some share of their domestic markets for certain commodities to foreign competition. This is, however, generally likely to be only a short-run concession. The propensity to import of developing countries is high, and it can be assumed that an increase in their exports will in the longer run result in a return flow of imports of an equal and possibly greater volume. The short-run sacrifice which may have to be borne by the developed countries is in terms of the economic frictions and astructural adjustments that may be required in the resultant restructuring of international trade. As such, it would apply to specific industries that are likely to be affected when serious industrialization or even scrapping of existing capacity is involved or when an existing labour force has to be redeployed.

129. In any case, if the magnitude of the exports involved is compared with the increment of total demand anticipated for the developed countries, the concessions which the developed countries may have to make in the short run appear to be small; and if the new exports could be properly oriented, both on the supply and on the demand side, the frictional difficulties may be reduced to a minimum. This can be achieved if the process of readjustment, involving a mutual adaption of productive structures, is made a part of the normal process of growth in both the developed and the developing countries. It is this necessity of adjusting productive structures so as to make them complementary that requires co-ordinated national and international action. This is true for both co-ordinated action among the developing countries themselves and among developed and developing countries. Such a process could take place effectively where the structure of production is in a state of flux. It therefore relates in the first place to "new" industries. Where the export problem concerns established industrial capacity in the developing countries, international action would have to be of a different nature.

The promotion of exports from existing capacity

130. With regard to the promotion of exports from existing capacity, there are basically three situations. First, there is the case of excess capacity in industries originally established in a highly protected domestic market. Such industries may turn out to be non-competitive once they are denied the shelter of protection. In this situation it may be necessary, for the achievement of competitiveness, to expand the industries or to carry out other structural changes which would require measures similar to those necessary for the development of entirely new industries. In the second case, exports may not be inhibited primarily by a non-competitive cost situation, but a relatively inelastic demand may make it difficult or impossible to expand export revenue. This situation is best exemplified by the case of primary commodities, but also exists or can be expected to develop in some manufactured goods. This case will generally also require a transformation of the productive structures. In the third case, in which exports are able to compete

against similar products in the importing countries, they may be debarred from doing so by trade restrictions. Such restrictions tend to be more severe the greater the competitiveness of the prospective exports, since their relaxation may conceivably mean not only the yielding of the increase in demand to foreign producers, but also, at the limit, the scrapping of existing capacity in the importing countries.

131. It will be borne in mind that much of the existing capacity in the so-called "traditional" exports of the developing countries generally arises as a by-product of industrialization and import substitution. Even if the developing countries should embark on an effort of export-oriented development directed towards commodities, the demand for which is elastic, import substitution is still the first stage of the process of industrialization. Import substitution will generally take place first in the light consumer goods industries. Capacity tends to be built, at any given stage of development, ahead of demand, and exportable surpluses tend to develop. In the early stages of economic development, the income elasticity of demand for light consumer goods is likely to be high, and capacity is often built in the expectation that the growth of demand will continue at the same rate. When elasticity of demand declines with rising incomes, excess capacity may develop. If no export outlets can be found for such excess capacity, there is under-utilization and consequent waste of capital resources; moreover, the import capacity of such countries and thereby their capability to transform their structure is impaired. The international action required must therefore make possible the utilization of the existing capacity through exports and at the same time not encourage the emergence of new excess capacity in these products.

132. The international measures to be taken for the promotion of exports of manufactured goods from existing industrial capacity are dealt with in other papers submitted to the United Nations Conference on Trade and Development. Since the present paper is mainly concerned with the development of new industries, the measures necessary for the solution of the current problems will not be further discussed here. One possible further solution may, however, be mentioned here, since it may provide the link between the process of import substitution, which, as mentioned before, tends to generate excess capacity, and the development of export industries. The reference is to the establishment of international buffer stocks, based on a policy of unlimited buying and selling at pre-determined, and probably gradually declining prices. This possibility, which is along the lines suggested by R. F. Harrod,[18] may be applicable in the first instance to standardized, storable manufactured goods in a way similar to that of the International Tin Agreement. It could, however, conceivably be expanded to cover a wider range of manufactured goods. The maintenance of such stocks could facilitate the structural adjustments which will be necessary whatever the specific solution adopted.

[18] Roy F. Harrod, *Towards a Dynamic Economics*, Macmillan and Co., New York, 1948, p. 124 ff.

The need for a study of export development projects

133. Even if progress is made towards a solution of the export problem as regards the so-called traditional industries, the main task of international and of national action will still be in the field of promoting structural changes in the directions outlined elsewhere in this paper. Important as existing industries are, they are small in comparison with the export requirements of the developing countries, let alone the targets of over-all industrial development of these countries. As stated before, internal efforts should be supplemented by international action. For, while countries can conceivably build new industries—and here they also need international assistance to provide them with know-how and capital—they cannot by their own efforts alone be assured of markets. The development of new industries is therefore bound up with the problem of international assistance and international trade policies. Before dealing with the ways in which international aid could become an instrument for the promotion of exports, it is necessary to consider an important area in which international action may be necessary: namely, identification of the industrial branches which should be eligible for development as export industries in the developing countries.

134. The development of new export industries in the developing countries basically implies the transplantation of certain industrial activities from the potential industrial growth areas of the developed countries to that of the developing countries. The transfer operation applies to the industrialized free enterprise as well as to centrally-planned economies. With regard to the developing countries taken as a group, it implies at the same time the co-ordination of their long-run industrial development plans. In all cases, a change in the structure of growth is involved. Since this means essentially increased specialization, a greater over-all rate of growth may be expected to result. The programming of such a restructuring of industrial growth is beyond the capabilities of individual countries. This is particularly true with regard to industries which depend, for the achievement of competitive strength, on international co-operation from the earliest stages of their establishment. Since the profitability of industries in which costs are sensitive to size is conditional upon access to foreign markets and, conversely, access to these markets is possible only if competitiveness is achieved, the identification of the candidate export industries cannot easily be carried out unilaterally. It is necessary to carry out a comprehensive survey of such potentialities, assuming international co-operation as a given factor. Such a survey of potential export industries would have to rely extensively on existing data and research; but at the same time it would have to go beyond the national framework in which most existing developing studies are cast at the present time. Its task would be to identify the more dynamic industries susceptible of rapid growth and to define the economic, technical, managerial and commercial factors which are either facilitating or inhibiting the transferability of industries. It would in particular single out the particular components of industrial growth which would be effectively transplanted to the

less industrialized countries to provide the basis of their industrial development.

135. The carrying out of such research could be the task of some international agency, which alone could command the resources, access to data, prestige, and ensure an economy of the research effort. The research would probably have to proceed simultaneously on several levels—from a first approximation intended to demarcate the most obvious areas of such a transplantation of industries—to the detailed technical and economic feasibility studies for specific industries and markets. Many of the basic data, at least for the first stages of such research, are readily available or could be made accessible without much effort. It is likely that such research, if initiated and carried out by an international body, would do much to focus attention on the transplantation possibilities and would stimulate appropriate research in the individual countries. It would also increase the awareness of the major industries in the developed countries, including those with centrally-planned economies, of the possibilities inherent in many of the developing countries, not only as producers of primary goods and semi-processed manufactures, but also of more highly processed manufactured goods.

International aid as an instrument for promotion of exports

136. One of the potentially most important instruments for the promotion of exports of manufactured goods, both of existing industrial capacity and for the development of new industries, is the flow of official international aid itself. The annual amount of that aid was, on the average for the years 1951-1961, approximately $3.5 billion. This aid serves a dual purpose: it increased the total resources at the disposal of an under-developed country, and it provides it with foreign exchange for the purpose of importing goods which the existing productive structure cannot produce. A major part of it is tied to specific development projects, and results in specific import requirements which can be supplied only by the most industrialized countries. In addition, and partly as a result of this, international aid tends increasingly to be tied to imports by the recipient country from the donor country. This tendency is sometimes detrimental to the growth of multilateral trade and international specialization; also, it often reduces the effectiveness of the aid.

137. It has further been suggested [19] that some developing countries tend to overconcentrate on the development of their infrastructure instead of giving priority to directly productive investments. This will have the effect of delaying a possible improvement in their balance-of-payments position, or of actually worsening it. These policies are probably influenced by the conditions and forms in which international assistance is granted at the present time; the emphasis is frequently on so-called "sound" projects, and as a result, development is often channelled into infrastructure projects although investment in direct production would sometimes yield more immediate results. It has therefore been proposed that international assistance be multilateralized, that the conditions of granting that assistance be made more flexible so as to allow a greater preference for directly productive investments, and that the assistance funds be used mainly for the acquisition of capital goods through open international tenders.

138. While such a multilateralization of aid and the introduction of greater flexibility is without doubt highly desirable, it must be realized that the tendency to tie aid to exports from the donor country itself is deeply rooted in the political realities of the donor countries. It is therefore unrealistic to expect a substantial relaxation of these restrictions resulting in "tied" aid in the short run. It is not, however, unrealistic to suggest that the political and economic objectives which donor countries wish to achieve by tying aid to their own exports could be equally achieved by triangular arrangements whereby aid to one developing country is used to promote exports from another developing country.

139. Even within the limits of its present volume, international aid could stimulate exports from the developing countries by making use of the uneven structure of industrial development of the various countries. The productive capacities of some of the semi-industrialized countries, in many respects, are to less advanced countries what those of the most highly developed countries are to semi-industrialized economies. It is not unrealistic to assume that at least triangular arrangements of this kind could be politically feasible and practically manageable. Under such arrangements, the exporting country would undertake to spend its export revenue on imports from the donor country. As long as the number of countries participating in such a multilateral arrangement is not too large, the donor country could still be reasonably sure that its aid would be matched by a corresponding outflow of exports, though not necessarily to the direct recipient of the aid.

140. Aid funds have in fact been used for the procurement of supplies from developing countries. However, such a use of the flow of international aid should be expanded and made a regular procedure. It would then be able to stimulate not only exports out of existing capacity, but also provide a basis for the establishment of new exports industries in the developing countries. Aid funds tend to serve similar purposes too in many developing countries; a larger part of the import requirements arising from this is in the area of the producer goods industries. While certainly only part of these requirements could be satisfied by imports from developing countries, imports so channelled could help to stimulate the development of those industries which are most important for the industrial growth of the developing countries.

141. Considering the present small volume of the producer goods industries in the developing countries, the diversion of even a relatively small part of international aid funds to the promotion of their exports could have very considerable effects. Such multilateralization of international aid would also require

[19] Particularly so by Prof. K. Kojima of Hitotsubashi University, Tokyo, whose consultative services were of great assistance in the preparation of the documentation for the Conference.

that some of the forms of tying aid to specific projects be relaxed. The execution of the projects for which the aid is intended could, with comparatively little additional effort, be ensured without linking them directly to the use of specific aid funds, and even the provision of resources for specific development purposes could, at least in part, assume the form of a triangular flow of commodity ties.

142. One other form of international aid, which could result in a two-way commodity flow between the donor and the recipient country, is that of the provision of capital goods against future deliveries of commodities. In this case aid is generally given directly in the form of plant and equipment and often made conditional upon repayment in the form of produce. Such arrangements are naturally more rigid than other forms of aid, but in some cases they may be the only practical way to obtain the aid. Where such aid is directed to the development of industries which will not make them dependent in perpetuity on only one market, it can become an important stimulant for industrial growth. In distinction to the multilateralization of aid discussed above, which would mainly benefit the development of producer goods industries and thus perhaps mainly promote exports from semi-industrialized countries, aid in the latter form could anticipate domestic demand for basic consumer goods. It could thus apply to some of the less industrialized of the developing countries which find that even import-substituting industries are difficult to establish at their present stage of development, and could provide them with the scale of production necessary for a reasonable level of efficiency.

143. Some aid arrangements of this kind have in the past been carried out between centrally-planned economies and a number of developing countries and have been tied in with bilateral trade arrangements. These arrangements have thus opened up markets which would not have been accessible otherwise. In addition, it is possible that some of the more developed free enterprise countries which themselves depend to a great extent on foreign trade and are faced with a rising wage level might find it profitable to shift some of their wage-goods industries to countries with a lower wage level. Furthermore, the stimulating effect of such aid on the level of economic activity in the donor countries should not be overlooked. As suggested by Professor K. Kojima, such aid could be used as an important contra-cyclical measure by the developed countries: in times of recession, exports of capital goods would increase employment and output in the donor countries, and at the same time sustain the import capacity of the developing countries, whose export revenues are likely to decline under the impact of recession in the developed countries.

Government-to-Government aid and joint ventures

144. The key role of Government in the economy of the developing countries has important consequences for the forms which effective international aid must take. There is hardly any developing country in which the Government has not had to undertake functions which in the developed private enterprise economies are taken to be the domain of private business. These government activities have ranged from indirect policy measures designed to encourage and "guide" private enterprise, to comprehensive planning, establishment of basic industries and conduct of actual industrial production and commerce.

145. The reasons for this intervention even in countries in which the basic social philosophy is one of private enterprise are well known. At the same time the consequences that follow are not as widely accepted as they should be where the vital role of public enterprise under the circumstances of those countries are fully realized. If government initiative is essential to start off a process of industrialization under an economic horizon limited to a national market, it is even more so in the case of the development of new export industries. The international co-operation required for their success, the ability to conduct operations on a scale surpassing that of the domestic market, the ability to undertake the risks involved will generally require even more government intervention than economic activities destined only for the domestic market.

146. This factor must therefore be taken account of in the forms in which international aid is given. The giving of official aid by one country to another, whatever its motivation, is normally carried out through their Governments. The stimulation of the flow of private capital can be highly beneficial; at the same time there is no assurance that the normal motivations of private capital will necessarily coincide with those of the economic, political, and social objectives of the Governments concerned. International aid should therefore clearly recognize the role of Governments in industrial growth of developing countries. At the same time it may have a stimulating effect on private initiative. The official capital made available from abroad, together with private technical and managerial know-how and services, and, when required, recognized access to markets, is likely to have a considerable leverage effect in mobilizing domestic investment in the developing countries.

147. This aspect of international aid may become most important if the transplantation of certain industries from the developed countries is considered. If exports of manufactured goods from the developing countries are to be expanded, the developed countries will have to forgo, in the short run, some part of the increase of their domestic markets. Basically, the choice is between permitting the developing countries to increase their exports at the expense of stagnant, or only slowly expanding, industries or in sectors which are themselves growing rapidly. The first alternative can be, as experience has shown, extremely painful. The industries so affected are often labour-intensive and composed of relatively small-scale enterprises operating in a highly competitive domestic market. The encroachment on their domestic markets meets with considerable opposition, not only on the part of employers, but also on the part of the labour which fears considerable displacement of workers.

148. Assuming that the developed countries were prepared to make major concessions as regards the sharing of their domestic markets with imports from

developing countries, it will have to be borne in mind that the limits of the share that countries would allow to imports in total consumption, together with the low income elasticity of demand for these commodities, would put definite limits to the expansion of the exports of the developing countries. The answer would lie in the recognition of the need for a reorientation of the composition of exports from the developing countries. The more dynamic industries are, almost by definition, the more flexible in their direction of growth. An increase of imports in these industrial sectors of the developed countries, where little displacement of labour or firms would be involved, is a process of restructuring which can be incorporated in the normal course of growth.

149. Moreover, the industries concerned are likely to be composed of larger firms, many of which already have experience in international activities. They are industries which are more likely to be in a position to shift their expansion in alternative directions if some of the activities they envisage for the future are replaced by imports. By the same token, they are the industries in which international co-operation and joint ventures can be expected to have a good chance of success. The natural partners of such industries in the developing countries are most likely to be the Governments or government-financed public or semi-public undertakings.

150. These dynamic industries cover a wide range of intermediate products which could be produced in the developing countries and tied in with the production programmes of the final processing industries in the developed countries. To transplant these productive processes, the industries of the developed countries, in addition to providing the markets in a process of international specialization, would also provide the technical know-how so as to integrate the production processes in both countries with each other. In many cases, this would be accompanied by capital investment of the mother industry itself, but the process could also be carried out by means of direct Government-to-Government aid.

151. This also means that the reluctance of some developing countries to be dependent upon foreign private interests for the industrial development would have to be realized in cases where there is an obvious mutual benefit in such complementary arrangements. The margin of profit expected by private investment in foreign ventures necessarily includes a considerable risk element. If this element of risk could be reduced, the strain of these profits upon the balance-of-payments position would be correspondingly lessened. It should not be overlooked that participation on the part of the industries in the developed countries is more likely to improve the position as regards the sharing of the market outlets of the mother industries. The balance between the various possibilities, from management and marketing agreements to outright foreign investment, will have to be struck in each case on its merits. It seems, nevertheless, that a widening of the scope of direct Government-to-Government aid would in this case serve as a pathbreaker which would stimulate private investment to come in its wake.

Promotion of exports to centrally-planned economies

152. The problem of trade and aid relations between the developing countries and countries with centrally-planned economies poses itself in a different form. This trade has so far been relatively limited. Total exports from the developing countries to the centrally-planned economies averaged, in 1960-1961, $1,345 million, accounting for only 9 per cent in the total imports of the centrally-planned countries. Of this total, $1,255 million, or 93 per cent, consisted of primary commodities, thus putting the share of imports of manufactures from developing countries at $93 million, or 0.6 per cent of their total imports.

153. The scope of possible expansion from this initial low level would seem to be very considerable, particularly so since the present industrial structures of the two groups of countries have a considerable degree of complementarity. The demand for consumer goods in the centrally-planned economies is expanding rapidly, thus providing potential export markets for many light industry goods which the developing countries can provide out of their existing capacity. These imports would free resources in the centrally-planned countries for alternative employment and at the same time would contribute to relieving the balance-of-payments difficulties of the developing countries.

154. Despite a tendency to expand their trade with countries outside CMEA, the centrally-planned countries have so far relied mainly on specialization and trade within this group of countries. The expansion of foreign trade outside the CMEA area has been held back by a number of restrictions—some political, others of economic nature—and has been conducted for the greater part under bilateral trade arrangements. A substantial expansion of exports of manufactures will require the introduction of greater flexibility in trade. This will be required not only in the direct trade between the developing and the centrally-planned countries, but also in the trade of either side with the rest of the world. Trends in this direction have recently become perceptible, and if continued and put on a more permanent basis, could greatly help to reduce the need for bilateralism.

155. Although political barriers to trade are often an important factor in restricting the expansion of trade between the developing and the centrally-planned countries, there are also important economic barriers. Some of these barriers are rooted in the difference between planned and free enterprise economies; their reduction can only come about if allowances are made on both sides for the different needs arising from the characteristics of each system. Planning involves certain prerequisites both on the demand side and on the supply side. For imports to be made part of a planned supply, there has to be great reliance that such imports will actually be carried out. This is at the root of the preference of centrally-planned economies for long-term arrangements, which, however, are difficult to arrive at with any single trading partner. Such difficulties are compounded when trade is based on barter agreements. On the other hand, if the partner country develops an export surplus *vis-à-vis* the centrally-planned economy, it often has to wait

until transactions can be balanced; and this may sometimes involve the necessity of clearing the balance by purchases of commodities that are readily available rather than those that are required.

156. It seems that trade between the centrally-planned and the developing countries could be expanded considerably if appropriate international instruments were devised which would reconcile the differences of requirements and capabilities of the different economic systems. One such instrument could be an East-West Payments Union, to serve as a clearing institution for payments between all free enterprise economies on the one hand, and centrally-planned countries on the other. It could enable the purchase and sale of commodities between the two types of economies against payment in cash, and could extend its operation to the granting of short-term credits. Thus, trade could be multilateralized and the regularity of supplies, which is of concern to the centrally-planned countries, better assured. Also, the long-term agreements would, for some cases, be easier to obtain, or might, in other cases, become unnecessary.

157. The East-West trade which could be carried out within such a payments union could be isolated, if necessary, from the pricing system in force in the centrally-planned countries. Whatever the relation of the "East" price to world prices, trade could be balanced by setting up an appropriate accounting currency, which would have an exchange rate against the United States dollar and/or the pound sterling supported by sufficient exchange reserves. This exchange rate would be adjusted if trade between the centrally-planned countries as a whole and the rest of the world fails in fundamental maladjustments. Any short-term fluctuations in the over-all balance of payments would be met out of the liquid reserves of the union, which would be provided by both free enterprise and centrally-planned economies. Assuming that the reserve requirements are put at one-third of total transactions on the basis of the 1961 volume of total imports of the centrally-planned from free enterprise economies, an amount of approximately $1,500 million would be required. This amount would not necessarily have to rise *pari passu* with a rising volume of trade, as trade relations became more stable.

158. Whereas the expansion of exports from existing industrial capacity in free enterprise economies is likely to find the requirements arising out of planning in the trading partner's economies a limiting factor, almost the opposite is likely to be true where the establishment of entirely new export industries are concerned. The integration of new industrial projects with industrial planning in the centrally-planned economies is likely to be relatively easy, provided that the centrally-planned countries show a readiness to divert some of their planned expansion to the developing countries. The aid which may be necessary is in any case given from Government to Government; the possible problems arising because of the factor of private interests do not exist. Planning being based on administered forecasts of supply and demand, the uncertainties due to demand fluctuations which make such projects in free enterprise economies more risky, are by that much reduced.

159. The nature of planning also makes it comparatively easy to shift investment resources from one sector to another, provided the diversion is decided upon at a sufficiently early stage of the plan. The experience of the centrally-planned economies in the accelerated development of advanced industries in relatively under-developed areas should be more easily applicable to the conditions of the developing countries than that of industries which have, as in the Western developed countries, existed and grown for a long time in a complex economic environment. The centrally-planned economies should consider to review the more flexible segments of their plans in the light of the needs of the developing countries. By defining the industries and the volume to the extent of which they are prepared to incorporate imports into their plans, they would open up development opportunities for the less industrialized countries.

160. In summary, the need for broad international action, aimed directly at the promotion of exports from the developing countries, arises out of the impossibility of solving this problem on the national level. Neither aid alone, nor trade concessions alone, are sufficient. They have to be combined so that the former will promote the latter, and the latter will in time make the former superfluous. Co-ordinated structural changes of industry would be required, both in the developing and in the developed countries: but if these are effected mainly not in the body of the industrial structure, but at the margin of growth, the readjustment required will involve in the first place a change of direction of growth.

161. At the same time, the problem of expanding exports from existing capacity must be solved if the means for structural change are to be available. Due to the fact that in any developing country the growth of industries intended for the home market is likely to precede the establishment of export industries, this problem is likely to re-emerge as new countries reach a certain level of industrialization. Various solutions to the problem of exports from existing capacity have been proposed, but in the light of the small volume of these exports, compared with those which have to be achieved, the most important field of international activity would remain in the field of developing new, predominantly export-oriented industries.

162. The identification of the industries capable of transplantation would be the task of a systematic research to be carried out preferably by an international agency.

163. On the level of concrete international action, the present flow of international aid should become an instrument for promotion of exports from developing countries. Triangular arrangements, in which aid would be used by the recipient country in the first instance to purchase imports from another developing country, which in turn would undertake to import from the donor country, should not be beyond the bounds of realistic possibilities. A relaxation of the strict tying of aid to imports from the donor countries and to specific projects seems therefore indicated. If such a multilateralization could be made a permanent

feature of the aid system, it would stimulate exports not only from existing capacity, but also encourage the growth of new industries.

164. In the promotion of the "new" export industries, the key role of Governments in the development process of new countries should be given greater recognition, and Government-to-Government aid should be made more prominent. This may be especially important in the process of transplantation of new industries to developing countries.

165. The efforts at transplantation of industries would be centred in the dynamic sectors of the developed countries, where increased imports are likely to have fewer adjustment difficulties in terms of employment and output.

166. The expansion of exports from the developing to the centrally-planned countries would call for greater flexibility in trade and payments arrangements between the centrally-planned countries as a whole and the free enterprise economies. As a possible instrument, an East-West Payments Union would increase the process of multilateralization and facilitate expansion of trade. The transplantation of industries to the developing countries could be made possible through early integration of such projects in the overall plans of the centrally-planned countries.

CHAPTER VII

CONCLUSIONS FROM THE EXPERIENCE OF SOME SELECTED COUNTRIES IN EXPORTS OF MANUFACTURES

The market orientation of industrial development

167. An examination of the experience of a number of countries [20] reveals that they can be grouped in two broad categories: those which have until now placed the primary emphasis on import substitution and the development of industries oriented almost exclusively towards the domestic markets, and those in which industrial development is from the outset more oriented towards exports. This seems to be due not only to different stages of industrial development, but to no small degree to a difference in the basic policy orientation.

168. The first group includes, among the countries studied, Argentina, Brazil, India and Mexico. In the remaining countries, a much greater emphasis on exports can be discerned, and considerations of export prospects play a more conspicuous role in their industrialization efforts. In the case of the three Latin American countries mentioned, the predominantly domestically oriented development which characterized them until very recently, apparently has its roots in their strongly entrenched tradition of production of primary goods. Their economies have in the past probably been the closest approximation to the classical concept of international division of labour: they specialized in the production and export of agricultural and other primary goods, and satisfied their demands for manufactured goods through imports. The entire productive structure and the attitudes as reflected in the policies of these countries were for a long time geared to this division of labour.

169. The fundamental changes in the pattern and volume of world trade after the nineteen-thirties deeply affected these countries. Revenue from exports of primary goods declined and was no longer sufficient to maintain the level of imports. The efforts to counteract these adverse changes in the balance of trade took the form of import substitution, while exports remained undiversified. Even the process of import substitution often had to wrestle with considerable difficulties, since the existing economic relationships and general policies, the institutional and legal arrangements and the social attitudes were to a great extent alien to industrialization.

170. This situation is perhaps most clearly exemplified in the case of Brazil, where the greater part of economic policy was primarily adapted to the country's traditional position as a large-scale exporter of primary goods. Thus, for example, the tariff protection of domestic industry introduced in the nineteen-thirties had been allowed to erode to the extent that by 1957 it had become ineffective. The exchange rate system, which mainly was adapted to exports of primary goods, generally operated in disfavour of industry in spite of some corrective measures that were taken.

171. Against this background, in which even import substitution is a relatively new phenomenon and has often had to overcome the inertia of a long-standing agrarian and importing tradition, it is perhaps not surprising that exports of manufactured goods should until very recently have found little favourable conditions.

172. This situation has changed in the last few years. The public authorities are increasingly aware of the fact that industrialization through import substitution is approaching the limits of feasibility, and that the diversification of exports is one of the most urgent requirements for safeguarding the balance-of-payments position. Nevertheless, for the time being exports of manufactures are in the main motivated by excess capacity established primarily for the domestic market. Such is the case in Argentina, Brazil, Mexico, and, although under different circumstances, also in India. Exports from industrial capacity specifically established with a view to exporting a substantial part of the output are only in their beginnings. In Latin America, some of these initiatives are due to the incentives provided by LAFTA; in some other cases, they are the result of joint ventures with foreign enterprises which provide both technical know-how, investment and markets. A notable example of a combination of such joint ventures with regional arrangements is the production of data processing equipment, in which the production of various components is distributed among a number of Latin American countries.

173. At the present stage, however, such new industries are still of relatively little importance in industrial exports. Apart from exports from excess capacity mentioned above, the major part of exports

[20] Argentina, Brazil, Hong Kong, India, Japan, Mexico, Poland and Yugoslavia. For these, separate studies are submitted to the Conference as part of the documentation. The above analysis draws to a certain extent also on the experience of other countries.

of manufactured goods are of a low degree of processing, and mainly based on the traditional primary products and their by-products. Such is the case, for example, in Argentina with regard to quebracho extract, casein, hides and other slaughter-house by-products.

174. The situation is somewhat different in India, which, in addition to being a large exporter of primary goods, has had a somewhat more varied structure of exports. As a result, the general policies affecting industrialization have not been influenced to the same extent by established non-industrial traditions. In general, however, India has oriented her industrialization efforts towards the domestic market, at least under the first two Plans.

175. The "inward-oriented" industrialization characteristic of these countries has had certain important long-run effects. The development of domestic industries has created in these countries a not inconsiderable reservoir of industrial skills. This may not embrace the whole spectrum of skills available in the more advanced industrial economies, but it is sufficient to characterize these countries as semi-industrialized. Since the new industries were, however, established to cater to the relatively small domestic market, and in response to a relatively unsophisticated commodity structure of demand, they often tend to be of small scale. Protection of these industries, dearth of capital, their relatively small scale of production with limited access to finance, and a relatively undiscriminating consumers' demand, have not encouraged the use of the most efficient techniques. The greater the protection given to the development of domestic industries, as in Argentina, India and Mexico, the more pronounced these tendencies. In other cases, such as the textile industry of Brazil, technology has remained at a low level, costs are high at the exchange rate system which is primarily adapted to exports of primary goods and which has not been able, despite the introduction of special exchange rates for industry since 1959, to reflect adequately the real cost level of industry; the industry is therefore not competitive in the world market even if tariff barriers, etc., in other countries are disregarded.

176. When the existing domestic industries of these countries are examined in detail, it becomes evident that the insignificant share of manufactures in exports, and of exports in total manufacturing output, cannot be ascribed to any lack of ability to undertake sophisticated and complex manufacturing operations. The industries producing for the domestic market, although characterized by structural weaknesses which raise their cost levels, comprise a wide range of industrial products, among them many which require a high level of skill and relatively advanced technologies. All the countries mentioned already possess fairly well developed metallurgical, engineering and electro-mechanical industries; their chemical industries are also quite sophisticated, and the range of consumer goods produced, both durable and non-durable, is already highly diversified.

177. The reason for the lag in development of exports must therefore be sought, on the one hand, in the existing trade barriers, which remove the foreign market from the horizon of entrepreneurs, and on the other hand in the productive structure which develops under these conditions. The small-scale, high-cost production which tends to develop precluded successful entry into foreign markets, even if trade barriers were removed. Evidently, if import substitution and export promotion had proceeded simultaneously, the scale of production could have been expanded and the cost level could have been brought down to a more competitive level. This would probably have called for a more concentrated industrial structure than that which developed under the incentive of import substitution alone.

178. The evidence indicates that a high degree of industrial concentration favours export possibilities, whereas a dispersed structure is a deterrent to exports. This is particularly so in the more sophisticated, non-traditional industries, which tend to be more capital-intensive and more cost-sensitive to size. Thus, the production of machine tools in Argentina, as well as in other countries, is highly dispersed. Although excess capacity is at present estimated at 75 per cent, this dispersal results in a low degree of specialization, in poor scheduling of production, and in low quality standards. The production of tractors in Argentina is another case in point. Although the total domestic demand could suffice to achieve substantial economies of scale, the dispersal of production among a number of producers results in a price differential, compared with imports, ranging from 58 to 93 per cent. Excess capacity in this industry is at the present time estimated to range from 25 to 50 per cent. The situation with regard to diesel engines is similar. Another example of such a high-cost structure is afforded by the automotive industry, both in Argentina and in Brazil. Exports of automobiles and spare parts could become a realistic possibility, at least within regional arrangements, if the industries could be integrated so as to achieve economies of scale.

179. Conversely, where an industry is more highly concentrated, it seems to be better able to enter the export market. Thus, exports of telephone equipment from Argentina or of bicycles and sewing machines from India show signs of success. The new industry of data processing equipment in Argentina, which is concentrated in one firm, is destined primarily for the export market. In Israel, too, there seems to be a high correlation between successful exports and a high degree of industrial concentration.[21]

180. These factors seem to have obtained increasing recognition in a number of countries. In Yugoslavia, for example, permission to engage in foreign trade is granted only upon submission of proof that the prospective exporter possesses sufficient resources to undertake exports. The specific conditions required tend to encourage larger size and greater concentration. Within the framework of LAFTA, Argentina, Brazil, and Chile have recently requested a delay in concluding a complementation agreement in order to improve specialization in their automotive industries. The Government of Israel has for the past three years been pursuing an active policy of integration of

[21] See Bank of Israel, *Annual Report 1962*, p. 229 ff.

industries with a view to encouraging greater specialization and economies of scale.

181. The statement may be reiterated that in the semi-industrialized countries, the expansion of exports is inhibited not so much by the absence of ability to undertake relatively sophisticated manufacturing operations as by lack of access to markets, together with a non-competitive level of costs. This is perhaps best illustrated by the changes which occurred in a number of countries during the period of the Second World War. When the level of costs was not a decisive factor and markets were available, India began to produce goods which had to meet strict specifications, such as aircraft components, armaments and munitions, automotive and railway equipment, as well as many other manufactures for military and civilian use which had not been produced before. In Argentina also exports of manufactures rose sharply during the war years. Other countries which would probably have been considered as incapable of sophisticated industrial operations had similar experiences.

182. It therefore seems that the lack of skills has been overrated, as an inhibiting factor, and it does not seem to be inevitable that the development of export industries should start from the relatively unsophisticated, "traditional" industries. The evidence shows that at least those of the developing countries which have already established an industrial basis for their domestic markets can embark on the expansion of exports of fairly sophisticated manufactured goods. If these find it difficult to enter, in the initial stages, the markets of the highly developed countries, they may be in a position to compete against imports from the latter into other developing countries. Beginnings of this development are evident in the exports of engineering goods from the three Latin American countries, India, Yugoslavia, and other countries.

183. Further expansion in this direction will depend upon the carrying out of the necessary structural changes, so that costs can be brought down and quality standards improved. To this end, import substitution and export promotion will have to go hand in hand. As has been mentioned, import substitution has in many countries reached a stage of diminishing returns, both from the point of view of the balance of payments and from that of the opportunities it can afford for further industrialization. This depends at the present stage—as has been recognized by a number of countries—on expansion of exports. The latter will increase domestic income and demand and the capacity to import.

184. The recognition of this necessity has led in the last few years to a conspicuous change in policy even in countries which had formerly directed almost all their industrialization efforts into import substitution. Both Argentina and Mexico have in the last two or three years initiated far-reaching export promotion policies, the major purpose of which is to accelerate the development of specific export industries. In India also, where the First and Second Plans were almost wholly directed to import substitution, the Third Plan states that "one of the main drawbacks in the past has been that the programme of exports has not been regarded as an integral part of the country's development efforts under the Five-Year Plan".[22] In Brazil, too, a much greater recognition of the need to promote and expand industrial exports has become apparent, although the promotion measures adopted have so far mainly been of a corrective nature, designed rather to remove disincentives to exports.

185. In the other countries mentioned—Hong Kong, Japan, Poland and Yugoslavia—there is, as mentioned before, a conspicuously greater integration of exports with the over-all development effort. In some cases, this is due to the fact that the dependence on exports of manufactures as a source of foreign exchange had been a more pressing need since the early stages of development. In other cases, when the economy was unable, due to its relatively small size to its still low level of industrial development, to build up a sufficiently varied capital goods sector, exports had to serve as a means to provide for adequate imports of capital goods. This was particularly true of countries which viewed the capital goods sector of the economy as the sector which determines the rate of growth, namely the centrally-planned economies of Poland and Yugoslavia. As the domestic capital goods industries developed, these goods began to play a more important role in exports. This is most clearly brought out by the changes in the commodity structure of Poland's exports in the last six years. This purpose of providing the capacity to import capital goods which cannot be produced locally can, of course, also be achieved by exports of primary goods. The greater emphasis on exports of manufactures is determined largely by the less promising demand conditions for primary products and the factor endowment of these countries. Thus, both Poland and Yugoslavia, which had in the past exported mainly primary goods, have steadily shifted towards manufactured products.

186. The marked export orientation of industrial development is common to all countries in the last-mentioned group, despite their highly diverse social and economic systems and general economic environment. Thus in Japan, which has always enjoyed a relatively large domestic market at an early stage, exports have played a prominent role already at the early stages of her industrial development. Although industrial production relied substantially on the domestic market, exports of manufactures were not based on the residual of the supply for the latter. Some industries became rapidly export-oriented to a high degree. Perhaps the most outstanding expression of Japan's remarkable export consciousness has been the continuous adaptation of the economy to the changes in conditions of demand in foreign markets. This great capacity to transform, to adopt new techniques and introduce new commodities was accompanied by a constant effort to raise the productivity of labour. The institutional framework existing for the greater part of the period of her development made it possible to restrain wage rises, while a high rate of investment and technical innovation increased efficiency at a very rapid rate, so that Japan's wage cost advantage was fully brought out.

[22] The Third Plan, p. 137.

187. The case of Hong Kong is again different, and the development of her exports was due to several exceptional circumstances including her past history as an important entrepôt. The success of Hong Kong in the textile industry after the Second World War, and the achievement of competitiveness in an industry for which demand conditions were not very favourable is due not only to the exceptionally low wage level prevailing there. The latter would not have been effective, had it not been accompanied by high productivity due to the high technological level of that industry and its modern equipment. This is a striking contrast to the situation in India and Brazil, two other countries with a low wage level but where labour costs are sometimes even higher than in some of the advanced countries. It was repeatedly stressed in the preceding chapters that technological efficiency is an essential pre-condition for the achievement of a competitive cost level.

188. In the two centrally-planned economies mentioned above, the role of exports in general, and in particular of manufactured exports, in industrial development is perhaps most fully recognized, and industrial expansion incorporates plans for the development of exports. General economic policy is also greatly influenced by the need to expand exports. We find that both in Yugoslavia and Poland the export prospects and anticipated foreign exchange revenue are an important criterion in the establishment of investment priorities. Among the private enterprise economies, Israel affords an example in which a similar, and sometimes even greater, weight is given to export prospects in development policy.

189. Measures of preference to export-oriented investments have only recently been adopted by countries which have embarked on a consistent export promotion policy—Argentina and Mexico. India, on the other hand, although having recognized in principle the need for making exports an important part of the over-all industrial development programme, has not yet differentiated at the investment level export industries from industry in general. It is, however, increasingly recognized by most developing countries, at least implicitly, that export promotion must begin with development programmes and investment policies, which decide the structure of production and the level of costs. At the same time, it is not yet apparent that the implications of the relationship between import substitution and export development which this paper has attempted to point out have found full expression in appropriate measures of industrial development and export promotion being effectively adapted and carried out by Governments.

The commodity structure and export prospects

190. The development of the commodity structure of exports follows a broadly similar pattern in various countries. Thus, Japan began as an exporter of primary goods; its exports of manufactures began with various products involving specialized skills. The same pattern holds true for other countries: the first products to be exported are those in which the country has a natural advantage, whether this derives from natural resources, climate and geographical location, or from traditional specialized skills. When countries reach the manufacturing stage, the range of choice widens. Relative prices of the basic factors, labour and capital, and the structure of demand to which the productive system is adapted, become more important.

191. Historically speaking, as long as the commodity structure of foreign demand was not too divergent from that of the domestic market, commodities destined primarily for the latter could be diverted to the external market when access of the latter was not artificially restricted. Thus, for example, exports of textiles, from developing to developed countries may have been easier in the past, when demand for these goods was more buoyant. Meanwhile, the basic conditions of demand for commodities of this type have changed. A great disparity in the structure of demand between developing and developed countries has developed. Goods which may be in high demand in the domestic market, face a very dissimilar situation when they attempt to enter the foreign market.

192. The evidence shows that where the so-called traditional industries are concerned, most countries have been affected recently by similar difficulties. Textile exports have slackened off in Mexico, a relatively small exporter of these goods, as well as in Hong Kong and Japan, both large exporters of textiles. The Indian textile industry has also faced external difficulties, as a result of increased competition from other textile exporters as well as the general slackening off of demand. In cotton textiles as well as jute, formerly a major export item for India, the main competitive advantage derives, in fact, not from the manufacturing operations proper, but from the low cost of the raw materials. Indeed, it seems that a number of traditional manufactures derive an important part of their competitive advantage not primarily from the manufacturing stage, but rather from the low cost of the primary products.

193. The difficulties which the so-called traditional exports were meeting with recently on the demand side were pointed out earlier in this paper. They are apparent in almost all the countries mentioned. For some goods, notably textiles, the existing trade restrictions are based on quota systems and thus affect small and large exporters in equal degree. The result of these difficulties has been that in those countries which are most export conscious, efforts have been made for the further diversification of exports, and at the same time, steps have been taken to increase productivity in the traditional industries. Thus, Hong Kong has increasingly shifted to the export of apparel —an industry more dependent on specific skills, in which her unusually low wage level gave her a marked competitive advantage. Another illustration of this trend is the assembly of transistorized wireless sets, where Hong Kong has the advantage of low wages combined with a high level of skill (manual dexterity). A similar example, which shows at the same time an effort of adaptation of production to the demands of the market, is afforded by the production of articles made of plastic. This industry, which is highly skill-intensive in the key stage of production—die making —produces for exports according to importers'

specifications and designs. Although different in many aspects of general economic conditions, much of the success of both Hong Kong and Japan must be also ascribed to their exceptionally versatile entrepreneurship, and the attention which both countries have been giving constantly to the commercial side of their exports. Both countries have taken full advantage of their low wage levels by combining low-wage labour with advanced technology in the relevant industries, thus raising their productivity to levels competitive with those of the advanced countries. Poland and Yugoslavia have similarly found it increasingly difficult to expand exports of traditional manufactures and have made great efforts to diversify their export structure.

194. In countries where similar entrepreneurship is not forthcoming spontaneously, its development might be fostered by appropriate policy measures and incentives, side by side with public programmes of development. An example of the latter is provided by the case of Mexico, where the Government has published a list of specific industries, the development of which is deemed to have priority and which will be given special encouragement.

195. When the growth rates of various export commodity groups in the different countries are examined, it appears that it is by and large the same type of industries which shows the most rapid increase. This is true although countries may vary greatly in their level of industrial development, size, general economic background, and the relative prices of their factors of production. Japan, which is an industrially advanced country, as well as Brazil or Mexico, where exports of manufactured goods are at their very beginnings; Argentina and India, which have developed their industries mainly for their domestic markets, and Poland and Yugoslavia, where exports have figured more prominently in development—have all had the most rapid increase in exports of their engineering industries and, in some countries, in the chemical industries. Although some of these high rates of growth may be due to initial low levels, the phenomenon is too general to be only the statistical result of ratios computed on a small base figure.

196. These industries are also among the most dynamic industries in the advanced industrial countries, although their detailed structures appear undoubtedly more sophisticated. The factor underlying this general dynamic expansion seems to be that demand for these goods is expanding more rapidly all over the world. The opportunities afforded by this buoyant demand should be taken advantage of by developing countries, where assuming comparable levels of technological efficiency, the prevailing low wage levels give them a competitive advantage. Even if these exports would find it difficult to enter the markets of the developed countries—and it may be argued that even there considerable opportunities exist—they should be able to compete against imports to developing countries from third countries.

197. As will be seen from the individual country studies, there are indeed already serious beginnings in this direction. A wide range of chemical and especially engineering goods has been successfully exported by a number of countries, both to other developing countries and also, although in much smaller volume, to developed countries. The engineering and chemical industries embrace a wide range of technologies, from highly skill-intensive processes to mechanized, automated processes involving comparatively unskilled labour. Good prospects for exports seem to be in universal machine tools, agricultural and irrigation equipment, a wide range of components and spare parts for machine industries, in a variety of electromechanical and other industries mainly based on processes of hand assembly. Thus, Argentina, Brazil, India and Mexico as well as Poland and Yugoslavia have all had successful experiences with exports of engineering goods of these various types. In the case of India, good prospects are seen for a variety of producer goods. Mexico has been successful or has good prospects in exports of rolling stock, buses, steel pipes, wires and cables, plywood, urea, polyethylene, methanol and caprolactama, all belonging in the producer goods category and mostly of the engineering or chemical industries. Argentina has been successful in exports of telephone equipment, industrial machinery and accessories, machine tools, agricultural machinery, refrigerators, power-generating equipment and electric motors, as well as parts and accessories for automobiles. The same picture is true for Poland and Yugoslavia. In these countries, export of complete factories has already become prominent, implying not only exports of capital goods, but also of the associated engineering services of project planning and installation.

198. As regards the pattern of commodity flaws by major destinations, the more sophisticated products appear to find their best markets in other developing countries, while slightly processed goods are sold to more developed countries. Such a dualistic structure of exports was not only characteristic of Japan, which developed her industry and exports earlier than the developing countries of today; a similar pattern is generally noticeable elsewhere. These features of the pattern of trade strongly suggest that the successful promotion of exports of manufactures may depend on the extent to which these tendencies can be utilized to full advantage and strengthened by appropriate national and international action. The evidence lends support to the argument put forward elsewhere in this paper, that the flow of international aid be utilized to further these developments. The indications are that the developing countries have substantial capabilities of producing capital goods and other producer goods, in which a major portion of the imports of developing countries are concentrated. From the point of view of supply, they are often able to compete against similar products from more developed countries. Their exports are, however, limited because most of the developing countries wrestle with balance-of-payments difficulties and finance much of their imports out of aid funds. As long as these are tied to direct imports from donor countries, the capacity to import from other developing countries is restricted. If this restriction were removed, additional markets for exports from developing countries would be opened up, at no loss to the more advanced industrial countries. The high propensity to import of developing

countries would result in an increased volume of imports from the developed countries if their foreign exchange earnings were increased in this way.

Export promotion policies

199. The role of Government, both in the establishment of a general economic framework conducive to the development of exports and in the adoption of direct measures of export promotion, appears to be central in almost all the countries studied. With the exception of the case of Hong Kong, which in many respects reflects a combination of a very unusual set of circumstances, active promotion by the Government was necessary in order to expand exports at all to any substantial degree. Even in centrally-planned economies managers of enterprises would generally prefer the relatively secure operation in a familiar and, on the whole, sheltered domestic market. This is clearly brought out in the cases of Poland and Yugoslavia, where a wide range of measures were required to divert manufactured goods to the foreign market, even when price differences were equalized through various measures. The same holds true for India and other predominantly private enterprise economies, in which the private entrepreneur is generally reluctant to assume the risks of foreign trade unless he is given very strong incentives to do so.

200. The promotion policies adopted in most countries possess many common characteristics and follow much the same pattern, with varying emphasis on different aspects. Generally, these policies relate to three major areas: investment and development of new industries, equalization of profitability of sales in the foreign and the domestic markets, and trade promotion through means of commercial policy and direct sales promotion. The first area is most emphasized in countries in which there is some measure of economic planning, but also exists in unplanned economies whenever the incentives normally afforded by the domestic market are not sufficient to provide for sufficient investment which would make possible a successful expansion into exports. The measures taken may include in some cases direct assumption, by the Government, of an entrepreneurial role. This has been the case in the early development of Japan, and is found, to a greater or lesser degree, in India, some Latin American countries, and in Israel. The main emphasis in the private enterprise economies is, however, on measures to encourage private investment, and Governments generally enter direct production only *faute de mieux*. The measures taken to induce private entrepreneurs to invest for exports take a great variety of forms, from provision of pre-investment data and assistance with respect to overhead costs of investment, to direct government loans, tax remissions, accelerated depreciation allowances, outright ownership participation by Governments, and others.

201. The policies designed to increase the profitability of exports as compared with domestic sales embrace a great variety of measures, nearly all of which amount to some form of subsidization. The more prevalent measures are preferential exchange rates for exports, either directly, as a higher exchange rate paid for foreign exchange obtained from exports or indirectly, through foreign exchange retension quotas or preferential import quotas for raw materials, capital goods and other supplies. These forms of incentives provided through exchange rates have been in force in practically all the countries studied, at least at some stage of development of exports. Direct subsidies, in proportion to the domestic value added earned from exports, are not very common. Frequently, subsidies or preferential exchange rates are given to the gross value of exports, thus encouraging exports with a high import content. Some countries, in which prolonged inflationary pressures combined with a chronic disequilibrium in their balance of payments have pushed into the forefront the problem of ascertaining the effective exchange rates, have developed elaborate systems for assessing the real value of foreign exchange earned from exports. These methods have served to evaluate investment projects from the point of view of their impact on the balance of trade, and to base the system of direct and indirect subsidies on the real value of exports. One example of such a system will be found in the study on Poland which is submitted to the Conference. Another similar method has been developed in Israel, and was described in *Industrialization and Productivity*, Bulletin No. 5.[23] In addition to subsidies through exchange rates or import quotas, exports are often granted indirect subsidies in the form of various tax and duty remissions, or through reduced costs of certain factors of production, reduced interest rates, power and transport costs, and others.

202. Finally, in the area of trade promotion, Governments have naturally been most active; the conclusion of trade agreements, collection and dissemination of commercial information, publicity and advertisement, trade missions, participation in fairs and exhibitions, as well as the establishment of organizations to facilitate export promotion in various fields. The latter include export risk insurance, export credit institutions, quality control authorities, trade organizations and others.

203. Although the specific form of the policies and measures adopted varies according to circumstances, it is clear that a consistent and sustained effort by the public authorities is required in order to promote exports of manufactured goods. In many cases the development of exports will require substantial structural changes which will have to be initiated at the level of investment. Appropriate investment policies will have to be devised so that investments will be channelled into export-oriented industries. Measures will have to be taken so as to assure their competitiveness in the world markets, taking into account the period of "infancy" which these industries will have to overcome in the earlier stage of their development. A policy of subsidization during this "infant" stage appears to be indicated. The achievement of a competitive cost level requires, in the best of cases, a substantial maturation period; this will require a certain measure of support until the industry becomes viable. This support, whatever its

[23] United Nations publication, Sales No.: 62.II.8.1. See p. 24 ff.

form, should be preferably measurable. The more indirect forms of subsidization, for example through cheapening certain factors of production, are likely to lead to a misallocation of resources. Also, being indirect, they tend to perpetuate themselves and to be applied even when not directly promoting exports. Support should be limited to a definite time, corresponding to the maturation period so as to avoid this protection being extended to industries which are not competitive in the long run.

PROMOTION OF EXPORTS OF SMALL INDUSTRY PRODUCTS FROM DEVELOPING COUNTRIES*

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INTRODUCTION

INDUSTRIALIZATION, IMPORT SUBSTITUTION AND EXPORT PROMOTION

1. The process of industrialization nearly always involves a substantial rise in the import requirements of the developing countries, to finance which increasing foreign exchange resources are needed. The foremost need of countries at both early and relatively advanced stages of industrialization is for capital goods, a large proportion, if not most of which, must be imported from the developed countries. As industrialization proceeds, and as long as domestic capital goods industries are not set up on a sufficient scale—a development which most industrialization programmes anticipate only in the long run—the supply of such goods through import should continuously expand in volume, if the annual rate of investment is

* This paper was prepared by the Centre for Industrial Development in connexion with the sub-item on "Measures and action for diversification and expansion of the exports of manufactures and semi-manufactures by developing countries with a view to increasing their share in world trade" (item III.1 of the list of main topics). See Interim Report of the Preparatory Committee (first session), in Vol. VIII of this series.

not only to be raised, but even maintained constant in relation to a growing domestic output.

2. While expanding imports of capital goods are a prerequisite of industrialization, increased supplies of other imports are usually made necessary as a result of the creation of new industries. In some of the relatively more advanced of the developing countries, industrial diversification may involve the creation of industries which are not necessarily based on the utilization of domestic natural resources. As a result, the share of raw materials, fuels and intermediate goods in total imports may increase. As industrialization raises *per capita* income, the demand for consumer goods, including foodstuffs, may grow. In many cases, such demand rises more rapidly than domestic production, and a substantial part of the increased demand has to be met by imports.

3. To finance increasing imports, the industrializing countries need expanding foreign exchange resources. The difficulty of achieving this through an expansion of their traditional exports of primary commodities—food-stuffs, agricultural raw materials and minerals—is well known. In the past decades, world demand for these commodities—leaving aside petroleum—has expanded relatively slowly, and the continuing deterioration in terms of trade of the primary producing countries has adversely affected the purchasing power of their exports. None the less, as long as their industry remains inadequately developed, these countries have to rely on the promotion of such exports to finance their imports of investment goods. At the same time, they adopt measures to change the structure of their imports and conserve foreign exchange. On the one hand, their industrialization policies favour the establishment of industries producing goods to replace imports. On the other hand, they adjust import controls, exchange rates and customs tariffs so as to give preference to imports of capital equipment and other essential goods.

4. The scope for import substitution of consumer goods or intermediate goods is particularly great in countries at early stages of industrial development. Import substitution of consumer goods has been a principal mechanism through which industrial growth has been initiated and the supply of capital equipment enhanced during the earlier phases of development. As industrialization proceeds and the reduction in imports of consumer goods progresses, the contribution of such industries to further industrial growth diminishes, especially when the foreign exchange saving on consumer goods becomes partly offset by increased imports of industrial raw materials and fuels. It is true that efforts are also made to create import substituting producer goods industries, but only a few of the more advanced developing countries have thus far succeeded in making any significant progress in this direction.

5. Thus, countries having reached a relatively advanced level of industrial development need to rely increasingly on the export of manufactured goods if they are to reduce the pressure upon their balance of payments. To that end, certain products of existing industries should be diverted from the domestic market, and new industries producing manufactures for export should be created. In both cases, measures to enhance the marketability and competitiveness of these goods on foreign markets should be adopted.

6. If such exports are to serve the purpose of accelerating industrial growth they should be directed principally towards the developed countries, so that the earnings derived from them could be used for the purchase of capital goods produced by the latter. The difficulties of developing an export trade with the advanced countries are much greater in the field of manufactures than in that of primary commodities. Manufactures from the developing countries should be goods for which the income elasticity of demand in the advanced countries is relatively high. They have to compete with those of the advanced countries not only in price but also in quality and design and have to face tariffs and import controls more restrictive than those applying to primary products.

7. Some of the relatively more industrialized countries intend to promote the export of manufactures as a policy objective, but the measures to that effect are seldom studied in detail. For all practical purposes, import substitution rather than export promotion continues to be the dominant tendency of the industrialization policies followed by most of the relatively more advanced countries. This is explained in part by the fact that import substitution can be carried out by a developing country under its full control, whereas efforts to increase exports, whether of commodities or manufactures, may be hampered by external forces. Moreover, import substitution of consumer goods aims at satisfying a domestic demand increased by growing income, while export promotion may often tend at diverting, in part or as a whole, essential goods from satisfying domestic needs, an objective which may be particularly difficult to achieve in countries with relatively low living standards.

THE ROLE OF SMALL-SCALE INDUSTRIES AND HANDICRAFTS IN EXPORT PROMOTION

8. Since import substitution of manufactured consumer goods is the principal objective of industrialization in countries at early and intermediate stages of industrial development, that is, in the majority of the developing countries, policies to stimulate exports of manufactures and accelerate the development of domestic capital goods industries are usually introduced only when the former objective is considered to be achieved. Sometimes, this is tantamount to saying when there are manufactures to be exported. In most countries, however, there exist, long before import substitution is completed, numerous small-scale industries and handicrafts producing goods many of which, if certain conditions—discussed below—were fulfilled, could be directed towards the export market. Yet, with a few exceptions, even the countries having reached relatively advanced stages of industrialization are paying little attention to the export promotion of these goods.

9. It is a fact that, in the under-developed countries, most small-scale industries and handicrafts turn out products of a type, quality and price which do not meet satisfactorily the requirements of the domestic market, let alone those of consumers in the advanced

countries. The frequently noted preference, in the less developed countries, for the imported product as against the corresponding domestic one, is more often than not due to appreciable shortcomings of the latter.[1]

10. These shortcomings are due to the well-known weaknesses of small-scale industries and handicrafts —lack of technological and managerial knowledge, inadequate skill of labour, primitive or antiquated equipment, unsatisfactory premises and working conditions, use of poor raw materials, lack of information on markets, and so on—which tend to perpetuate themselves for lack of financial resources and inadequacy or non-existence of assistance, servicing, training and financing facilities.

11. The weaknesses and handicaps of small-scale industries and handicrafts create even greater obstacles to the export of their products than to their sale on the home market. The difficulties of producing, packaging, shipping and selling goods of a type, style, grade, quality and price fulfilling, demand requirements and trade conditions in a variety of foreign countries, especially in the advanced ones, are indeed formidable for individual small entrepreneurs frequently unable to meet satisfactorily less exacting conditions on their own markets. In the absence of joint arrangements between small producers and specialized servicing institutions, these problems are usually solved—as far as the small entrepreneur is concerned—in a wasteful and uneconomic way by wholesalers, middlemen and export traders who provide them with materials and finance, give them some guidance on products and processes, and secure an outlet for their output.

12. Until recently, there were considerable differences in the degree of attention paid to the promotion of small-scale industries and handicrafts in the industrialization plans and programmes of the developing countries. Since the early nineteen-fifties, the Governments of most of the countries of Asia and the Far East have consistently stressed the importance they attach to their development, and many of them have recognized that progress in this area was contingent upon provision of a broad range of measures to strengthen, protect, assist and serve small industrial establishments. In actual practice, the extent to which such measures have been introduced in countries of this region has been very uneven. In one country, a comprehensive, thoroughly integrated nation-wide programme has been steadily strengthened and expanded over a period of nearly fifteen years. In other countries, action has ranged from partial implementation of similar broad programmes to piecemeal introduction of a few incentives.

13. In Latin America, government action has been directed principally at supporting the establishment and modernization of heavy industries, processing raw materials and producing intermediate good, and large-scale manufacturing of consumer goods. The development of small-scale industries has been largely left to private initiative and effort. No country has developed an integrated set of promotion measures, though many have provided small enterprises with some assistance, mainly in the field of technology and financing.

14. In most of the newly-independent countries of Africa, efforts have been focused on the formulation of development policies and programmes and the establishment of machinery for carrying these out. Some Governments have stated that they would give high priority to the development of small-scale and medium-sized industries and there are indications that similar policies will be adopted in most African countries. There is widespread awareness in these countries that, for many years, the implementation of such policies will require foreign aid under multilateral or bilateral programmes rather than the creation of national assistance and servicing facilities.

15. Towards the end of the nineteen-fifties, many countries which until then had been little active in this area and some which had even shown scepticism as regards the contribution which small-scale industries could make to economic and social development came to realize that Government efforts to promote this sector were justified on many grounds.[2] To be fully effective, the promotion measures have to deal at once with all the problems of small-scale industries. Their purpose is to strengthen and assist small industries. Strengthening is done by locating them on common sites, in particular, in industrial estates, promoting co-operative and complementary arrangements among them, and encouraging the establishment of subcontracting relationships between them and large industries. Sustained assistance and servicing are provided by institutions especially set up for this purpose. Also, incentives and protection are provided by legislative measures.

16. Both the little developed and relatively advanced countries which, in growing numbers, introduce such measures, aim principally at raising the level of productivity and product quality and reducing production costs in new and existing enterprises as part of an effort to increase investment, production, consumption and living standards in the country.

[1] While there are undoubtedly cases of prejudice and consumer loyalty or habit, comparisons of quality and durability can easily be done on narrow markets offering only a few competing products of a given type. On such markets, consumers usually achieve their "education" rapidly.

[2] This viewpoint was endorsed by the Committee for Industrial Development in its report on its second session:

"The Committee recognized that accelerated industrialization in under-developed countries could be promoted not only by policies for setting up large industrial undertakings, but also by policies for encouraging the establishment of small, modern enterprises and the modernization and expansion of existing ones. In some cases, smallness was a stage in growth, as had been demonstrated in all countries by instances of increase in the employment, production facilities, and output of firms, originally set up as small units or workshops. In other cases, enterprises could, while remaining small, meet specific needs which did not require large-scale production or servicing, and achieve high levels of productivity and efficiency. Small-scale industries were a training ground for skilled labour and management. They could coexist with large undertakings, and, in some cases, compete successfully with them. They could also be economically linked with them by complementary relationships for processing and finishing their products and supplying them with parts and components. They permitted tapping local natural resources which otherwise would remain unused. They also permitted the mobilization of financial resources and provided additional employment. These objectives could be achieved by adopting measures to strengthen and assist small industries". (*Official Records of the Economic and Social Council, Thirty-third Session, Supplement No. 2*, document E/3600/Rev. 1, para. 70.)

There are reasons for considering that such measures could serve at the same time some of the objectives of an export promotion programme and, if they were successfully implemented and other, specific measures introduced, export promotion of small industry products could be a realistic policy objective even in many countries at early stages of industrialization. In other words, in such countries export promotion of small industry products could be undertaken without waiting for the completion of the process of import substitution of manufactured consumer goods. The implication of such a policy would be that some sacrifices in domestic consumption of small industry products would have to be accepted earlier than they would be otherwise. While it is recognized that the raising of saving and investment for economic development involves some restriction in the rate of consumption, the reduction in living standards which might result from an expansion in exports of manufactures in very poor and little developed countries might not be tolerated, and the introduction of such policies would be premature. However, in many countries at early stages of industrialization, where living standards are not excessively depressed and industrial development policies are actively pursued, a consumption-reducing export drive might be accepted, especially if the offsetting effects of import substitution are felt at the same time.

17. In most developing countries, especially in those at an early stage of industrialization, it may be expected that a relatively small part of small industry sector will contribute to export trade and only part of the output of the contributing enterprises will be exported. In creating an institutional framework—associations and co-operatives of small producers on the one hand, and servicing and assistance centres on the other—the primary objective will normally be to encourage the general development of small-scale industries—stimulating entrepreneurship, modernizing plant and equipment, raising productivity and lowering costs of production, improving design and quality of products, improving management, facilitating sales on the domestic market and so on. Basically, the export promotion measures taken in the exporting country are of the same type, but the improvements to be achieved as regards type, styling, grade, standards, quality, and packaging of the product and the commercial practices will respond to different and in many cases more rigorous requirements than those applying in the home country. Thus, much of the basic development work will serve export promotion but some specialized assistance will need to be provided. Where institutions such as government small industry departments, small industry service institutes, industrial extension centres, technological research institutes, productivity centres, industrial design centres, etc., exist or are being created, facilities for extending assistance to export industries should be included as part of their organization. Sometimes, however, this may not suffice, and a certain number of special institutions may need to be set up and encouragement be given to the establishment of export associations under private or mixed sponsorship. Whether such agencies and associations are or are not set up, the measures taken with regard to the domestic producers and exporters will have to be supplemented by action abroad. This will involve measures to improve general trade conditions, contractual arrangements with importers, and publicity. The establishment of special institutions for this purpose will sometimes be required.

18. In the next chapters, only specific methods and measures to promote exports of products of small industries and handicrafts are examined. Although, as already stated, the general measures to develop this sector are relevant, they are beyond the scope of the present study. Also, while measures may be needed to enhance the marketability and competitiveness abroad of products of large-scale industries, these will not be considered here. Large enterprises do not normally require the comprehensive system of institutions, incentives and protection which Governments set up or sponsor for small industries. The products manufactured by the large-scale industries are nearly always of the types prevailing on the world markets, and improvements in quality, reductions in cost, studies of market, contacts and publicity abroad and other necessary measures can normally be taken by the industries themselves with a minimum of special government assistance, at home as well as abroad. Large industries are usually the main beneficiaries of the trade agreements, tariff conventions and other general measures taken by the developing countries to expand foreign trade, and this aspect need not be examined here.

19. The discussion of the national measures to promote exports of small industry products, which forms the first part of the study, is presented under two main headings: promotion measures at home and abroad, respectively. Under the former, a brief review is made of the types of associations of small producers which are particularly suitable for promoting the export of their products. This is followed by an examination of the measures which may be taken by these or other institutions with a view to improving processes and products for export, improving management practices and export sales, and improving marketing information. This section concludes with a brief reference to government incentives and controls in the field under consideration.

20. Under the latter heading are examined measures to improve trade relations, contractual arrangements and publicity.

21. Most of the discussion is thus devoted to the measures taken, at home and abroad, with particular emphasis on the former, by the Government, the producers and exporters of the exporting country. Inasmuch as co-operation is also required on the part of the importing countries, particularly the advanced ones, the second part of the report is concerned with international action in this field, with special reference to that taken by GATT and the United Nations. In particular, it contains examples of technical assistance in the field of export promotion of small industry products provided to certain countries by the United Nations.

22. A discussion of industrialization policies in respect of import substitution and export promotion,

with special reference to the role of small-scale industries, formulated by the Governments of a certain number of countries at different stages of industrial development, is presented in an annex.

PART I. NATIONAL MEASURES TO PROMOTE EXPORTS OF SMALL INDUSTRY PRODUCTS

A. PROMOTION MEASURES AT HOME

1. *Special associations and institutions*

Co-operatives and associations under private sponsorship

23. The creation of co-operatives and other associations of small producers is aimed at providing them with some of the benefits and services, economies of scale and bargaining power of the large enterprises.

24. One type of co-operatives which might be formed by export manufacturers is the so-called "joint enterprise" co-operative association. In such a co-operative, members amalgamate their individual production processes and business operations in one unit controlled and managed by the organization. Members are small producers working in the same industry or participating in the manufacture of the same product, usually established at different locations. The co-operative is principally concerned with production operations.

25. Although such co-operatives are not very common in the developing countries, some efforts might be made to encourage their creation by export manufacturers. A particularly useful form would seem to be a joint enterprise co-operative grouping occupants of a "functional" industrial estate, who would produce parts and components for an assembling unit also located on the site.

26. More widespread—though certainly not as much as would be desirable [3]—are "common facility" or "common service" co-operatives, under which members maintain the separate identity of their operations, the organization providing one or several facilities or services which they all need, in the fields of processing, procurement, marketing or shipping. Such co-operatives are well adapted to supplying, in part or as a whole, many of the services needed to promote the export of small industry and handicraft products—representing export industries *vis-à-vis* government authorities, improving processes, products, and management methods, disseminating marketing information, and assisting in executing some of the formalities of export trade. It is possible that some co-operatives might also engage in contract negotiation and export operations proper.

27. Action in the field of export promotion of small industry products may also be taken by organizations of another type, also jointly set up by manufacturers—the industrial trade associations—frequently designated by a variety of other names such as industrial or manufacturers' unions, councils, alliances, federations, institutes, and so on. These are non-profit, voluntarily joined organizations designed to represent, guide and assist their members in areas of common concern. Industrial associations are distinct from co-operatives in that they do not undertake productive or commercial operations, but only auxiliary functions of common interest; moreover, they frequently serve the interests of industrial enterprises of all size, belonging to one industrial branch—sometimes manufacturing a specific single article—or to a broad industrial sector, and occasionally group together manufacturing, commercial, financial and shipping companies, with a view to co-ordinating policies and facilitating operations. Many exporters' associations in Japan belong to the latter category.

28. While provision of assistance in the field of export trade of small industry products can only be a minor function of the large "sectoral" associations created to represent and protect the interests of their members, specialized services in this field may be supplied by smaller "functional" groups. Examples are provided by the exporters' associations, quality control and export product inspection associations, particularly numerous in Japan; export trade associations making market surveys, providing advisory services and disseminating information, in the form of trade directories, journals, newsletters and the like; and associations with offices in one or several major importing countries, engaged in promoting sales and lending assistance to foreign importers.

Promotional institutions under mixed or public sponsorship

29. In the past decades, various types of collegial bodies called councils, boards, committees, etc., have been set up in many countries on the initiative of Governments to promote exports of manufactured products, in particular those of small-scale industries. The membership of these institutions includes representatives of the public administration, industry and related trades. Their functions are usually advisory and promotional and, occasionally, executive. They advise government and industry on export policies and practices, assist in implementing these, serve as liaison between government, industry and trade, sometimes including relationships with foreign importers, and provide services and information to the various parties involved in export trade.

30. The organization and operation of such institutions may be illustrated by a few examples. In May 1962, the Government of India established a Board of Trade under the chairmanship of the Minister of International Trade. The Board consists of economists, private personalities representing trade interests and senior government officials from various economic departments. The Board is an advisory body dealing with all problems bearing on the development of export trade. It reviews the need for establishing special agencies which may help export promotion and undertakes detailed studies of specific problems through expert sub-committees.

31. At an earlier date, the Government set up an Export Promotion Advisory Council which meets twice a year and reviews the general export policy of

[3] The reasons for the relative lack of success in creating co-operative associations in most developing countries would seem to deserve a special investigation which might reveal some remedial measures.

the Government. Regional Export Promotion Advisory Committees have been set up at Bombay, Calcutta, Cochin and Madras to make detailed studies of the export possibilities of manufactured products and commodities of importance to each region. The Committees divide themselves into small groups for the study of individual items, e.g., tiles, groundnuts, silk, hosiery goods, etc. The Regional Committees are presided over by prominent businessmen of high standing.

32. In order to provide guidance, encouragement and assistance to authorities, producers and tradesmen engaged in the export of specific goods, the Government has established separate Export Promotion Councils. There are fifteen Councils for, respectively, cashew, chemicals, cotton textiles, engineering products, leather, marine products, mica, shellac, plastics and linoleum, silk and rayon textiles, spices, sports goods, tobacco, processed foods, pharmaceuticals and soap. The services which they render include advice on markets, shipping procedure, etc., to newcomers to export trade, market studies, publicity through exhibitions, showrooms, etc., securing of samples from overseas for guidance to Indian manufacturers, assistance in the maintenance of quality standards and help in the settlement of commercial disputes.

33. Export promotion is an important function of Commodity Boards set up to encourage the production and trade of rubber, tea, coffee, silk, coir, handloom and handicrafts.

34. Special Development Councils have been set up to assist the growth of certain new industries. Some Councils have formed sub-committees for export promotion of such products as bicycles, internal combustion engines, power-driven pumps, pharmaceuticals and drugs, heavy chemicals (alkalis and acids), woollens, sugar, processed foods, fermented products and metals. Some of the products covered by these sub-committees are also dealt with by the Export Promotion Councils. The demarcation of functions between the sub-committees and the Councils is that the former attend more to the production aspects of export promotion while the latter deal principally with merchandising.

35. The Government of India has entrusted certain important responsibilities and tasks in export promotion to the State Trading Corporation, set up in 1956. Its principal role is to develop new export markets for certain products. It arranges for export where bulk handling and long-term contracting are advantageous, and facilitates the export of "difficult to sell" items through various devices such as barter deals. The Corporation serves private trade by bringing together buyers and sellers, assisting them in implementing their business contracts and using its good offices to settle disputes amicably.

36. The National Small Industries Corporation, an autonomous agency set up for the development of small-scale industries, has been providing assistance for the export of certain products manufactured by these industries. The most notable example is the organization of export of shoes produced by small industries to the USSR and East European countries. The Corporation undertook the responsibility for negotiation of contracts, inspection and prompt delivery, thereby eliminating profiteering by middlemen at the expense of small manufacturers.

37. The Indian Handicraft Development Corporation is another organization set up by the Government to provide assistance to handicraft producers and exporters. Assistance in the field of export promotion includes participation in foreign exhibitions, establishment of trade centres abroad for display of handicrafts, setting up selling agencies abroad, pre-shipment inspection of export consignments and financial assistance to exporters.

38. Similar organizations exist in other countries. For instance, there is, in Pakistan, a Handloom Export Promotion Board which, among other functions, provides guidance to a Design Centre set up by the National Small Industries Corporation, and advice to the Pakistan Standards Institution, e.g., for laying down specifications for various types of cloth for export. In China (Taiwan), a Handicraft Promotion Centre has been set up which, among other things, provides training for skilled handicraft workers, designs, tests and develops new products for export, and manages a model retail store catering principally to foreign traders and tourists.

39. Another type of organization is the Japan External Trade Organization (JETRO), initially set up in 1951 under the name Japan Export Trade Research Organization, and reorganized in 1958 and 1961. JETRO is an autonomous agency established by law, with a capital of 2 billion yen supplied by the Government. Its operating expenses are covered by a subsidy from the Ministry of International Trade and Industry. Its principal officers are appointed by the Minister.

40. JETRO has its head office in Tokyo, an annex in Osaka and branch offices in the main cities of Japan. Abroad, it controls seven trade centres (in New York, San Francisco, Toronto, Bangkok, Cairo, Sydney and Hamburg), five branch offices (in Chicago, Los Angeles, New Orleans, Hong Kong and Singapore), two machinery centres (in Mexico City and Bombay), and more than 40 research offices throughout the world: 33 research representatives are stationed in 28 major overseas market places, and research correspondents report from ten other areas. JETRO also utilizes the services of foreign professional trade research organizations. The major function of JETRO's overseas facilities is to advertise Japanese products. JETRO participates in all international exhibitions and the most important trade fairs.

41. While JETRO is empowered to promote the exports of all Japanese products—raw materials and other commodities, agricultural products and manufactures, whether produced by large or small industries —it has, actually, devoted most of its efforts to promoting exports of small industry and handicraft products. In this area, JETRO covers practically all aspects of export promotion, at home and abroad, either by direct action through its centres and branches, research and publication services and other facilities, or by guiding and assisting private export agencies, co-operatives and associations, and co-ordinating their activities.

2. *Improving processes and products* [4]

Design and styling

42. The requirements regarding design and styling of small industry and handicraft products for export vary with the type of product and demand conditions in the importing countries. The functional aspects of design are of considerable importance for consumer durables, producers goods and other articles for industrial or agricultural use. The decorative value of design is a major feature of novelty or specialty goods, certain textiles, and a majority of handicraft products, though it is generally considered that, for many articles in either category, functional soundness should be associated to aesthetic appeal and distinctiveness of appearance.[5]

43. All other things being equal, the design of consumer durables and producers goods for export will be relatively little influenced by varying demand requirements in the importing countries. It is probable that the largest market for such goods will be found within the under-developed areas rather than in the advanced countries. Design should therefore fit needs basically similar to those prevailing in the producing country. The main problem—generally considered to present major challenges as well as major opportunities to the developing countries—is to design and develop products adapted to the needs and resources of the under-developed countries themselves.[6] Some special aspects may however be important: the design of some of the goods considered may have to be adapted to fit certain foreign standards, to allow for interchangeability of spare parts, and so on.

44. It is hardly possible to make generalizations regarding the design of novelty goods and handicrafts, and to abstract this problem from those of quality, price and foreign demand conditions. United Nations technical assistance experts have commented on beautifully designed, modelled and decorated articles, many of which were of good craftsmanship and could, with relatively little effort, be exported towards the most discriminating markets, and others, equally well designed, which presented major shortcomings, especially in quality, uniformity and durability. Other products were found to be poor copies or imitations of old articles and often of new ones, lacking in inventiveness and originality, sometimes too plain, sometimes over-ornate and garish, non-functional, easily breakable, in particular in crating and shipping, etc.

45. In general, experts recommend that handicrafts should not produce articles competing with mass-produced machine-made items, and concentrate on products of distinctive appearance, based, as the case may be, on traditional, western or new models. They consider that the problem of design of machine-made products is in many respects similar to that of product standardization—that is, that size, grade, and quality are closely linked to design and functionality and should be such as to permit minimization of production cost and maximization of competitiveness with corresponding products of the advanced countries.

46. For designing and developing both types of products, experts recommend the establishment of design, research and testing institutions, training and marketing surveys abroad. Examples of such institutions are the Weavers' Service Centres set up by the All-India Handloom Board at Bombay, Calcutta, Madras, New Delhi and Varanasi, which carry out research on design, dyes, tools, production and finishing processes, etc. Also the Japan Pottery Design Centre, set up in 1956 under the joint sponsorship of the Japan Pottery Manufacturers' Federation and the Japan Pottery Exporters' Association, which, in addition to research and training in design, carries out product inspection and certification, provides advisory services and undertakes marketing surveys.

Quality

47. More attention has been given by associations, agencies and experts to the problem of quality of export goods produced by small-scale industries and handicrafts than to any other aspect of export promotion. Improvements in quality are linked to improvements in design, raw materials, standards, equipment, labour skill, production and finishing processes, storage, packing and other industrial factors and operations. In a way, it may be considered that the ultimate objective of the efforts undertaken by servicing, training and other institutions to overcome the basic weaknesses of small industrial enterprises is to improve the quality of their products and reduce their price.

48. From the standpoint of export trade, markets can be opened for goods of different grades of quality, provided minimum levels of acceptance by consumers are achieved. Such levels may vary from country to country, and depend upon a variety of factors ranging from income elasticity of demand to climatic conditions. For many products, it is far more important that they be uniform in quality than high in quality. Within certain limits, products of relatively low quality may find a market, even in the most advanced countries, provided they are sufficiently uniform and price is competitively adjusted. In extreme cases, however, this may give rise to "anti-dumping" and "anti-cheap-labour-product" campaigns which usually result in protectionist or discriminatory measures, not to mention the damage to the reputation of the products of the exporting country, which may not be limited to the incriminated articles. To compete effectively, the export product should be of a quality somewhat higher than the lowest quality of the competing product and its price lower or at least equal to that of the latter. This can only be achieved if productivity is raised through the integrated efforts emphasized in the present study. There is every reason to believe that quality and price competitiveness may be achieved by well-supported and assisted small enterprises engaged in production of low capital intensity, having low overhead costs and paying relatively low wages. The

[4] The question of the specific small industry products which are or could be advantageously manufactured and exported towards different markets is beyond the scope of the present study.

[5] A particularly obvious case is that of house furnishings and fixtures.

[6] See "Adaptation of Processes, Equipment and Products", United Nations, *Bulletin on Industrialization and Productivity* No. 6 (Sales No.: 63.II.B.1).

accruing comparative advantages might be stronger in exporting towards the high-income, high-price industrial markets with a diversified structure of demand than towards the markets of the underdeveloped countries—a paramount objective of export promotion policies aimed at expanding foreign exchange resources.

49. It is increasingly recognized that, to gain acceptance and compete effectively on foreign markets, export articles should conform to precise standards formulated in the exporting or the importing country, or to certain international standards, and relating to types, dimensions, quality, safety and other features of the product. Such norms are developed by national and international standards institutions and by large companies. Their application involves use of quality control procedures, the results of which, as will be seen below, are often guaranteed and publicized through pre-shipment inspection schemes, quality certification marking schemes, voluntary or compulsory, labelling and other methods.

50. Quality control is the methodical application of inspection, testing and related procedures to products and processes with a view to ensuring application of quality standards and specifications. The main methods are acceptance inspection, prevention of defects and quality verification.

51. In little or not mechanized processes such as those used by handicrafts and cottage industries, process control can hardly be applied and quality control consists mainly of inspecting incoming materials and end products. United Nations technical assistance experts report that, in mechanized small-scale industries, quality control, when it exists, is usually performed only at the end of the processing stage: the outgoing product is inspected to compare its quality with predetermined specifications. In the absence of controls at earlier stages of manufacturing, such an inspection usually leads to a high rate of rejection of finished products, with consequent rise in unit costs and prices, and probable restrictions on the export opportunities for the product. All experts recommend that controls be extended to cover the major stages of production, so as to take remedial steps long before reaching the final stage when the product is no longer liable to improvement. While relatively simple methods may be applied in small plants by specially trained workers, scientific testing need to be undertaken by special institutions, with laboratory facilities and highly skilled personnel. A co-operative form of organization is often recommended for voluntary quality control institutions.

52. Co-operative quality control may also help to solve a difficulty often encountered in enterprises which incorporate in their product appreciable amounts of parts and components manufactured by other industries. Co-operative quality control will ensure the conformity to standards of both the components and the final product.

53. The introduction of quality control in small-scale industries is encouraged, in the developing countries, by quality control societies, productivity and service centres, co-operating associations and other agencies, most of which also provide training and advisory services.

54. For obvious reasons, certification systems, discussed below, are implemented by agencies independent from the manufacturers or commercial export houses.

Certification marking

55. A certification mark is a guarantee given by a competent agency independent from the producer or the exporter that the goods have been inspected and tested against precise standards by or under the supervision of the agency. The latter is either a special body created for the purpose, or a national standards institution; special legislation is usually enacted to enable these bodies to register the marks and operate the schemes. Certification marking presupposes that quality control procedures are applied by the export industries and the inspection and/or testing made by the controlling agency are further applications of these procedures.

56. Certification marking may be compulsory or voluntary, and the inspection and testing methods may be direct or indirect.

57. Compulsory certification is usually required for articles for human consumption or application which may affect health or safety, such as drugs and medicines, toilet and cosmetic articles, food-stuffs, poisonous substances, explosives, etc., and, in many cases, for products considered to be of special importance in export trade. In the latter case, the purpose is to prevent the shipment of defective or inferior products, which might cause lasting injury to the country's exports in general.

58. Voluntary certification is not an alternative to compulsory certification and is generally given considerable encouragement. The certification system is in itself a strong incentive for producers to introduce and maintain quality control, since obtaining the mark may become a virtual prerequisite to making any substantial sales abroad, especially in the advanced countries.

59. Under the direct certification system, the authority makes a systematic inspection, either at the production stage or at the pre-shipment stage, of products or shipments of products for export, and applies itself its mark to the products passing the inspection.

60. Under the indirect system, which is not, again, an alternative to the former, the manufacturers or exporters themselves are given the responsibility of applying the certification mark, when the authority is satisfied that products are manufactured (and packed) under conditions ensuring conformity to standards. The authority prescribes to the enterprise specifications and regulations regarding materials and supplies, equipment and its maintenance, processing techniques, quality control procedures, etc. It helps the enterprise in the application of these regulations and, after a trial period, allows it to register, by doing which the enterprise commits itself to maintaining the prescribed standards. In addition to an annual registration fee, manufacturers may be required to deposit a sum of

money as a pledge against misuse of the marking privilege. Unannounced spot checks are made by the authority's inspectors, which may cover every aspect of production, from state of premises to quality of goods in process or in stock. Misuse of the mark may lead not only to withdrawal of the privilege but also to fine and imprisonment.

61. Under either system, standard contracts are passed between the authority and the manufacturer or exporter, stating conditions, procedures, fees, arrangements for arbitration of disputes, and so on.

62. Both systems have advantages and disadvantages: for example, the direct system offers a better guarantee of conformity to standards but is more costly to operate than the indirect system; on the other hand, the indirect system may reach wider circles of producers and serve as an incentive to improve productivity and spread quality control. However, as already stated, the systems are not alternatives: they apply to different types of enterprises and manufactures. Direct certification is particularly appropriate in the case of products having to conform to strict—and frequently compulsory—quality or safety standards, imposed either by the exporting country or the importing one. It is likely to be the only feasible system for certifying the quality of products of handicraft and cottage industries, where, as mentioned earlier, the introduction of process quality control is impracticable or uneconomic. Indirect certification is advisable for products which do not require compulsory inspection, or which need to meet national standards only, or which involve relatively complex manufacturing processes calling for multiple quality control operations in the factory. In practice, there may be advantages in setting up first a direct certification scheme in a developing country, so as to gain experience of the operation of the system, and let it serve as a "demonstration project" stimulating the interest of industrialists for the other type of scheme.

63. As a result of the inspections and tests performed by the authority, a certification mark [7] is affixed onto the approved product, accompanied or not by an inspection certificate. The mark or marks —different types of marks may correspond to different grades of quality—consist of tags or labels with various combinations of words, numerals and symbols. Inspection certificates provide indications regarding the authority performing the inspection; techniques and procedures followed in testing; the producers' or exporters' brand names or trade marks and the identification marks of the inspected lot or shipment; and the standards and specifications prescribed for the product.

64. The mark affixed onto the product or the package is conveyed down to the ultimate consumer or user. Especially when no inspection certificate is provided, the value of the mark is a function of the confidence attached by the importers or consumers to the testing and inspection methods and acceptance standards of the authority. It is therefore important that adequate publicity be given, through a variety of media reaching importers and the general public, to the certification methods and the guarantees implied by the marks. It does not seem that this aspect has so far been given enough attention.

65. Export standardization and quality control have been pioneered in Japan. In 1948, the Government enacted the "Export Inspection Law" (amended in 1957) under which a number of agencies were set up to conduct compulsory pre-shipment inspection of certain products designated in the Law. As of 1959, the Japanese Government authorities have designated 145 items subject to compulsory control before export, accounting for about 40 per cent of the country's total exports. The products include machinery and metal manufactures, chemical products, textile goods, agricultural, forestry and marine goods, medicines and medical instruments and sundry manufactures. A large part of the items or parts thereof are manufactured by small-scale industries, either independently or as sub-contractors of large concerns.

66. All of these goods are subject to compulsory inspection in respect of product quality, including appearance, structure, size, function and related features, and packing. Some products, e.g., rayon and cotton fabrics, velveteens and corduroys, are subject, in addition, to inspection of materials and manufacturing processes prior to finished product inspection. Special packing standards are applied to certain goods, for instance silk and rayon fabrics. Several quality grades are distinguished and corresponding marks affixed. The 1957 Export Inspection Law provides for standards higher than average for products to be exported towards particular export markets.

67. In 1959, in addition to six government organs with a staff totalling more than 1,000 persons, 39 private organizations with a total staff of over 3,500 were functioning as export inspection authorities recognized by the Government. These private organizations are independent of industry and trade and are subject to Government's control and supervision in regard to financial position, premises, equipment, personnel, and testing and inspection facilities and methods. Some of them deal exclusively with small industry products, e.g., the Japan Pottery Inspection Association,[8] the Japan Mechanical Toy Inspection Association, the Japan Floor Covering Inspection Institute, etc. Most of these organizations also provide testing, inspection and marking—with different marks than those applied under the law—upon request of manufacturers, sellers or buyers. The law states that such activities should not hinder those undertaken under the compulsory system.

68. Compulsory inspection is financed by fees charged to manufacturers or exporters. The fee is determined by government order in each specific case; according to the Law, it cannot exceed 1 per cent of the f.o.b. value of the shipment.

69. The law designates also a number of products, certification of which is entrusted to producers and exporters. The products include diesel engines for railway vehicles, viscose staple fibres, rayon filament

[7] Also known as quality mark, seal, stamp, label and the like.

[8] It is of interest to note that this Association has prescribed double standard specifications for dinner sets and dinner ware according to whether these are to be exported to North America or to other areas.

yarns, electric poles, railway timber and other producer goods. Export standards are laid down in detail by Ministry ordinances. The manufacturers and exporters are authorized to label the goods as "Export Standard". Spot checks are made by government authorities and violations are punished by fines up to 300,000 yen and imprisonment up to a maximum term of three years.

70. In India, the Indian Standards Institution has prescribed and published quality standards for over 2,000 items produced in the country, including several export products like plywood for tea-chests, aluminium utensils, enamelled ware, cutlery, batteries, radios, fans, etc., many of which are produced by small-scale industrial units. The Institute has been empowered to grant licences to manufacturers for use of the ISI certification marks. The ISI certification marks scheme is of the voluntary type, but is capable of being compulsorily administered as was done in the case of aluminium utensils when the Government received several complaints about poor quality of exports.[9]

71. In order to maintain the quality of Indian exports and packing, the Government has enacted legislation providing for quality control and pre-shipment inspection of export products. An Export Inspection Advisory Council has been set up to advise the Government on these matters.

72. Some of the compulsory quality control schemes are operated under the Agricultural Produce Grading and Marketing Act which empowers the Government to prescribe specifications for various agricultural commodities and make suitable arrangements for grading.

73. In China (Taiwan), an Industrial Standards Committee was set up in 1931; in 1947, it was merged with the National Bureau of Weights and Measures to become the National Bureau of Standards. As of the end of 1962, the Bureau has promulgated more than 1,500 standards for manufactured goods, many of which are exported. The export of manufactured goods which are not in conformity with national standards is banned by the Government. Inspection of export products is administered by the Provincial Bureau of Commodity Inspection and Quarantine.

74. Some voluntary quality control schemes relating to certain export products are organized by Export Promotion Councils and Industry Boards, often in co-operation with state government authorities. For example, the Leather Export Promotion Council has devised a pre-shipment inspection system to guarantee conformity of leather goods with trade accepted standards. Manufacturers and traders willing to join the scheme register with the Council. They agree to apply prescribed standards, to use quality control methods and to mark their goods according to grades of quality, e.g., in the cases of tanned leather, "prime", "semi-prime", or "single tannage". Chemical tests are made by the manufacturer, the Council or recognized laboratories. When preparing a shipment for export, the registered manufacturers or exporters submit a standard declaration to the Council prior to packing, to facilitate inspection. Inspection is made by sampling pieces from one out of five bales or consignment lots; the pieces are sent to laboratories for chemical analysis, the results of which are registered and copies of reports are made available to exporters.[10] A system of sanctions is in effect in case of discrepancies between the exporter's declaration and the result of the analysis, which ranges from warning to cancellation of registration of the trade-mark, with notification to overseas trade organizations. Fees are charged for the inspection and analysis.

75. Voluntary quality control schemes have been developed by the All-India Handicraft Board for such products as printed cotton textiles, brocade and artistic silk goods, saris, gold thread and carpets. Inspection depots with laboratory facilities and technical staff have been set up in a number of centres of production of such handicrafts. The staff of the depots provides technical guidance and advice to the producers. Quality seals are affixed on the inspected products. Compulsory certification exists for certain products intended for export to certain markets, for instance, druggets [11] for export to the United States.

Packaging and crating

76. Packaging of products and bulk crating for shipment are important operations in export trade, and are, in many cases, defined by standards and subject to quality control. The design of certain items is sometimes influenced in part by packaging requirements, as is the case, for instance, of furniture designed to be "knocked down" or "nested" for export shipment, and re-assembled in the importer's country. Distinctive appearance in package labelling may be a sales promotion factor for certain products.

3. *Improving management and sales*

Producers and exporters

77. The commercial arrangements for export of small industry products are made by the manufacturer himself or, in the majority of cases, by merchants or export houses. These are profit-making enterprises which purchase goods from individual manufacturers or co-operatives and associations, and sell them for their own account, not infrequently under their own brand. Commercial operations are also carried out by export agents who handle non-competitive but more or less related items on a commission basis. In both cases, exclusive selling rights are sometimes granted in counterpart of preferred treatment or special services.

78. These types of arrangements, which relieve industrialists of risks and responsibilities inherent to export trade, are of primary importance in most developing countries.[12] While export merchants and agents have usually considerable knowledge of foreign markets, this may be confined to relatively narrow

[9] On standardization in India, including standardization for export, see "Standardization in a Developing Economy", by Lal C. Verman, in *Industrialization and Productivity*, Bulletin No. 7 (Sales No.: 64.II.B.1).

[10] In case of dispute, the sample is analysed by the Central Leather Research Institute of India, which takes a final decision.

[11] Rugs with cotton warp and wool filling.

[12] Government foreign trade monopolies have been set up in certain countries.

groups of articles. As manufacturing for export grows and becomes more diversified, they will need information on new marketing opportunities as well as particulars of the new products. Provision of such information by trade, marketing and other agencies should evidently accompany the expansion of export trade. This question will be examined below.

79. Not infrequently, co-operative associations of manufacturers set up to facilitate production tend to branch out in other fields, in particular in procurement of raw materials and marketing, as a rule on the domestic market. It might be useful to undertake a study of the feasibility and prospects of orienting production and marketing co-operatives towards commercial export operations. It is likely that only co-operatives having attained a firm hold over domestic marketing would be able to undertake contract negotiations and actual export sales, whether as sales agencies for the account of members, or trading firms purchasing and selling the members' products on their own account. According to some reports, marketing is frequently the weakest function of co-operatives in the developing countries.

80. A number of auxiliary services are commonly rendered by co-operatives of export manufacturers to their members: among these are provision of documentation accompanying shipments (export licences, certificates of origin, consular invoices, bills of lading, freight insurance policies, etc.), compliance with formalities relating to clearance of goods with customs and port authorities, collection of remittances in foreign currencies, and assistance in correspondence and other administrative matters relating to foreign trade.

81. A form of joint venture which arouses considerable interest in certain industrial countries, in particular in the United Kingdom, and is being introduced in Japan, is that of the export group.

82. Apart from differences in legal status, export groups are distinct from co-operatives in two main respects. First, they are exclusively concerned with export trade, and their members retain full independence in all industrial and business operations not directly related to export. Second, they are formed by a number of industries, large and small, but often with a predominance of the latter, engaged in the production of different but usually related, sometimes complementary and in most cases non-competitive types of goods, including handicraft articles. For example, an export group founded by a big manufacturer of women's dresses was joined by producers of lingerie, scarves, belts, shoes, costume jewellery and other accessories. Groups are also formed by producers of small machinery and related equipment, appliances and tools, of home furnishings, of household appliances, and so forth. The objective common to members of the group is to secure export markets through joint arrangements which may combine representation, negotiation, shipping, advertising, exhibitions, and other action, or may be limited to co-ordinating the members' sales policies and operations, actual implementation remaining each member's personal responsibility. While grouping closely related lines of articles evidently facilitates joint action, the system might also be used by small producers engaged in different lines of manufacturing or handicraft, but having some common interests or some common features with a potential sales appeal, as may be the case, for instance, of handicraft producers of a given locality or region. Export groups are normally non-profit making associations. Surplus funds, if any, are generally used for further sales campaigns.

83. The Indian Government has recently begun to encourage the formation of "export houses" by groups of exporters. The Government is prepared to give recognition to export houses having a broad programme of export including financing of production for exports, market surveys, participation in fairs and exhibitions, advertising, after-sales service, warehousing and repacking in foreign countries. Recognized export houses obtain, as necessary, allocations of foreign exchange and assistance in establishing offices abroad and developing contacts with foreign buyers.

Commercial practices

84. The reports of United Nations technical assistance experts provide numerous examples of deficiencies in the management of small-scale industries which have unfavourable repercussions on the sale of their products, especially on foreign markets. Thus, manufacturers fail to provide samples of their products, send them too late or do not keep duplicates of sample lines supplied to prospective buyers, with the result that, after orders are placed, the goods delivered do not conform to the sample, e.g., because modifications requested by the importer have not been complied with. In some cases, sales were lost because hand-tooled samples could not be satisfactorily mass-produced on machines. A frequent occurrence is non-conformity to the sample in terms of quality, colour or other characteristics, because of lack of quality control.

85. Another example provided by an expert relates to failure to provide information on the lines of goods which could be supplied by the manufacturer. The expert comments as follows on some textile samples displayed in New York:

> "There were no distinguishing labels which would serve as an advertisement for the quality of the product. Information as to whether textiles could be made in widths or bolt yardage other than those stated on the sample, and if so, at what price, was needed. Details were lacking as to cloth construction, i.e., width, count of warp, count of weft, reed, picks, weight for square yard, whether pre-shrunk and whether vat colours."

86. Delays in production and delivery, partial filling of orders, complete failure to produce or deliver, damage, decay or destruction of goods in storage or shipping, supply of stained or dirtied articles, and even shipment of articles other than those ordered, are among the most extreme faults noted by experts in the commercial practices of a number of small-scale industries. Needless to say, experts also observe many cases of sound business operation, and

all of them insist on the eagerness of small industrialists to improve their methods.[13] All experts recommend the establishment of institutions to train management and employees in accountancy and cost accounting, filing and other business methods, the introduction of work study and quality control at all or several stages of operation, and so on. In India, the Government has begun to provide training to small exporters in techniques and practices of export trade and to assist them in obtaining and completing business contracts. An Export Aid to Small Industry (EASI) scheme is currently being implemented on a pilot scale by the State Trading Corporation of India with the assistance of the Small Industries Service Institutes. Assistance is given in the choice of export products and level of quality, presentation, marketing, documentation, pricing, preparation of sales literature and credit problems. Trained field officers and supervisors have been appointed in each of the sixteen Small Industries Service Institutes for this purpose.

87. One serious deficiency which may deserve to be more closely examined in the present report than the general shortcomings mentioned above relates to price quotation and pricing policies for export. Experts report that small industrialists and handicraft owners often give quotations to prospective buyers without indicating whether prices are at factory or delivered to the importer, whether they include or not the cost of packing, transportation, insurance, and so forth, whether discounts would be granted for larger orders, and whether alternative terms of payment might be offered.

88. Moreover, many price quotations are found to be over-estimated and even occasionally under-estimated. Experts report that the prices most often quoted are the retail prices in the country of manufacture.

89. Pricing for export is not an easy problem anywhere, but, in many under-developed areas, it may be a real challenge. The major drawback, of course, is the inability to obtain a precise picture of manufacturing and distribution costs and a break-down between fixed and variable costs for any given product, because of lack or inadequacy of knowledge of cost accounting. The difficulty is compounded by the fact that costing should take into account varying volumes of orders which might be reflected in different degrees of utilization of capacity, and different possible terms of payment. The mark-up on the computed total unit cost might vary according to the conditions of the importing countries, the need for sales promotion and other factors.

90. Experts report that, in practice, trade discounts graded according to the type and scope of services extended by wholesalers or retailers, or quantity discounts, cumulative or non-cumulative, to distributors or buyers, are seldom being granted. Also, because of their precarious financial position, manufacturers usually insist on as prompt a payment as possible. Some handicraft producers go as far as to request payment on order or against delivery—conditions which are usually hardly acceptable to importers.

91. Some of the above problems could be solved for producers by specialized services of co-operatives and other associations or assistance agencies, but a fundamental problem would still remain—the financial weakness of small establishments. Some aspects of this problem relating to export trade are examined in the next section. Before returning to it, another problem relating to pricing policies may be briefly discussed—the question of export price stabilization, and, in particular, that of prevention of excessive competitive price-cutting.

92. Minimum export prices—alone or combined with export quota—are frequently adopted for goods, mostly primary commodities and agricultural products, subject to strong seasonal, cyclical or occasional price fluctuations. The objective is to prevent excess price-cutting among competitors, speculation and short-selling, which are associated with these fluctuations and which tend to aggravate the country's position on the export markets.

93. In some countries, minimum export prices are being introduced for manufactured products, especially those made by small-scale industries, to prevent price wars between these on heavily competitive foreign places characterized by "buyer's market" conditions, that is, markets on which the importer's choice is the more active force and exporters compete intensely against each other. Minimum prices are determined either by legislation or by export associations or agencies, with Government encouragement and supervision.

94. Export quotas are usually introduced to allocate among national producers shares of a predetermined maximum amount of product exportable to a given country, to face import restrictions adopted by the latter. A major purpose is to avoid price competition among national producers on such a restricted market, since this might induce the importing country to set up even stronger trade barriers.

Financing for export

95. The difficulties of small-scale industries in obtaining financing, whether for investment in plant and equipment or working capital are well known, and measures to facilitate credit, including establishment of special financial institutions, have been adopted in many countries.[14] The financing difficulties of small industries manufacturing for export appear to be even greater than those confronting producers catering to the domestic market.

96. One difficulty, due to financial weakness and to the uncertainties involved in foreign operations, is that industries producing wholly or in part for export tend, more than those selling only on the home market, to produce on order rather than to produce for stock.[15] As a result, they can hardly take

[13] The accent on shortcomings, which is a striking feature of a great number of technical assistance reports, is actually in line with the assignment of the expert, which is to make a diagnosis of specific situations calling for remedy and improvement and to make recommendations to that end.

[14] See "Financing of Small-scale Industries in Under-developed Countries", United Nations, *Bulletin on Industrialization and Productivity No. 3* (Sales No.: 60.II.B.1).

[15] Certain highly specialized small handicraft workshops work exclusively on order.

prompt advantage of new export opportunities and to choose between them, and, in many instances, export marketing is a precarious, unstable and occasional business, yielding small returns and expanding slowly. Thus, lending institutions may be reluctant to finance small export manufacturers because of higher than average risks.

97. Another difficulty, which confronts producers and export merchants, stems from the already mentioned fact that, for an increasing number of manufactured goods, the international market is today a buyer's market. Competition between export manufacturers or exporters may result not only in price cuts, but also in granting buyers very favourable terms of payment—a concession tantamount to extending them cheap financial credit. Because of the shortage and high cost of credit at home, this may put manufacturers and exporters of under-developed countries at a disadvantage even when they succeed in competing effectively on a price basis. The disadvantage may be particularly serious in the case of durable consumer goods in the trade of which concessions may go beyond what is ordinarily called short-term credit.

98. Finally, export trade involves heavy commercial and promotional expenses, particularly abroad—travel, display and exhibition of lines of goods, advertising, even, occasionally, establishment of facilities abroad for after-sale servicing, etc., all of which contribute to increasing financial needs and lengthening the rate of turnover of the working capital.

99. Thus, in many cases manufacturing and marketing for export will involve, in comparison to producing and selling the same article on the domestic market: larger needs for working capital, both for production and marketing; a slower rate of working capital turnover and, consequently, a need for longer terms of credit; more and higher risks for the lender; and, as a result of the preceding, higher rates of interest.

100. It does not seem that the special financing needs of small export manufacturers and exporters, whether individual enterprises or co-operatives or associations, have been sufficiently taken into consideration in export promotion programmes. Further studies of means to provide such financing in economic conditions would be useful. In many cases the measures would include the establishment of special facilities in commercial banks or the creation of specialized lending institutions, which would extend "supervised credit", in particular in connexion with certification marking schemes or other forms of control or inspection. Credit guaranteeing schemes have been adopted, in some countries, e.g., the Export Risks Insurance Corporation set up in India in 1957 to encourage export on credit terms, and to insure Indian exporters against certain commercial and other risks resulting in non-payment by foreign buyers. India has also entrusted the Handicraft Development Corporation with provision of loans at low rates of interest to producers and exporters of handicraft articles. The provision of special credit facilities for export is part of the EASI scheme referred to earlier in this report. Grants-in-aid are provided by a Special Marketing Development Fund for certain export promotion programmes, e.g., sending trade delegations, study teams, making market and area surveys, commodity surveys, export publicity and advertisements abroad, commercial intelligence, documentary films, and opening offices in foreign countries.

Other sales promotion measures

101. Co-operatives, associations and agencies dealing with export of small products frequently lay down "codes of conduct" for their members, usually expressed in the form of standard export contracts between manufacturers and domestic exporters or foreign importers or their agents. The contracts specify terms and conditions of manufacturing and sale, including rights and obligations with respect to price, quality, tolerance, delivery, terms of payment, and settlement and arbitration of commercial disputes.

102. Joint agreements are also made to implement regulations concerning minimum export prices and allocation of export quotas.

103. Among the sales facilities provided by co-operatives and associations, and sometimes by government agencies, are warehouses, storage depots, showrooms, and packing and shipping services. Emporia and retail shops are set up in India, China (Taiwan) and other countries, by various organizations grouping or servicing handicraft and cottage industries. Exhibitions of products are organized in important tourist or trade centres.

104. A new type of facility which might in some cases be set up by groups (or federations) of export manufacturers might be aimed at providing assistance to foreign buyers visiting the country. Among the services which might be rendered might be, besides provision of information, supply of temporary office space, interpreting, stenographic and clerical assistance, telephone, automobile transportation, organization of visits to producers, exporters, show-rooms and sales-rooms, and assistance in further business travel. Services of this type are provided, for instance, by the Netherlands Export Combinatie, an association grouping some 200 Dutch export manufacturers.

4. *Improving marketing information*

105. Leaving aside the general need for statistical offices, economic research departments and agencies and other information, intelligence and research facilities, which is felt in all developing countries, special marketing information should be collected, analysed and disseminated for use by manufacturers, exporters and importers, by a variety of agencies which may include government departments, co-operatives, associations, private or semi-public marketing institutions, and so on. As already pointed out, the need for such information will become increasingly pressing if export trade is to expand in volume and in scope.

106. The review of export promotion measures contained in the preceding pages gives an indication of the considerable range and amount of the information which should be made available if improvements

are to be made in the production, processing, management and sales of small-scale industries producing for export.

107. A far from exhaustive list of main topics would include: domestic, foreign and international policies and regulations relating to export and import trade; tariffs, quotas, foreign exchange regulations, controls and procedures; trade agreements; prices of raw materials and manufactures and freight rates; domestic incentives to export and foreign restrictions on import, customs duties and other charges; technological research on new products and materials; standards, quality control procedures, certification marking schemes, patents legislation, design, brand name and trade mark protection; export and import agencies and facilities; advertising facilities; market surveys, marketing opportunities; and so on.

108. The media by which such information may be made available, at home and abroad, are numerous: pamphlets, journals, bulletins, newsletters, industry survey reports, trade mission reports, directories of suppliers, exporters and foreign importers, catalogues, etc. Bureaus of inquiry are set up by many associations providing advisory and consultative services; according to the volume of research involved, the information is provided free or at a nominal fee.

109. Among the most important media are trade directories or guides. These are compiled for free distribution to domestic exporters and foreign importers, national and foreign embassies, consulates and trade centres. Publication is often financed through advertising charges.[16]

[16] In their simplest form, directories and guides provide names and addresses of export manufacturers and traders and indications on the lines of products which they supply. More elaborate publications may include data on manufacturers' production capacity, quality standards and specifications, various statistical data such as employment, output, export, and so on. Price quotations, as a rule, are not included, in order to avoid misrepresentations due to price fluctuations and other factors. Among the sources of information of importance to domestic manufacturers and exporters are special trade publications and journals issued by co-operatives, associations and other agencies. To give a few examples, the following publications have been prepared by some of the Indian Export Promotion Councils:

The Engineering Export Promotion Council has published a booklet—*Things an exporter should know*—which describes procedures and practices relating to pricing of export goods, preparation of goods for despatch, methods and means of shipment, customs and exchange control formalities, documentation required to accompany shipments, negotiation of shipping documents, and terms of payment. A similar pamphlet has been published by the Silk and Rayon Export Promotion Council under the title *How, what and where to export?* Another booklet issued by the Engineering Council —*Customs practices and formalities in various countries*—provides information on currency and exchange rates, import and exchange controls and shipping documents required with imports, for some 80 countries throughout the world. The same Council issues a series of small pamphlets, under the title *Hints to business men visiting* ..., each relating to a particular country and providing detailed information and statistics on population, geography and climate, transport and communication, as well as practical matters such as travel documents required, holidays, hours of business, postal services, accommodations; external trade and economy, with statistics on production and imports; foreign exchange system and terms of payment; import procedures, customs warehouses; shipping documents and debt collection; advertising media and organizations; government and other public purchasing departments. The Silk and Rayon Textiles Export Promotion Council issues a series of pamphlets, *Export markets at a glance*, which provide, for various countries, statistics on domestic production, volume and varieties of imports, hints at consumers' tastes and preferences, types of trade channels, buying seasons, packing requirements, and publicity media. Reports on the findings of trade delegations which toured various areas were put on sale by the two Councils just mentioned and by the Cotton Textiles, the Plastics and Linoleum and the Chemicals and Allied Product Export Promotion Councils.

Some of the Councils have published, or are in the process of publishing, directories and trade guides. In 1960, the Indian Cotton Textile Promotion Council published a *Handbook* designed "to serve as an exhaustive reference book for the textile trade in India and overseas". The publication opens with an introductory article describing the current situation and recent developments of the cotton textile industry in India, including its export accomplishments in various countries, the functions of the Export Promotion Council, and the system of pre-shipment inspection of cotton textiles. Detailed information is provided on cotton mills, textile processors, hosiery, apparel and miscellaneous cotton textile manufacturers, including, for each manufacturer: name and address, including telegraphic address; type of equipment used, with details concerning types of spindles and looms installed; type of products manufactured, with detailed specifications concerning the count range of yarn spun in the cotton mills and the cloth width in the cotton textile processing plants. There is also a list of textile exporters and a list of the Export Promotion Council's offices abroad. The handbook contains a statistical appendix on production and export of cotton manufactures.

Among periodicals may be mentioned the *Indian Engineering Exporter*, a monthly journal published by the Engineering Export Promotion Council of India, Calcutta, with "the primary object to keep overseas buyers informed of the range and type of engineering goods India produces and is in a position to supply to countries overseas". In 1963, the journal listed 184 products available for export, covering a variety of machines and accessories, household and other appliances and fixtures, vehicles and parts, and so on. Among other features, each issue provides a detachable form which prospective buyers are invited to fill in and mail to the Inquiry Department of the Council. The Department then puts the inquirer in contact with the appropriate manufacturer or exporter who supplies price quotations and other information on the products. The Leather Export Promotion Council, Madras, publishes a monthly journal entitled *Leathers* which, like the above-mentioned one and other publications of this type, contains news and information of interest both to foreign importers and national producers and exporters.

A *Handbook of Export Promotion* has been published by the Directorate of Commercial Publicity, Ministry of International Trade, Government of India (New Delhi, fourth edition, November 1963). The handbook provides information on institutional arrangements, export policies and procedures, facilities available to exporters, and trading practices.

5. *Government incentives and controls*

110. The foregoing review shows that the implementation of most of the export promotion measures discussed so far calls for various degrees of government intervention. The Government may either take direct action or give some encouragement to private groups, or both; it may participate in schemes under joint sponsorship and give legal, administrative or financial support to a variety of projects. In the particular case of export promotion, as in the more general one of promotion and development of small-scale industries, the main objective of the Government is usually to stimulate and eventually assist further private initiative.

111. A number of export promotion measures, however, are within the exclusive competence of the Government. This is the case of the fiscal and financial incentives to small manufacturers and exporters, special measures to protect small industries, e.g., against the competition of, or subordination by large-scale industries, or against damaging competition among themselves, negotiation of trade agreements, and similar types of action calling for legislation or negotiation of treaties.

112. The most common devices of export promotion by Government are (*a*) removal of restrictions and disincentives and (*b*) provision of positive inducements and incentives. Sometimes, export restrictions and quota systems introduced under special circumstances may become disincentives to exports. A careful

examination of the export-import rules and procedures may reveal some important factors inhibiting the expansion of export trade. Some measures adopted by Governments for the promotion of exports are discussed below.

Simplification of administrative procedures and regulations

113. Elaborate administrative procedures and multiplicity of administrative agencies are the despair of all exporters, and more so of the small-scale industrialists. The small entrepreneurs do not generally have managers or advisers able to handle their export problems and have to rely on their own, usually limited, knowledge and resources. The natural tendency on their part is to avoid the troubles, complications and risks involved in export trade and to be satisfied with the comparatively easier domestic markets. Simplification of administrative procedures and methods is therefore one of the first steps to be taken by the Government to induce the small industrialists to enter the export field. Some developing countries, notably India, have introduced simplified procedures and established regional and decentralized authorities such as those discussed earlier, to lend assistance to manufacturers and exporters.

Fiscal incentives and measures

114. Among the most common fiscal incentives and measures introduced by Governments for the promotion of exports are drawbacks on import duties, rebates or refunds on excise sales tax and other such levies and bonuses and import entitlements on the basis of exports. These fiscal measures, whatever shape or form they may take, are in effect subsidies for export. Export subsidies for small industry products evidently help to sustain price competition not only with similar products from other developing countries, but also with those manufactured in the importing country itself. There are, however, reasons suggesting that this device should be applied with great caution. In the first place, the granting of export subsidies, especially by Governments of countries where wage levels are relatively low, is generally considered on the markets of the industrial countries to be unfair practice, and consequently generates pressure to apply discriminatory measures and strengthen trade and tariff barriers. In the second place, export subsidies are usually meant to offset the inability of the producer to reduce his prices to a competitive level, which, when overheads and wage rates are low, is a clear sign of poor productivity.

115. However, fiscal measures and incentives have proved to be very effective in promoting exports and may remain a fairly permanent feature for certain products and sectors of industry. The most common fiscal incentive is the rebate on customs and excise duties on raw materials for the manufacture of exportable products. The extent of rebate depends on the support required by the product to sustain its competitive advantage, and may vary in the course of time.

116. Some countries have reduced or abolished sales taxes and similar levies on exportable goods. For example, the Government of Argentina reduced the sales tax on exports of meat by a decree of 6 June 1960 which applied to shipments effected between that date and 31 December 1961. Italy established a new rate schedule on 1 September 1960 for refund of taxes and duties ranging from 1 to 8 per cent on a wide range of exported goods. In Spain, a decree providing for rebates of indirect taxes on exported products was issued on 28 July 1960 as a means of aiding Spanish exports.

117. In some countries, direct subsidies are given as an incentive for exports by small industries. For example, the Japanese Government subsidizes small industries manufacturing novel export items and those which conduct technological research for improving the quality of export goods.

118. Other financial incentives granted by some Governments for promotion of exports include special depreciation allowances to exporters, special tax exemptions for overseas earnings which are remitted home, deductions from assessable income of expenditures incurred in increasing export sales, etc. In India, where tight restrictions are imposed on the import of a wide range of capital goods and raw materials on account of foreign exchange shortage, special relaxations are granted in cases where there are firm assurances of export of certain manufactured goods. Special allocations of foreign exchange are made available to exporters who wish to visit foreign countries to promote their sales or for the import of samples from foreign countries.

119. An incentive to export manufacturers, especially to small enterprises, which appears to work successfully in some developing countries, consists of linking their imports to their export operations. A system linking import entitlements to exports—called the exchange settlement certificate system—has been evolved in China (Taiwan) after several years of experimentation. A first measure, introduced in 1955, gave manufacturers the opportunity to apply for rebates on taxes levied on materials used, provided that the quality of their products was such as to permit competition with similar products marketed abroad. This was followed in 1956 by a regulation permitting manufacturers producing for exports to apply up to 80 per cent of the exchange they earned from exports to the import of their raw materials. This system, however, proved to be unsatisfactory and was replaced in 1958 by a procedure whereby importers had to obtain from exporters an exchange settlement certificate to validate their import applications. In 1961, the system of the exchange settlement certificate was extended to cover all imports and outward remittances and all exports and inward remittances, and tightened to eliminate imports of unnecessary consumer goods.

120. A similar system, in force in Pakistan, is the export bonus scheme, whereby exporters of certain manufactured goods are given transferable import licences depending in amount on their export earnings, and the type of goods exported. The incentive is provided by the large premium which these licences command in the market. The export bonus system is credited with increasing the export value of the goods

falling under the scheme from 215 million rupees in 1958 to 570 rupees in 1959.

121. In India also, special import entitlements are granted to exporters of a wide range of goods. This has resulted in increasing not only the volume of exports, but also of the quality of products, since certain scarce raw materials and components have been made available to the producers.

Special preference in allocation of raw materials

122. The need for special allocation of raw materials arises only where there are shortages and delays in supply, due either to inadequate domestic production or inadequate imports caused by shortage of foreign exchange. In many developing countries, shortage of raw materials is a serious problem, and special preference is often given to exporting industries in the allocation of both indigenous and imported raw materials in order to improve the foreign exchange earnings.

Transport facilities

123. In many countries assistance is given by the Government to exporters to move their consignments from the factory to the ports of shipment. Such assistance is generally in the form of special priorities in the movement of goods and reduction in freight rates.

Export credit facilities

124. A major support which Governments can provide to small exporters is in securing short-term and long-term credit on favourable conditions. The special difficulties of small-scale industries in general and exporters in particular in securing credit and a number of measures to facilitate financing have already been discussed in an earlier section. It may be pointed out here that, as a rule, only the Government can effectively liberalize the terms and conditions of credit to small-scale industrialists, in particular, by creating special State financial institutions or including financing among the responsibilities of State development agencies, and introduce guarantee and insurance schemes inducing commercial banks to adopt more liberal credit policies.

B. PROMOTION MEASURES ABROAD

125. It has been emphasized throughout the present study that, if exports of small industry products are to be promoted, the main reliance is to be placed on measures to improve production, processes and management at home. If successfully implemented, these measures would go a long way in enabling the developing countries to compete effectively, pricewise, and qualitywise, even in well-protected markets. Promotion measures should evidently also be taken abroad; some of these are briefly referred to here.

126. Promotion measures abroad by the Government of the exporting country are mainly carried out through official commercial representatives and intensified action evidently requires strengthening the commercial sections of embassies and consulates. Large industries having export programmes are not as much in need of government assistance abroad as small industries, because they may have their own foreign agencies and offices; in this area, small industries are invariably dependent on government help. The commercial representatives abroad advise their heads of missions on broad issues of trade and industry as well as on specific questions. They attend to all inquiries from the trade and periodically visit local commercial firms to acquaint them with the exportable goods from the home country. They give trade introductions to visiting businessmen and provide them with all reasonable facilities, and give information to foreign businessmen about national business organizations and exporters. They test the markets by trial consignments of new products and advise the producers about market reactions and trends. They procure samples from the home country and send samples to manufacturers at home. Also, they help in the settlement of trade disputes. On the whole, they are the most effective agencies for export promotion measures abroad. A trained cadre of efficient commercial representatives can provide valuable services to developing countries not only in the expansion of exports, but also in their diversification. Many Governments encourage their State and commercial banks having branches abroad to engage in such activities.

127. Trade delegations help in establishing business contacts, ascertaining market preferences and the competitive position of different products, and in settling misunderstandings and disputes which may arise between exporters and importers. Delegations to negotiate the sale of specific products are generally sent by co-operatives or associations of traders. Sometimes they are sponsored by Governments to explore new markets or promote the sale of new products. United Nations technical assistance advisers stress the importance of direct contacts with foreign importers, buyers for department stores, etc., and of the need for direct studies of tastes, fashion and demand requirements by the exporters.

128. Participation in trade fairs and exhibitions is a major measure of export promotion. Small industries and handicrafts may not be able to participate in such fairs and exhibitions because of the expenses involved. Often they may not even be aware of such opportunities for advertising of their products. Also, they lack the technical knowledge to organize the proper display of their products. In most developing countries, the Government provides assistance to manufacturers for participation in foreign fairs and exhibitions. Governments often participate directly in the exhibitions and fairs and collect representative products from the manufacturers.

129. Another measure of export promotion abroad is the organization of trade centres and showrooms. These facilitate trade introduction and supply of data required by the buyers on the spot, avoiding the necessity of protracted correspondence.

130. In India, a Council of Trade Fairs and Exhibitions has been recently set up by the Government in order to promote, organize and participate in industrial and trade exhibitions, fairs and showrooms. The Directorate of Exhibitions of the Government of India bears all transportation and insurance charges

from the ports of India and back of such goods as are accepted by it for exhibition abroad. All inquiries made about the products exhibited are conveyed to the manufacturers and assistance is given in establishing further contacts between the foreign importer and the producer.

131. Other promotion measures abroad include advertisements and publicity through newspapers and journals, local arrangements for after-sales service, distribution of free samples, etc.[17]

PART II. INTERNATIONAL ACTION

Action by Governments

132. In its Third Five Year Plan, the Indian Government placed very strong emphasis on the expansion of exports of manufactures, in particular those produced by small-scale industries, and relied largely, to achieve this objective, on domestic promotion efforts. At the same time, the Indian planners kept in mind the external difficulties facing the developing countries in their attempt to secure new markets. They stressed that patterns of trade cannot but change as the developing countries expand and broaden their economic base, and expressed the wish that this be recognized by the advanced countries and translated into action by adoption of liberal commercial policies.[18]

133. The difficulty of entering new markets is not confined to those of the advanced countries. Most of the developing countries endeavour to set up import-substituting industries and to protect these by restrictive trade measures.

134. Intra-regional and international co-operation to bring about trade liberalization with a view to promoting the development of the under-developed countries has been consistently recommended by the General Assembly, the Economic and Social Council, and the regional economic commissions of the United Nations,[19] and other international organizations. In particular, an examination of the international obstacles to the expansion of trade of the less developed countries, and detailed recommendations on measures to expand the export earnings of these countries, especially those relating to the sale of manufactured goods, have been made, late in 1961, by Committee III set up by the Contracting Parties to the General Agreement on Tariffs and Trade (GATT), in a report submitted after a three-year study.[20] In view of the importance of the report and of the fact that a large part of the exports of manufactured goods from the developing countries can be, as stressed in the present study, those produced by small-scale industries, it is considered useful to reproduce here the main findings and recommendations of the Committee.

135. The Committee felt that,

"in the field of trade, the Contracting Parties are in a position to make a most useful contribution which . . . will not only serve to make the less-developed countries less dependent on external aid, strengthen their economies and accelerate their development, but will reinforce the prosperity of their trading partners as well. . . . Even if a substantial increase in international financial assistance should be forthcoming in the form of grants and loans and even if account is taken of the possibilities offered to less-developed countries in expanding intra-regional trade, none the less, there will remain a gap in their balance of trade of alarming proportions which will not be bridged unless the less-developed countries can increase their earning capacity not only from traditional exports but also from exports of manufactured goods." [21]

136. The main findings of the Committee regarding obstacles to the expansion of trade of less developed countries and its recommendations are given in Annex II.

Action by the United Nations Secretariat

137. Apart from the action taken by the governing bodies of the United Nations, to which reference has been made above, work in the field of export promotion has been carried out by the Secretariat of the United Nations, at Headquarters and the regional commissions.

138. Two projects in this field were recently carried out under the joint sponsorship of the Economic Commission for Asia and the Far East (ECAFE) and the United Nations Bureau of Technical Assistance Operations (BTAO). A Training Centre in Trade Promotion, conducted in Tokyo, Japan, from 30 March to 24 May 1959,[22] and a Regional Seminar and Training Centre in Trade Promotion, held in Jaipur, India, from 20 November to 15 December 1961.[23] Both projects were concerned to a large extent with the promotion of exports of small-industry products.

139. Nineteen fellows from 12 countries of the ECAFE region and seven observers from six countries of the region participated in the Training Centre conducted in Tokyo, which included seven weeks of lectures and a one-week study tour. The curriculum

[17] It may also be mentioned that subcontracting arrangements are sometimes made between large manufacturing establishments in some advanced countries and small-scale industries in certain developing countries. As in similar domestic arrangements, the "parent" company benefits from the low cost of production of the small industry and provides it with technical and sometimes financial assistance. The small industries produce and export parts and components or carry out processing or finishing operations on items supplied from abroad; these items are then returned to the parent company. Such arrangements are made by big manufacturers of clothing, underwear, household appliances and other products.

[18] Government of India, Planning Commission, *Third Five Year Plan—A Draft Outline*, New Delhi, 1960, p. 83. See Annex.

[19] A large number of resolutions adopted by the General Assembly and the Economic and Social Council relate to international commodity problems (Council resolutions 512A (XVII), 557 F (XVIII), 620 (XXII), 691A (XXVI), 726 (XXVIII), 917 (XXXIV) and 919 (XXXIV) and General Assembly resolutions 1029 (XI), 1324 (XIII) and 1423 (XIV)), and expansion of international trade (Council resolutions 614 A(XXII), 654 A(XXIV), 917 (XXXIV) and 919 (XXXIV), and General Assembly resolutions 623 (VII), 1027 (XI), 1028 (XI), 1156 (XII), 1322 (XIII), 1323 (XIII), 1324 (XIII), 1421 (XIV), 1422 (XIV), 1519 (XV), 1520 (XV), 1707 (XVI) and 1785 (XVII)).

[20] *GATT Programme for Expansion of International Trade—Trade of Less-Developed Countries—Special Report of Committee III*, Geneva, 1962 (Sales No.: GATT/1962-3).

[21] For an estimate of the balance-of-payments gap of the less-developed countries in the period 1960 to 1980, see United Nations, *Economic Survey of Europe in 1960* (Sales No.: 61.II.E.1), chapter V.

[22] See document E/CN.11/TRADE/L.3 (mimeographed).

[23] See document E/CN.11/TRADE/L.50 (mimeographed).

was prepared by the Government of Japan, in consultation with the ECAFE Secretariat. The subjects of the lectures were as follows:

(*a*) Japanese governmental and industrial structures;

(*b*) International trade and payments (international trade and balance of payments; international trade policies; trade and payments agreements; exchange control and restrictions on imports and exports; food situation in relation to the foreign trade of Japan);

(*c*) Export and import financing (organization and functions of export-import banks and foreign exchange banks; export and import financing; export insurance system; export credit guarantee insurance; marine insurance);

(*d*) Trade information services and market research (compilation and publication of trade statistics and opportunities for trade; trade publications; activities of trade commissioners and commercial secretaries or attachés; market research organizations and procedures);

(*e*) Commodity standards and inspection (Japanese industrial standards; inspection procedures and quality control; inspection and quarantine procedures);

(*f*) Customs administration and formalities (Japan's tariff structure, customs administration, customs formalities and procedures and bonded areas);

(*g*) Harbour and shipping services (including surveying of commodity shipments and services offered by customs brokers and freight forwarders);

(*h*) Commercial claims and commercial arbitration procedures;

(*i*) International trade fairs and exhibitions (objectives and types of international trade fairs and exhibitions; techniques and facilities for organizing international fairs and exhibitions; follow-up action);

(*j*) Overseas investment and economic co-operation;

(*k*) Activities of trade organizations (Japan Export Trade Promotion Agency, otherwise known as JETRO; Tokyo Chamber of Commerce and Industry; Tokyo International Trade Fair Association; Japan Foreign Trade Council; Institute of Asian Economic Affairs).

140. The Jaipur Regional Seminar and Training Centre was attended by the 17 participants from the 12 countries of the ECAFE region. The programme consisted of 35 lectures, each followed by group discussions, and visits to industrial and commercial establishments.

141. The lectures were devoted to the following main subjects: activities of ECAFE in the field of trade; trade policies and trade promotion measures in Australia, Ceylon, Federation of Malaya, France, India, Pakistan, the USSR, the United Kingdom and the United States; activities of trade promotion organizations in different countries; tariffs; customs procedures and formalities; quality control and preshipment inspection; commercial intelligence and publicity; the role of banking and insurance; port facilities and shipping services; development of small-scale industries; regional trade co-operation; and policies regarding foreign assistance and foreign investment.

142. Other ECAFE projects have related to intra-regional trade promotion, shipping and ocean freight rates, commercial arbitration and customs administration. In 1966 ECAFE will sponsor an Asian Trade Fair in Bangkok, to be organized by the Government of Thailand providing host facilities.

UNITED NATIONS TECHNICAL ASSISTANCE IN THE FIELD OF EXPORT PROMOTION OF SMALL INDUSTRY PRODUCTS

143. Expert advice and fellowships are provided by the United Nations for projects in the field of export promotion of small industry and handicraft products. As in the case of other technical co-operation projects relating to small-scale industries, expert advice in the field under consideration may be made available, in accordance with the Government's request, either for narrowly specialized assignments, e.g., improving design and production of certain types of export articles in a given region—or for multi-purpose projects which may include advice to Government on export promotion policies, assistance in the establishment and operation of special agencies, setting up of certification marking schemes, assistance to individual small producers or exporters, and so on.[24] Fellowships may be awarded for training in industrial design, quality control and marketing for export, and other relevant subjects.

144. Only a small number of requests for export missions and fellowships in this field have so far been made to the United Nations by Governments of underdeveloped countries, a fact which is undoubtedly explained by the narrow scope of the export promotion measures adopted by most Governments, and, to some extent, by inadequate information on the facilities which may be made available in this field by the United Nations. An appreciably larger number of technical assistance operations have been carried out in the field of domestic marketing. Many recommendations made by experts in this area have a bearing on marketing for export. Furthermore, in many cases, experts have felt the need to submit specific recommendations to improve sales abroad.

145. Nearly all technical assistance operations in the field of export promotion have been concerned with handicraft and cottage industry articles, especially those produced and marketed under State-sponsored schemes.

146. Although, as has been pointed out in the present study, the problems of export promotion of handicraft products differ from those relating to products of small-scale industries, mainly in respect of design and styling, standardization, quality control, and certification marking, it may be of interest to present here, in the form of a brief case study, an account of the activities, findings and recommendations of a United Nations expert concerned principally with the export marketing of handicrafts. In their main lines, the methods of investigation adopted by the expert are likely to be similar to those which would apply in a study devoted to small-scale industries.

[24] Assistance in the field of co-operatives is made available by the International Labour Organization.

147. The terms of reference of the expert were to advise the Government of Uttar Pradesh, India, in the marketing of products of cottage and small-scale industries in foreign countries, particular attention being given to training in methods of modern merchandising, study and research into tastes and requirements of foreign customers, and adaptation of products to the requirements of foreign customers.[25] Over a period of about eight months the expert visited production and marketing centres to explore all possible sources of supply, examined products with a view to ascertaining their suitability for export, suggested modifications or innovations in design and production processes, and recommended improvements in the working conditions and management practices of the producers and in the activities of the competent state government agencies (Cottage Industries Directorate, State Emporia, Arts and Crafts School and other training centres). The expert made arrangements to send samples of handicraft articles to importers-wholesalers and buyers in several cities in the United States, for comments on marketing opportunities, in the light of the type, quality and price of the products and the requirements of American consumers. She made recommendations for further technical assistance, both expert advice and fellowships. Upon return to the United States, her services were made available by the United Nations to the Indian Consulate General in New York to assist it in arranging a display and testing out the receptivity of American buyers to a special sample line of Uttar Pradesh handicrafts which she had selected or had helped to design and develop while in the field.

148. The expert considered that a large number of articles were unsuitable for export, mostly on account of major defects in design and craftsmanship, but also because certain items had no market whatever in foreign countries.[26] She selected a limited number of handicraft lines which, if restyled and redesigned, properly produced and marketed, offered, in her opinion, reasonable prospects for export development.[27]

149. For these articles, the expert gave detailed instructions regarding design, size and quality qualifications, including export standards of the Indian Standards Institute (with which state officials were not familiar), colour schemes, packing, labelling, sampling and pricing. She recommended strengthening the co-operative system, and, to achieve economies of scale and apply some quality control procedures, the organization of workers into small production units.[28] She gave instructions for rigid inspection at collection centres before shipment.

150. Throughout her report the expert insisted on the fact that the overseas market for handicraft articles, especially the American demand, was for high quality products:

> "American consumers have become so accustomed to fine uniform quality machine-made articles that they expect, and in most cases, will not accept, lesser quality in hand-made products. Handicrafts from whatever source, which have deteriorated in style, design, or workmanship, have an uphill climb to attract American customers. To reintroduce or expand the market, the standards of quality and workmanship must be not only of the best, but something different, unique, or outstanding must be offered. 'Hand-made' means quality . . . 'Seconds' are not acceptable."

151. The expert recommended that the state organizations provide technical advice on all aspects of production and distribution to all producers, not just to the few state-sponsored units, that the state emporia carry quality goods made by all producers, and that the quality-marking scheme be strengthened.

152. She suggested that fellowships be requested to provide selected personnel with advanced instruction (including study tours) in styling and designing, merchandising, cost accounting and pricing, and trading and sales promotion practices; that seminars be held in India under the direction of experts, among officials of state handicraft organizations; that follow-up expert missions to Uttar Pradesh be requested; and that technical assistance for marketing and display be provided to the Indian Consulate-General in New York.

SUMMARY

153. The theme of this study is that, in most developing countries, small-scale industries can make a significant contribution to the expansion of exports even at early stages of industrialization, provided certain conditions, outlined in the report, are fulfilled. In most of these countries, import substitution is, at the present time, the principal objective of industrialization, and measures to stimulate exports are generally taken only when this objective is considered to have been achieved. (A discussion of this question is presented in Annex I.) In most countries, however, there exist numerous small-scale industries and handicrafts producing goods, some of which could be directed towards the export market, even without waiting for the completion of the process of import substitution. To achieve this, these industries should meet the often rigorous requirements of international trade in respect of type, styling, grade, standard, quality and packaging of products. To a large extent, the basic development work in the field of small-scale industries aimed at improving management, modernizing plant and equipment, raising productivity and

[25] The expert's report is published in United Nations, *Survey of Uttar Pradesh (India) Handicrafts—Production and Export Market Possibilities* (Sales No.: 55.II.H.4).

[26] This was the case, in particular, of numerous souvenirs for tourist consumption, papier-mâché and plaster figures of gods and goddesses, etc. Certain articles made of perishable clay were not transportable. Other items, e.g., carved alabaster models of the Taj Mahal, were not only unsuitable for export, but too expensive even for local sale.

[27] These included dress accessories (handbags, belts, scarves, shawls), brassware and metal work, ceramics, handwoven textiles, traditional embroideries, trimmings for wearing apparel, ivory carvings, wooden and papier-mâché folk art. It is of interest to note that, contrary to the expectations of officials in charge of the handicrafts programme, new orders for brassware came not for ornate decorative articles, but for utility articles showing good craftsmanship.

[28] She also recommended, whenever possible, combining several productions into one, e.g., packing ceramic pots in a basket container, and filling them with locally-made condiments.

lowering costs of production, and improving design and quality of products will serve the main objectives of an export promotion programme. However, some specialized assistance needs to be provided.

154. The study discusses the relevant measures under two main headings: promotion measures at home and abroad, respectively. Under the former, a review is made of the most suitable types of export producers' and commercial associations and promotional institutions under public or mixed sponsorship, of the methods of promotion applied by these institutions, and of measures of fiscal and financial nature. Under the second heading are examined measures for improving trade channels, contractual arrangements and commercial intelligence and promotion.

155. While the exporting country would rely primarily on its own efforts, there is a great need for co-operation on the part of the importing countries. Part of the study is devoted to international action in this field. Finally, reference is made to the technical assistance facilities for export promotion which are made available to exporting countries by the United Nations.

I. NATIONAL MEASURES TO PROMOTE EXPORTS OF SMALL INDUSTRY PRODUCTS

A. *Promotion measures at home*

156. The creation of co-operatives and associations by small export manufacturers and export merchants is aimed at providing them with some of the benefits and services, economies of scale and bargaining power of the large enterprises. Privately sponsored organizations of this type represent their members *vis-à-vis* government authorities, and provide them with assistance, services and information on products, markets and trade practices.

157. Promotional institutions under public or mixed sponsorship, such as external trade organizations and export promotion councils, bring together representatives of government, industry and trade. They advise government on export policies and provide services and information to manufacturers and exporters, and sometimes to foreign importers.

158. Some of the most important services rendered by the above institutions and certain agencies such as technological research institutes, testing laboratories and design centres tend to improve the design, styling, packaging and, above all, the quality of export products, in the light of foreign requirements and standards. Markets can be opened for goods of different grades of quality, provided minimum levels of acceptance by consumers are achieved. Sometimes, it is far more important that products be uniform in quality than high in quality. In most cases, export articles should conform to precise standards relating to type, dimensions, quality, safety and other specifications. The application of standards developed by national and international standard institutions involves use of quality control procedures, the results of which are often guaranteed and publicized through pre-shipment inspection procedures, certification marking schemes, voluntary or compulsory, labeling and other methods.

159. A certification mark is a guarantee given by a competent agency independent from the producer or the exporter that the goods have been inspected and tested against precise standards by or under the supervision of the agency. Compulsory certification is usually required for articles for human consumption or application which may affect health or safety, and, in many cases, for products considered to be of special importance in export trade; in the latter case, the purpose is to prevent the shipment of defective or inferior products, which might cause lasting injury to the country's exports in general.

160. Voluntary certification is not an alternative to compulsory certification and is generally given considerable encouragement. The certification system is in itself a strong incentive for producers to introduce and maintain quality control, since obtaining the mark may become a virtual prerequisite to making any substantial sales abroad, especially in the advanced countries.

161. Servicing, assistance and training are also needed to improve the management methods and commercial practices of small-scale industries, if their products are to compete effectively on foreign markets. Failure or delay to provide samples, delays in production and delivery, damage to goods in storage or shipping and other faults are frequently noted by technical assistance experts. The experts recommend the establishment of institutions to train management and employees in accountancy and cost accounting, filing and other business methods, work study, quality control at all or several stages of operation, etc. Many important auxiliary services may be rendered by co-operatives of export manufacturers to their members, e.g., provision of documentation accompanying shipments, compliance with customs and shipping formalities, collection of remittances in foreign currencies, assistance in correspondence and other administrative matters relating to foreign trade. A new form of joint venture—the export group, formed by different but usually related industries—appears to be an effective instrument for securing export markets through arrangements which usually combine representation, negotiation, shipping, advertising, exhibitions and other action.

162. Servicing is also needed in the field of pricing, where shortcomings relating to costing, price quotations, discounting and other commercial terms are often noted.

163. The difficulties of small industries in obtaining credit are well known and special measures to provide relief and assistance in this field have been adopted in many countries. The financing difficulties of small industries manufacturing for export appear to be even greater than those of producers for the domestic market. Manufacturing for export is often an uncertain and unstable business involving, for the manufacturer, larger needs and longer terms of credit for working capital, and, for the lender, greater risks reflected in higher rates of interest. This calls for special measures of credit assistance such as export credit guarantee or risk insurance schemes.

164. Special facilities are also needed to provide

small-scale industries with marketing information. Such information, which covers a broad range of subjects, should be presented in a concentrated and understandable form. The collection, analysis and dissemination of information may be effectively carried out by associations and co-operatives as well as by government and semi-public institutions interested in the promotion of exports.

165. Certain export promotion measures are within the exclusive competence of the Government. These include fiscal and financial incentives to small manufacturers and exporters, special measures to protect small industries, negotiation of trade agreements and similar types of action calling for legislation or negotiation of treaties. The most common devices of export promotion by Government are, on the one hand, removal of restrictions and disincentives and, on the other hand, provision of positive inducements and incentives. Simplification of administrative procedures and regulations, drawbacks on import duties, rebates or refunds on excise sales tax and other such levies, bonuses and import entitlements on the basis of export are some of the most common measures taken by Governments to promote exports. In some countries export industries are given special preference in the allocation of raw materials, and priorities and even subsidies in the transport of goods. A major form of support that Governments can give to small exporters is to liberalize the terms and conditions of credit.

B. *Promotion measures abroad*

166. Promotion measures by Governments in foreign countries are mainly carried out through official commercial representatives, and intensified action requires strengthening the commercial sections of embassies and consulates. The services of the commercial representatives may be of particular assistance to small industrialists since the large industrialists can afford to have their own agencies and offices abroad.

167. Among the principal measures of export promotion in foreign countries are sponsoring of trade delegations, participation in trade fairs and exhibitions, and organization of trade centres and showrooms.

II. INTERNATIONAL ACTION

168. Inter-regional and international co-operation to bring about trade liberalization with a view to promoting the development of under-developed countries has been constantly recommended by the General Assembly, the Economic and Social Council and the regional economic commissions of the United Nations and other international organizations. A particularly important discussion of the international obstacles to the expansion of trade of the less developed countries and detailed recommendations on measures to expand the export earnings of these countries has been made by Committee III set up by the Contracting Parties to the General Agreement on Tariffs and Trade (GATT) in a report submitted in 1961. (The main findings and recommendations of the Committee are presented in Annex II.)

169. Two projects in the field of export promotion have been recently carried out under the joint sponsorship of the Economic Commission for Asia and the Far East and the United Nations Bureau of Technical Assistance Operations: a training centre in trade promotion was conducted in Tokyo in March-May 1959 and a regional seminar and training centre in trade promotion was held in Jaipur, India, in November-December 1961. Both projects were concerned to a large extent with the promotion of exports of small industry products.

170. Expert advice and fellowships are provided by the United Nations for projects in the field of export promotion of small industry and handicraft products. A brief case study giving an account of the main findings and recommendations of a United Nations expert on the export marketing of handicrafts is presented as an illustration.

ANNEXES

I. INDUSTRIAL DEVELOPMENT, IMPORT SUBSTITUTION AND EXPORT PROMOTION

Policy statements of certain developing countries at different stages of industrialization

171. The question of export trade is of considerable concern to industrializing countries at all levels of development and is discussed in its short-term and long-term aspects in many government policy statements, in particular in those relating to national development plans and programmes. Both the primary producing countries and those with more diversified economies have, over the past decades, been continuously confronted with balance-of-payments difficulties reflecting largely their vulnerability to changes in external demand and terms of trade, and also their growing requirements for imports not only of capital goods, but also of raw materials and consumer goods, including food. In many cases, inflationary developments related to domestic growth have aggravated the deterioration of their external balances. Most of the developing countries recognize the balance of payments difficulties are the almost inevitable counterpart of rapid economic growth, in particular of industrial development, and that certain patterns of industrialization and foreign trade policies aimed at expanding exports and curtailing imports must be adopted if these difficulties are to be alleviated. The priorities given to the means of achieving this, that is, import substitution of consumer goods, producer goods, and not unfrequently, agricultural products, and export promotion of primary commodities, processed raw materials or manufactured products, in particular those of small-scale industries, vary according to the stage of development of the different countries. Examples of the different policies and objectives are provided by the following descriptions and excerpts from policy statements of a number of countries.

172. As a rule, the primary producing countries do not expect to develop to any significant extent manufacturing industries able to produce exportable surpluses in the short-term or medium-term, that is, in periods of five to ten years, and sometimes in even longer periods. To promote industrialization and stabilize the balance of payments, reliance is placed, on the one hand, on raising the output

and export of crude agricultural products and mineral raw materials and, usually to a minor extent, on the processing for export of primary commodities. On the other hand, priority is given to the establishment of import substituting consumer goods industries, preferably using local raw materials, and catering to the domestic market. In most Asian and African countries belonging to this group, many of these industries are to be set up on a small or medium scale.

173. Thus, it is stated in Ghana's Second Development Plan[a] that

". . . although Ghana is and will remain predominantly an agricultural country, the Government is determined to develop to the maximum its potential for industrialization which will not only be based on the processing of agricultural products and the exploitation of mineral resources but on the manufacture and fabrication of all products for which there is a market in Ghana and which will assist in the balance of payments. . . . There must . . . be a considerable increase in agricultural exports, to pay for the heavy imports of industrial machinery and other capital goods which are intended over the next decade or two. . . . It is necessary to meet the rapidly growing demand for manufactured commodities. Imports of consumer goods have been increasing sharply in recent years, at the cost of our balance of payments,[b] and will continue to grow unless domestic production is adequately expanded. . . . There is a fair range of commodities which it will cost less to manufacture in Ghana than to import. . . ."

174. Basically similar policies have been set forth by the Governments of Burma and Ceylon. In the policy statements of these Governments,[c] the need for import substitution and use of domestic raw materials on the one hand, and promotion of exports of primary products on the other, is spelled out in more details. There is some reference to export promotion of manufactures, but this is envisaged for a limited range of products and only in the long run. This question is discussed mostly in general terms and while reference is occasionally made to some specific measures of promotion of exports of industrial products, these are seldom described in detail. Thus, although the industrialization plans of Burma and Ceylon lay considerable emphasis on the development of small-scale industries, few explicit references are made to the role which they might eventually play in increasing exports and none to the special measures which should be taken to that end.

175. The Government of Burma, a country depending heavily on primary production and earning more than three-quarters of its foreign exchange through the export of food (principally rice), one-fifth by export of raw materials and 2.4 per cent by export of industrial products, mostly refined metals, recognizes that

"the economy must be sufficiently diversified in order to be free from vulnerability to external fluctuations. There must . . . be diversification within agriculture as well as diversification away from agriculture towards industry. In order to diversify agriculture and moreover to generate an increasing surplus from agriculture with which to invest in industrial facilities it is necessary to modernize agriculture itself. This would then be followed by an expanded industry beginning with light consumer industries and gradually broadening its base towards heavy industry. . . . Efforts will be made during [the Second Four-Year Plan] period to achieve self-sufficiency in selected agricultural products such as oilseeds, sugar-cane, cotton and wheat and at the same time increased export of such agricultural products as rice, beans and pulses and virginia tobacco. These will no doubt contribute to saving of imports and earning of additional foreign exchange. As a measure of diversification towards industry, the Second Four-Year Plan aims at production of selected industrial products to substitute current imports. Achievement of self-sufficiency in these selected industrial products will not however mean a reduction in the level of foreign trade as the foreign exchange saved will be diverted towards the purchase of other foreign goods, particularly capital goods. . . . Projects which use domestic raw materials should be given priority."

176. The Burmese plan provides for the promotion of exports of a number of manufactures, namely: aluminium products, rubber and slippers, furniture, cottage industry products, vests and towels, canned and dehydrated agricultural products and corn-flakes. Some of the promotion measures would be of a general character: establishment of a standardization committee and an industrial development bank, and timely issue of raw materials. Specific export promotion measures would consist of tax incentives and exchange rebates for exporters.

177. The economy of Ceylon and its foreign exchange earnings are largely dependent upon the production and export of tea, rubber and coconut. Manufactured products account for only 1 per cent of total exports. Most essential durable consumer goods and producer goods are imported. In its Ten-Year Plan, the Government considers that

"a process of import substitution could . . . afford a basis for industrial development through the production locally of manufactured goods that were hitherto imported. . . . In principle it is easier to commence industrialization on the basis of a domestic market since in this case conscious policies could play a more effective role in mitigating difficulties. . . . In the preliminary phase, and certainly over the next ten years, the main spurt in industrial development can best be obtained through production for the domestic market by import substitution. . . . But it is doubtful that import substitution alone will make possible the magnitude of industrialization needed to provide employment for the increasing work-force. In the long run industrial production for export may also be necessary. . . . Such production could embrace not merely the further processing of existing agricultural products but also new products based on the processing of imported materials. . . . The extent to which agriculture can contribute towards the saving of imports and the increasing of exports is limited. . . . In the future, industry would have to make the main contribution towards saving imports and increasing exports."

178. The Government of Ceylon considers that most of Ceylon's potential export markets are likely to be in the

[a] Government of Ghana, *Second Development Plan, 1959-64*, Accra, s.d. (1959).

[b] It is also stated that "import of food [has] doubled during the past seven years, thus creating a severe strain on the balance of payments".

[c] Government of Burma, Ministry of National Planning, *Second Four-Year Plan for the Union of Burma (1961-62 to 1964-65)*, Rangoon, 1961; Government of Ceylon, National Planning Council, *The Ten-Year Plan*, Colombo, 1959.

Asian region and expresses apprehension that the industrialization of countries of this region would result in the setting up of protective tariff barriers. One approach to this difficulty would be "for Ceylon to develop those types of products whose exports are not likely to encounter tariff barriers", such as certain types of capital and intermediate goods. These would not consist of heavy machinery or products of similar complexity, but of mechanical components, cement and other building materials, and fertilizers. Another approach which appears to be desirable to the Government of Ceylon, and which is not an alternative to the first one, "is through co-ordinated regional planning between the countries of the area . . . [providing] for a certain degree of specialization and interdependence in industrial development".

179. In a number of countries, the economy still depends heavily on the production and export of primary commodities but a substantial industrial sector, usually including both semi-manufacturing and manufacturing, has been developed. As a rule, this sector caters almost exclusively to the domestic market, but efforts are made to expand exports of manufactured products. Many of the established industries produce goods replacing imports, but there is much scope for further substitution and this objective stands out prominently in the industrialization policies and programmes of these countries. At the same time, great stress is put on increasing rapidly the export of both primary commodities and manufactures. It is usually recognized that, in the long run, a considerable expansion of exports of manufactures will be a requisite for further growth. Meanwhile, measures are taken to restrict domestic consumption of exportable articles, provide incentives to exporters and set up special export industries. In some Asian countries of this group, the promotion of small-scale industries is an important policy objective, but little if any consideration is given to promoting the export of their products. In Latin America, on the other hand, attention is principally given to the establishment of large enterprises.

180. To give an example, Pakistan's second five-year plan[d]

"depends heavily on foreign aid and foreign investment [but] there is emphasis on increased production of exportable goods and substitutes for imports",

which should, in the long run, reduce dependence on foreign aid and loans and improve the balance-of-payments position. The latter objective

"has been the principal consideration in determining the various production targets set in the Plan. . . . With the successful implementation of the Plan the need for balance-of-payments support and [part of the foreign] aid should be eliminated, and it should become possible to finance development imports increasingly from the country's own resources.

"Foreign exchange earnings of the country depend largely on world market conditions for exports of raw jute, raw cotton, raw wool, hides, skins and tea. The two major commodity exports, raw jute and cotton, are susceptible to wide fluctuations in world demand and prices. The new major industrial products, jute goods and cotton goods, which currently constitute about one-quarter of total commodity earnings, have to confront uncertain markets. Export earnings also depend on the availability of export surpluses which are, in turn, dependent on increases in agricultural and industrial production and changes in domestic consumption.

". . . It is intended to increase the output of commodities that can be sold in foreign markets, to curtail domestic consumption in order to have a surplus for export, and to provide adequate incentives and opportunities to exporters. . . . Domestic demand for many goods that can be exported is growing and inflationary pressures may increase it further. If exports are to expand on the scale envisaged, domestic demand will have to be curtailed sufficiently. This means both that taxation levels will have to be high enough to restrain consumption, and that more specific measures will have to be taken to restrict consumption of particular goods that can find an export market. It may be possible to impose excise duties on domestic consumption of commodities which are required to be exported. Where this is not possible the use of compulsory export quotas can be considered as an alternative."

181. Import substitution is to be introduced or further carried out in such industries as machinery and equipment, cement, fertilizers, chemicals, sugar, paper, newsprint, cigarettes, bicycles, sewing machines, cycle tyres and tubes, and a large number of engineering and electrical products. An export bonus scheme, introduced by the Government in January 1959, has succeeded in promoting exports of certain goods, not exported previously in significant quantities, such as crude glycerine, cement, tiles, gold thread, household utensils, reed board, maize starch, molasses, tents, oxygen gas, brushes and cotton canvas. Further measures, such as a reduction of export duties, are relied upon to increase the export of cotton and jute manufactures. It is considered that there are opportunities to expand exports of certain products in demand in the world markets, such as footwear, surgical instruments, sports equipment and chemicals.

182. Although some of these products are or may be manufactured by small-scale industries, only cursory reference is found in Pakistan's Five-Year Plan to the role of these industries in promoting exports. This may be due to the fact that little progress has so far been made in Pakistan in developing this sector. Although "the First Plan recognized the importance of small and medium scale industries and made a provision of 86.5 million rupees in the public sector, implementation fell far short of objectives, and the major problems of small industries remained unsolved because of lack of a concerted effort to tackle them". A comprehensive programme of servicing and assistance for small industries is drawn up in the second plan, but, with two exceptions, the commercial and marketing services to be extended seem to be concerned more with meeting the requirements of the domestic market than promoting sales abroad. The Provincial Small Industries Corporations will provide "supply and marketing services, including sales and display centres to market small industries products and display modern designs, patterns and suitable equipment; grading and inspection to ensure standardized quality of products; and supply of materials and equipment, especially imported supplies, which will be sold to small industries by the Corporations to the extent necessary". It is true that these and other proposed measures such as establishment of

[d] Government of Pakistan, Planning Commission, *The Second Five Year Plan (1960-65)*, Karachi, 1960.

small industries service centres, extension centres, design centres, and special credit facilities may, to an appreciable extent, serve the objectives of an export promotion effort, but, as has been seen in the present study, many specific measures are called for. In the second plan, two specific export promotion measures, not otherwise described, are listed among those for which the central Government will be responsible: "international marketing and foreign and national exhibitions."

183. Colombia's exports account for more than three-quarters of coffee and for about one-eighth of petroleum. Manufactures account for only 1 per cent of total exports. Over the period 1950 to 1959, the Government encouraged with some success the establishment of import substituting industries, such as steel mills, chemical plants, textile and paper industries. Neither the devaluation of 1957 nor incentives such as tax concessions succeeded in increasing the export of manufactured products. Colombia's ten-year plan provides for further strengthening of import substitution of such products as pulp and paper, chemicals, steel and metallurgical and engineering products, and for increased export not only of traditional commodities but also of manufactures, principally sugar, lumber, chemicals, cement and steel.[e] To achieve the latter objective, reliance is placed on four factors: trade integration with neighbouring countries and other Latin American countries under the Treaty of Montevideo; direct subsidies to exporters of manufactures; market studies; and government measures to diversify and stimulate industrial production.

184. A relatively small number of developing countries are reaching the limit of the possiblities afforded by import substitution of consumer goods and are placing increasing emphasis on the establishment of capital goods and intermediate goods industries.

185. While, in the short run, this development is likely to increase import requirements and accentuate balance-of-payments problems, it will, in the long run, maximize import saving and economic growth. In some countries, stronger emphasis is also placed on import substitution of agricultural products.

186. Since the rate of increase in imports of capital goods cannot be much further accelerated by means of import substitution and expansion of exports of traditional commodities, the promotion of exports of semi-manufactured and manufactured products becomes of major importance. In some Latin American countries of this group, industrialization has been focused in the past decades on the establishment of heavy industries processing raw materials and producing intermediate goods and large-scale manufacturing of consumer goods, both catering principally to the domestic market. Export promotion programmes contemplate increases in the production of some of these industries beyond the needs of domestic demand or measures, mainly fiscal, to restrict consumption in order to obtain surpluses for export. In general, the programmes do not contemplate, to any appreciable extent, the creation of special export industries. It is considered that exports should be expanded primarily through the efforts of the private sector, and the scope of the Government's intervention in the domestic production and export mechanisms is deliberately kept modest. Promotion measures abroad consist mostly of strengthening commercial representation, negotiating trade agreements and using various forms of advertising. Policies of this type are followed, with minor variations, by Argentina, Brazil and Chile.

187. In Asia, India and China (Taiwan) may be taken as examples of developing countries having reached a relatively advanced stage of industrialization. In India, export promotion of manufactures is largely concerned with the products of small-scale industries, handicrafts, and cottage industries. As is well known, the Government of India is developing and modernizing small enterprises by supplying them either a wide range of services and measures of assistance, and by furthering the establishment of complementary and co-operative relationships between them. While the principal objective of this promotion effort was, and still is, to raise standards of living by increasing employment, output, income and domestic consumption, the diversification of industrial production and the improvement in productivity and quality of product to which it gave rise met some of the requisites of an export promotion programme.

188. In the late nineteen-fifties, towards the end of the second five-year plan, the same approach was used to associate small industries and handicrafts to the country's export promotion effort. As in other relatively advanced countries, the need to expand the export of industrial products was keenly felt in India.

189. On the one hand, the central and state Governments encourage the formation by small-scale industrialists, artisans and village craftsmen, of associations, boards, councils and other bodies for such purposes as selecting appropriate productions and designs for export and improving and controlling quality in order to meet foreign tastes, standards and prices, and collecting and disseminating marketing information. Encouragement is also given to joint action of producers abroad, such as organization of trade missions, participation in trade fairs and negotiation of contracts with importers.

190. On the other hand, the Government provides fiscal, financial and other incentives and assistance to exporters, sets up special trade and export agencies and facilities under public or joint sponsorship, introduces systems of export licensing, inspection, and quality marking, and provides protection of trade-marks, brand names and designs.[f] Abroad, permanent trade agencies and commercial intelligence services are established by the Government, and use is made of various promotional and advertising means.

191. In China (Taiwan), the progress of industrialization in recent years was reflected in sharp increases in the country's foreign trade and significant changes in the composition of both exports and imports.[g] A major

[e] It is expected that exports of coffee would increase but that their share in total exports would be reduced to 50 per cent by 1970. (Government of Colombia, Consejo nacional de politica economica y planeacion, Departamento administrativo de planeacion y servicios tecnicos, *Plan general de desarrollo economico y social*, Bogotá, s.d. (1961).)

[f] Export operations for certain commodities, e.g., iron ore, are carried out directly through the State Trading Corporating, a government enterprise set up in 1956.

[g] Over the period 1956 to 1961, exports of industrial products increased more than five times in value, and their share in total exports expanded from 12 to nearly 40 per cent; exports of handicraft products increased threefold, and their relative weight rose from 1.2 to 2.3 per cent; exports of crude agricultural products nearly doubled, and their share remained roughly unchanged, at

development, largely induced by government efforts with foreign assistance, was a considerable rise in exports of manufactured products of light industries, many of which operate on a small scale.

192. At home, efforts to improve the marketability and competitiveness of manufactures for export have included specialized technical assistance, standardization, quality control, provision of marketing information, and incentives to exporters through a series of fiscal, financial and trade regulations: tax rebates, relaxation or discontinuation of export controls, unification of the exchange rate and devaluation of the national currency, and an exchange settlement certificate system linking all import operations to exports, aimed at controlling the former and stimulating the latter. Measures abroad have included the setting up of economic and commercial counsellor offices in several importing countries, and the exhibition of Taiwan products at several foreign trade fairs.

193. The differences in the policies prevailing in the relatively advanced countries are made apparent by the following excerpts from recent statements by the Government of Chile and the Government of India.

194. In Chile's national programme of economic development,[h] the implementation of which is largely entrusted to the Corporación de Fomento de la Producción (CORFO), it is considered that

". . . cautious application of the import substitution process is needed, so as to encourage, as far as possible, those productions which have minimum requirements of imported inputs. In this connexion, the possibility of substituting economically imports of agricultural and animal origin becomes today of major national importance.

". . . The number of industries which can be set up in the future with a view to substituting for the import of manufactures is very limited, since those most justified or obvious have already been created. It follows that, to alleviate our balance-of-payments difficulties, it is of paramount importance, apart from following a well-formulated substitution policy, to tend towards an ambitious policy of exporting those agricultural and industrial products in which the country is able to compete.

". . . Within the manufacturing sector, the relatively simple substitution of final consumer goods has already been completed for most items, and it remains to lay more emphasis on those intermediate and capital goods which may be economically produced in the country. . . . On the other hand, it is important to develop an export consciousness with respect to manufactured and agricultural products. It is indispensable to diversify Chilean exports if development is to be given more stability and if stagnation due to a limited capacity to import is to be avoided. For this export consciousness to materialize, it is necessary, among other things, to give attention to the great differences in productivity among the various export sectors or sub-sectors, to the simplification and improvement of the system of laws and regulations relating to export, and to appropriate co-ordination between the government agencies in charge of economic development and the Ministry of Foreign Relations.

". . . Although it is assumed that export will be, in general, an activity of the private sector, the State may carry out an important work of promotion and technical assistance and introduce fiscal measures aimed at putting export activities on solid technical, financial and commercial grounds. . . . The consular system and the offices abroad of the CORFO may be very useful.

". . . In this first programme of industrial development, it has not been possible to devote sufficient efforts to the preparation of new projects. What has been considered to be urgent was to strengthen and bring to optimum scale of production and quality those industries which, in practice, have appeared to be competitive on the international market."

195. Apart from the well-established food industries, such as wines, preserves and dried fruit, it is intended to develop, principally for export, industries producing intermediate goods such as steel, refined copper, lumber, pulp and paper, and, to a smaller extent, such products as linen yarn and malt barley.

196. The importance of the handicraft and small-scale industry sector in Chile is indicated by the fact that there are today more than 80,000 handicraft workshops and more than 4,000 industrial establishments employing 5 to 19 workers, which together employ about 60 per cent of the labour force in manufacturing and produce about 41 per cent of the gross product in manufacturing. In 1962, CORFO prepared the outline of a programme for the modernization of existing handicrafts and small-scale industries and the promotion of new ones. Thus far, the programme does not contain any provision for the participation of this sector in the promotion of exports.

197. In its second five-year plan covering the period 1956/57 to 1961/62, the Planning Commission of the Government of India noted that

". . . the fact remains that the increase in exports that we envisage over the plan period is not very striking. India's export earnings are derived from a few commodities. Three of them, namely, tea, jute manufactures, and cotton piece goods account for one-half of the total. These major exports are meeting increasing competition abroad. This limits the scope for any substantial increase in exports in the short run. While every effort has to be made to promote exports of new items and to develop and diversify the markets for the country's major exports, it has to be recognized that it is only after industrialization has proceeded some way that increased production at home will be reflected in larger export earnings."[i]

198. Up to the end of the second plan period, import substitution of both producer and consumer goods, aimed principally at meeting domestic demand, remained a major principle guiding the country's industrialization. Beginning with the third plan period, 1962/63 to 1967/68, it was considered that industrialization had progressed to the point where strong emphasis could be placed on increasing exports, principally of manufactures, and expanding the domestic production of capital goods and equipment in substitution of imports, with a view to advancing

about 16 per cent of the total; there was a decline both in value and relative weight in exports of processed agricultural products, mostly sugar, due principally to a reduction in international quotas for this product. On the import side, there were appreciable increases both in the value and the proportion of capital goods and consumer goods; imports of raw materials rose in absolute terms but declined in relation to total imports.

[h] Corporación de Fomento de la Producción, *Programa nacional de desarrollo económico, 1961-1970*, Santiago de Chile, s.d. (1961).

[i] Government of India, Planning Commission, *Second Five Year Plan*, New Delhi, 1956, chapter IV, para. 47.

towards self-sustaining growth and a balanced external account. The Indian planners realize

"that the balance-of-payments difficulties the country is facing are not a temporary or fortuitous phenomenon. They are part and parcel of the process of development. For a period, the excess import requirements have to be met from external assistance. But it is important to aim at a progressive reduction in the imbalance, so as to eliminate it within a foreseeable period. . . . [These] considerations bring out the need for building up the country's exports. Only on the basis of a steadily expanding volume of exports can a growing volume of imports be financed. Export promotion has, therefore, to be regarded as a major plank of economic policy. The economy has to provide a progressively larger surplus for exports. Whatever measures, fiscal or organizational, might be required for this purpose will have to be taken.

". . . A viable balance-of-payments position can be reached only on the basis of a progressive increase in the domestic capacity for producing capital goods and equipment and a strengthening, at the same time, of the export capacity of the economy.

"Commercial policy in the coming years will have to concentrate on export promotion to the maximum extent possible. It will be necessary also to exercise the greatest possible restraint in respect of imports. The gap between import requirements and export earnings cannot be closed immediately, but every effort will have to be made to do so progressively. The aim is to secure a balance on external account within a period of ten years or so."[j]

199. As already mentioned, many of the export promotion measures taken by the Government tend to assist small industries and handicrafts. Measures are also taken to expand exports of ores, metallurgical products and products of large-scale manufacturing, and traditional lines of exports, e.g., raw and finished jute and cotton, tea, coffee, oil, pulses, tobacco and spices, "even at some sacrifice in domestic consumption". The measures to promote exports of manufactures tend not only at strengthening and assisting existing industrial enterprises but also at creating new export industries, many of which would be set up on a small scale. Favourable export prospects appear to exist for new products such as certain engineering goods—agricultural implements, builders' hardware, diesel engines, electric motors, pumps, sewing machines and household electrical equipment and appliances—chemical and pharmaceutical products and products based on agricultural raw materials.

200. It is expected that the export of manufactures will be stepped up during the third plan period to five or six times their present level. While relying largely on domestic efforts, the Indian planners keep in mind the external difficulties facing the developing countries in their attempt to secure new markets. They stress that patterns of trade cannot but change as the developing countries expand and broaden their economic base, and express the wish that this be recognized by the advanced countries and translated into action by adoption of liberal commercial policies.

[j] Government of India, Planning Commission, *Third Five Year Plan—A Draft Outline*, New Delhi, 1960, chapter IV, paras. 40 and 41, chapter V, paras. 49 and 50.

II. INTERNATIONAL ACTION

RECOMMENDATIONS OF COMMITTEE III OF GATT

201. The main findings of Committee III set up by the Contracting Parties to the General Agreement on Tariffs and Trade (GATT) regarding obstacles to the expansion of trade of the less-developed countries are as follows:[a]

"(i) *Quantitative import restrictions.* One of the most serious barriers confronting the exports of less-developed countries was identified by the Committee as being quantitative import restrictions. Exports from less-developed countries of such important products as vegetable seeds and oils, coffee, raw cotton, tobacco, tropical timber, manufactures of jute, of cotton and of coir, and sewing machines are often adversely affected by quantitative import restrictions which are sometimes applied in a discriminatory manner. The Committee noted that the less developed countries, as a group, had not benefited significantly from the widely observed movement towards trade liberalization by industrialized countries as a result of their emergence from balance-of-payments difficulties. In certain instances industrialized countries, when proceeding with their programme of relaxation of import restrictions, have extended the removal of restrictions only to imports of raw materials while the products processed from these materials have continued to be subject to restrictions. The Committee noted with some concern that certain industrialized countries had liberalized trade on an area basis, while maintaining restrictions against other areas in which most of the less-developed countries are located. The maintenance of such restrictions by industrialized countries is a serious threat to the balanced expansion of exports of less-developed countries and to sound patterns of growth in the international economy; the maintenance of such restrictions does not only seriously affect export possibilities for less-developed countries, but also has the effect of concentrating imports in markets where goods can enter freely, thus sometimes contributing to strains on the capacity of these markets to absorb imports. Moreover, many of these restrictive measures, particularly discriminatory restrictions, are in clear contradiction with obligations of the importing countries under the General Agreement; a conscientious application of the General Assembly by all contracting parties will in itself go a long way towards removing many of the barriers at present still confronting exports from less-developed countries.

"(ii) *Tariffs.* High tariffs and tariffs which differentiate disproportionately in favour of imports of raw materials, as compared to duties for processed goods, were also identified as constituting serious barriers to exports from less-developed countries, particularly with respect to vegetable oils, coffee, tea, cocoa products, manufactures of jute, of cotton and of coir, sports goods, aluminium, ferro-alloys and copper rollings, leather products, and certain other manufactured consumer goods. It was found that a reduction of these barriers would be of considerable assistance to less-developed countries. In addition, it was found that tariff preferences may cause significant diversions of trade, for example, certain tariff preferences on coffee, cocoa, vegetable seeds and oils and tropical timber.

"(iii) *Revenue duties and internal fiscal charges.* High

[a] *GATT Programme for Expansion of International Trade—Trade of Less-Developed Countries—Special Report of Committee III*, Geneva, 1962 (Sales No.: GATT/1962-3).

revenue duties and high fiscal charges were also emphasized as major barriers to such important traditional exports from less-developed countries as coffee, tea, cocoa, and tobacco, and for some of the newer exports of manufactured consumer goods. In the case of coffee, tea and cocoa, these taxes apply only to imports from less-developed countries since there is no domestic production in the countries imposing the taxes. The incidence of revenue duties on these commodities is particularly heavy in various European countries. It was emphasized that a reduction of these barriers would be of considerable assistance to less-developed countries in increasing export earnings from these commodities.

"(iv) *State monopolies.* The Committee also found that the activities of restrictive State monopolies, whether in countries with centrally-planned or market economies, had an adverse effect on imports from less-developed countries of items such as coffee, cocoa, tea and tobacco, particularly where retail prices fixed for these products are very high in relation to import costs. It was found that decisions, followed by action, by these monopolies and by purchasing agencies in State-trading countries, to import larger amounts of these products and to provide liberal access to imports from less-developed countries, combined, if necessary, with significant reductions in internal prices, would make a considerable contribution to an expansion of the export-earning capacity of less-developed countries.

"(v) *Other obstacles to the development of export earnings of less-developed countries.* The above list of obstacles to the expansion of trade of less-developed countries is by no means exhaustive. For example, a possible loss of trade opportunities for less-developed countries arises from the operation of price-support schemes, surplus disposal operations, and mixing regulations in some countries. Also, the Committee was well aware of the paramount importance of seeking a solution to the problem that exists as a result of price fluctuations in the field of commodity trade, but noted that this problem was being considered elsewhere. Nevertheless, the Committee retained a strong interest in this problem and kept it in mind in its detailed deliberations and in the preparation of this report."

202. In the light of these findings, the Committee placed before the Contracting Parties the following specific recommendations:

"(i) Contracting Parties should give immediate and special attention to the speedy removal of those remaining quantitative import restrictions which affect the export trade of less-developed countries;

"(ii) Contracting Parties should consider the immediate removal of any element of discrimination in the application of their import restrictions which affects the export trade of less-developed countries;

"(iii) Contracting Parties, especially industrialized countries, should examine their tariffs with a view to an early expansion of the export earnings of less-developed countries;

"(iv) Contracting Parties, during tariff negotiations, should keep in mind the needs of less-developed countries, as stipulated in Article XXVIII *bis:* 3 (*b*) of the General Agreement, for a more flexible use of tariff protection, particularly to assist their economic development.

"(v) Contracting Parties should adopt a sympathetic attitude to the question of reciprocity of tariff concessions to meet the special needs of less-developed countries;

"(vi) Contracting Parties considering methods to bring about a general reduction of tariffs in the future should take account of the needs of less-developed countries;

"(vii) Contracting Parties, especially those industrialized countries with favourable financial and economic situations, should re-examine the possibility of reducing substantially their internal revenue and fiscal charges on products of interest to less-developed countries;

"(viii) Contracting Parties, especially industrialized countries, when formulating and implementing their commercial and economic policies, should give increasing emphasis to measures which would enable less-developed countries to enjoy a progressively increasing rate of growth; where their requirements of processed goods, semi-finished and finished components and of the simpler industrial products can be met by imports from less-developed countries, instead of being produced at home, Contracting Parties should give sympathetic consideration to moderating their tariff and non-tariff measures affecting these products;

"(ix) Contracting Parties should take account of the long-term development plans of the less-developed countries and recognize that, important as financial assistance is to less-developed countries, an expansion of exports, both of manufactured goods and raw materials, is essential if less-developed countries are to develop on a sound economic basis.

"(x) Contracting Parties, operating State monopolies or purchasing agencies, should endeavour to improve access to their markets for products of less-developed countries by decisions to import larger quantities of the products concerned and, if necessary, by reductions in the difference between import and sales prices."

SURVEY OF PROGRESS IN THE REDUCTION AND ELIMINATION OF BARRIERS AFFECTING PRODUCTS EXPORTED BY LESS-DEVELOPED COUNTRIES *

I. INTRODUCTION

1. This paper sets out in a comprehensive form data on progress made in the reduction and removal of barriers affecting products which have so far been examined by Committee III of the GATT Programme for the Expansion of Trade. It also shows, in respect of major markets, the type and incidence of commercial policy measures affecting these products which were in force at the beginning of 1964.

2. The commodities covered by this survey have in recent years accounted for more than one-third of the value of total exports from less-developed countries to industrialized countries.[1] A further list of products, comprising some 190 tariff items or subitems, notified by less-developed countries as being of special export interest to them, is under examination in Committee III.[1]

3. The document is referred to in paragraph 76 of the principal submission by the GATT secretariat entitled "The Role of GATT in Relation to Trade and Development".[2]

II. SUMMARY OF INFORMATION CONTAINED IN THE TABLES

3. While the tables are largely self-explanatory, a brief summary of the tables has been prepared for the convenience of the reader. It may be pointed out in this context that the compression into summary tables of a large amount of information has involved, by necessity, some degree of simplification. Every effort was made, however, to ensure that the information is as unbiased and up to date as possible.[3] Notes have been prepared for each of the tables setting out the necessary explanations as to the method used in drawing up the table and any qualifications to the data which may be required.

A. QUANTITATIVE RESTRICTIONS [4]

4. Summary Table A on quantitative restrictions covers 19 countries, predominantly industrialized countries. Information is given under 43 commodity headings, the breakdown having been made in accordance with the customary grouping in Committee III documents. The table has thus provision for 817 entries.

5. An analysis of the table shows that in 528 out of the 817 possible instances the items concerned were free of restriction at the time they were first examined by Committee III and remain free from import restriction today. Taking account of the consideration regularly given by the *Contracting parties* in the various sectors of their work to measures of assistance to less-developed countries in expanding their export trade and also of the time lapse between the institution of the GATT Programme for the Expansion of International Trade in the autumn of 1958 and the first examination by Committee III of Lists I, II and III in 1959, 1960 and 1961 respectively, it may be assumed that in a considerable number of instances (although these are not identified in the table) action taken by contracting parties in the elimination of restrictions on these items can be attributed to the GATT.

6. Progress in the relaxation or removal of quantitative restrictions was reported in 232 cases out of the 289 instances where restrictions were applied at the beginning of the period under review. This figure does not take into account the numerous cases where quotas were increased, significant as progress in this form may have been.

7. At the present time imports are completely free from restrictions or licensing control in 719 instances. There are thus ninety-eight entries in the table showing that controls are still applied. Eleven out of these imports are effected by State monopolies. While the operation of such monopolies may have a restrictive effect in some cases, State monopoly operation should not be equated with quantitative restrictions. Twenty-nine out of the remaining eighty-seven entries showing the maintenance of quantitative restrictions or licensing controls are imposed by countries invoking the balance-of-payments provisions of the General Agreement for the use of quantitative restrictions. In nine out of the eighty-seven cases the measures are covered by the provisions of the Long-Term Arrangement Regarding International Trade in Cotton Textiles, which makes provision for gradual but automatically increasing access to the protected markets. Target

* This paper was prepared by the Secretariat of the Contracting Parties to the General Agreement on Tariffs and Trade (GATT) in connexion with item 11 (*b*) of the provisional agenda on the subject of International commodity problems (item II.2 of the list of main topics). See Interim Report of the Preparatory Committee (first session), in Vol. VIII of this series.

[1] The value of exports in recent years of the commodities already examined by Committee III was approximately $7,000 million, while the export value of the further list of products amounted to approximately $5,000 million. If petroleum and petroleum products are excluded, the commodities under examination in Committee III account for approximately three-fourths of total exports from less-developed countries to industrialized countries.

[2] See Vol. V of this series.

[3] The data were originally circulated in document COM.III/119 and COM.III/116 to Governments of GATT countries for verification and amendment. They have been brought up to date and revised in the light of submissions by Governments and show the situation existing at the beginning of 1964.

[4] Also cover State trading and monopoly.

dates for the removal of restrictions have been indicated or an indication has been given that liberalization is envisaged in the near future in fourteen instances.

8. Thirteen out of the nineteen countries covered apply restrictions in less than five out of forty-three possible instances. Six of these thirteen countries apply restrictions in only one instance or apply no restrictions or controls on any of the products examined by the Committee. Apart from cotton textiles where the use of restrictions or controls is recorded in nine out of nineteen possible instances, vegetable oils (ten cases), jute manufactures (seven cases), canned fish, oilseeds, and coir manufactures (four cases each) are the items most frequently affected by quantitative restrictions.

9. In respect of the products and countries covered by the table, there remain thirty cases where the whole item, and fifty-seven cases where part of an item, is subject to restriction or licensing control. In forty-one out of the fifty-seven cases the item concerned has benefited from partial import liberalization during the period under review.

10. Summary Table B on quantitative restrictions shows the use of import restrictions in respect of forty-six countries, thus giving a broader picture of the use of restrictions. In the case of twenty countries applying restrictions, the restrictions are maintained for balance-of-payments reasons. The table shows that out of the twenty-six countries which are not invoking balance-of-payments justification for the maintenance of import restrictions, nine maintain no restrictions or controls on any of the products examined by the Committee and eleven are applying restrictions in not more than five out of forty-three possible instances.

11. On the other hand, most of the countries which are applying the restrictions for balance-of-payments reasons, mainly less-developed countries, impose restrictions in one form or another on the majority of the products covered in this survey.

B. CUSTOMS TARIFFS

12. The summary tables on customs tariffs cover sixteen industrialized GATT countries and provide information in respect of seventy-eight commodity classifications. They show present rates of duty or their *ad valorem* equivalents, progress made since 1960/61, the amount of tariff reductions and the instances where a tariff binding (Table B) is in force. For the convenience of the reader the main tariff table is preceded by an abbreviated table (Table A) which shows in symbol form those cases where duty reductions and tariff bindings were effected or where "low" (5 per cent *ad valorem* or less) or zero duties apply.

13. For the United Kingdom and Canada information is given both in respect of most-favoured-nation rates and in respect of preferential rates. For the EEC countries only the Common External Tariff is shown. Nevertheless, imports from a considerable number of less-developed countries into the EEC benefit from intra-Community tariff rates or may be imported duty-free under special arrangements. For details regarding the import tariff treatment in the EEC applicable to associated States, see footnote 12. The tables thus have thirteen country columns. Taking account of the complexity of tariff schedules and the type of information customarily supplied by contracting parties to Committee III, the commodity breakdown was expanded, as compared with the section on quantitative restrictions, to seventy-eight headings. The possible number of entries in the tables is therefore 1,014.

14. The tables distinguish between three broad groups of products (1) foodstuffs and tropical agricultural products, (2) industrial raw materials and semi-manufactures, (3) manufactured goods.

Foodstuffs and tropical agricultural products

15. The possible number of entries in this section of Tables A and B is 247 each. Progress in the reduction of duties was made in sixty instances. A zero duty rate applies in eighty-two out of the 247 cases.[5] In twenty-four out of the eighty-two cases, the elimination of the duty took place since 1960/61 (the duty-free entry granted to tea in thirteen cases as from 1 January 1964 was made in accordance with undertakings relating to the Action Programme). (See the explanatory notes to Table B.) In thirty instances a duty of 5 per cent or less is applied. In twelve out of these thirty, this "low" rate is the result of action taken since 1960/61. The total number of instances where the products concerned already benefit from a zero or low rate of duty is 112, thus accounting for nearly half of the possible instances. Tariff bindings are in force in ninety cases.

16. It is relevant to point out in this context that the table does not show zero rates of duty which will be applied by the EEC to imports from the associated African States and Madagascar in respect of a number of products (including: coconuts, coffee, tea and cocoa) with the coming into force of the new Association Convention. Similarly, it should be pointed out that included among the countries where the majority of the products concerned benefit from zero duties are such important markets as the United States and, as far as imports from the preferential area are concerned, the United Kingdom.

Industrial raw materials and semi-manufactures

17. The possible number of entries in this section of the table is 273. In 163 out of the 273 possible cases, a zero import duty applies. A rate of duty of 5 per cent *ad valorem* or less applies in thirty-eight cases. Thus in 70 per cent of all cases the duty is either zero or "low". There are thirty-three cases where progress was made in the reduction or elimination of duties. Tariff bindings are in force in 102 cases.

Manufactured goods

18. The possible number of entries in this section of the table is 494. A zero rate of duty applies in fifty-three cases. In nineteen cases the duty is 5 per cent *ad valorem* or less. Progress in the reduction of

[5] Includes those cases where a firm decision to suspend or remove duties has been notified.

duties is recorded in 111 cases. Tariffs are bound in 244 cases.

19. It may be useful to draw a distinction between reductions affecting products traditionally exported by less-developed countries included in the table (cotton manufactures, jute manufactures, coir manufactures, finished leather, leather footwear, leather goods and sports goods) and the newer lines of manufactured exports (steel furniture, diesel engines, electric motors, electric fans, sewing machines and bicycles). While the tables do not permit a strict comparison to be made of progress between duty reductions in one of these groups as against the other because of the considerably larger number of subclassifications for the traditional manufactured exports, the following observations may, nevertheless, be worth noting. Out of 416 possible entries in the table for the traditional manufactured exports, progress was made in ninety-six cases (i.e., in approximately 23 per cent of all possible cases).[6] For the newer lines of manufactures there are seventy-eight entries, and duty reductions were recorded in fifteen cases (approximately 20 per cent of all possible cases).[6]

C. Internal fiscal charges

20. The table gives information on sixteen industrialized countries in respect of internal fiscal charges on cocoa, coffee and tea. It should be pointed out that progress in the elimination of revenue duties is summarized in the table on customs tariffs.

21. The possible number of entries in the table is 105.[7] In eighty-three cases no fiscal charge is applied (ten countries covered by the table do not apply fiscal charges on any of the items covered by the table). Fiscal charges with an *ad valorem* incidence of 10 per cent or less are applied in not less than six out of twenty-two instances where fiscal charges are applied.

22. It should be noted that in response to the Action Programme adopted by Ministers, Sweden abolished its internal tax on coffee with effect from 1 January 1964 (see footnote 5 to the table for more detailed information). In respect of a further four cases, Italy notified that draft legislation has been drawn up providing for a reduction by 50 per cent of the tax.

III. DETAILS OF MEASURES AFFECTING EXPORTS OF LESS-DEVELOPED COUNTRIES AND PROGRESS MADE IN THE REDUCTION AND REMOVAL OF SUCH MEASURES

A. Summary tables relating to quantitative restrictions

23. Table A below indicates in a summary form quantitative restrictions which are applied by a selected number of GATT countries on items examined by Committee III [8] and the progress made in the removal or relaxation of quantitative restrictions since these products were first subjected to an examination by the Committee. Of the nineteen [9] countries covered by the table, four countries (Denmark, Finland, Greece and Israel) apply restrictions for balance-of-payments reasons. Where a dash is entered in the table, it indicates that the item was free of restrictions at the time Committee III first examined the product and that it continues to be free from restrictions or licensing control. In the majority of these cases restrictions had earlier been imposed but had been eliminated by the countries concerned in accordance with their obligations under the GATT. Where "X" or "x" is entered in the table it denotes that the item concerned was freed from import control during the period under review. Where "y" is entered it denotes that a part of the item concerned was freed from import control during the period under review. The table does not indicate progress which took the form of quota increases, significant as progress in that direction may have been.

24. Table B below indicates restrictions at present applied by forty-six GATT countries [10] in comparison with nineteen GATT countries covered in Table A, thus giving a broader picture of the restrictions still maintained by GATT countries. In this table a distinction has been made between countries applying restrictions for balance-of-payments reasons (twenty-six countries) (Part B), and those not invoking balance-of-payments justification for the maintenance of import restrictions (twenty countries) (Part A).[11]

25. Where a dash is entered in the table, it indicates that the item is free of restrictions at present, while the other symbols used for purposes of this table indicate the still remaining restrictions, State trading and monopoly.

B. Summary table relating to customs tariffs

26. In using the table it should be borne in mind that some degree of simplification is inevitable in any study of this kind. The recent adoption of a common tariff classification, the Brussels Nomenclature, by many important trading countries has facilitated the preparation of this study. Even these countries, however, do not use identical tariff sub-headings. The United States and Canada have not adopted the Brussels Nomenclature but their tariff rates have, as nearly as possible, been related to this Nomenclature.

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[6] Makes allowances for cases where in 1960/61 the duty was zero.

[7] Seven commodity classifications multiplied by fifteen columns (Belgium/Luxembourg counted as one country for purposes of this table).

[8] The table also gives information on bananas which were first studied in 1962 by the Sub-Group on Trade in Tropical Products. With respect to bananas only the present position is shown since reliable information on the import treatment in the different countries during 1960/61 is not available.

[9] Belgium/Luxembourg counted as one country for purposes of this table.

[10] Belgium/Luxembourg counted as one country for purposes of this table.

[11] While such a distinction has been made, the position is not clear in every case, particularly in the case of countries which have only recently acceded to the GATT. The classification should, therefore, not be deemed to indicate the exact legal position under the General Agreement as regards the restrictions applied by the countries concerned.

27. Information is given in symbol form in Table A, and in terms of actual duties or their *ad valorem* equivalents in Table B. Information is also given on tariff bindings and on progress made in the reduction of duties. Duty rates are given for the years 1960/61 and 1962/63, i.e., before and after the last round of tariff negotiations.

28. No distinction is made in the table between duties primarily imposed for fiscal purposes, and those which are primarily protective in character. It may be borne in mind that an internal tax may have the same effect as an import duty where there is no domestic production. These internal taxes can be of some importance, for instance, in the case of tropical beverages. (See also under C below.)

29. Generally, the duty rates shown are those actually applied, i.e., account is taken as far as possible of administrative action resulting in the suspension of duty rates in tariff schedules. In the case of the European Economic Community (EEC), the rates of the Common External Tariff are shown. These will not, of course, come completely into force until the end of the transitional period, but the EEC will use the Common External Tariff as the basis for any tariff concessions.[12]

30. *Symbols used:* where rates are shown in brackets (for example: (7)), this indicates that a specific duty has been converted into *ad valorem* terms. These conversions have, in the majority of cases, been supplied by Governments (for the United States where the *ad valorem* equivalents are those contained in *Comparative Tariffs and Trade*,[13] published by the Committee for Economic Development, New York, 1963). In those cases where no information on *ad valorem* equivalents had been supplied they were calculated by the secretariat on the basis of average import unit values derived from national trade returns. For these conversions *a single base year* has been used to calculate the equivalents both for the entries 1960/61 and 1962/63, i.e., where import statistics were available for 1962 the conversion both for the 1960/61 and the 1962/63 entries is based on average 1962 import unit price. In cases where a specific duty remains unchanged during the period under review the same *ad valorem* equivalent is shown in both entries regardless of any change in import unit price which may have occurred. The method was adopted so that changes resulting from duty reductions can be isolated from those which might result from fluctuations in import unit values. It should be noted that the *ad valorem* equivalents of specific duties are significantly affected by fluctuations in import prices so that the effective rate of duty depends on the base period chosen and the effective rate of duty levied at present may not always be apparent from the table.

31. Two asterisks (for example: 5**) indicate that alternative specific duties have been omitted. Bound rates are indicated by *italic type* (for example: *free, 10*). Where the *italic type* is found only under the entry for 1962/63, this indicates that the item was bound at its existing level during the last tariff conference. Where a rate was reduced during that conference this is indicated by **bold type** (for example: **free, 5**). Rates which have been reduced as a result of unilateral action are indicated by an asterisk (for example: free*, 12*).

32. Where a wide range of duties appear in the tariffs because of a large number of tariff sub-classifications for the items in the table, an attempt was made to show only those tariff rates applied to the goods which would seem to be most important in the trade of less-developed countries.

C. SUMMARY TABLE RELATING TO INTERNAL FISCAL CHARGES

33. The table below indicates in a summary form, internal fiscal charges which are applied by a selected number of GATT countries on cocoa, coffee and tea. It will be recalled that at the outset of the examination of products included in Lists I to III, Committee III had taken up the question of internal fiscal charges, where applicable, with respect to all of these products. The Committee found that in the majority of cases, the charges were imposed on home-produced goods as well as on imported goods. A comparative evaluation of the effect on trade and consumption of such taxes is complicated if not impossible, since the particular measures must be seen against the background of various fiscal policies and methods of raising revenue, applied in different countries. For this reason, it was felt desirable to limit the information in the table to internal fiscal charges on cocoa, coffee and tea.[14] In respect of these products, it may be assumed that there is generally no domestic production in the countries covered by the table so that the taxes impinge only on imports from developing countries. Tobacco, one of the products examined by Committee III, which is often subject to high fiscal charges, has not been included in this table as it was repeatedly pointed out in Committee III that charges on tobacco were often motivated by considerations other than collecting revenue. Trade in tobacco is often the responsibility of a State monopoly; information relating to State monopolies is summarized in the table on quantitative restrictions, in Section A below.[15]

[12] It should be noted, however, that imports from the associated African States and Madagascar will, in general, benefit from the same gradual elimination of duties as the member States of the EEC apply among themselves. Moreover, as soon as the new Association Convention comes into force, a number of products covered by the table, i.e., coffee, cocoa, tea and coconuts, coming from the associated African States and Madagascar will enter the member States of the Community duty-free. At the same time, the Common External Tariff for these products will come into operation at reduced rates (shown in the table). Imports from Greece under the Association Agreement with that country will also benefit from the same gradual elimination of duties as the member States apply among themselves except for certain agricultural products to which a different time schedule is applied. Moreover, tobacco, a product covered by the table originating in Greece, will benefit from a speedier elimination of customs duties.

Further, in accordance with the Association Agreement between Turkey and the EEC, it is envisaged that the EEC will grant Turkey preferential tariff quotas on four products, including tobacco.

[13] Tariff data on the United States in this paper remain subject to verification by the United States authorities.

[14] The table does not show general turnover or sales taxes, as long as their incidence is less than 15 per cent.

[15] Also relevant in this context is the information on revenue duties on tobacco appearing in the tariff table, Section B below.

SUMMARY

Quantitative restrictions on products examined by Committee

X, x = Complete elimination of quantitative restriction or licensing requirement since 1959 in the case of List I, 1960 in the case of List II and 1961 in the case of List III, and where as a result there is no restriction or licensing requirement at present.

y = Removal of a quantitative restriction or licensing requirement in respect of part of an item and the continued maintenance of quantitative restriction or licensing requirement in respect of the residual portion of the item in question.

Where small letters are used, the measure applies only to a part of the item against which it appears. (A small x denotes the complete Symbol within brackets denoting import restriction, elimination of which is indicated or envisaged by Governments at certain target

Product	*Australia*	*Austria*	*Belgium/ Luxembourg*	*Canada*	*Denmark*	*Finland*	*France*	*Germany Fed. Rep.*	*Greece*[21]	*Israel*	*Italy*	*Japan*
List I												
Coffee: Raw		X	—	—	L	—	Q	—	—	X	—	X
Roasted	—	X	—	—	L	—	Q	—	—	X	X	(y)[24]
Tea	—	—	—	—	—	—	X	—	—	X	—	y[25]
Cocoa: Beans	—	—	X	—	—	—	—		—	X	—	X
Butter	—	—	X	—	—	—	X	X	—	X	X	X
Preparations	—	—	X	—	—	R	X	y	—	X	X	(y)[26]
Oilseeds	X	x	—	—	—	R	x	—	—	X	x	y[27]
Vegetable oils	X	y[2]	(y)[7]	—	X	y	y[10]	y[16]	r	X	y[23]	y
Tobacco: Leaf	X	M	X	—	—	—	M	—	—	R	M	M
Manufactured	—	M	X	—	—	—	M	—	—	X	M	M
Lead: Ore and concentrate	X	—	—	—	—	—	—	—	—	X	—	—
Unwrought	X	—	—	—	x	—	X	—	—	X	X	(R)[28]
Wrought	X	X	—	—	X	—	X	—	—	X	—	(y)[28]
Copper: Ore and concentrate	—	—	—	—	—	—	—	—	—	X	X	—
Unwrought and matte	X	X	—	—	—	—	—	—	—	X	X	X
Timber: In round	y[1]	—	—	—	—	—	—	—	—	X	X	x
Sawn in rough	y[1]	—	—	—	—	—	—	—	—	X	X	(y)[29]
Processed	y[1]	X[3]	—	—	X	—	X	—	—	X	X	(y)[29]
Cotton	X	—	X	—	—	—	—	—	—	R	X	—
Cotton textiles[10]	X	y	—	—	y	x[8]	y[11]	y	L	R	X	X
Jute manufactures	x	Q[4]	x	—	r	y[9]	y[12]	(y)[17]	—	X	X	X
List II												
Iron ore	—	—	—	—	—	—	—	—	X	X	—	X
Bauxite	—	—	—	—	—	X	X	—	X	X	—	—
Alumina	—	—	—	—	—	X	X	—	X	X	—	X
Aluminium	R	—	—	—	—	X	X	X	X	X	—	X
Leather	—	X	x	—	—	q	—	(y)[18]	X	X	—	y
Leather goods	x	x	—	—	—	y	y	—	X	X	—	X
Leather footwear	X	(Q)[5]	—	—	X	Q	—	—	X	X	—	y
Diesel engines (under 50 h.p.)	—	x	—	—	x	Q	X	—	r	X	—	y
Sewing machines	—	X	—	—	—	—	Q	(q)[19]	X	X	X	X
Electric motors	—	(y)[5]	—	—	X	y	x	—	y[22]	X	—	X
Electric fans	—	X	—	—	—	—	—	—	X	X	—	X
Bicycles	—	X[6]	—	—	X	X[8]	—	—	X	R	—	X
Sports goods	—	X	—	—	x	X	q[13]	—	X	X	—	—
List III												
Canned fish	X	—	—	—	—	y	q[14]	—	—	R	—	y[30]
Phosphates	—	—	—	—	—	q	X	—	—	R	—	—
Cement	—	—	—	—	—	Q	X	—	—	X	—	x
Coir manufactures	—	(y)[5]	—	—	x	r[9]	y[15]	y[20]	—	X	—	x
Ferro-chrome	—	—	—	—	—	—	Q	—	—	X	—	X
Ferro-manganese	—	—	—	—	—	—	Q	—	—	X	—	X
Copper products	—	x	—	—	—	—	X	—	—	X	—	X
Steel furniture	—	X	—	—	—	—	X	—	—	X	—	X
Bananas	—	—	—	—	—	R	R	—	—	R	M	X

TABLE A

II and progress made in the removal of these restrictions

— = No quantitative restriction or licensing requirement.
L, l = Licensing requirement but imports are generally liberally licensed.
R, r = Import restriction.
Q, q = Import restriction applied through quota.
M, m = State monopoly.

elimi ıation of restriction or a licensing requirement which was maintained on part of the item in 1959, 1960 or 1961.)
dates or in the near future (see explanatory notes below).

Netherlands	*Norway*	*Rhodesia and Nyasaland*	*Sweden*	*Switzerland*	*United Kingdom*	*United States*	—	X x	y	l r q	L R Q	M m	— + X x	X x + y
—	x [31]	—	X	—	X	—	11	6	0	0	2	0	17	6
—	x [31]	—	X	—	X	—	10	6	1	0	2	0	16	7
—	—	—	X	—	—	—	15	3	1	0	0	0	18	4
—	—	—	X	—	—	—	15	4	0	0	0	0	19	4
—	—	X	X	—	—	—	11	8	0	0	0	0	19	8
—	—	X	X	—	—	—	10	7	1	0	1	0	17	8
—	—	r	X	—	—	q [37]	9	6	1	2	1	0	15	7
(y) [7]	X	r	X	x	—	x	2	7	8	2	0	0	9	15
—	—	—	M	—	X	—	10	3	0	0	1	5	13	3
—	—	—	X	—	q [34]	—	11	3	0	1	0	4	14	3
—	—	—	X	—	—	q [38]	15	3	0	1	0	0	18	3
—	x	—	X	—	—	Q [38]	10	7	0	0	2	0	17	7
—	x	—	X	—	—	—	11	7	1	0	0	0	18	8
—	—	—	X	—	—	—	16	3	0	0	0	0	19	3
—	—	—	X	—	—	—	13	6	0	0	0	0	19	6
—	—	—	X	—	—	—	14	4	1	0	0	0	18	5
—	—	—	X	x	—	—	13	4	2	0	0	0	17	6
—	—	X	X	X	—	—	9	8	2	0	0	0	17	10
—	—	—	X	—	—	Q	13	4	0	0	2	0	17	4
—	—	r [32]	X	—	y [35]	q [39]	5	5	5	2	2	0	10	10
—	—	y [33]	x	—	m [36]	—	6	6	4	1	1	1	12	10
—	—	—	—	—	—	—	16	3	0	0	0	0	19	3
—	—	—	—	—	—	—	15	4	0	0	0	0	19	4
—	—	—	—	—	—	—	14	5	0	0	0	0	19	5
—	—	—	—	—	—	—	12	6	0	0	1	0	18	6
X	—	—	—	—	—	—	11	5	2	1	0	0	16	7
—	—	—	—	—	—	—	12	5	2	0	0	0	17	7
—	—	—	—	—	—	—	12	4	1	0	2	0	16	5
—	—	—	—	—	—	—	12	4	1	1	1	0	16	5
—	—	—	—	—	—	—	12	5	0	1	1	0	17	5
—	—	—	—	—	—	—	12	4	3	0	0	0	16	7
—	—	—	—	—	—	—	15	4	0	0	0	0	19	4
—	—	—	—	—	—	—	13	5	0	0	1	0	17	5
—	—	—	—	—	—	—	13	5	0	1	0	0	18	5
—	—	—	—	—	—	—	14	1	2	1	1	0	15	3
—	—	—	—	—	—	—	16	1	0	1	1	0	17	1
—	—	—	—	—	—	—	15	3	0	0	1	0	18	3
—	—	—	—	—	—	—	12	3	3	1	0	0	15	6
—	—	—	—	—	—	—	16	2	0	0	1	0	18	2
—	—	—	—	—	—	—	16	2	0	0	1	0	18	2
—	—	—	—	—	—	—	15	4	0	0	0	0	19	4
—	x	—	—	—	—	—	14	5	0	0	0	0	19	5
—	—	R	—	—	Q	—	12	1	0	0	5	1	13	1
						TOTAL	528	191	41	16	30	11	719	232
										(43 × 19 = 817)				

(See notes overleaf.)

EXPLANATORY NOTES TO TABLE A ON QUANTITATIVE RESTRICTIONS

The use of symbols for explaining the import policy for a specific product in a given country involves, by necessity, some degree of simplification. For example where a small letter symbol such as "q" or "r" is used it is not directly visible from the table whether the measure applies to one or to many sub-classifications of the product or product category against which it appears. To remedy this shortcoming explanatory notes have been used to point out as far as possible these entries where the measure denoted by a small letter symbol relates only to one or to a few sub-classifications of the product or product category concerned.

[1] Only (*a*) Douglas fir and hemlock; (*b*) other undressed timber excluding radiata pine; (*c*) dressed timber excluding weatherboards and flooring boards, remain subject to quotas (measures applied under the provisions of Article XIX of the GATT).

[2] Items falling under heading 15.08 were completely liberalized on 1 January 1963. Soyabean oil, cottonseed oil, coconut oil, palm kernel oil and palm oil, fit for human consumption only, remain subject to restrictions.

[3] Items falling under headings 44.14 to 44.16 were liberalized on 1 January 1963 and 44.18 on 1 July 1963.

[4] Existing quotas are as a rule increased by 20 per cent each semester.

[5] It is envisaged that the remaining restrictions on leather footwear, electric motors (a few types) and coir manufactures (twine, cordage, rope, etc.) will be removed during the year 1964.

[6] The restriction on bicycles was removed on 1 January 1964.

[7] Castor oil (fluid or solid, crude or not) only remains subject to quotas. An indication was given that the restriction will be eliminated by 31 December 1964, at the latest.

[8] Terry fabrics (55.08) were liberalized on 1 January 1964, thus completely eliminating restrictions on cotton textiles.
Bicycles were also liberalized on 1 January 1964.

[9] Certain carpets, carpeting rugs, mats and matting, only remain subject to quotas.

[10] Palm oil and some other oils remain subject to quotas. Castor oil was liberalized on an experimental basis on 5 November 1963.

[11] Products falling under 55.08, 55.09, 58.04, 58.05, 58.09, ex 60.01-60.05 and 62.01 to 62.03 of the BTN remain subject to quotas. Products falling under 55.05, 55.06, 55.07, 58.08 and 62.04 were liberalized on 2 July 1963.

[12] Jute fabrics and bags only, remain subject to quotas. Jute yarn was liberalized in July 1963.

[13] The restrictions mainly relate to leather balls, rackets and nets. Under bilateral agreements, France opens quotas for India and Pakistan.

[14] Canned sardines, tunny fish and bonito only, remain subject to quotas.

[15] Carpeting and rugs falling under ex 58.01 and ex 58.02 of the BTN and nets falling under ex 59.05 only, subject to quotas. Twine, cordage, ropes and cables falling under 59.04 were liberalized on 2 July 1963.

[16] Fatty vegetable oils, not crude, for feed (except olive oil in small containers) only, remain subject to quotas.

[17] Bags of jute for packaging only remain subject to quotas; liberalization is scheduled for 1 July 1964.

[18] Neat leather only remains subject to quotas; liberalization is scheduled for 1 June 1964.

[19] Sewing machines (not industrial) and parts thereof remain subject to quotas; liberalization is scheduled for 1 January 1965.

[20] Woven carpets of coconut fibres only remain subject to quotas.

[21] As no information was available on quantitative restrictions in force in 1959 on the items contained in List I, the table shows in respect of items in List I only the existing restrictions without indicating progress which may have been made.
The majority of items listed are subject to a prior deposit requirement which is applied as a deflationary measure, designed to restrict the accumulation of surpluses for speculation.

[22] Motors under 100 h.p. only remain subject to import control.

[23] Soya oil only remains subject to quotas.

[24] Roasted coffee beans in packages of a net weight of more than 400 grs. only remain subject to Fund Allocation System. Liberalization of the item is envisaged in the near future.

[25] Black tea only, remains subject to Fund Allocation System.

[26] Cocoa powder, not sugared, in containers of less than 2,260 grs. net content remain subject to Fund Allocation System. Liberalization of the item is envisaged in the near future.

[27] Peanuts, rape-seeds and mustard seeds only, remain subject to Fund Allocation System.

[28] Bars, rods, angles, shapes and sections, of lead and lead wire (No. 78.02) were liberalized on 31 August 1963. Liberalization of the remaining items (Nos. 78.01, 78.03 and 78.05) will be realized in the near future, account being taken of stabilization of the price of lead in the international market.

[29] Lawan and apiton only remain subject to Fund Allocation System; liberalization is envisaged in the near future.

[30] Cod roe and herring roe only remain subject to Fund Allocation System.

[31] The restrictions were abolished on 15 November 1963.

[32] The restrictions are of a temporary nature, imposed under the provisions of Article XIX of the GATT.

[33] Grain bags only remain subject to licensing.

[34] Cigars from the dollar area only, remain subject to quotas.

[35] Certain cotton textiles falling within tariff item Nos. 55.05 to 55.09, 58.04 and 62.02 (other then those originating in India, Pakistan and Hong Kong) remain subject to licensing. Imports of cotton yarn from Pakistan are subject to quotas. Agreements or import ceilings have been reached with the major suppliers.

[36] Jute yarn, cloth and bags when coming from India and Pakistan are imported only by the Jute Control (except heavy bags, common sacking and wool packs which have been returned to private trade and are freely licensed). Imports from other sources of yarn, heavy bags, common sacking and wool packs are freely licensed. Imports of other cloth and bags are subject to global quota, however. (See AC/3, p. 22.)

[37] Peanuts only remain subject to quotas.

[38] Temporary import quotas are placed on unmanufactured lead and concentrates under the provisions of Article XIX of the GATT.

[39] In accordance with the provisions of the Long-Term Arrangement Regarding International Trade in Cotton Textiles, the United States has imposed import restraints on certain categories of cotton textiles originating from various countries. Reporting on United States implementation of the Arrangement has been submitted to the Cotton Textiles Committee.

[40] In the case of Austria, Canada, the European Economic Community, Denmark and the United States, imports of cotton textiles are regulated in accordance with the Long-Term Arrangement Regarding International Trade in Cotton Textiles. (As regards imports into the United Kingdom, see under 35 above. For United States action see under 39 above.)

34. It will be noted that almost without exception, the fiscal charges applied are expressed in specific terms. To permit an idea to be formed of their general order of magnitude the rates have been converted by the secretariat into *ad valorem* terms. These *ad valorem* equivalents should be considered as broad indicators only, as the incidence of the charges is, of course, significantly affected by fluctuations in import prices. Moreover, the basis of assessment is not always comparable.

EXPLANATORY NOTES TO TABLE B ON QUANTITATIVE RESTRICTIONS

[1] In the case of Austria, Canada, the European Economic Community, Denmark and the United States, imports of cotton textiles are regulated in accordance with the Long-Term Arrangement Regarding International Trade in Cotton Textiles. (As regards imports into the United Kingdom; see under 30 below. For United States action see under 34 below.)

[2] Only (*a*) Douglas fir and hemlock; (*b*) other undressed timber excluding radiata pine; (*c*) dressed timber excluding weatherboards and flooring boards, remain subject to quotas (measures applied under the provisions of Article XIX of the GATT).

[3] Items falling under headings 15.08 were completely liberalized on 1 January 1963. Soyabean oil, cottonseed oil, coconut oil, palm kernel oil and palm oil, fit for human consumption only, remain subject to restrictions.

[4] Existing quotas are as a rule increased by 20 per cent each semester.

[5] It is envisaged that the remaining restrictions on leather footwear, electric motors (a few types) and choir manufactures (twine, cordage, rope, etc.) will be removed during the year 1964.

[6] Castor oil (fluid or solid, crude or not) only remains subject to quotas. An indication was given that the restriction will be eliminated by 31 December 1964, at the latest.

[7] Palm oil and some other oils only, remain subject to quotas.

[8] Products falling under 55.08, 55.09, 58.04, 58.05, 58.09, ex 60.01-60.05 and 62.01 to 62.03 of the BTN remain subject to quotas.

[9] Jute fabrics and bags only, remain subject to quotas.

[10] The restrictions mainly relate to leather balls, rackets and nets.

[11] Canned sardines, tunny fish and bonito only, remain subject to quotas.

[12] Carpeting and rugs falling under ex 58.01 and ex 58.02 of the BTN and nets falling under ex 59.05 only subject to quotas.

[13] Fatty vegetable oils, not crude, for food, except olive oil in small containers, only remain subject to quotas.

[14] Bags of jute for packaging only remain subject to quotas; liberalization is scheduled for 1 July 1964.

[15] Neat leather only remains subject to quotas; liberalization is scheduled for 1 June 1964.

[16] Sewing machines (not industrial) and parts thereof remain subject to quotas; liberalization is scheduled for 1 January 1965.

[17] Woven carpets of coconut fibres only remain subject to quotas.

[18] Soya oil only remains subject to quotas.

[19] Roasted coffee beans in packages of a net weight of more than 400 grs. only remain subject to Fund Allocation System. Liberalization of the items is envisaged in the near future.

[20] Black tea only remains subject to Fund Allocation System.

[21] Cocoa powder, not sugared, in containers of less than 2,260 grs. net content remain subject to Fund Allocation System. Liberalization of the item is envisaged in the near future.

[22] Peanuts, rape-seeds and mustard seeds only, remain subject to Fund Allocation System.

[23] Bars, rods, angles, shapes and sections, of lead and lead wire (No. 78.02) were liberalized on 31 August 1963. Liberalization of the remaining items (Nos. 78.01, 78.03 and 78.05) will be realized in the near future, account being taken of stabilization of price of lead in the international market.

[24] Lawan and apiton only remain subject to Fund Allocation System; liberalization is envisaged in the near future.

[25] Cod roe and herring roe only remain subject to Fund Allocation System.

[26] The restrictions are of a temporary nature, imposed under the provisions of Article XIX of the GATT.

[27] Grain bags only remain subject to licensing.

[28] The restrictions under specific licensing system are placed on the imports only from countries outside the sterling area.

[29] Cigars from the dollar area only, remain subject to quotas.

[30] Certain cotton textiles falling within tariff item Nos. 55.05 to 55.09, 58.04 and 62.02 (other than those originating in India, Pakistan and Hong Kong) remain subject to licensing. Imports of cotton yarn from Pakistan are subject to quotas.

[31] Jute yarn, cloth and bags when coming from India and Pakistan are imported only by the Jute Control (except heavy bags, common sacking and woolpacks which have been returned to private trade and are freely licensed). Imports from other sources of yarn, heavy bags, common sacking and woolpacks are freely licensed, imports of other cloth and bags are subject to global quota, however. (See AC/3, p. 22.)

[32] Peanuts only remain subject to quotas.

[33] Temporary import quotas are placed on unmanufactured lead and concentrates under the provisions of Article XIX of the GATT.

[34] In accordance with the provisions of the Long-Term Arrangement Regarding International Trade in Cotton Textiles, the United States has imposed import restraints on certain categories of cotton textiles originating from various countries. Reporting on United States implementation of the Arrangement has been submitted to the Cotton Textiles Committee.

[35] Imports from member countries of the Latin American Free Trade Association (LAFTA) are not subject to the prior deposit requirement (see L/1777).

[36] Restrictions are imposed on oils other than groundnut oil.

[37] Phosphates other than fertilizers only, remain subject to restriction.

[38] In the case of Chile, "R" and "r" denote that imports are at present prohibited. The prior deposit requirement does not apply to imports from LAFTA countries in respect of goods included in Chile's "national list" and to certain other imports.

[39] Certain sacks and bags of a kind used for packaging (except sacks of reinforced jute and sacks of cotton-net fabric) remain subject to restriction.

[40] Imports from Cuba, Czechoslovakia, Greece, Israel, Poland, Turkey and the United Arab Republic remain subject to import licence.

[41] Terry fabrics (55.08) were liberalized on 1 January 1964, thus completely eliminating restrictions on cotton textiles.
Bicycles were also liberalized on 1 January 1964.

[42] Certain carpets, carpeting rugs, mats and matting only, remain subject to quotas.

[43] The majority of items listed are subject to the prior deposit requirements which are imposed as a deflationary measure, designed to restrict the accumulation of surpluses for speculation.

[44] Sesame seeds only, remain subject to restriction.

[45] Motors under 100 h.p. only, remain subject to control.

[46] Imports of internal combustion engines are restricted except for diesel engines of certain specifications and spare parts which are subject to quotas.

[47] Sports goods remain restricted except for table-tennis balls which are subject to quotas.

[48] Refined ferro-manganese of grades below 3 per cent carbon only, remain subject to quotas.

[49] Certain types of copper products are importable under quota; others are restricted.

[50] For details of the import licensing system of Indonesia see BOP/26/Rev.1.

[51] The import of textiles, weaving yarns, cement and gunny bags is generally carried out by the State. A special licence must be obtained if private importers wish to import these commodities.

[52] In the case of Pakistan, "L" denotes "Free importation under the Export Bonus Scheme" while "R" denotes that imports are at present prohibited.

[53] Copra, mustard seed, coconut oil, linseed oil, mustard oil and essential oils of all sorts are importable under the Export Bonus Scheme.

[54] Coir fibre and coir yarn and textile manufactures of coir not otherwise specified, other than coir mats and mattings are importable under the Export Bonus Scheme.

[55] Imports are subject to import licence. Licences are issued, however, to meet manufacturers, full requirements.

[56] While imports are subject to quotas, manufacturers can import under licence without quota restrictions.

[57] Sewing machines for industrial use and sewing machines for domestic use exceeding R 25 each (f.o.b. price) only remain subject to quotas.

[58] Specific permits are not required for electric motors of less than 1 h.p.

[59] Import treatment shown is applicable to imports from countries in categories "A" and "B" only. Imports of goods from all other countries are effected under bilateral arrangements, except in the case of goods covered by State trading. Import control policy is being renewed.

[60] Imports are effected under bilateral arrangements.

[61] Cottonseeds, sesamum, sunflower and safflower seeds only, remain subject to State trading.

[62] Aluminium hydroxide (Hydrated alumina) only, remain subject to quotas.

[63] In the case of Tunisia and the United Arab Republic, "R" and "r" denote that imports of the products concerned are at present prohibited.

[64] Liberalized licence.

[65] General Licence—no import licence is required for the importation under general licence category. An enterprise can import freely any quantity of any commodity falling in the general licence category within the amount of foreign exchange allocated annually to that enterprise for importation of goods under "general licence".

[66] Quota exists only for importation of sawn coniferous wood.

[67] Superphosphates are only subject to restrictive licence.

SUMMARY

Quantitative restrictions on products

— = No quantitative restrictions.
L, l = Licensing requirement but imports are generally liberally licensed.
R, r = Import restriction.

Where small letters are used, the measure applies only to a part of the item against which it appears.
A symbol appearing within brackets denotes that the Government concerned has notified that the

A. Countries other than those applying restrictions fo rbalance-of-payments reasons

Product	*Argentina*	*Australia*	*Austria*	*Benelux*	*Canada*	*Dominican Republic*	*France*	*Germany Fed. Rep.*	*Haiti*	*Italy*	*Japan*	*Malaya*	*Netherlands*	*Nicaragua*	*Nigeria*	*Norway*	*Peru*	*Portugal*	*Rhodesia and Nyasaland*	*Sierra Leone*
List I																				
Coffee: Raw	—	—	—	—	—	—	Q	—	—	—	—	—	—	D	—	—	—	—	—	R
Roasted	—	—	—	—	—	—	Q	—	—	—	(r) [19]	—	—	D	—	—	—	—	—	R
Tea	—	—	—	—	—	—	—	—	—	—	r [20]	—	—	D	—	—	—	—	—	—
Cocoa: Beans	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Butter	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Preparations	—	—	—	—	—	—	—	—	—	—	(r) [21]	—	—	D	—	—	—	—	—	—
Oilseeds	—	—	—	—	—	—	—	—	—	—	r [22]	—	—	D	—	—	—	—	r	r
Vegetable oils	—	—	q [3]	(q) [6]	—	—	q [7]	q [13]	—	q [18]	r	—	(q) [6]	D	—	—	—	r	r	r
Tobacco: Leaf	—	—	M	—	—	—	M	—	—	M	M	—	—	D	—	—	—	—	—	—
Manufactured	—	—	M	—	—	—	M	—	—	M	M	—	—	D	—	—	—	—	—	—
Lead: Ore and concentrate	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Unwrought	—	—	—	—	—	—	—	—	—	—	(R) [23]	—	—	—	—	—	—	—	—	—
Wrought	—	—	—	—	—	—	—	—	—	—	(r) [23]	—	—	D	—	—	—	—	—	—
Copper: Ore and concentrate	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Unwrought and matte	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Timber: In round	—	q [2]	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Sawn in rough	—	q [2]	—	—	—	—	—	—	—	—	(r) [24]	—	—	D	—	—	—	—	—	—
Processed	—	q [2]	—	—	—	—	—	—	—	—	(r) [24]	—	—	D	—	—	—	—	—	—
Cotton	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	R	—	—
Cotton textiles [1]	—	—	q [4]	—	—	—	q [8]	q	—	—	—	—	—	d	—	—	—	—	r [26]	—
Jute manufactures	—	—	Q [4]	—	—	—	q [9]	(q) [14]	—	—	—	—	—	d	—	—	—	—	l [27]	—
List II																				
Iron ore	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Bauxite	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Alumina	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Aluminium	—	R	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Leather	—	—	—	—	—	—	—	(q) [15]	—	—	r	—	—	D	—	—	—	—	—	—
Leather goods	—	—	—	—	—	—	q	—	—	—	—	—	—	d	—	—	—	—	—	—
Leather footwear	—	—	(Q) [5]	—	—	—	—	—	—	—	r	—	—	r	—	—	—	—	—	—
Diesel engines (under 50 h.p.)	—	—	—	—	—	—	—	—	—	—	r	—	—	D	—	—	—	—	—	—
Sewing machines	—	—	—	—	—	—	—	(q) [16]	—	—	—	—	—	—	—	—	—	—	—	—
Electric motors	—	—	(q) [5]	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Electric fans	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Bicycles	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Sports goods	—	—	—	—	—	—	q [10]	—	—	—	—	—	—	D	—	—	—	—	—	—
List III																				
Canned fish	—	—	—	—	—	—	q [11]	—	—	—	r [25]	—	—	D	—	—	—	—	—	—
Phosphates	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Cement	—	—	—	—	—	—	—	—	—	—	—	—	—	d	—	—	—	—	—	—
Coir manufactures	—	—	(q) [5]	—	—	—	q [12]	q [17]	—	—	—	—	—	D	—	—	—	r	—	—
Ferro-chrome	—	—	—	—	—	—	Q	—	—	—	—	—	—	D	—	—	—	—	—	—
Ferro-manganese	—	—	—	—	—	—	Q	—	—	—	—	—	—	D	—	—	—	—	—	—
Copper products	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Steel furniture	—	—	—	—	—	—	—	—	—	—	—	—	—	D	—	—	—	—	—	—
Bananas		—	—	—	—		R	—		M	—		—			—			R	

(*See notes on preceding page.*)

TABLE B

examined by Committee III

Q, q = Denoting import restriction applied through quota.
D, d = Denoting prior deposit requirement.
M, m = Denoting State monopoly.

measures will be eliminated by a certain target date or in the near future (see explanatory notes).

B. Countries applying restrictions for balance-of-payments reasons

Sweden	*Switzerland*	*Tanganyika*	*Uganda*	*United Kingdom*	*United States*	*Brazil* [35]	*Burma*	*Ceylon*	*Chile* [38]	*Denmark*	*Finland* [40]	*Ghana*	*Greece*	*India*	*Indonesia* [50]	*Israel*	*New Zealand*	*Pakistan* [52]	*South Africa*	*Spain* [59]	*Tunisia* [63]	*Turkey*	*United Arab Republic* [63]	*Uruguay*	*Yugoslavia*
—	—	—	R	—	—	D	R	R	D	L	—	R	—	R	L	—	L	L	L	M	Q	QM	Q	—	Q
—	—	—	—	—	—	D	R	R	R	L	—	R	—	R	L	—	R	L	L	M	R	RM	Q	—	Q
—	—	—	—	—	—	D	R	R	r	—	—	R	—	R	L	—	l	L	—	R [60]	Q	—M	Q	—	—
—	—	—	R	—	—	D	R	R	D	—	—	—	—	R	L	—	Q	L	L [55]	R [60]	—	Q	Q	—	L [64]
—	—	—	R	—	—	D	R	R	R	—	—	—	—	R	L	—	Q	L	L [55]	R [60]	—	Q	Q	—	L [64]
—	—	—	R	—	—	D	R	R	r	—	R	—	—	R	L	—	Q	L	L	R [60]	r	R	q	—	L [64]
—	—	—	r	—	q [32]	D	R	R	D	—	R	R	r [44]	R	L	—	Q	r [53]	L [55]	m [61]	Q	r	Q	—	L [64]
—	—	—	R	—	—	D	r [36]	R	r	—	q	R	—	R	L	—	q	r [53]	L [55]	m	Q	q	—	—	L [64]
M	—	—	R	—	—	D	R	R	D	—	—	R	—	R	L	R	—	L	L	M	M	RM	—	—	L [64]
—	—	—	R	q [29]	—	D	R	R	R	—	—	R	—	R	L	—	R	L	L	M	M	RM	Q	—	L [64]
—	—	—	—	—	q [33]	D	R	R	R	—	—	R	—	R	L	—	L	L	L [55]	R	—	R		—	L [65]
—	—	—	—	—	Q [33]	D	R	R	r	—	—	R	—	L	L	—	L	L	L [55]	R [60]	—	Q		—	L [65]
—	—	—	—	—	—	D	R	R	R	—	—	R	—	R	L	—	l	L	L [55]		—	R		—	L [65]
—	—	—	—	—	—	D	R	R	R	—	—	R	—	Q	l	—	L	L	L [55]	—	—	R	Q	—	L [65]
—	—	—	—	—	—	D	R	R	R	—	—	R	—	Q	L	—	L	L	L [55]	—	—	R	Q	—	L [65]
—	—	—	—	—	—	D	R	R	r	—	—	R	—	R	L	—	R	L	L	—	R	Q	Q	—	L [65]
—	—	—	—	—	—	D	R	R	r	—	—	R	—	R	L	—	Q	L	L	—	R	R	Q	—	l [65] q [66]
—	—	—	—	—	—	D	R	R	r	—	—	R	—	R	L	—	Q	L	L	q	R	R	Q	—	L
—	—	—	R	—	Q	D	R	R	D	—	—	R	—	R	L	R	Q	R	—	M	—	Q	R	—	—
—	—	r [28]	r	l [30]	q [34]	D	R	R	r	r [39]	— [41]	R	L	R	M [51]	R	L	R	L [56]	Q	Q	R	R	—	Q
—	—	—	R	m [31]	—	D	R	R	D	r [39]	q [42]	R	—	R	m [51]	—	q	R	L [56]	Q	Q	r	Q	—	L [65]
—	—	—	—	—	—	D	R	R	R	—	—	R	—	R	L	—	L	L	L	—	—	R	Q	—	L [64]
—	—	—	—	—	—	D	R	R	R	—	—	R	—	R	L	—	l	L	L	—	—	R	Q	—	L [65]
—	—	—	—	—	—	D	R	R	R	—	—	R	—	R	L	—	L	L	L	q [62]	—	R	Q	—	—
—	—	—	—	—	—	D	R	R	r	—	—	R	—	Q	L	—	q	L	L	—	—	—	Q	—	Q
—	—	—	—	—	—	D	R	R	R	—	q	R	—	R	L	—	q	L	L	—	R	R	Q	—	—
—	—	—	—	—	—	D	R	R	R	—	q	R	—	R	L	—	q	R	Q	—	R	r	R	d	Q
—	—	—	—	—	—	D	R	R	R	—	Q	R	—	R	L	—	R	L	L	—	Q	R	R		Q
—	—	—	—	—	—	D	R	R	D	—	Q	R	r	R [46]	L	—	Q	L	L	q	—	Q	Q	—	R
—	—	—	—	—	—	D	R	R	R	—	—	R	—	l	L	—	L	L	q [57]	r	—	q	R	—	R
—	—	—	—	—	—	D	R	R	r	—	q	R	r [45]	r	L	—	Q	Q	r [58]	—	—	Q	Q	—	L [65]
—	—	—	—	—	—	D	R	R	R	—	—	R	—	R	L	—	Q	R	Q	—	—	Q	Q	—	Q
—	—	—	—	—	—	D	R	R	R	—	— [41]	R	—	R	L	R	Q	L	L	—	—	Q	R	—	Q
—	—	—	—	—	—	D	—	R	D	—	—	R	—	R [47]	L	—	q	r	Q	—	—	R	Q	—	Q
—	—	—	—	—	—	D	R	—	R	—	q	R	—	R	L	R	Q	R	L	—	R	R	Q	—	Q
—	—	—	—	—	—	D	—	r [37]	D	—	q	R	—	R	L	R	—	R	L	—	Q	—	R	—	r [67]
—	—	R [28]	R	—	—	D	R	R	D	—	Q	R	—	R	M [51]	—	Q	L	L	—	Q	Q		—	R
—	—	—	—	—	—	D	R	R	D	—	r [42]	R	—	R	L	—	Q	r [54]	Q	Q	Q	R	R	—	Q
—	—	—	—	—	—	D	R	R	R	—	—	R	—	L	L	—	Q	L	L	—		—	Q	—	Q
—	—	—	—	—	—	D	R	R	R	—	—	R	—	q [48]	L	—	L	L	L	—		—	Q	—	Q
—	—	—	—	—	—	D	R	R	R	—	—	R	—	R [49]	L	—	L	L	L	—	—	Q		—	L [65]
—	—	—	—	—	—	D	R	R	R	—	—	R	—	R	—	—	Q	L	L	—	R	R	R	—	Q
—	—	—	—	Q	—					—	R		—			R	Q	R		R [60]		R			—

SUMMARY

Tariffs applied by selected industrialized countries on products examined

O = Free of duty.
L = Low rate of duty (not more than 5 per cent *ad valorem* or *ad valorem* equivalent of specific duty).
P = Progress made in eliminating and reducing duty.
B = Bound rates (up-binding is not included).
— = Duty of more than 5 per cent in force.

	EEC	*Austria*	*Denmark*	*Finland*	*Norway*	*Sweden*	*Switzerland*
1. *Food stuffs and tropical agricultural products*							
Coffee:							
Raw	— P	— P	— B	— P	O P	— B	—
Roasted	—	— P	—	— P	—	— B	—
Cocoa:							
Beans	— P	—	O	— B	O P B	—	L
Paste	—	— B	L	—	—	—	— B
Butter	— P B	— B	O	L B	O P	—	L B
Powder	—	— P	—	— B	—	—	— B
Tea:							
In small containers	L P	— P	O P	— P	O P	O P	O P
Other	O P	— P	O P	— P	O P	O P	O P
Tobacco leaf	— P B	O	— B	— B	O P	O	—
Tropical oilseeds:							
Copra	O B	O	O B	—	O B	O	L
Palm kernels	O B	O	O B	—	O B	O	L
Groundnuts	O B	O	O B	—	O P	O	L
Tropical vegetable oils:							
Coconut oil	l b	— B	L P	— P	—	O	l
Palm oil	l b	— B	L P	— P	O	O	l
Palm kernel oil	l b	— B	L P	— P	—	O	l
Groundnut oil	l b	— B	L P	—	—	O	l
Canned fish:							
Fish	— p B	— b	— B	— B	L B	— b	l B
Crustaceans	— B	— b	L B	— B	L B	— b	l p b
Bananas	—	—	L B	? ?	O P	—	—
2. *Industrial raw materials and semi-manufactures*							
Iron ores	O	O	O	O	O B	O	L
Copper:							
Ores and concentrates	O	O	O	O	O	O	L
Unwrought and matte	O B	O	O B	O B	O	O B	L
Copper rollings:							
Bars and wires, etc.	— B	— P	L	l	O	L b	L b
Plates and sheets, etc.	— P B	— P	L	l	L	L	l b
Foil	— p b	— p	L	—	O	L	l p B
Tubes and pipes, etc.	— P B	— p	L	—	L	L	L
Lead:							
Ores and concentrates	O B	O	O	O	O B	O	L B
Unwrought	— B	L P	O B	O	O B	O B	L B
Ferro-chrome	l p B	O	O	O	O	O B	L
Ferro-manganese	l b	O	O	O	O	O	L
Bauxite	O B	O	O	O	O B	O	L
Alumina	— B	O	O	O	O	O B	L
Aluminium	— P B	— B	O B	O B	O B	O B	—
Phosphates	O B	l P	O	O B	O	O B	?
Cement	—	l p	O	—	L	L	—
Cotton:							
Not carded or combed	O B	O P	O B	O	O B	O B	L
Carded or combed	L B	—	O	O	O B	—	— P
Tropical timber:							
In the rough	O P	O	O B	O B	O B	O B	O P
Roughly squared	O P	O	O B	O B	O B	O	O P
Sawn lengthwise	O P	O B	O P	O	O B	O	O P
3. *Manufactured goods*							
Cotton manufactures:							
Yarn	— P B	l p	L p	— B	L P	l b	l p b
Woven fabrics	— p B	— P b	l p b	— b	— B	—	— p b
Ribbons, etc.	— p B	l p	— p	—	—	— b	?

TABLE A

by Committee III and action taken in binding or reducing these tariffs

Where small letters (e.g., l, p, and b) are used instead of capitals, the measure applies only to a part of the item against which it appears.

United Kingdom		*United States*	*Canada*		*Japan*	P	p	O	L	l	OLPp	B	b	OB	LB
MFN	*Pref.*		*MFN*	*Pref.*											
L P	O P	O B	— B	O B	— P	7	0	4	1	0	9	5	0	2	0
L P	L P	O B	— B	L B	—	4	0	1	3	0	6	3	0	1	1
L P	O P	O B	L B	O	L	4	0	5	4	0	10	4	0	2	1
L P	O P	L	— B	—	—	2	0	1	3	0	4	3	0	0	0
L P	O P	—	L B	O	— P B	5	0	4	4	0	10	6	0	0	3
L P	O P	L	— B	— B	—	3	0	1	2	0	4	4	0	0	0
O P	O	O B	O P	O	—	9	0	9	1	0	12	1	0	1	0
O P	O	O B	O P	O	—	9	0	10	0	0	12	1	0	1	1
—	—	—	l B	l B	—	2	0	3	0	2	4	5	0	0	0
— B	O	O B	O B	O	O B	0	0	10	1	0	11	7	0	6	0
—	O	O B	O B	O	O	0	0	10	1	0	11	5	0	5	0
— B	O	—	O B	O	—	1	0	8	1	0	9	4	0	3	0
— B	O	—	— b	l	—	2	0	2	1	3	4	2	2	0	0
— B	O	O B	— b	l	—	2	0	4	1	3	6	3	2	1	0
— B	O	L B	— b	l	—	2	0	2	2	3	5	3	2	0	1
— B	O	—	l b	l	—	1	0	2	1	4	3	2	2	0	0
l p b	O	l p B	— B	— B	—	0	3	1	1	3	5	8	3	0	1
— B	O	l B	l p B	?	—	0	2	1	2	3	5	7	3	0	2
— B	O	O	— B	O	— P	2	0	4	1	0	5	3	0	0	1
					TOTAL	55	5	82	30	21	135	76	14	22	11
									(19 × 13 = 247)						
O	O	O B	O B	O	O	0	0	12	1	0	13	3	0	3	0
O	O	O B	O	O	O B	0	0	12	1	0	13	2	0	2	0
O	O	O B	L P B	L P	l b	2	0	9	3	1	12	6	1	5	1
— b	O	— b	— B	L	— b	1	0	2	4	1	7	2	5	0	1
— b	O	— b	— B	L	—	2	0	1	4	2	7	2	3	0	0
— P B	O	— B	— B	L	—	1	3	2	3	1	9	4	1	0	0
— b	O	—	— B	L	— b	1	1	1	5	0	8	2	2	0	0
O	O	—	O	O	O B	0	0	11	1	0	12	4	0	3	1
L	O	—	— P B	— P	—	3	0	5	3	0	10	6	0	3	1
O B	O	l p B	L B	O	—	0	2	8	2	2	12	5	0	4	0
l b	O	— p B	—	O	—	0	1	7	1	2	9	1	2	0	0
O B	O	O	O	O	O B	0	0	12	1	0	13	4	0	4	0
— p b	O	O	O	O	— P	1	1	9	1	0	12	2	1	1	0
O b	O	L	— B	O	—	1	0	7	1	0	9	7	1	5	0
O	O	O B	O B	O	O	0	0	11	0	1	11	5	0	5	0
l b	O	L B	l b	L	—	1	0	2	4	3	7	1	2	0	1
l b	O	O	O B	O	O B	0	0	11	1	1	12	6	1	6	0
—	O	O	— B	L	O	2	0	6	2	0	8	3	0	1	1
O P	O	O B	O B	O	l b	3	0	12	0	1	12	6	1	6	0
O P	O	O B	O B	O	l b	3	0	12	0	1	13	5	1	5	0
O P	O	l B	O B	O	l b	4	0	11	0	2	12	4	1	9	0
					TOTAL	25	8	163	38	18	221	80	22	62	6
									(21 × 13 = 273)						
— B	O	—	— B	l	l b	2	3	1	2	5	6	4	3	0	0
— B	O	— B	— B	—	—	1	3	1	0	1	5	5	4	0	0
— b	O	—	— B	— B	—	0	3	1	0	1	4	3	2	0	0

SUMMARY TABLE A (*continued*)

	EEC	*Austria*	*Denmark*	*Finland*	*Norway*	*Sweden*	*Switzerland*
3. *Manufactured goods (continued)*							
Cotton manufactures: (*continued*)							
Tulle lace embroidery	— p B	— P	— p b	— b	l p	—	— p b
Knitted or crocheted undergarments . .	— B	— P	—	—	—	—	? B
Knitted or crocheted outergarments . .	— P B	— P	— p b	—	—	—	? B
Undergarments . . .	— p B	? ?	— p	— B	— B	—	— P B
Outergarments . . .	— p B	? ?	— P	— B	— B	— b	— p B
Blankets, etc.	— B	— P	—	—	— B	—	? B
Bed linen, table linen	— B	— P	— p b	—	—	—	? b
Other made-up articles	— p B	— P	l	—	— B	— b	?
Jute manufactures:							
Yarn	— B	— P B	L	— b	O P	—	— p b
Woven fabrics . . .	— B	— P	L b	—	— P B	—	l b
Sacks	— b	— P	O B	—	? B	l	— P
Carpets and rugs . .	— b	— p	—	—	—	—	— P
Coir manufactures:							
Yarn	O B	O	O	O	O B	O b	l b
Woven fabrics . . .	—	— P	L	—	—	—	—
Carpets and mats knotted	— B	—	—	—	—	—	— B
Other carpets and mats	— B	— P	l B	—	?	— B	— B
Twines, ropes, etc.. .	— P B	— P	l B	— b	—	—	?
Nets and netting made of twines, etc. . .	— B	— P	—	—	l	—	—
Other articles made from twine, etc. . .	—	— P	l	—	? ?	—	— b
Mattresses, etc. . . .	— P B	— P	—	—	—	—	— b
Finished leather:							
Bovine cattle	— B	l p	—	p b	? b	l b	l p b
Sheep and lamb skin	l B	l p b	l	p b	? b	l b	L B
Goat and kid skin .	l B	l p	l	p b	? b	l	L b
Other kinds	— B	l p	—	p b	? ?	l b	L B
Leather footwear . . .	— P B	— P B	—	— B	? ?	—	— p b
Leather goods:							
Luggage, handbags, purses	— P B	— P	—	— B	—	— b	— p B
Gloves, etc..	— p B	— p b	—	— B	— b	—	l p b
Other articles	— P B	— P	—	— B	—	—	l p B
Sports goods	— B	l p b	l p b	—	— b	l b	l
Bicycles (not motorized)	— P B	— P	—	—	—	—	— B
Sewing machines:							
Domestic.	—	— P	O B	— B	O	—	L
Electric fans	— P B	— P	—	— B	—	— b	—
Electric motors	— P B	— p B	—	l B	—	— b	l b
Diesel engines (under 50 h.p.) . . .	— p B	l p	l b	— B	—	— B	l p b
Steel furniture	— P B	— p	l	— b	—	— b	— b

United Kingdom MFN	United Kingdom Pref.	United States	Canada MFN	Canada Pref.	Japan	P	p	O	L	l	OLPp	B	b	OB	LB
—	B O	— p b	—	B	—	B	—	1	5	1	0	1	7	4	4	0	0
—	O	— p b	—	B	—		—	1	1	1	0	0	3	3	1	0	0
—	b O	—	—	B	—		—	2	1	1	0	0	4	3	2	0	0
—	B O	—	—	B	—	B	—	1	2	1	0	0	4	7	0	0	0
—	b O	—	—	B	—	B	— b	1	2	1	0	0	4	6	3	0	0
—	O	—	—	B	—	B	—	1	0	1	0	0	2	5	0	0	0
—	b O	—	—	B	—	B	—	1	1	1	0	0	3	3	3	0	0
l	b O	— p b	—	B	—	B	—	1	2	1	0	2	4	4	3	0	0
—	O	— B	— p	B	— p	b	—	2	3	2	1	0	7	4	3	0	0
—	O	l p b	L	B	O p		—	3	1	2	2	2	7	3	3	0	1
—	b O	— P B	—	B	—	B	—	3	0	2	0	1	5	5	2	1	0
—	b O	— P B	—	B	—	B	—	2	1	1	0	0	4	3	2	0	0
—	O	O	O	B	O		—	0	0	10	0	1	10	3	2	4	0
—	O	—	—	B	—	B	—	1	0	1	1	0	3	2	0	0	0
—	B O	—	L	B	L	B	—	0	0	1	2	0	3	5	1	0	2
—	O	—	L	B	L	B	—	1	0	1	2	1	4	8	0	0	2
—	O	—	l	B	l		—	2	0	1	0	3	3	3	1	0	0
—	O	—	l P	B	l P	b	—	3	0	1	0	3	4	2	1	0	0
—	O	— B	—	B	—	b	—	1	0	1	0	1	2	2	2	0	0
—	O	—	—	B	—		—	2	0	1	0	0	3	2	1	0	0
—	b O	— P B	l	B	L	b	— b	1	3	1	1	4	6	3	7	0	0
—	b O	— p B	l	B	L		—	0	3	1	2	5	6	4	5	0	1
—	b O	— p B	l	B	L		—	0	3	1	2	5	6	3	4	0	0
— p	b O	— p b	l	B	L		—	0	4	1	2	3	7	3	4	0	1
—	b O	l p B	—	B	—	B	— p b	2	3	1	0	1	6	6	3	0	0
—	B O	— p b	—	B	—	B	— p b	2	3	1	0	0	6	6	3	0	0
—	b O	— p b	—	B	l		— p b	0	5	1	0	2	6	3	6	0	0
—	O	— p b	—	B	—		—	2	2	1	0	1	5	4	1	0	0
—	b O	— p b	—	B	—	b	—	0	3	1	0	4	4	2	7	0	0
—	B O	— B	—	B	—		—	2	0	1	0	0	3	5	0	0	0
—	B O	— b	—	B	L		— B	1	0	3	2	0	6	5	1	1	0
—	B O	—	—	B	—		—	2	0	1	0	0	3	4	1	0	0
—	b O	—	—	B	—		— b	1	1	1	0	2	3	4	4	0	0
— P	B l P b	—	— P	B	O	b	— b	3	3	2	0	3	6	5	5	0	0
—	B O	—	—	b	—		—	1	1	1	0	1	3	2	4	0	0
						TOTAL		49	62	53	19 (38 × 13 = 494)	53	177	146	98	6	7
						GRAND TOTAL		129	75	298	87	92	533	302	134	90	24

SUMMARY

Tariffs applied by selected industrialized countries on products examined

(*Per cent*

Bold type, or bold underlining in parentheses (**__**) = Duty was reduced during last round of tariff negotiations.
* = Duty was reduced unilaterally.
** = Alternative specific duty not shown.
Italics, or light underlining in parentheses (*__*) = Tariff is bound at the rate indicated in this table.
( ) = *Ad valorem* equivalents of specific duties.
Free = Exemption.

Products		*Year*	*EEC/CET*	*Austria*	*Denmark*	*Finland*
(1) *Foodstuffs and tropical agricultural products*						
Coffee:						
Raw	ex 0901	60/61	16	(63)	(33)	(123)
		62/63	9.6* [1]	(27)*	(*33*)	(56)*
Roasted		60/61	25	(37)	(23)	(150)
		62/63	25	(30)*	(23)	(79)*
Cocoa:						
Beans	1801	60/61	9	(6)	free	(*53*)
		62/63	5, 4* [1]	(6)	free	(*53*)
Paste	1803	60/61	25	(*23*)	(2)	( )
		62/63	25	(*23*)	(2)	( )
Butter	1804	60/61	22	*16*	free	(*3.5*)
		62/63	**20**	*16*	free	(*3.5*)
Powder	1805	60/61	27	29	(7)	(*78*)
		62/63	27	25*	(7)	(*78*)
Tea:						
In small containers	0902	60/61	23	(113)	(25)	(54)
		62/63	5* [2]	(42)*	free* [3]	(23)* [4]
Other		60/61	18	(89)	(25)	(54)
		62/63	free* [2]	(33)*	free* [3]	(23)* [4]
Tobacco leaf	ex 2401	60/61	30**	free	(*16*)	(*13.5*)
		62/63	**28****	free	(*16*)	(*13.5*)
Tropical oilseeds:	ex 1201					
Copra		60/61	free	free	*free*	(73.7)
		62/63	*free*	free	*free*	(73.7)
Palm kernels		60/61	free	free	*free*	( )
		62/63	*free*	free	*free*	( )
Groundnuts		60/61	free	free	*free*	(48.5)
		62/63	*free*	free	*free*	(48.5)
Tropical vegetable oils:	ex 1507					
Coconut oil		60/61	5, 8, 10, 15	*12*	8, 12	(6.1-97.1)
		62/63	*5, 8*, 10, 15	*12*	4*, 5*	10*, 16*
Palm oil		60/61	5, 8, 9, 14	*12*	free, 12	(10.3-42.2)
		62/63	*5, 8*, 9, 14	*12*	free, 5*	10*, 16*
Palm kernel oil		60/61	5, 8, 10, 15	*12*	8, 12	(10.5-104.1)
		62/63	*5, 8*, 10, 15	*12*	4*, 5*	10*, 16*
Groundnut oil		60/61	5, 8, 10, 15	*12*	8, 12	(6.1)
		62/63	*5, 8*, 10, 15	*12*	4*, 5*	10, 16
Canned fish:						
Fish	ex 1604	60/61	20, 23, 25, 25, 30	15, (*15-20*)	(*11-21*)	*15, 30*
		62/63	**16, 22, 20**, *25, 30*	15, (*15-20*)	(*11-21*)	*15, 30*
Crustaceans	ex 1605	60/61	20	*10*, 30	(*4-5*)	*30*
		62/63	*20*	*10*, 30	(*4-5*)	*30*
Bananas	ex 0801	60/61	20	8	(*1*)	
		62/63	20	8	(*1*)	
(2) *Industrial raw materials and semi-manufactures*						
Iron ores	ex 2601	60/61	free	free	free	free
		62/63	free	free	free	free

TABLE B

by Committee III and action taken in binding or reducing these tariffs

Ad valorem)

Where more than one rate is shown (e.g., 5, 8, 10, 15) one or the other of these rates is applicable on different items under this heading.
Where a range of duties is shown (e.g., 0.8-9.6) many rates of duty (ranging from 0.8% to 9.6%) are applicable to the different items falling under this tariff heading.

Norway	*Sweden*	*Switzerland*	*United Kingdom*		*United States*	*Canada*		*Japan*
			MFN	*Pref.*		*MFN*	*Pref.*	
(3.4)	(*10*)	(16)	(5)	(3)	*free*	(*6*)	*free*	*30*
free*[5]	(*10*)	(16)	(3)*	free*	*free*	(*6*)	*free*	10*
(12)	(7.5)	(20)	(3)	(2)[9]	*free*	(*6*)	(*3*)	35
(12)	(7.5)	(20)	(2)*	(1)*[9]	*free*	(*6*)	(*3*)	35
(4)	(6)	(0.4)	(9)	(7)	*free*	(*5*)	free	5
free	(6)	(0.4)	(1.5)*	free*	*free*	(*5*)	free	5
(19)	( )	(14.6)	( )	( )	(2)	(*9.15*)		20
(19)	( )	(*14.6*)	(1)*	free*	(2)[10]	(*9.15*)		20
	(6)	(*0.9*)	(3)	(2)	(6)	(*4*)	free	10
free*	(6)	(*0.9*)	(0.5)*	free*	(6)[10]	(*4*)	free	**9**
(28)	(14)	(*21.2*)	( )	( )	(4.2)	*22.5*	*22.5*	30
(28)	(14)	(*21.2*)	(2)*	free*	(4.2)	*22.5*	*22.5*	30
(*10*)	(*7*)	(15-17.5)	(4)	free	*free*	(*4*)	free	35
free*[5]	free*[6]	free**	free*[8]	free	*free*	free*[11]	free	35
(*10*)	(*7*)	(15-17.5)	(4)	free	*free*	(*4*)	free	35
free*[5]	free*[6]	free**	free*[8]	free	*free*	free*[11]	free	35
(*6-7*)	free	(5.2-96.8)	(1106-1122)	(1386-1402)[9]	(18-36)	(*5-41*)	(*5-27*)	355
free	free	(5.2-96.8)	(1106-1122)	(1386-1402)[9]	(18-36)	(*5-41*)	(*5-27*)	355
free	free	(0.1)	*10*	free	*free*	*free*	free	*free*
free	free	(0.1)	*10*	free	*free*	*free*	free	*free*
free	free	(0.1)	10	free	*free*	*free*	free	free
free	free	(0.1)	10	free	*free*	*free*	free	free
(*14*)	free	(0.1)	*10*	free	(25.7-49.2)	*free*	free	20**
free*	free	(0.1)	*10*	free	(25.7-49.2)	*free*	free	20**
(8)	free	(0.8-17.8)	*15*	free	6.7	*10*-17.5	free-12.5	10**
(8)	free	(0.8-17.8)	*15*	free	6.7	*10*-17.5	free-12.5	10**
free	free	(0.8-9.6)	*10*	free	*free*	*10*-20	free-15	10
free	free	(0.8-9.6)	*10*	free	*free*	*10*-20	free-15	10
(8)	free	(0.8-17.8)	*10*	free	(*3.4*)	*10*-20	free-15	10
(8)	free	(0.8-17.8)	*10*	free	(*3.4*)	*10*-20	free-15	10
(6)	free	(0.8-9.6)	*15*	free	(33)	free-*10*-20	free-12.5	(27)
(6)	free	(0.8-9.6)	*15*	free	(33)	free-*10*-20	free-12.5	(27)
(*5*)	(8, *12*, *20*)	(*3*, *6*)	*5*, *10*, *10*, 30	free	*5-22*, *44*	*15-22.5*	*15*, *17.5*	20
(*5*)	(8, *12*, *20*)	(*3*, *6*)	*5*, *8*, *10*, 30	free	**3-17.5**, *44*	*15-22.5*	*15*, *17.5*	20
(*5*)	(*6*-10, 23)	(*6*, *9*, 13)	*7.5*, *10*, *15*, *30*	free	*0-22.5*	*10-40*		20
(*5*)	(*6*-10, 23)	(*5*, *9*, 13)	*7.5*, *10*, *15*, *30*	free	*0-22.5*	*5-40*		20
(5)			(*14*)	free	free	(*7*)	free	20 + 80
free*[12]	(10)	(25)	(*14*)	free	free	(*7*)	free	70
free	free	(1)	free	free	*free*	*free*	free	free
free	free	(1)	free	free	*free*	*free*	free	free

(See notes at end of table.)

SUMMARY TABLE B (*continued*)

Products		*Year*	*EEC/CET*	*Austria*	*Denmark*	*Finland*
(2) *Industrial raw materials and semi-manufactures (continued)*						
Copper:						
Ores and concentrates	ex 2601	60/61	free	free	free	free
		62/63	free	free	free	free
Unwrought and matte	ex 7401	60/61	free	free	*free*	*free*
		62/63	*free*	free	*free*	*free*
Copper rollings:						
Bars, wires, etc.	7403	60/61	10	11, 15	free, 4, 5	free, 4, 6
		62/63	*10*	10*, 13.5*	free, 4, 5	free, 4, 6
Plates and sheets	7404	60/61	10	11, 12, 18	5	0.9
		62/63	**8**	10*, 11*, 16*	5	0.9
Foil	7405	60/61	10, 13	10, 15	3	15
		62/63	10, **10**	10, 13.5*	3	15
Tubes and pipes, etc.	7407	60/61	13	12, 15	5	10
		62/63	**10**	12, 13.5*	5	10
Lead:						
Ores and concentrates	ex 2601	60/61	free	free	free	free
		62/63	*free*	free	free	free
Unwrought	ex 7801	60/61	(8)	5**	*free*	free
		62/63	(*8*)	4.5**, *	*free*	free
Ferro-chrome	ex 7302	60/61	8, 8	free	free	free
		62/63	**0**, *8*	free	free	free
Ferro-manganese	ex 7302	60/61	2-4, 8	free	free	free
		62/63	2-4, *8*	free	free	free
Bauxite	ex 2601	60/61	free	free	free	free
		62/63	*free*	free	free	free
Alumina	ex 2820	60/61	11	free	free	free
		62/63	*11*	free	free	free
Aluminium	ex 7601	60/61	10	(*6*)	*free*	*free*
		62/63	**9**	(*6*)	*free*	*free*
Phosphates	ex 2510	60/61	free	0, 15	free	*free*
		62/63	*free*	0, 13.5*	free	*free*
Cement	2523	60/61	8	(*6*, *9*)	free	15**, 20**
		62/63	8	(5*, 8*)	free	15**, 20**
Cotton:						
Not carded or combed	5501	60/61	free	free	*free*	free
		62/63	*free*	free	*free*	free
Carded or combed	5504	60/61	3	7	free	free
		62/63	*3*	6.3*	free	free
Tropical timber:						
In the rough	ex 4403	60/61	free, 5	free	*free*	*free*
		62/63	free* [2]	free	*free*	*free*
Roughly squared	ex 4404	60/61	free, 5	free	*free*	*free*
		62/63	free* [2]	free	*free*	*free*
Sawn lengthwise	ex 4405	60/61	free, 10	free	*free-0, 3*	free
		62/63	free* [2]	*free*	**free***	free
(3) *Manufactured goods*						
Cotton manufactures:						
Yarn	5505	60/61	10	free-10, 11-17	*3*	*8***
		62/63	**8**	free-10, 10-15*	free*, 5	*8***
Woven fabrics	5509	60/61	17, 19	26, 28, 30	8, 10, *12.5*	25, *30***
		62/63	**14-16**, *19*	23*, 25*, **25**	3*, 10, *12.5*	25, *30***
Ribbons, etc.	ex 5805 ex 5807	60/61	16, 18, 21	0, 25-30	7.5, *25*	35**
		62/63	*16*, **17**, *21*	0, 22, 5-27*	7.5, 12.5*	35**

Norway	Sweden	Switzerland	United Kingdom		United States	Canada		Japan
			MFN	Pref.		MFN	Pref.	
free	free	(0.04)	free	free	*free*	free	free	*free*
free	free	(0.04)	free	free	*free*	free	free	*free*
free	*free*	(0.1)	free	free	*free*	(5)	(4)	free, *10*, (16)
free	*free*	(0.1)	free	free	*free*	(3)	( )*	free, *10*, (16)
free	*3*	(1-5)	*10*	free	(*8*), 12.5	*10*	5	*20*, 30
free	*3*	(1-5)	*10*	free	(*8*), 12.5	*10*	5	*20*, 30
(1)	3	(1-9)	*15*	free	(6-*7*)	*10*	5	20, 30
(1)	3	(1-9)	*15*	free	(6-*7*)	*10*	5	20, 30
free	5	(5, 13)	20	free	(*7*)	*10*	5	20
free	5	(*5*, **11**)	**16**	free	(*7*)	*10*	5	20
5	3	(5)	*20*	free	(11-14)	*10*	5	20, *25*, 30
5	3	(5)	*20*	free	(11-14)	*10*	5	20, *25*, 30
free	free	(*0.04*)	free	free	(5.7)	free	free	*free*
free	free	(*0.04*)	free	free	(5.7)	free	free	*free*
free	*free*	(*0.2*)	(1)	free	(8)	(11)	(11)	10, 12, 20
free	*free*	(*0.2*)	(1)	free	(8)	(**6**)	(6)*	10, 12, 20
free	*free*	(0.5)	*free*	free	(*4*, *11*)	*5*	free	10
free	*free*	(0.5)	*free*	free	(*4*, **9**)	*5*	free	10
free	free	(0.5)	*0*-10**	free	(*7-9*)		free	20
free	free	(0.5)	*0*-10**	free	(*7*-**8**)		free	20
free	free	(0.3)	*free*	free	free	free	free	*free*
free	free	(0.3)	*free*	free	free	free	free	*free*
free	*free*	(1)	*10*, 20, 33 1/3	free	free	free	free	20
free	*free*	(1)	*10*, **16**, 33 1/3	free	free	free	free	15*
free	*free*	(29)	*free*	free	(5)	(*7*)	free	15
free	*free*	(29)	*free*	free	(5)	(*7*)	free	15
free	*free*		free	free	*free*	*free*	free	free
free	*free*		free	free	*free*	*free*	free	free
(3)	(1, 3)	(12, 30)	*5*, 10	free	(*2-3*, *5*)	(*4*, 6)		10
(3)	(1, 3)	(12, 30)	*5*, 10	free	(*2-3*, *5*)	(*4*, 6)		10
free	*free*	(0.05)	*free*, 10	free	free	*free*	free	*free*
free	*free*	(0.05)	*free*, 10	free	free	*free*	free	*free*
free	10	(12)	10	free	free	*10*	5	free
free	10	(7)*	10	free	free	*10*	5	free
free	*free*	(2.7)	*free*, 10	free	*free*	*free*	free	*free*, *20*
free	*free*	free* [7]	*free*, free* [8]	free	*free*	*free*	free	*free*, *20* [13]
free	free	(1.3)	*free*, 10	free	*free*	*free*	free	*free*, *20*
free	free	free* [7]	*free*, free* [8]	free	*free*	*free*	free	*free*, *20* [13]
free	free	(4.6)	*free*, 6, 7.5, 10, 15	free	*free*-*7.5*	*free*	free	*free*, *20*
free	free	free* [7]	*free*, free* [8]	free	*free*-*7.5*	*free*	free	*free*, *10*, *20* [13]
free, *7.5***	*free*, *8*, 13		7.5	free	[*14*] average	*10-20*	free-15	5**, *7.5*, 15
free, 5*	*free*, *8*, 13	2.8, *3.0*-**7.0**-**11.5**-*15.3* *7.5*		free		*10-20*	free-15	5**, *7.5*, 15
8.5-18-25	13		*17.5*	free	(*11-30*)	*20-25*	free, 17.5	10, 15, 20, 25
8.5-18-25	13	8.5-**11.2**-*21.8*	*17.5*	free	(*11-30*)	*20-25*	free, 17.5	10, 15, 20, 25
18-30	*8*, 14	( )	*17.5*-20	free	12.5-15-42.5	*22.5-25*	*17.5-25*	20, 25
18-30	*8*, 14	( )	*17.5*-20	free	12.5-15-42.5	*22.5-25*	*17.5-25*	20, 25

(See notes at end of table.)

SUMMARY TABLE B (*continued*)

Products		*Year*	*EEC/CET*	*Austria*	*Denmark*	*Finland*
(3) *Manufactured goods (continued)*						
Cotton manufactures: (*continued*)						
Tulle, lace, embroidery	ex 5808 ex 5809 ex 5810	60/61 62/63	17, 22, 20, 22, 23 **15, 18**, *20, 22, 23*	25-30 22.5-27*	*10-12.5-25* *10-12.5*-20*	**10**, *30-40* 10, *30-40*
Undergarments knitted or crocheted	ex 6004	60/61 62/63	21 *21*	*28* 25*	15 15	35** 35**
Outergarments knitted or crocheted	ex 6005	60/61 62/63	20, 21 **16, 17**	*28* 25*	*15*, 25 *15*, 22.5*	35** 35**
Undergarments	ex 6103 ex 6104	60/61 62/63	20, 22 *24*, **18**		12.5, *25* 12.5, 22.5*	*40*** *40***
Outergarments	ex 6101 ex 6102	60/61 62/63	20, 22 *20*, **18**		*25* 22.5*	*40*** *40***
Blankets, etc.	ex 6201	60/61 62/63	19 *19*	26 23*	12.5 12.5	32** 32**
Bed linen, table linen	ex 6202	60/61 62/63	22 *24*	32 28.8*	*12.5*, *25* *12.5*, 12.5*	40** 40**
Other made up articles	ex 6203 ex 6204 ex 6205	60/61 62/63	19, 21, 19, 21 **15, 16**, *19, 21*	20-32 18-29*	3, 12.5, 20 3, 12.5, 20	40 40
Jute manufactures:						
Yarn	5706	60/61 62/63	10 *10*	18** **16****	3 5	*7*, 12** *7*, 12**
Woven fabrics	5710	60/61 62/63	23 *23*	28** 25**, *	*free*, 3 *free*, 3	40** 40**
Sacks	ex 6203	60/61 62/63	11, 23 11, *23*	32 29*	*free* *free*	35 35
Carpets and rugs	ex 5801 ex 5802 ex 5803	60/61 62/63	21, 23, 24 21, *23*, *24*	30 30, 25*	12.5-25 12.5-25	40** 40**
Coir manufactures:						
Yarn	ex 5707	60/61 62/63	free *free*	free free	free free	free free
Woven fabrics	ex 5711	60/61 62/63	20 20	28 25*	3 3	25 25
Carpets and mats knotted	ex 5801	60/61 62/63	24 *24*	30 30	20, 25 20, 25	40** 40**
Other carpets and mats	ex 5802	60/61 62/63	23 *23*	28 25*	*5*, *12.5* *5*, *12.5*	10** 10**
Twines, ropes, etc.	ex 5904	60/61 62/63	16 **13**	*25* 22.5*	*free* (__) *free* (__)	12**, *25*, 32 12**, *25*, 32
Nets and netting made of twines, etc.	ex 5905	60/61 62/63	14, 19 *14*, *19*	25 22.5*	6, 10 6, 10	10**, 35 10**, 35
Other articles made from twine, etc.	ex 5906	60/61 62/63	18 18	*25* 22.5*	0, 6 0, 6	20 20
Mattresses, etc.	ex 9404	60/61 62/63	20 **16**	25** 22.5**, *	12 12	25 25
Finished leather:						
Bovine cattle	ex 4102	60/61 62/63	9, 10 *9*, *10*	free, 6, 12, 14 free, 6, 11*13*	10 10	60/61 *15-25*
Sheep and lamb skin	ex 4103	60/61 62/63	free, 6, 10 *free*, *6*, *10*	free, 5, 7, 11 free, 5, 7, **10**	free, 10 free, 10	
Goat and kid skin	ex 4104	60/61 62/63	free, 7, 10 *free*, *7*, *10*	free, 5, 7, 11 free, 5, 7, 10*	free, 10 free, 10	
Other kinds	ex 4105	60/61 62/63	8, 9 **8, 9**	free, 11 free, 10*	25 25	62/63 **14-20***

Norway	Sweden	Switzerland	United Kingdom		United States	Canada		Japan
			MFN	Pref.		MFN	Pref.	
10, 16, 19	15	(_,)	*25*	free	25-30-38-45-65	*12.5*	*10*	15, 35
free*, 16, 19	15	(_,)	*25*	free	25-**24-30-36**-65	*12.5*	*10*	15, 35
17	15**	(_)	20, 25	free	20, 25, 30, 42.5	*35*	20	20*, 30
17	15**	(_)	20, 25	free	**17**, 25, 30, 42.5	*35*	20	20*, 30
17	15**	(_)	*20-25*	free	25, 42.5, 50	*35*	20	25*, 30
17	15**	(_)	*20-25*	free	25, 42.5, 50	*35*	20	25*, 30
20-30	15	(_)	*20, 25*	free	10, 20, 25, 42.5	*25*	*25*	20*, 30
20-30	15	(_)	*20, 25*	free	10, 20, 25, 42.5	*25*	*25*	20*, 30
20-30	13, *15*	(_)	*17.5***-*20-25*	free	10, 20, 42.5	*25*	*25*	*21*, 25, 30, 40
20-30	13, *15*	(_, _)	*17.5***-*20-25*	free	10, 20, 42.5	*25*	*25*	*21*, 25, 30, 40
18-20	13	(_)	20	free	15**, 22.5	*25*	*25*	20
18-20	13	(_)	20	free	15**, 22.5	*25*	*25*	20
15-25	14	(_,)	*17.5*, 20, *25*	free	12.5-50	*25*	*25*	20*, 30
15-25	14	(_,)	*17.5*, 20, *25*	free	12.5-50	*25*	*25*	20*, 30
16-30	11, 14, *15*	( )	free, *17.5*-20**	free	11, 12.5, 20, 20	*25*	*25*	15, 20, 25
16-30	11, 14, *15*	( )	free, *17.5*-20**	free	*11*, **10**, **16**, 20	*25*	*25*	15, 20, 25
5	9, 10	(7-22)	10, 15	free	(18-22)	*17.5*, *25*	*free*, *20*	20
free*	9, 10	(**6**-22)	10, 15	free	(*18*-*22*)	*17.5*, **20**	10, **15**	20
12	11	(*1.6*-22)	20	free	(2-7), 8.5-12.5	(*2.5*), *22.5*, 22.5	free, 15	25
8	11	(*1.6*-22)	20	free	(2-**3**), 8.5-**10**	(*2.5*)*	free*	25
(*10*)	free, 11	(29)	*17.5*, 20	free	(10-11)	*15*	*12.5*	25
(*10*)	free, 11	(20)*	*17.5*, 20	free	(**8**-**9**)	*15*	*12.5*	25
14, 20, 25	12	(18)	*20***, 25	free	17.5	*17.5*	*12.5*	30
14, 20, 25	12	(17)*	*20***, 25	free	**14**	*17.5*	*12.5*	30
free	*free*	(0.4, *14*)	10	free	free	*free*	free	7.5
free	*free*	(0.4, *14*)	10	free	free	*free*	free	7.5
7, 12, 15	7	(13)	20	free	8.5, 10, 13.5, 15			10
7, 12, 15	7	(13)	20	free	8.5, 10, 13.5, 15			10
14	( )	(*7*)	*20***	free	10-17	(*5*)	(*5*)	30
14	( )	(*7*)	*20***	free	10-17	(*5*)	(*5*)	30
( )	*7*	(*15*)	20	free	10-17	(*3*)	(*5*)	30
( )	*7*	(*15*)	20	free	10-17	(*3*)	(*5*)	30
( ), 10	9, 10	( )	10	free	( ), 15	*free*, *22.5*	free, 17.5	10
( ), 10	9, 10	( )	10	free	( ), 15	*free*, *22.5*	free, 17.5	10
5, 16	10	(13)	20	free	20	free, (*21*)	free, 15	10
5, 16	10	(13)	20	free	20	*free*, **12.5**	free, **10**	10
	10	(10.5, *12*)	20	free	*20*			10
	10	(10.5, *12*)	20	free	*20*			10
15	15	(22.5, *17*, *20*)	20	free	20	*25*	20	30
15	15	(22.5, *17*, *20*)	20	free	20	*25*	20	30
(_,)	free, 7		10, *15*, *20*	free	7.5-15			15, *20*
(_,)	*free*, 7	*3.3*-**5.1**-**11.8**	10, *15*, *20*	free	**5.5**-**12.5**			15, *20*
(_,)	free, 7		10, *15*	free	10, *10*, 12.5			15, 20
(_,)	*free*, 7	(*1.1*)	10, *15*	free	**8**, *10*, **10**	60/61 *free*-*25*		15, 20
(_,)	free, 7		*10*, *15*	free	*10*-*12.5*			15, 20
(_,)	free, 7	(0.4, *1.6*, *1.9*)	*10*, *15*	free	**8**-*12.5*			15, 20
	free, 7		*10*, *15*, *15*	free	*10*-15, 15			15, 20, 25
	free, 7	(*0.5*, *1.8*)	*10*, *15*, **12**	free	*10*-**12**, 15			15, 20, 25

(See notes at end of table.)

SUMMARY TABLE B (*continued*)

Products		*Year*	*EEC/CET*	*Austria*	*Denmark*	*Finland*
(3) *Manufactured goods (continued)*						
Leather footwear	ex 6402	60/61	20	28	25	*14, 18, 20*
		62/63	**16**	**25**	25	*14, 18, 20*
Leather goods:						
Luggages, handbags, purses	ex 4202	60/61	19, 21	22	22.5	*15, 20*
		62/63	**15, 17**	20*	22.5	*15, 20*
Gloves, etc.	ex 4203	60/61	17, 19, 19, 20	18, 20, 22, 24, 24	15, 27.5	*16, 25**, 30*
		62/63	**14, 15**, *19, 20*	16*, 20, 20*, **22**, 24	15, 27.5	*16, 25**, 30*
Other articles	ex 4205	60/61	17	20	15, 22.5	*25, 30*
		62/63	**14**	18*	15, 22.5	*25, 30*
Sports goods	9706	60/61	19	0, 25-27-30	12, 18, (__)	15-25
		62/63	*19*	0, 25-**24**-25*	5*, 18, (__)	15-25
Bicycles (not motorized)	ex 8710	60/61	21	34	20	25
		62/63	**17**	31*	20	25
Sewing machines:						
Domestic	ex 8441	60/61	12	27	*free*	*15*
		62/63	12	20*	*free*	*15*
Electric fans	ex 8506	60/61	19	*22*	15	*15*
		62/63	**15**	19*	15	*15*
Electric motors	ex 8501	60/61	12, 14	14-24	12	*5, 6, 15, 18*
		62/63	**10, 11**	**14-22**	12	*5, 6, 15, 18*
Diesel engines (under 50 h.p.)	ex 8406	60/61	15, 16, 18, 19, 22	free-*20*	free *5*, 15	*12*
		62/63	**15, 13, 14, 14, 18**	free-18*	free *5*, 15	*12*
Steel furniture	ex 9401 ex 9402 ex 9403 ex 9404	60/61	17, 18, 20	15, 20, 25	5, 12	*15*, 25
		62/63	**14, 17, 16**	15, 18*, 22.5*	5, 12	*15*, 25

[1] The Convention of Association with the African States and the Malagasy Republic signed at Yaoundé on 29 July 1963 provides that the common external duty on *coffee* shall be reduced by 40 per cent from 16 per cent to 9.6 per cent and the duty on *cocoa* from 9 to 5.4 per cent. Of this, 25 per cent is a true reduction in the rate of duty and 15 per cent a suspension. *The rates shown in the table are to be from the date on which the Convention enters into force.*

[2] *The rates indicated in the table are suspended rates of duties to be applied by the EEC member States as from 1 January 1964 until 31 December 1965.*

[3] *The Danish Government removed its duty on tea as from 1 January 1964.*

[4] The Finnish Government gave the Parliament on 12 December 1963 a bill to the effect that the duty on bulk tea be abolished and the duty on tea in retail packages be reduced from the present 1.5 new markkas per kg. to 10 per cent *ad valorem.*

[5] *The present duty-free entry for coffee and tea was formalized as from 1 January 1964.*

Norway	*Sweden*	*Switzerland*	*United Kingdom*		*United States*	*Canada*		*Japan*
			MFN	*Pref.*		*MFN*	*Pref.*	
	14		*10***, *15*, 20	free	*5-17-20*	*27.5*	*20*	30
	14	9.3, *10*-**16**-**21**	*10***, *15*, 20	free	*5*-**14**-*20*	*27.5*	*20*	20*, **27**, 30
30	*13*	(*8*, *9.5*)	15**, 20**, 20	free	17.5, 17.5, 20, 20	*22.5*	*12.5*	25, 25, 40, 40
30	*13*	(*8*, **9**)	15**, 20**, 20	free	**14**, 17.5, **16**, 20	*22.5*	*12.5*	**20**, 25, **35**, 40
__), 15, 18, 25	8, 12	3.3-6.8-9.5-*24*	20, *30*	free	(*15-82*)	*10-25*	free-20	25, 25, 40, 40
__), 15, 18, 25	8, 12	3.3-**6.4**-9.5-*24*	20, *30*	free	(**12**-*82*)	*10-25*	free-20	**20**, 25, **35**, 40
15	8	(*3*-12)	20	free	7.5-15-17.5-20	*20-27.5*	7.5-17.5	25
15	8	(*3*-**11**)	20	free	**6-12-14-16**	*20-27.5*	7.5-17.5	25
15, 25, (__)	*5*, *8*, 12	(4-20)	*10*, *20*, *25*, 25**	free	7.5-10-12.5-25	*20-30*	*15-20*	20
15, 25, (__)	*5*, *8*, 12	(4-20)	*10*, *20*, *25*, 25**	free	7.5-**8**-**10**-**20**	*20-30*	*15-20*	20
(36)	(19)	(*25*)	*20*	free	11.25-30	*25*	20	20
(36)	(19)	(*25*)	*20*	free	*11.25-30*	*25*	20	20
free	10	(2.6)	*15*	free	7.5-*10*	*15*	5	*15*
free	10	(2.6)	*15*	free	7.5-*10*	*15*	5	*15*
20	*10*	(5.8)	*17.5*	free	17.5	*22.5*	10	15
20	*10*	(5.8)	*17.5*	free	17.5	*22.5*	10	15
10	*10*	(3.8-5.5)	*17.5*	free	10.5	*22.5*	15	*15*, 20
10	*10*	(*3.8*-5.5)	*17.5*	free	10.5	*22.5*	15	*15*, 20
10, 20	*10*	(3.7, 5-8, 12, 18.5)	17.5, 30, 30	free, 20, 20	10	*20*	*free*	*15*, 25, *30*
10, 20	*10*	(3.7, 5-8, 10, 18.5)	**16 22, 24**	free, **14 2/3, 16**	10	**17.5**	*free*	*15*, 25, *30*
10-20, ( )	8, *10*, 15	(5.5-13, *11-17*)	*15*, *20*	free	11.5, 19	10, *25*		20, 25, 30
10-20, ( )	8, *10*, 15	(5.5-13, *11-17*)	*15*, *20*	free	11.5, 19	10, *25*		20, 25, 30

[6] *The duty-free treatment granted to tea entered into force as from 1 January 1964, the action being approved on 4 November 1963 by the Swedish Parliament.*

[7] *The Swiss duties on tea and tropical timber were removed as from 1 January 1964.*

[8] *The UK rates on tea and timber indicated in the table are suspended rates of duties to be applied as from 1 January 1964 until 31 December 1965.*

[9] The absolute level of the specific duty on imports benefiting from preference is lower than that on other imports. The *ad valorem* equivalent is however higher as preferential imports have had a lower average unit import value.

[10] *The United States Government has indicated that it will seek legislative authority to remove or reduce duties on semi-processed cocoa.*

[11] *The Canadian duty on tea was removed at the beginning of 1964.*

[12] *The Norwegian duty on bananas was removed as from 1 January 1964.*

[13] *The Japanese Government will shortly initiate the necessary action for the complete elimination of duties on tropical timbers.*

SUMMARY TABLE

Internal charges on coffee, cocoa and tea applied by industrialized GATT countries

NOTE: Where rates are shown in parentheses [for example: (99%)], this indicates that a specific charge has been converted into *ad valorem* terms.

	Belgium [1]	*Nether-lands* [1]	*Germany, F.R.* [1] *(DM. per 100 kg.)*	*France* [1] *(Fr. per 100 kg.)*	*Italy* [1] *(Lire per kg.)*	*Austria* [1]	*Denmark*	*Finland* [1]	*Norway*	*Sweden* [1] *(Kr. per 100 k.g)*	*Switzer-land*	*United Kingdom*	*United States*	*Canada* [1]	*Japan (per cent)*
Coffee:															
Raw	—	—	360 (99%)	142.5 (42%)	500 (134%)	—	—	—	—	—[5]	—	—	—	—	10
Roasted	—	—	480	n.a.	690 (81%)	—	—	—	—	—[5]	—	—	—	—	10
Cocoa:															
Beans	—	—	—	7 (3%)	250 [3] (74%)	—	—	—	—	—	—	—	—	—	—
Paste	—	—	—	8.5 (9%)	312.5 [3]	—	1.5 Kr./kg.[4] (34%) +37 1/2%	—	—	—	—	—	—	—	—
Butter	—	—	—	8.5 (2%)	312.5 [3]	—	1.5 Kr./kg.[4] (22%) +37 1/2%	—	—	—	—	—	—	—	—
Powder	—	—	—	8.5 (5%)	312.5 [3]	—	1.5 Kr./kg.[4] (55%) +37 1/2%	—	—	—	—	—	—	—	10
Tea	—	—	415 (71%)	183 (25%) [2]	—	—	—	—	—	—	—	—	—	—	—

[1] General turnover and sales taxes of less than 15% which may be applied against the product concerned are not shown. France applies a 25% turnover tax on cocoa powder.

[2] Black tea. For green tea the rate is (30%).

[3] The Italian Government has notified that draft legislation has been drawn up providing for a reduction by 50 per cent of the consumption tax.

The tax is levied on the wholesale price.

[5] The taxes of 35 Kr. per 100 kg. (9%) on raw coffee and 45 Kr. per 100 kg. (6%) on roasted coffee was abolished on 1 January 1964, the action being approved on 4 November 1963 by the Swedish Parliament.

AN ANALYSIS OF THE PROCEEDINGS OF THE UNITED NATIONS CONFERENCE ON THE APPLICATION OF SCIENCE AND TECHNOLOGY (UNCSAT) RELATED TO PROBLEMS OF EXPORTS OF MANUFACTURED GOODS FROM DEVELOPING COUNTRIES *

TABLE OF CONTENTS

PREFACE

The United Nations Conference on the Application of Science and Technology (UNCSAT) held in Geneva, 4 to 20 February 1963, gave close attention to the role of exports of manufactured and semi-manufactured goods from the developing countries which was considered as a dynamic factor in the process of industrialization of these countries. It appeared therefore useful to present a brief analysis of the proceedings of the Conference. The analysis is particularly concerned with the problem of priorities in the development of export industries that would contribute most to the acceleration of the industrialization process. A note on the origin, documentation and follow-up of the UNCSAT Conference is attached to this report.

* This paper has been prepared by the Centre for Industrial Development in connexion with the sub-items on "Measures and action for diversification and expansion of the exports of manufactures and semi-manufactures by developing countries with a view to increasing their share in world trade" and "Measures for the expansion of markets of the developed countries for exports of manufactures and semi-manufactures of developing countries", (items III.1 and III.2 of the list of main topics). See "Report of the Preparatory Committee (first session)" para. 6, in Vol. VIII of this series.

1. LINK TO THE UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

1. The purpose of the Conference was to assist the less developed areas in their "leap across the centuries" through the application of science and technology to the solution of their problems in economic and social development. The need for exports from developing countries, and the need for exports of manufactures as an aid in this process of development, was stressed by the Conference President, who in his address at the opening plenary session, asked whether these countries could not be aided in creating the necessary financial resources by "import policies on the part of the advanced countries which would provide them with essential markets for the commodities and manufactures they must sell if their standard of living is to rise". And in this connexion, he noted with gratification that the United Nations "proposes to convene a conference . . . to consider the problems of international trade".[1]

2. The problem of trade and development was

[1] E/3772, Add. 1, p. 83.

dealt with by the UNCSAT Conference under two of its twelve point agenda, "D" Industrial Development and "H" Organization, Planning and Programming for Economic Development.[2]

3. The section on Industrial Development was designed to bring the developing countries within reach of the latest scientific and technological achievements applicable to their economic development. Attention was drawn to the dual effects the technological revolution of our times could have on the developing countries.

4. On the one hand the gap between developed and developing countries might be widened through the unfavourable effect on the latter of substitution of natural raw materials by synthetics (fall in export prices and hence incomes) and the higher cost of industrialization (demand for highly specialized machinery and trained scientific and technical personnel). While on the other hand, "under favourable social, economic and political conditions, the development of science and technology enables underdeveloped countries to make a rapid transition from a primitive to a modern economy, avoiding the intermediate stages of development formerly undergone by the more developed countries".[3] The developing countries who want to "reap the gains of the latecomers" must have access to the knowledge on (1) latest technological information applicable to the transformation of their resources, and (2) the proper course of development suitable to their specific economic and other features. Thus, the agenda on Industrial Development was concerned with two groups of papers. The first group, which dealt with "vertical" problems of industrialization of individual production processes and most recent scientific and technical advances, was devoted to an examination of individual industry branches such as food processing and preservation; textiles; products of animal and vegetable origin and substitutes; heavy chemicals and fertilizers; iron and steel, non-ferrous metals; engineering techniques; building materials and techniques. The second or "horizontal" general group of items was designed to identify main problems of industrialization. It dealt with the direction of development, citing the actual experience in a number of countries and raised the questions of: selection of priorities for development; choice of techniques and equipment; size of enterprises; difficulties of mechanization in developing countries and other special factors affecting industrial development in less developed areas; structural and locational problems and specifications and standards.

5. A briefer part of the agenda and documentation was devoted to "Organization, Planning and Programming for Economic Development". The sector on planning was subdivided into three parts, "Methodology", "Organization arrangements" and "Implementation".

6. The part on "Methodology" contained sections on aggregate, sectoral and project planning and programming; priorities and relationships among sectors; and regional planning. The "Organization Arrangements" dealt with the organization of statistical services; planning mechanisms; integration with appropriate government departments; and co-ordination of external assistance. The "Implementation" covered the mobilization of resources (capital, labour and foreign exchange) and the implementation of plans and projects in private and public sectors. In the documentation and discussions on Planning, attention was drawn to the need for developing countries to reduce their dependence on a single or a few primary export commodities with price fluctuations that tend to cancel out the benefits of external financial assistance. Primary commodities stabilization measures were outlined, questions of commercial policy were raised and, as a means of lessening the import coefficient the need for changing the traditional division of labour through industrialization was emphasized, with particular attention devoted to co-ordination at regional level.

7. Under both agenda items "Planning" and "Industrial Development" the discussion centred on the problem of what sectors should be given priorities in industrial development planning, with different views expressed on the need for starting with light labour intensive industries or rather with capital intensive producer goods that would provide the country with the means for carrying out development and exports.

2. FOREIGN TRADE AND DEVELOPMENT CAUSED BALANCE-OF-PAYMENTS GAP

8. There was general agreement that the starting point for all industrial development must be a well integrated plan, related to the economic potential of the country and its market prospects. Industrial development and foreign trade were recognized among the foremost problems facing the developing countries, and the need was emphasized for a simultaneous approach to the solution of these problems as an integrated whole.[4] The most direct link between UNCSAT and the Conference on Trade and Development appeared in the discussions of a specialized session on planning and programming, where it was stated that a certain degree of stability in international trade was an essential prerequisite for development planning and where it was suggested that a link should be established between the Conference on Science and Technology and the proposed Conference on Trade and Development.[5]

9. Foreign trade, as a determinant of income, savings, investments and import capacity was considered a strategic variable in economic development.[6] The inter-relationship between foreign trade and economic development planning was particularly

[2] The other sections of the agenda were: A. Natural Resources; B. Human Resources; C. Agriculture; E. Transport; F. Health and Nutrition; G. Social problems of development and urbanization; I. Organization and Planning of scientific and technological policies; J. International co-operation and problems of transfer and adaptation; K. Training of scientific and technical personnel; L. Communication. See the complete conference agenda in E/CONF.39/Inf.1/Rev.1.

[3] E/CONF.39/GR.81(D).

[4] E/CONF.39/RR.89(H).

[5] E/CONF.39/RR.86(H), p. 2.

[6] E/CONF.39/H/76.

recognized in the case of newly independent States. As these were largely dependent upon foreign markets, it was emphasized that their terms of trade were a highly influential factor in both making and implementation of development plans.

10. The very disrupting influence of fluctuations in world prices of primary commodities, produced in developing countries, was recognized by most speakers, although some questioned the existence of a declining long-term trend in prices.[7] The outlook for primary products export expansion was generally pessimistic. Because of the sluggishness of demand by developed countries, due in part to substitution and better utilization of raw materials through industrial saving devices and greater recovery from waste, it was thought that exports could not be expected to rise sufficiently to meet the requirements of development planning at an accelerated rate. "The persistent problem . . . is not that the past and expected rise of primary products' export is small, but that it is insufficient for a world in which accelerated and planned development has become a permanent feature." [8] Thus, a key issue generally recognized at the Conference was that developing areas' imports are bound to rise much faster than their "traditional" exports and, as stated clearly in the Conference documentation, the entire strategy of development in export dependent countries is towards reducing the balance-of-payment gap and ultimately the import coefficient.[9]

3. PRIMARY COMMODITIES, STABILIZATION MEASURES

11. Under the agenda item "International Aspects of Implementation of Planning" considerable discussion was devoted to the scheme for stabilizing prices of raw materials by the creation of an international stockpiling and regulation fund.[10] It was thought that "a machinery for regulating prices of a few raw materials could evolve into a device for regulating economic life as a whole".[11] The proposed system consists of an international fund purchasing homogeneous basic products suitable for stockpiling (cereals, metals, rubber, etc.) at a fixed price and selling at a slightly higher price. The scheme, described in the Conference documentation, provided for compensation for deviations of export receipts of countries from a trend, by means of compensatory finance.[12] Stocks purchased at a fairly large scale were thought to facilitate absorption of periodic market fluctuations. The fund would be financed by contributions from various countries or by being given issuing power for financing the stabilization fund. The arbitrary element inherent in price fixing could be eliminated by periodical readjustments or by fixing a global price for a composite range of commodities. Furthermore, the fund might include a sort of overflow aid in kind to the developing countries.

12. The establishment of the regulation fund would offer developing countries the direct advantage of making regularly available to them resources required for imports of capital goods necessary for the implementation of development programmes.

13. Suggestions were also made for measures to be taken by the exporting countries themselves, such as the establishment of marketing boards, application of export taxes or duties, or use of variable exchange rates. These measures were expected to stabilize prices and thereby incomes in the export sector by siphoning off revenue at times of high prices while supplementing income and purchasing power at times of low prices.

4. THE NEED FOR INDUSTRIALIZATION

14. The measures for improving exports of traditional, primary commodities, advocated by the Conference (see also under commercial policy) were considered, however, insufficient to free developing countries from the constraint exerted by the balance-of-payments gap. As the "export economies" were changing into "import sensitive" economies it was thought that a more effective solution could be found in the reduction of their import coefficient and a change in the traditional international division of labour.[13] To obtain a reduction in the import coefficient, it was necessary to select investment projects with the smallest import content possible—having in mind the long-term net impact of export oriented projects on the balance of payments. In many countries, resources easy exploitable for exports of primary products had become limited; large investments were required for opening up new primary production for export purposes, so that a number of developing countries were now devoting attention to the production for export of industrial goods. Precedence of export production over import substitution was explained by the fact that in many small developing countries, internal markets alone were insufficient for setting up modern industrial plants; this, in turn, called for close co-operation between developing countries on the blueprints of their industrialization (see also regional planning).

15. While the Conference was in general agreement as to the role of industrial development as a means for accelerating economic growth, there were however expressed very divergent views under both agenda items "D" Industrial Development and "H" Planning as to which industries constitute the nucleus of industrialization and which industries should first be developed; there was also considerable debate on the question of techniques to be used, as well as scale of enterprises.

5. LABOUR-INTENSIVE INDUSTRIES (TEXTILES AND LIGHT ENGINEERING PRODUCTS)

16. A number of participants expressed the view that the first priority for investment projects in the developing countries should be given labour-intensive

[7] E/CONF.39/RR.89(H), p. 2.
[8] E/CONF.39/H/76.
[9] E/CONF.39/H/7.
[10] E/CONF.39/RR.65(H).
[11] E/CONF.39/H/36.
[12] E/CONF.39/H/76.
[13] E/CONF.39/H/7.

industries which would make use of an abundantly available resource. It was hoped that markets for the output of these industries could be found in the developed countries and result in mutual benefits. "Accommodating labour-intensive light manufactures from developing countries is . . . imperative and would optimize use of the industrial countries' own resources as well." [14]

17. The viewpoint that industrialization should start with the development of light industries producing articles of consumption (e.g., textiles, light engineering goods) was supported by the argument that these types of industry require fewer capital resources; result in a relatively rapid capital turn-over; yield immediate profits; and that the requisite labour force could easily be trained. For this purpose, some speakers favoured modernization of existing small-scale enterprises by granting them technical, financial and other assistance, instead of establishing new large enterprises, and the importing of cheap second-hand machinery that was still usable, instead of costly new equipment.[15] In a specialized session on textiles, a speaker from one developing country drew attention to the fact that in his country, the textile industry was established on a large scale about thirty years ago and that it is today a flourishing industry which, "besides satisfying the needs of the local market, is becoming a source of foreign currency through export of textile products to many countries all over the world". It was stated that this achievement could be taken as an example for other newly developing countries who possess the necessary natural resources of textile raw materials and other elements, such as fuel, manpower, etc.[16]

18. Promotion in the developing countries of exports of light engineering goods, particularly those using assembly techniques, appealed to a number of participants because these were technically easy to produce and provided an outlet to the abundant labour resources. However, other participants felt that it was necessary to take a very careful view of this argument. In the first place, they mentioned that some of the light engineering goods had a high import content and involved royalties to foreign firms paid for in hard currency. In the second place, it was necessary to evaluate the import substitution effects in terms of prices prevailing at world markets.

19. It was also stated that a too great emphasis on manufacture in the developing countries of light engineering goods that might bring about a quick improvement of the balance of trade should not overlook considerations of the long-run strategy of industrialization since it may tend to distort the structure of the industrial sector of the developing areas and increase their dependence in the long run on the industrially developed countries.[17] The development of light industries and the use of obsolete techniques were not thought to present in themselves a solution to the problem of industrialization; the developing countries would still have to hand over to the developed countries the proceeds obtained from light industries' exports, in payment for the supply of machinery, equipment, spare parts, chemicals, etc. "With an unfavourable balance of payments, this development trend leads to serious financial dependence. Even under normal international conditions, it is not possible to construct a stable national economy on the basis of complete dependence on the import of machinery, equipment, spare parts, chemicals and other production items. It is even more difficult to do this in an unstable transitional period." [18]

20. Other participants were, in addition, pessimistic about the possibility of rapidly expanding exports of the labour-intensive goods from the developing to the developed countries. They took a dim view of the export possibilities of the textile and light engineering goods industries which were mushrooming all over the world in spite of excess capacity already existing both in developed and underdeveloped countries and stated that there is "hardly any room left for new Japans" in the present international division of labour.[19]

21. In this connexion some criticism should be noted on the argument of the developing countries' inherent advantage in labour-intensive industries. As is well known, a comparative advantage in this area as illustrated for example in the case of Japan, exists only if (*a*) there is abundance of skilled labour at relatively low wages, and (*b*) the productivity of labour is comparable to that of the industrial countries.

6. PRODUCER GOODS INDUSTRIES

22. Those in favour of priority for the development of producer goods industries argued that the way of breaching the development gap between developed and developing countries consisted in developing countries achieving an accelerated rate of economic growth, surpassing that of the developed countries. The basis for ensuring such an accelerated rate was a rapid and persistent rise in labour productivity, based on use of machinery and therefore "involving a radical reorganization in the agrarian and raw material structure of the economy". Since, in their opinion, such a reorganization could not be based on imports alone, it was imperative for the developing countries to establish "indigenous output of the basic means of production, machinery, equipment, means of transport, metals and building materials".[20]

23. These participants considered that priority for the establishment of producer goods industries was the only lasting solution to the problem of underdevelopment stating that "only a strong capital goods industry . . . makes the rate of investment, and therefore of economic development, relatively independent from the contingencies of world market".[21] In particular, the engineering industry was considered to be the nucleus of all industrialization.[22]

[14] E/CONF.39/H.76.
[15] E/CONF.39/GR.81D.
[16] E/CONF.39/RR.17(D).
[17] E/CONF.39/H.7.
[18] E/CONF.39/GR.81(D).
[19] E/CONF.39/H/7.
[20] E/CONF.39/GR.90(D).
[21] E/CONF.39/H.7.
[22] E/CONF.39/GR.81(D).

24. Besides giving the country economic independence, establishment of producer goods industries was justified on the basis of creating employment opportunities for considerable numbers of persons over the longer period. It was mentioned as an example that a metallurgical plant, costing $200 to $300 million, employs a fair number of workers and office staff (between 15,000 and 20,000) and that the metal consuming industries based on this output would employ seven to eight times more. Moreover, the establishment of such an industry involves the employment of many thousands of building workers, as exemplified in the case of the Bhilai works in India.[23] However, it was considered that the problem of employment should not be the main criterion when deciding on the merits of this industry; no less important for developing countries was the fact that the value added per employee was higher in steel production than in almost any other industry. This aspect was thought by the participants of this view to be of greater significance for countries interested in a rapid rise in national income and living standards.

25. The Conference provided the developing (and the developed) countries with a considerable amount of documentation on the technical aspects of the producer goods industries.[24] In the field of engineering industry, documentation was provided on choice of techniques and optimal size of plants, based on experience recently gained by India, the USSR and Yugoslavia. Of particular importance to developing countries were the findings that "there is a marked tendency for modern techniques to permit even small plants to work very efficiently" thus by-passing the factor of increasing returns to size which worked at the disadvantage of the developing countries with generally limited internal markets.[25] And attention was drawn to the possibilities that exist in "rather undeveloped areas" of advancing into the more complex field of machinery production, provided agreement could be reached on regional co-operation to create the necessary size of demand. Thus, the production of selected types of machinery and electrical equipment is rendered possible much earlier than would otherwise be the case.

26. In the particular field of steel industry, attention was drawn to the latest scientific and technological achievements which increase the possibility of production in countries where the natural resources in ores or fuel were previously considered to be unsatisfactory or even unsuitable in quality. It was stated that:

". . . The existing factual information is sufficient to justify the assertion that present day methods of iron ore dressing that have been well developed and tested by extensive production experience, enable low-grade ores of various composition to be used successfully and profitably for metallurgical purposes. . . . As already mentioned, many under-developed countries have water power resources that are adequate for the production of cheap electric power, which, in its turn, is finding increasingly wide application in all metallurgical processes. . . . Therefore, the former view that the organization of iron and steel production is only economically justified in countries that have adequate reserves of high-grade raw materials and fuel is no longer of such decisive significance." [26]

27. However, in the specialized session on "Iron and Steel; Non-ferrous Metals", attention was drawn to the fact that while it was relatively easy to build an iron and steel plant, the problem of ensuring the supply of raw materials, power and transport, was a more complex and time consuming task and that therefore "it was necessary to make sure that these elements were fully available by the time the plant was ready, as a poor country could not afford to keep idle any capacity put up at great costs". It was also mentioned that an industrializing country required not merely ordinary carbon steels, but also a range of special steels, without which machines and special steels could not be made.[27]

7. MIXED PATTERN OF DEVELOPMENT

28. Despite the very strong case made by some participants on both economic and technical grounds for the need of establishing producer goods industries in developing countries, there was no general agreement that these industries should be given priority in development. In the specialized session on "Structural and Locational Problems of Industry", an expert from a developing country summarized the position by saying that two approaches to industrial development had been mentioned, (*a*) to develop light industry first and heavy industry next; (*b*) to develop first heavy industry and then establish a light industry on its basis. This participant favoured a third solution which was to begin with the development of light industry, and at the same time to force the growth of heavy industry. This alternative was illustrated by the examples of India and Indonesia, who began with small industry and who realized that "the main economic problems could not be solved without heavy industry".[28] In another specialized session on "Special Factors Affecting Industrial Development in Less-Developed Areas" it was recalled that the choice of priorities was vital, as is the choice of the best means of production in a given industry, and that while in some countries basic industries were given priority—this "was not always the best solution".[29]

29. It was thought by a number of participants that choice and timing of the establishment of producer goods industries in the developing countries should be guided by the size of the country, its natural endowments, the degree of production already achieved, and the availability of unskilled and semi-skilled labour. It was mentioned that "since factor endowment may vary from country to country, the

[23] E/CONF.39/GR.90(D).

[24] A guide to the documentation on technologica aspects of the producer goods industries is contained in the reports of the conference secretary on "Iron and Steel; Non-ferrous Metals" (E/CONF. 39/GR.90(D), and "Engineering Techniques; Heavy Engineering Industries" (E/CONF.39/GR.35(D). For other, heavy industries, see the conference secretary's reports on "Heavy Chemicals and Fertilizers" (E/CONF.39/GR.67(D) also "Products of Animal and Vegetable Origin and Substitutes".

[25] E/CONF.39/GR.35(D).

[26] E/CONF.39/GR.90(D).

[27] E/CONF.39/RR.90(D), Statement by Mr. Tata of India.

[28] E/CONF.39/RR.48(D).

[29] E/CONF.39/RR.87(D).

path of economic development is not necessarily uniform".[30] Thus, a mixed pattern of development, favouring application of science and technology to resource-based industries for export expansion and import substitution in the field of either producer or necessary consumer goods, were considered as an effective policy.

30. Within this "mixed" pattern of development, flexibility in the policy of project evaluation was recommended. As the development plan progressed, it might become necessary to shift emphasis from one goal to the other. Thus different "weights" were to be attached to the projects, according to the size and potentialities of the country as well as the degree of acuteness of the foreign exchange situation. The alternative which often confronted development planners was one of higher immediate consumption at the expense of long-range rate of growth as against a higher future consumption made possible through a higher rate of investments in the time horizon envisaged by the Plan.[31] But as a general rule in an "import sensitive economy", a project with a higher import substitution effect should, *ceteris paribus*, always be preferred.

8. COMPETITIVE ADVANTAGES

31. The argument which was frequently invoked against the establishment of industries in developing countries was that they were uneconomical, on the basis of comparative costs. However, this argument was dismissed by some participants on two counts: first, the theory of comparative cost was in its very essence static, and did not take into account the dynamics of the development process. It failed to take a dynamic view of a country's resource endowment, presently idle, and of the evolution of the costs of production with the development of these resources. As an example, it was mentioned that in a factory just set up in a newly developed country, the production cost of a given item may be at the first time twice as much as that in a factory of Western Europe but that "tomorrow this gap may diminish or disappear".[32] Second, the argument of comparative costs was not considered to be applicable as a criterion since primary producer countries faced a generally inelastic demand for their traditional exports on the world market. It was stated "that for an import-sensitive economy, the consideration of absolute cost of production of essential import-substituting goods and also of export goods may be secondary . . . provided that such goods . . . are produced at the lowest possible cost under given circumstances".[33] This reasoning would of course also justify initiation of production of capital goods in developing countries, even at high initial cost. It was argued that in the long run, there was no reason why costs of machine building industries should differ significantly from country to country; it was thought that the concept of "comparative advantage" applies in the long run only to certain raw material based industries such as iron and steel, where the factor of proximity of raw materials supply and of transportation costs have a considerable bearing upon costs and normal prices.

32. In a number of developing countries, there are abundant resources of raw materials (e.g., iron ore, non-ferrous ores, animal and vegetable products, etc.) which provide a potential comparative advantage in exports of manufactured goods based on such raw materials. The processing of some of these raw materials may provide in certain cases an economic basis for export industries. This applies to industries based on agricultural products of vegetable and animal origin and implies the replacement of the former exports of crude materials. It also applies to processing of certain categories of minerals, and to exporting of refined products instead of the crude. The developing countries stand to benefit from such substitution because of the element of value added involved in the exports. Thus the Conference provided developing countries with valuable guidance to effective development of their resources and policy for economic development. In this connexion it may however be noted that the Conference was not empowered to make recommendations to Governments or to take decisions regarding policy.

9. ECONOMIES OF SCALE AND NEED FOR REGIONAL CO-ORDINATION OF INDUSTRIAL PRODUCTION AND MARKETS

33. While there was divergence of views regarding which industries to be given priority, the Conference agreed on the important role played by the factor of economies of scale in the development of industries. The latter frequently involve large capital investments, with unit costs highly dependent on size of operation. Most of the developing countries have only a small domestic market and a competitive low cost could in some instances only be obtained with the help of a large export market, from which the developing countries are excluded by their high costs of production. Breaking of this vicious circle calls for "a close co-ordination between the developing countries of their blueprints for industrialization", and attention was drawn to future "common markets" among developing areas while "mere taking of commercial measures, reducing or abolishing of customs tariffs, etc., will not do".[34] The need for regional allocation of industrial tasks was emphasized at numerous occasions as stated earlier in this report in connexion with the producer goods industries, to create the necessary size of demand, "since it is obvious that not all countries can perform all industrial tasks".[35]

34. The interdependence between regional economic development planning and exports was also stressed at other meetings of the Conference, when it was stated as exemplified in the case of Latin America, that "national economic development . . . was largely dependent on the course of international trade", and that therefore "a certain minimum co-ordination of inter-regional economic policy or multinational

[30] E/CONF.39/GR.35(D).
[31] E/CONF.39/H/7.
[32] E/CONF.39/H/7.
[33] E/CONF.39/H/7.
[34] E/CONF.39/H/7.
[35] E/CONF.39/RR.81(D).

regional planning was . . . essential".[36] The importance attached to Regional Planning, which constituted a sub-item on the agenda, is seen in the special session on Regional Planning and the documentation devoted to the subject.[37] It was pointed out that planning may be instituted for individual areas within the country, or jointly for a large region consisting of adjoining countries, that can co-ordinate, or even integrate, their economies.[38]

10. COMMERCIAL POLICIES

35. The need for expanding exports from developing countries of both primary products and manufactures was strongly emphasized by the Conference. In addition to the references to the interdependence between trade and development already given in this report, liberalization of trade was frequently demanded. With regard to primary products, it was stated that "industrial countries should be expected to promote imports from less developed areas rather than obstruct them through import quotas, tariffs and internal taxes whose abolition could increase the exports of primary products very sizably.[39] The author of this statement drew attention to a recent publication of Professor Jan Tinbergen showing that the cost of abolition of such impediments is fairly small compared to the benefits for the exporting countries.[40] Further, in the opinion of the same participants, the developed countries provided a market for the manufactured goods produced in the developing countries, particularly as regards labour-intensive products such as textile and light engineering goods, to whose production the developing countries are turning. "Accommodating labour-intensive light manufactures from developing countries is equally imperative" (as that of primary products) "and would optimize use of the industrial countries' own resources as well."[41]

36. In the specialized session on "Special Factors Affecting Industrial Development in Less-Developed Areas", the effect of protective tariffs on industrial development was discussed.[42]

APPENDIX I

ORIGIN, PROCEEDINGS, DOCUMENTATION AND FOLLOW-UP OF THE UNITED NATIONS CONFERENCE ON THE APPLICATION OF SCIENCE AND TECHNOLOGY (UNCSAT)

1. ORIGIN, PROCEEDINGS AND DOCUMENTATION OF THE CONFERENCE

The proposal for holding a United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas (UNCSAT) held in Geneva from 4 to 20 February 1963, had its origin in the United Nations Scientific Advisory Committee. Following their meetings of January 1961 (Bombay) and May 1961 (Rome), and in consultation with the interested specialized and related agencies of the United Nations, they reported to the Secretary-General on the broad outlines of the Conference.[a] At its thirty-second session in July 1961, the Economic and Social Council having considered the report of the Scientific Advisory Committee, unanimously approved the holding of the Conference, see resolution 834 (XXXII) of 3 August 1961.[b] This decision of the Economic and Social Council was welcomed by the General Assembly of October 1961, where the usefulness of the proposed Conference was generally recognized. In particular it was thought that the meetings of scientists and technologists from countries that were already technically advanced with those from countries at earlier stages of development would help the latter to establish general guide lines for their development and to accelerate their progress by applying many of the latest advances in science and technology. At the same time, the more advanced countries would enlarge their understanding and knowledge of the needs of the developing areas. The Conference, originally scheduled for August 1962, was postponed to February 1963, to fit into the schedule of international organizations' meetings in Geneva.

Three preparatory meetings were held (December 1961, July and September/October 1962) by a twelve man advisory panel, serving the Scientific Advisory Committee.[c] Upon recommendation of the Committee, Professor M. S. Thacker (India) was nominated Conference President and the United Nations Secretary-General appointed Dr. Carlos Chagas (Brazil) as Secretary-General, Mr. George Laclavere (France) as Deputy Secretary-General, and Mr. Alfred G. Katzin (United Nations) as Executive Secretary. The Conference was attended by 1,665 registered participants, including 1,467 members of delegations from ninety-six Member States, 108 representatives of specialized and related agencies of the United Nations, and ninety observers from non-governmental organizations—plus fifty-four official guests invited by the Conference Secretary-General.

In the course of the Conference, ninety-nine sessions were held; three plenary, addressed by invited speakers and without discussion from the floor; twelve general, at which each of the main items of the agenda were introduced; eighty-one specialized for detailed discussions and three special sessions not contained in the advance Conference programme, but called by the Conference President for discussion of general problems of special concern to less developed areas. In addition, twenty-three special meetings of an informal character were held at the request

[36] E/CONF.39/RR.86(H).

[37] On the subject of regional planning, see the rapporteur's report [E/CONF.39/RR.50(H)] and the Conference General Report [E/CONF.39/GR.50(H)]; see also Working Paper E/CONF.39/H/77.

[38] E/3772, para. 174.

[39] E/CONF.39/H/76.

[40] E/CONF.39/H/76, p. 45.

[41] E/CONF.39/H/76.

[42] E/CONF.39/RR.87(D).

[a] See the full text of the Report of the forty-fifth and forty-sixth meetings of the United Nations Scientific Advisory Committee held at the Headquarters of the Food and Agriculture Organization, Rome, on 10 and 11 May 1961, reproduced in Annex I of E/3772.

[b] Resolution 834 (XXXII) of 3 August 1961 is reproduced in Appendix II.

[c] The members of the Scientific Advisory Panel were: H.E. Mr. S. E. Hedayat (United Arab Republic), Chairman: Mr. S. Awokoya (Nigeria): later, Dr. J. C. Edozien (Nigeria); Dr. J. Babbitt (Canada); Admiral O. Cunha (Brazil), Rapporteur; Mr. E. K. Fedorov (Union of Soviet Socialist Republics); H.E. Ambassador G. Georges-Picot (France); later, Mr. J. A. Gandilhon (France); Dr. V. Kaigl (Czechoslovakia); later, Professor J. Lukas (Czechoslovakia); Mr. F. Diaz Lombardo (Mexico); later, Mr. F. Zamora (Mexico); Dr. Walsh McDermott (United States of America); Mr. N. B. Prasad (India); Sir William Slater (United Kingdom of Great Britain and Northern Ireland) and Professor R. M. Soemantri (Indonesia).

of Chairmen of various sessions for the consideration of matters discussed at general or specialized sessions.

The Conference documentation is voluminous. Nearly 2,000 working papers presented by experts from developed and developing countries served as background for either general or specialized sessions. Preceding each session, the theme was introduced in a paper referred to as "Report of the Conference Secretary-General" and at the close of the general and specialized sessions, "Rapporteurs reports" on the proceedings were drawn up.[d]

The report on the Conference is published in two parts. The first, which provides a summary account of the organization and proceedings of the Conference, including recommendations on desirable follow-up action, is contained in the Secretary-General's report to the Economic and Social Council, distributed in May 1963.[e] The second part, "aimed at providing a definitive account of the general substance of the written and oral proceedings in readily readable form" consists of eight volumes.[f]

The United Nations publishing services photo-offset for general distribution in English, French, Russian and Spanish the indexed list of papers and all Conference general reports, all Rapporteurs reports, and the papers contributed to the general sessions; papers contributed to specialized sessions were reproduced in their original language, together with summaries in all four languages.

2. Follow-up work of the Conference

By its resolution 980 A (XXXVI)[g] the Economic and Social Council decided to establish an Advisory Committee on the Application of Science and Technology, consisting of fifteen members appointed by the Council on nomination of the Secretary-General after consultation with Governments. At its resumed 36th session, the Council by resolution 997 (XXXVI) increased the membership of the Committee from fifteen to eighteen. On 21 January 1964, the Council appointed the following persons as members of the Committee for a term of office of three years:

Svend Aage Andersen (Denmark); Pierre Victor Auger (France); Mamadou Aw (Mali); Nicolae Cernescu (Romania); Carlos Chagas (Brazil); Josef Charvat (Czechoslovakia); Abba Eban (Israel); Francisco Garcia Olano (Argentina); Dzherman Mikhailovich Gvishiani (USSR); Salah El-Din Hedayat (United Arab Republic); Kankuro Kaneshige (Japan); Eni Njoku (Nigeria); Oliverio Phillips-Michelsen (Colombia); Abdus Salam (Pakistan); Manekial Sankalchand Thacker (India); Sir Ronald Walker (Australia); Carroll L. Wilson (United States); Sir Norman Charles Wright (United Kingdom).

The Committee was expected to hold its first meeting at United Nations Headquarters from 25 February to 6 March 1964.[h] In accordance with the resolution of the Council, the Committee was to review the work of the United Nations and related agencies in the field of application of science and technology for the benefit of less developed areas; it was, in particular, to examine the United Nations work in this field, including the establishment of priorities and elimination of duplication. The Committee was expected to report to the Council at its summer session of 1964. In the performance of its tasks, the Committee was to work in close co-operation with the Sub-Committee on Science and Technology of the United Nations Administrative Committee on Co-ordination.[i]

3. Role of the Centre for Industrial Development

In the general session of the Conference on Science and Technology on industrial development, the United Nations Commissioner for Industrial Development recalled that a number of the United Nations agencies had been active in the area of transfer of technical knowledge. He drew attention in particular to the activities of the United Nations Centre for Industrial Development which in addition to its responsibilities in the field of technical assistance in industry was engaged in studies and was keeping under review technological development of interest to developing countries.

The establishment of the Committee for Industrial Development and the work of the Centre for Industrial Development was noted with gratification by the UNCSAT Conference.

APPENDIX II

RESOLUTION ADOPTED BY THE ECONOMIC AND SOCIAL COUNCIL DURING ITS THIRTY-SECOND SESSION

834 (XXXII). Development of scientific and technical co-operation and exchange of experience

The Economic and Social Council,

Considering Article 62, paragraph 4, of the Charter, which provides that the Council may call "international" conferences on matters falling within its competence,

Having considered the Report of the United Nations Scientific Advisory Committee for the calling of a United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas,[a]

Considering further that such a conference would benefit and accelerate the economic and social development of the less developed areas,

1. *Approves* in principle the theme and agenda for the Conference as outlined in the Report of the Scientific

[d] Rapporteurs reports were issued under symbol E/CONF.39/RR . . . The working papers, bearing symbol E/CONF./39 . . . and the Conference Secretary-General papers bearing symbol E/CONF. 39/GR . . . are indexed in document E/CONF.39/Inf. 3. *List of Papers*. There are no working papers, no Secretary-General Conference Reports and no Rapporteurs reports for the three special sessions and the twenty-three special meetings of an informal character mentioned above.

[e] E/3772 and E/3772/Add.1.

[f] United Nations, *Science and Technology for Development*, New York, 1963-1964.

[g] E/Res.980 United Nations publication, Sales No.: 63.I.21 to 28 (XXXVI) is reproduced in Appendix III.

[h] E/3848 and E/3848/Corr.1.

[i] Following the UNCSAT Conference, the Administrative Committee on Co-ordination has been responsible for ensuring co-operation among the United Nations agencies working in the field of application of science and technology to less developed areas. At its meeting of 2 to 3 May 1963, it established the Sub-Committee on Science and Technology, which held its first session in Paris from 6 to 8 January 1964.

[a] *Official Records of the Economic and Social Council, Thirty-second Session, Annexes*, agenda item 14, document E/3510.

Advisory Committee, subject to the observations which Governments are invited to submit before 1 October 1961;

2. *Decides* that an international technical conference of Governments should be held, under the auspices of the United Nations, to explore the application of science and technology for the benefit of the less developed areas;

3. *Requests* the Secretary-General to invite to the Conference all State Members of the United Nations or of the specialized agencies to participate in the Conference and to include among their representatives individual experts competent in the fields to be discussed by the Conference, taking into account the principle that a large number of representatives of the developing countries should participate in the Conference;

4. *Decides* that the Conference should be held in Geneva, if possible in August 1962, for not more than twelve days;

5. *Requests* the Secretary-General in consultation with the United Nations Scientific Advisory Committee to make the necessary arrangement for the Conference, including the further development of the final agenda and the preparation of technical papers to be presented;

6. *Further suggests* that the Secretary-General and the United Nations Scientific Advisory Committee consult with the interested related agencies;

7. *Invites* the above-mentioned agencies and the interested non-governmental organizations in consultative status to designate persons to represent them at the Conference; and

8. *Requests* the Secretary-General to circulate for information a report on the Conference to all Members of the United Nations and of the specialized agencies, to the related agencies, and to the non-governmental organizations in consultative status.

1180th plenary meeting,
3 August 1961

APPENDIX III

RESOLUTION ADOPTED BY THE ECONOMIC AND SOCIAL COUNCIL DURING ITS THIRTY-SIXTH SESSION

980 (XXXVI). *Questions relating to science and technology*

A

REPORT OF THE SECRETARY-GENERAL ON THE RESULTS OF THE UNITED NATIONS CONFERENCE ON THE APPLICATION OF SCIENCE AND TECHNOLOGY FOR THE BENEFIT OF THE LESS DEVELOPED AREAS

The Economic and Social Council,

Recalling its decision in resolution 834 (XXXII) that an international technical conference of Governments should be held, under the auspices of the United Nations, to explore the application of science and technology for the benefit of the less developed areas,

Noting with satisfaction the positive results achieved by the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas, which met in Geneva from 4 to 20 February 1963,

Emphasizing the important contribution which the more effective application of science and technology can make to the economic and social advancement of the developing countries, and to the attainment of the objectives of the Development Decade,

Calling attention to the important part which national scientific research institutions in developing countries, and the training of national scientific personnel, can play towards these ends,

Recognizing its responsibility for the co-ordination of the activities of the United Nations, the specialized agencies and the International Atomic Energy Agency in the scientific and technological field,

Considering the need for ensuring the adequate co-ordination of all efforts aimed at the utilization of science and technology in the interests of the developing countries,

1. *Takes note* with appreciation of the report[a] of the Secretary-General on the results of the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas;

2. *Recommends* that the United Nations and specialized agencies give high priority to the application of science and technology for the benefit of the less developed areas in the preparation of their economic and social programmes;

3. *Welcomes* the action being taken by the United Nations, the specialized agencies and the International Atomic Energy Agency to follow up the work of the Conference, particularly the decision of the Administrative Committee on Co-ordination to establish a sub-committee on science and technology, and the reviews being undertaken with a view to enabling the members of the United Nations family to discharge more effectively their growing responsibilities in the field of science and technology, to define more sharply, where necessary, the respective competence of the various agencies in this field, and to promote closer co-ordination;

4. *Decides* to establish an advisory committee on the application of science and technology to development, consisting of fifteen members appointed by the Council, on the nomination of the Secretary-General after consultation with Governments, on the basis of their personal qualifications, knowledge or experience in this field, with due regard to equitable geographical representation, the committee to have the following functions:

(*a*) To keep under review progress in the application of science and technology and propose to the Council practical measures for such application for the benefit of the less developed areas;

(*b*) To review, in close co-operation with the Administrative Committee on Co-ordination, the scientific and technological programmes and activities of the United Nations and related agencies and propose to the Council measures for their improvement, including the establishment of priorities and the elimination of duplication;

(*c*) To consider specific questions referred to it by the Economic and Social Council, or by the Secretary-General, or by the executive heads of the specialized agencies and the International Atomic Energy Agency;

(*d*) To study and advise the Council as to the need for

[a] *Official Records of the Economic and Social Council, Thirty-sixth Session, Annexes* agenda item 15, document E/3772 and Add. 1.

making changes of organization or other arrangements which would advance the application of science and technology for the benefit of developing countries;

5. *Decides further* to arrange for the appointment of the members of the Committee at its resumed thirty-sixth session;

6. *Invites* the Secretary-General, the specialized agencies, and the International Atomic Energy Agency to submit their views and suggestions to the Committee, thus assisting it to carry out its task;

7. *Requests* the Committee to report to the Council at its 1964 summer session;

8. *Urges* States Members of the United Nations or the specialized agencies and the International Atomic Energy Agency to lend their full co-operation in ensuring that science and technology are more effectively applied in the interests of the economic and social advancement of the developing countries and to transmit their observations to the Committee through the Secretary-General;

9. *Urges* States Members of the United Nations or the specialized agencies and the International Atomic Energy Agency to ensure that the United Nations and related agencies are provided with adequate resources so as to help ensure effective follow-up action resulting from the United Nations Conference on the Application of Science and Technology.

1302nd plenary meeting,
1 August 1963

STRUCTURAL EMPLOYMENT PROBLEMS IN THE INDUSTRIALIZED COUNTRIES CAUSED BY HIGHER IMPORTS OF MANUFACTURED GOODS FROM THE DEVELOPING COUNTRIES*

Rapid economic growth by the developing countries implies changes in the existing international division of labour and acceptance by the industrialized countries of growing imports of manufactured and semi-manufactured goods from the developing countries.

This paper begins by examining some of the implications for the industrialized countries of the changes that are needed in the international division of labour. The second part reviews the principal ways of enabling the labour force in these countries to adapt itself as smoothly as possible to such changes, and the third concludes by discussing the organization of these adjustments and the contribution that can be made at the international level towards solving the problem.

I

A NEW INTERNATIONAL DIVISION OF LABOUR

There is general agreement that the developing countries must expand their exports of all kinds. This is the only way in which they can obtain the currency to pay for imports of the capital goods they need to enable their peoples to work with the efficiency made possible by modern techniques and so set off a process of rapid economic development and rising incomes and living standards.

But the current pattern of international trade still, to a large extent, reflects the system inherited from past centuries, which is based on an international division of labour where by the under-developed countries act as suppliers of raw materials to the industrialized countries and import from them the manufactured goods needed by their consumers.

Yet this international division of labour in such an extreme form has virtually no defenders nowadays. One of the main reasons for this is the instability of commodity markets combined with the much criticized tendency for the terms of trade of the primary producers to worsen.[1] By keeping export earnings down, these two phenomena help to retard the economic development—and therefore the social progress—of many developing countries while, at the same time, depressing the level of employment. The fact that many formerly dependent territories have become politically independent over the past two decades has strengthened the desire to overhaul patterns of production and trade which seem to favour the different participants unequally.

A number of attempts are now being made at the international level to devise machinery and schemes for dealing with the special problems of commodity trade. But although better-managed commodity markets must be an important feature of the organization of world trade, the long-term answer to the problem of commercial relations between countries at different stages of development will have to be achieved in the main by changes in the pattern of trade itself, i.e., in the production of the countries concerned. It is of course true that the value of the primary commodities exported by the developing countries is about ten times as great as that of their exports of manufactured or semi-manufactured goods. But the share of manufactured goods in world trade is constantly increasing, and if the developing countries are to enlarge their share in world trade they must expand their output of these goods. A further inducement to do this is that commodity production is normally thought to have only limited linkage effects on the remainder of the economy, while its employment-creating potential, and therefore its power to absorb open or concealed unemployment, is small and cannot be expected to set off any sustained process of development. Moreover, to the extent that industrialization enables the developing countries to process the commodities they now usually export in the form of raw materials, their export earnings will be increased appreciably by the value added in processing.[2]

It is difficult to see how the developing countries can catch up except through a certain degree of industrialization enabling them to diversify their production and their share in international trade. However, if this is to be done, it will involve a twofold effort to achieve structural change:

An effort by the developing countries themselves to make the investments—human as well as physical—needed to create an environment in which individuals with initiative and ability can start new businesses; they must also train the managers, technicians and workers needed to operate the new industries;

An effort by the industrialized countries, which will have to open their doors to a larger flow of manufactured and semi-manufactured goods from the developing countries; this implies in the present the progressive abolition of protective tariffs and import restrictions where they exist,[3] and in the future the

* This paper was prepared by the secretariat of the International Labour Organization in connexion with sub-item III.2 (*c*) of the list of main topics. See Interim Report of the Preparatory Committee (first session), in Vol. VIII of this series.

[1] This in turn is largely due to the declining share of the demand for food stuffs and primary products generally as incomes rise.

[2] On this point see United Nations: *Ways and Means of Promoting Wider Trade Co-operation among States. Trade Relations between Under-developed and Industrially Advanced Economies. Report by the Secretary-General*, Document E/3520 (7 June 1961), especially para. 60 *et seq.*

[3] On this subject see the second report of Committee III of GATT in *Basic Instruments and Selected Documents*, No. 8, p. 147 *et seq.*

acceptance of rising imports as the capacity of the industrializing countries expands. In order to adapt themselves to this new situation, the countries which are already industrialized will have to alter their patterns of production, and therefore of employment promoting complementary relationships with the developing economies.

The possible scale of the adjustments that will be needed has caused a good deal of concern in the economically advanced countries. The fear has sometimes been expressed that if barriers are lowered, the markets of the industrialized countries will be swamped by manufactured goods produced at costs with which the developed countries cannot compete because of the "abnormally low" level of wages in the developing countries.

This question is discussed in detail in an article due to be published shortly in the *International Labour Review*.[4] Here it is necessary only to recall a number of points which should be borne in mind if distorted judgements are to be avoided:

Firstly, while in absolute terms, workers' wages in the developing countries are often low, they are frequently higher in relation to average incomes than is the case in the industrialized countries; thus they are only "low" from a certain standpoint;

Secondly, the low level of wages may merely reflect the low productivity of labour, in which case there is no reason to fear widespread competition from the developing countries because production costs will reflect this low productivity;

Furthermore, wages are only one component of costs and if the developing countries have an advantage in this respect, they are handicapped in others, e.g., the cost of capital, distance from markets and external economies;

Lastly, it must be borne in mind that no country (or group of countries taken together) can go on indefinitely importing more than it exports. There can, therefore, be no question whatever of the whole economy of an industrialized country being swamped by imports from the developing countries; the imports are bound to be offset by exports to these countries, especially since (as is well known) their needs are enormous and, in fact, tend to involve them in chronic balance-of-payments deficits.

But while a flood of imports can be ruled out, it is important to know the likely extent of the increase that can be expected if the barriers are lowered, for the smaller the volume of imports in relation to the national product of the importing countries, the easier it will be to absorb them.

The estimates that have been put forward are, of course, unreliable because they are based on a number of hypotheses and extrapolations, especially as regards the elasticity of demand for imports. It can, however, be assumed that the figures obtained do give some idea of the scale of the problem. The striking point which emerges is that the probable increases in imports would be fairly small. The United Nations [5] have estimated in 1960 that imports of manufactured goods from the developing countries accounted for less than 1 per cent of the gross national product of the industrialized countries. Even if their value were multiplied several times over, these imports would be likely to absorb only a very small share of the additional demand for manufactured goods that can reasonably be expected to materialize in the years ahead.

Looking at the picture as a whole, therefore, it can be seen that the fears sometimes expressed of a wholesale upheaval in the production patterns of the industrialized countries are greatly exaggerated. The adjustments entailed by the lowering of barriers to imports from the developing countries would, in many cases, be far less substantial than those caused by technical progress, for example. In their relationships with each other, the industrialized countries are constantly having to cope with far more serious threats to their own industries. The formation of regional groupings such as common markets or free trade areas also leads to structural changes, and the difficulties involved are of the same nature and undoubtedly greater in extent than in the case of relationships between industrialized and developing countries.

This does not mean, however, that adjustments in the latter case do not involve any problems. The difficulty is that, despite their minor importance in relation to the national product of the industrialized countries, exports from the developing countries are liable to be concentrated on a limited range of manufactured goods, usually produced by a light industry.[6] Thus the burden of adjustment may be very unevenly shared and the brunt may have to be borne by a small number of industries or plants which, into the bargain, are sometimes located in the same area.[7] In such cases, activities may have to be modified and capacity converted to other forms of production. This is bound to create problems, especially for the workers, who may lose their jobs and remain out of work unless special measures are taken to protect them and find other employment.

In fact, measures to ease the shift to new jobs by workers who are displaced when new trade flows are established are perhaps essential to the success of any attempt to lower barriers. If such measures are not taken in the industrialized countries, the resulting social tensions might compromise any chance of increasing imports.

While measures of this type are socially valuable, they also have beneficial economic effects. To the extent that they contribute to the rapid re-absorption of workers, they help to make the most of an important factor of production by bringing it back into use as quickly and efficiently as possible. They must, therefore, be regarded as a means of enhancing the efficiency of the economy. In fact they amount to an investment —somewhat distinctive in character perhaps, but highly productive.[8]

[4] "Labour costs as a Factor in International Trade", *International Labour Review*, Volume LXXXIX, 1964; see also "Trade, wages and employment in textiles", *ibid.*, January 1963.

[5] Cf. United Nations document E/CONF.46/PC/20, p. 52.

[6] In which productivity is often higher than the national average in the exporting countries whereas wages do not exceed the average to the same extent.

[7] E.g., in many cases, such industries as textiles, leatherware or woodworking.

[8] Whenever special measures such as those discussed below enable a redundant worker to find a new job sooner than he would have done without help, or if his new job is more productive than the job he would have found if he had been left to his own devices, a certain

The position in their case can be compared with the classic situation which occurs when an invention is developed. An invention is an opportunity for economic progress, just as the fact that a country can obtain its imports more cheaply is also an opportunity for progress. But an invention cannot begin to serve the economy until money has been spent to develop it, i.e., until it becomes an economic fact. Similarly, the opportunity for progress afforded by cheaper exports can be seized only if these new imports do not entail unemployment and—more generally—a loss of output, i.e., if action is taken to ensure that the resources thereby freed are effectively diverted to other uses.

It should be noted that *a priori* there is no reason why, in a dynamic economy, these new jobs should be less productive than those that have become redundant following the replacement of domestic production by imports. They may even be more productive and therefore involve the payment of higher wages, for under a freer trading system new jobs will be created in the expanding industries; this expansion would be made possible, to some extent at least, by the growth in demand from abroad.[9]

Expanding industries are, almost by definition, short of labour and are compelled to pay attractive wages to obtain the workers they need; while in contracting industries where employment is falling off, wages and conditions of work are usually inferior to the national average. It is apparent, therefore, that if appropriate measures are taken, workers need not necessarily suffer from change and in many cases may even benefit by it.

Thus from the economic as well as the social standpoint, measures to promote the readaptation of the labour force are both necessary and desirable. As regards their actual nature, a number of different approaches are possible and many of them have actually been tried out, although usually in different circumstances from those with which this paper is concerned. The following pages briefly discuss some of these approaches and go on to examine the institutional and financial problems involved.

II

METHODS OF ADJUSTMENT [10]

Often the adjustments made necessary by structural change take place smoothly and automatically without involving undue hardship for any particular section of the population. Structural change is, after all, a continuous phenomenon which inevitably accompanies economic growth. Measures to ease the shift to a new structure of production better suited to current economic conditions are mainly designed to make the economy more flexible and speed up the rate of adjustment in cases where the interplay of economic forces alone would take too long or exact too high a social price. Such measures, in any event, only supplement and facilitate the process of spontaneous adjustment. Many workers and employers affected by structural change are, of course, perfectly capable of finding other jobs or converting to other products without help. The important thing is that there should be arrangements to give aid to those who need it.

The formation of the European Common Market provides instructive examples of the way in which such measures work in practice. The Rome Treaty which provided for an accelerated liberalization of trade between the six Member countries of the Community also established a Social Fund to finance any measures of adjustment that might be made necessary by this liberalization.[11] The fact is, however, that relatively little use has been made of this fund. The progressive abolition of barriers has led to such an expansion of the economies participating in the Common Market that there has been almost universal high employment and such shifts in employment as have occurred have taken place, in the main, rapidly and smoothly.

Measures to promote adjustment may be taken in connexion with any type of structural change, and not only with those dealt with in this paper. In discussing them, therefore, it is appropriate to draw on the experience acquired by a number of countries in dealing with other problems of structural change besides changes in patterns of trade.[12]

Broadly speaking, the measures of adjustment that can be taken may be divided into two main classes:

Firstly, those designed to bring jobs to workers, who do not therefore have to change their homes but may often have to acquire new skills, secondly, those designed to attract unemployed workers to areas or towns where other jobs are available, either in the same occupation or in a different one, in which case they must be given opportunities of acquiring new skills.

Measures of both types are described briefly below. The paper goes on to consider whether they may need to be supplemented by other arrangements to deal with certain special problems.

Measures designed to facilitate the re-employment of workers locally

Examples of such measures are numerous and well known. Almost all the industrialized countries have found it necessary to institute them in circumstances

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loss of output is avoided. It can be measured by the net productivity of a marginal worker (approximately equal to his wage in competitive conditions) if he would otherwise have remained unemployed, or by the difference between his net marginal productivity in the job he obtains and in the less productive job he would have obtained in the absence of any assistance scheme. These calculations can be made with a certain amount of precision and might be used by Governments to gauge the extent to which it is economically justifiable to spend money on measures to help the adjustment of the labour force to structural changes. But, of course, this is not the only consideration which enters into the picture and Governments normally give due weight to social as well as to economic factors. For an economic justification of an active employment policy see G. Rehn, *The Case for Expansion of Labour Market Policy as an Instrument of Economic Progress*, Paper for the Meeting of Senior Economic Advisers, Economic Commission for Europe (ECE), 20 to 24 March 1961.

[9] Including demand from the developing countries themselves. See p. 146 above.

[10] On points dealt with in this section, see also ILO *Unemployment and Structural Change*, Studies and Reports, New Series, No. 65 (Geneva, 1962) and ILO Preparatory Technical Conference on Employment Policy, Geneva, 1963: Report I: *Employment Objectives and Policies* (Geneva, 1963), Chapter V.

[11] For further details on this Social Fund, see p. 152 below.

[12] Of which the United States Trade Expansion Act, 1962, is the most recent major example.

which are somewhat different from those with which we are concerned here, but with exactly the same practical consequences. The aim has usually been to help workers with skills made obsolete by technical or other developments to enter trades in which they could be sure of finding stable, productive employment locally.

Such schemes are common because finding alternative work locally avoids the psychological and social problems involved in uprooting workers and their families and also the economic cost for the community of duplicating elsewhere the facilities such as roads, schools, houses, water supplies, etc., which usually exist already at the former place of work and would become useless or redundant if the population were to emigrate.

Broadly speaking, it is possible to single out three main methods by which Governments try to help workers affected by structural change to find other work locally. These are examined in turn below.

1. *Special adult vocational training measures.* These usually consist of accelerated vocational training courses lasting only a few months and held in the districts where the unemployed workers live. While in some cases payment of unemployment benefit after a certain period is conditional on taking an approved course of training, it seems preferable to encourage unemployed workers to acquire useful skills by entitling them to special allowances if they agree to take the courses organized on their behalf. Government subsidies are payable for this purpose in Norway, the United States (under the Area Redevelopment Act of 1961 and the Manpower Development and Training Act and Trade Expansion Act of 1962), France, Belgium, Japan and other countries. These allowances are sometimes coupled with additional benefits, such as priority in employment (e.g., in Italy) or the payment of bonuses as training progresses (e.g., in Belgium).

However, it is far preferable whenever possible to help workers who are threatened by structural change to acquire new skills which they can use in other jobs even before they become redundant. This retraining of workers while they are still at work has the advantage of lessening the psychological cost of the change. It can usually be given through evening classes of the type that exist in almost every country and here too, attendance can be encouraged by paying bonuses or granting other benefits. On the other hand, if workers have to learn their new skills after a full working day there is a danger that the strain may be too great and may lead to discouragement and loss of efficiency. For this reason, schemes whereby they can be trained during normal working hours in the firms where they are already employed are of the utmost value and deserve encouragement.[13] Under schemes of this kind the Government may meet the cost by compensating the employer for the loss incurred and the instructors' salaries. This is the policy followed by the French Manpower Retraining Fund.

2. *Measures to facilitate industrial conversion* are particularly worthwhile because they enable a large proportion of the labour force to go on working in the same plant as before and thereby reduce to a minimum the hardship entailed for the wage earners. The scope for conversion is, however, limited, since sometimes it is physically impossible to adapt an old layout for new products; in other cases the risks and costs of doing so are great. Even if the switch to a new type of product is successful, it is still not certain that painful adjustments by the labour force will not be necessary since the new product may require fewer workers or a different type of labour. However, this conversion of existing plants may help to soften the adjustment the workers have to make to structural change, and Governments are often willing to help firms that are prepared to make the experiment. The difficulties liable to be encountered by firms trying to convert to another type of product fall under two headings: those relating to (*a*) the labour force and (*b*) the investment needed to convert their equipment. Government help may be effective in either field.[14]

As regards labour, the problem is twofold:

Firstly, conversion usually involves a transitional period during which output is reduced or even suspended, so that some of the workers become temporarily or permanently redundant or are assigned to less well-paid jobs. This means that the employer has to run the risk of losing part of the permanent labour force he will need once more after the conversion is completed. For these reasons, a Royal Order was issued in Belgium on 20 March 1961 authorizing the Government to make up the incomes of workers who, as a result of the conversion of the firms employing them, are provisionally unemployed or temporarily assigned to less well-paid jobs (up to a maximum of six months).

Secondly, conversion very often raises the problem of teaching new skills to the workers in the plant. Governments can intervene to help employers in making the necessary arrangements. Again in Belgium, a Royal Order dated 24 March 1961 states that employers may negotiate agreements with the National Employment Office for retraining their workers at their place of employment, and provides for government financial assistance to be made available for this purpose. Similarly in France, the Government may make a grant covering all or part of the cost of training wage earners affected by conversion schemes. In the USSR, courses to teach new skills to workers affected by technical change are given in the plants where they are employed; the courses are arranged by the local manpower planning authorities. Workers who take these courses may either keep their jobs in the same plant or take other jobs elsewhere.

While the manpower aspect is important, arrangements for financing the conversion of equipment may have a decisive influence in determining whether employers stay in business or not. Government intervention in such cases takes the form of low-interest loans, subsidies or tax reliefs and is usually similar to the aid given when encouraging new firms to move to areas threatened or affected by structural unemployment.

3. *Measures to encourage the establishment of new undertakings* can, as was said earlier, vary widely.

[13] Especially if the firm is already working short time.

[14] It may also consist of appropriate technical assistance as, e.g., under the United States Trade Expansion Act.

Some of them rely on incentives while others—less numerous—employ a measure of compulsion. Incentives are designed to attract new firms to areas suffering from unemployment or underemployment by offering them various concessions:

These concessions may be financial in character, i.e., firms which settle in these areas are granted low-interest loans or the State guarantees loans to them or pays part of the interest. In some cases, outright grants may be made. For example, in the Federal Republic of Germany firms moving to certain areas (Sanierungsgebiete) were entitled in 1959 to long-term loans at a low rate of interest whenever they could be expected to create one permanent local job for every 10,000 DM lent. In France, there is also provision for low-interest loans and grants; firms which settle in areas where there is underemployment may receive a grant of up to 20 per cent of the total investment, provided it does not exceed 7,500 NF per job created. Schemes whereby loans can be granted on special terms are also to be found in many other countries such as the United States (under the 1961 Area Redevelopment Act), Austria, Belgium, Italy, the Netherlands, the United Kingdom, etc.

In addition, these financial inducements are very often accompanied by tax concessions, e.g., in Belgium, where firms which are granted subsidies or loans are exempt from property tax for five years; in France, where various tax reliefs (such as reduction in registration and licensing fees) are allowed; in the United states, where state governments may seek to attract new industries by means of tax concessions; in Canada, where firms settling in areas suffering from chronic underemployment are allowed faster write-offs, etc.

In many cases efforts are made to attract new industries through the physical facilities available for them. These facilities may take the form of an improved economic infrastructure, e.g., in the Federal Republic of Germany, where government loans are made to local authorities for improving roads, electricity supplies, etc., or in the United States, where the Area Redevelopment Act contains provisions designed to have the same effect. An even greater inducement may be provided if industrial centres or factories are built by public bodies and leased to employers below cost. This method has been used notably in the United Kingdom (the industrial estates schemes), Belgium, certain states of the United States, etc.

One of the factors, however, which often deters employers who are thinking of moving to areas with a labour surplus is the fear that they will not be able to find workers with the necessary skills. This explains why, for example, in the Federal Republic of Germany, local authorities, chambers of commerce and agricultural and similar institutions can obtain government loans on exceptionally favourable terms to finance vocational training schemes. Similarly in the United States, the Federal Government may pay special allowances to unemployed workers taking a course of vocational training in the depressed areas. In Norway, the unemployment insurance scheme subsidizes vocational training. Belgium, France, Italy, Japan, the Netherlands, and Spain among others, have likewise established vocational training schemes to ensure that employers who are willing to move to areas with a manpower surplus can obtain the skilled labour they need. In Belgium indeed, the arrangements to help employers overcome their manpower problems include a scheme whereby the National Employment Office on request helps at its own expense in giving psychological and aptitude tests to would-be employees.

Nevertheless, this array of measures to attract firms to areas with a labour surplus has not always been sufficient to counteract the pull of the more prosperous areas. Some countries, therefore, have fallen back on a measure of compulsion by forbidding or restricting the establishment of new firms in areas where there is no unemployment or underemployment. Measures of this type have been taken, for example, in Sweden, where the Royal Commission on Employment usually tries to dissuade firms from establishing themselves in the Stockholm area, and until 1959 a system of building licences was used to steer industry to parts of the country with a manpower surplus. Similarly in France, industrial building on any scale has to obtain the sanction of the authorities before it can begin. In the United Kingdom, under the 1947 Town and Country Planning Act, any application for industrial building in excess of 5,000 sq. ft. must be accompanied by a Board of Trade certificate stating that the project fits in with the Government's policy on the distribution of industry. These provisions are repeated in the Local Employment Act, so that the procedure can be used as a way of creating additional employment where necessary. It seems likely that this method will be used more extensively under the regional development plans drawn up recently for the depressed areas of central Scotland and north-east England. Similar systems are in force in many other countries.

Mention should also be made (though only briefly because of lack of space) of the growing school of thought which believes that the depressed areas cannot really be given a new lease of life unless one or more industrial centres are created to act as "growth points" which can generate new economic activity.[15] In addition, the industries selected to supply the impetus must be able to stand on their own feet in the long run, and the areas to be "revived" must be sufficiently large for a new economic complex to be established and developed.[16] It is also important to ensure that the establishment of new industries in one area does not take place at the expense of industry in adjacent areas, as otherwise the problem will simply have been transferred elsewhere.

Nevertheless, despite all these efforts to create employment locally, the decline of some industries sometimes compels workers to move in order to find permanently productive employment. The geographical redistribution of labour has always been one of

[15] On this topic see R. Marjolin: "Rapport de synthèse finale de la Conférence sur les économies regionales", in the *Bulletin de la CEE*, February 1962, p. 30. The regional development policy of the United Kingdom seems to be based on a similar approach, cf. *The Economist*, 16 November 1963, "Scotland's Point of Growth", p. 666 *et seq.*, and *The Observer*, 17 November 1963.

[16] See F. Perroux "La firme motrice dans une région et la région motrice", *Cahiers de l'Institut de Science économique appliquée* (Paris), No. 111, March 1961 (series AD, No. 1), and by the same author "Note sur la notion de pôle de croissance", *Economie appliquée* (Paris), Nos. 1-2, January-June 1955.

the normal features of any country's economic life and in many cases could only be avoided by permanent subsidies to firms operating in the areas hit by structural change. In such cases, it may be preferable to concentrate on finding a long-term answer by helping workers who are prepared to move to the expanding areas where they will be able to play an effective part in general development.

Measures to facilitate the geographical mobility of labour

These measures are often combined with others to help workers acquire new skills, since when their jobs disappear it is not certain that they will be able to continue in their old occupations even if they do move. In any event, however, resettlement is often regarded as an alternative to establishing new industries in areas with a manpower surplus. Which of these two courses is preferable is, to a large extent, an open question. The best answer is the one which, in the long run, allows the greatest increase in production relative to the social cost involved. However, as social cost, which is one of the yardsticks, is difficult to assess and highly subjective in character, national policies vary widely in practice. For example, in Sweden, the Royal Commission on Employment takes the view that resettlement is the cheapest and most efficient way of overcoming structural employment problems. The maintenance of uneconomic industries for the sole purpose of creating employment is regarded as a cause of waste; as long as there are vacant jobs elsewhere in the country, Swedish workers must be expected to move to them. Belgium, on the other hand, has favoured the establishment of new industries in the areas affected by the coal slump. A general attitude appears to be that manpower transfers should be avoided if they involve large numbers of workers. In any event, however, almost all countries consider that willingness on the part of some workers to move from an area with a manpower surplus to vacant jobs elsewhere can do much to overcome problems caused by structural unemployment, and arrangements to encourage movements of this type and to help workers who are willing to leave their homes are fairly common. Essentially, they are the same everywhere and take the form, firstly, of allowances of one kind or another and secondly, of assistance over housing.

Removal grants are paid at different rates in different countries. In Belgium, for example, they comprise the fares of the worker and his family, the cost of moving his furniture, and a lump sum to cover other expenses calculated on the basis of his wage and the number of his dependants. In Sweden, a worker who moves is entitled to payment of his travelling and removal expenses, either by means of an interest free loan or a grant; since January 1951, an allowance of 300 crowns has also been payable. Special allowances are also payable if, by taking a new job, a worker has to live away from home. In the United Kingdom, a worker (and his family) may under certain circumstances travel free of charge to take up a new job. Removal expenses may be paid and, in addition, a lump sum of £10 may be granted to cover miscellaneous expenses. In the United States, the 1962 Trade Expansion Act provides that workers whose jobs are affected by tariff concessions made by the Government and who are unable to find new jobs locally may be paid an allowance to cover their removal expenses and the cost of resettlement in a new home. Similar schemes are in force in the case of coal-miners in Spain and France. In the USSR, the Orgnabor, which is primarily responsible for assisting in the redistribution of labour as between different industries and areas whenever developments made it desirable, pays the removal expenses of workers who are willing to move and helps them with their housing.

Help over housing may consist of providing accommodation or paying an allowance, or sometimes both simultaneously. In Sweden, the Government tries to overcome the housing shortage in areas where jobs are available by putting up prefabricated houses; it also gives workers facilities for obtaining mortgages. In the United Kingdom, a worker who has to buy or sell a house because he changes his place of employment may be entitled to a government contribution of £50 towards legal costs and estate agents' fees (in addition to the benefits mentioned earlier).

Need for additional measures

There is thus a whole arsenal of measures for securing greater occupational and geographical mobility and creating new employment for workers affected by the unavoidable changes involved in the adjustment of national economies to a new pattern of international trade.

The measures which have just been briefly surveyed are not sufficient in themselves, and need to be supplemented by others, in either of the two following cases:

Firstly, some workers may be difficult to place in other employment because of their age and may require special measures to help them; secondly, since a certain amount of time must elapse before the measures just described can take effect, it is often necessary to introduce an interim scheme to prevent or limit industrial dislocation and also to plan ahead so as to ensure that the necessary action is taken sufficiently far in advance for its effects to make themselves felt when needed.

1. MEASURES TO ASSIST WORKERS ENCOUNTERING SPECIAL DIFFICULTIES

The case of older workers who, in any event, can hardly be expected to acquire a new skill is perhaps one of the most difficult to resolve. For example, in France in certain coal fields, workers with thirty-five years' service have been retired without waiting for them to reach the official pensionable age.

Other workers, however, are still too far from the retirement age for this to be possible and yet, at the same time, they are too old for other employers to be willing to take them on. This difficulty has been dealt with by Belgian legislation, the method being to allow the National Employment Office to pay part of these workers' earnings. In this way, employers are encouraged to waive the traditional age limits; this scheme operates in the case of clerical workers over the age of forty and mine workers over the age of fifty-five.

The same method is employed in Belgium in the

case of handicapped workers, who are exceptionally difficult to place elsewhere once they have lost their jobs. The National Employment Office grants assistance whenever a worker's capacity is reduced by 30 per cent if his handicap is a physical one, or 20 per cent if it is mental.

Lastly, in the case of the workers who are hardest to reabsorb, jobs may be deliberately created for the purpose of giving them a livelihood. Thus, in Italy, especially in recent years, schemes for providing work for the temporarily unemployed also provide jobs and wages for the unemployed who are hardest to place elsewhere.

2. TRANSITIONAL MEASURES

There are cases where measures of adjustment, no matter how comprehensive and well designed, may be inadequate and ineffectual. Even if the possibility of a general invasion of an economy by imports is excluded, the fact remains that in some particularly vulnerable industries the structural changes entailed by a lowering of barriers might take place so quickly that even an active social policy would be unable to cope with the consequences, and a whole section of industry might be severely dislocated, causing unemployment, underemployment, a sharp fall in output and a decline in living standards in the area or industry affected.

In such cases, it may be desirable to take action not to stop the structural change itself, but at least to slow down the tempo to a tolerable pace which the economic and social system can cope with. It would, for example, be reasonable to subsidize a declining industry so as to spread the necessary adjustments over a longer period. But such subsidies can be justified only if they are temporary and accompanied by measures to facilitate adjustments, as otherwise they would merely crystallize existing patterns and compel society as a whole to bear the cost of failure to adapt to changed economic conditions. From this standpoint the "escape clauses" and similar provisions often found in international, bilateral and multilateral agreements may be justified. However, as long as they remain in force they have to be paid for by foregoing a change which in the longer run would lead to higher productivity—which means that such a policy should be pursued only as long as it is unavoidable, i.e., as long as the value of avoiding dislocation and collapse is (having regard to the social factors) greater than the benefit which the country would obtain from an adjustment to real production conditions.

3. NEED FOR PROPER FORECASTS AND ORGANIZATION

Lastly, in the interests of maximum efficiency, it is essential that such adjustments as are necessary should not be improvised. In point of fact, the evolution of a new pattern of international trade through the deliberate stimulation of imports from the developing countries affords an exceptionally favourable opportunity for making structural changes, since measures to facilitate adaptation to these can be organized at the same time that the forces making them necessary are set in motion. It is both possible and desirable in such cases to carry out the necessary economic analyses beforehand in order to discover as accurately as possible the industry or industries that are likely to be affected, the magnitude of the adjustments that will be needed and the rate at which they will have to be carried out.

This would also constitute an opportunity of deciding whether the scale of these adjustments was such as to make it advisable to set up appropriate machinery—national or international—with responsibility for investigating and co-ordinating the necessary measures and arranging for finance.

III

INSTITUTIONAL ASPECTS: ORGANIZING AND FINANCING OF ADJUSTMENTS

At the national level it is not, of course, essential to set up a special organization or arrange for special sources of finance to cope with the structural changes caused by international trade, still less with those due to larger imports of manufactured or semi-manufactured goods from the developing countries. These are only particular aspects of the wider problem of organizing and financing adjustments to structural changes whatever their cause; action to this end forms a natural part of any active employment policy. This is true of the measures described in the preceding pages.

Most of these measures seek to enlist the support of both labour and managements.

In the case of labour, on which a great deal of the burden must fall, there can be no doubt that support and active participation by representative organizations is essential to the success of any measures that may be decided upon. As was suggested in the introductory section, if this agreement is not forthcoming, the social tensions caused by fears on the part of working people might seriously compromise the prospects of achieving a new international division of labour by creating opposition to any measures for liberalizing trade. The agreement and active participation of organized labour can best be obtained by frank discussions between all the parties involved and the establishment of a coherent, effective scheme to deal with the changes. The recent past affords encouraging examples of acceptance by workers and their organizations of the structural changes entailed by the opening of domestic markets to foreign imports.

Thus, in the United Kingdom the Cotton Industry Act of 9 July 1959 reorganizing the British cotton industry to meet new international competition was preceded by an agreement between the employers' and workers' organizations on a scheme to compensate and retrain any workers made redundant. More recently, in the United States, the AFL-CIO adopted a positive approach towards the important tariff negotiations in Geneva in 1961 by coming out in favour of a policy of expanding foreign trade on condition that it was accompanied by measures to safeguard the workers' vital interests. Chapter III, Title III of the 1962 Trade Expansion Act does, in fact, list the steps that can be taken to help any workers who are affected as a result of tariff concessions. At the international level also, the workers' organizations

have frequently stated their awareness of the need for adjustments by national economies to an international division of labour. One example of this is the attitude taken up by the International Confederation of Free Trade Unions in a memorandum submitted to the eighteenth session of the United Nations General Assembly; in this document, the Confederation declared itself to be in favour of a reorganization of world trade by creating more outlets for exports of manufactured or semi-manufactured goods from the developing countries, accompanied by appropriate changes in the production patterns of the most highly industrialized countries. In more general terms, the Preparatory Technical Conference on Employment organized by the ILO in Geneva in September-October 1963 adopted conclusions (supported by the workers' representatives of all shades of opinion) which stated that "industrialized countries should take measures to accommodate increased imports of products, manufactured as well as primary, that can be economically produced in developing countries, thus promoting reciprocal trade." [17]

Managements, for their part, also widely acknowledge the need for a change in production patterns and at the Conference just referred to also gave their endorsement to this conclusion. The burden upon them, however, is twofold—in the first place, they must display sufficient enterprise to convert their plants or build new ones; and in the second place, they must help their employees as far as possible to acquire the new skills they need to find a place in industry once more. In both cases, it is advisable for manufacturers to co-ordinate their efforts and pool their resources in the interests of efficiency. It is not uncommon for employers' associations to set up information bureaux or technical and economic research establishments to ease the adjustment to new conditions and organize vocational training courses for the workers affected.

Nevertheless, the main responsibility for the co-ordination of a country's economy inevitably lies with the Government which wields the most effective power and combines great financial resources with the ability to issue binding regulations. In addition, it is in a better position, through its own economic agencies, to collect comprehensive information and make forecasts of future developments. This co-ordination may be achieved simply by means of contacts between the government departments involved. It may also be more institutionalized, i.e., special bodies may be established with direct responsibility for carrying out some or all of the measures needed to facilitate adjustment to the new situation. This has been the case for example in France where the Manpower Retraining Fund [18] plays an important part (referred to earlier) in operating schemes for improving the geographical and occupational mobility of the labour force. On this subject, the Preparatory Technical Conference on Employment Policy concluded that "countries that do not already have such machinery should establish appropriate machinery . . . to promote and facilitate the adaptation of production and employment to structural changes" and that "such machinery could appropriately include an adaptation fund from which financial grants or low-interest loans could be made for these purposes".[19]

Beyond the national framework—regional schemes

Especially in cases where structural changes are due to a deliberate change in the former patterns of trade with the aim of securing a better international division of labour, it may be conducive both to equity and efficiency to consider international action to supplement the measures taken by national Governments to organize and finance the necessary changes. Up to a certain point, an internationalization of costs of adjustment may quite readily be contemplated when a small number of adjacent States decide to integrate their economies. In such a case, the consequences of an increase in trade are certainly easier to identify than they are in a world setting where causes have widely diffused effects, and aid from all to assist each country to make the optimum adjustment to the new economic order can more clearly be recognized as a necessary counterpart to the advantages obtained by an enlargement of the market. Moreover, if, as is likely, some countries are affected more than others, it may be presumed that left to their own devices these countries could not take such far-reaching or comprehensive measures as would be desirable.

This doubtless explains why the first schemes of this kind are regional in character. In Europe, the inclusion in the treaties founding the European Coal and Steel Community (ECSC) and the European Economic Community (EEC) of provisions for the retraining of workers displaced by structural change constitutes a major step forward in this direction. These provisions cannot be analysed in detail here. As is well known, the Social Fund of the EEC was set up mainly for the purpose of facilitating the re-employment of workers made redundant by structural changes following the lowering of customs barriers; the Fund bears half the cost of vocational retraining courses and subsistence allowances, as well as half the cost of removal for workers who have to move their homes in order to find employment at an adequate wage. The workers' country of residence bears the other half of the cost. Similar provisions, though of longer standing, are to be found in the treaty establishing the ECSC. Under this regional scheme, international co-operation is not confined to assisting workers' occupational and geographical mobility. The creation of new jobs is also encouraged, e.g., the High Authority of the ECSC may assist the conversion of industrial plants by making loans on easy terms or by guaranteeing orders to plants which change their product.[20]

It must, however, be acknowledged that these regional schemes for "internationalizing" at least part

[17] ILO Preparatory Technical Conference on Employment Policy (Geneva, 30 September to 16 October 1963), *Texts adopted by the Preparatory Technical Conference on Employment Policy* (document PTCE/14), Part VI, para. 33 (2).

[18] At the time of writing, a scheme has been put forward by the National Employment Fund to co-ordinate still further the arrangements for retraining workers and to increase their efficiency.

[19] ILO *Texts adopted by the Preparatory Technical Conference on Employment Policy, op. cit.* Part III, para. 14.

[20] Under these loan or guarantee contracts, firms are naturally required to ear-mark a proportion of the new jobs for redundant workers from ECSC industries.

of the cost of adjustments within the EEC are still the only examples of their kind. Would it be possible to establish similar schemes elsewhere? What would be their advantages and drawbacks? Questions such as these seem hardly to have been discussed so far and would perhaps deserve detailed examination. In 1961, at its forty-fifth session, the International Labour Conference called attention in an unanimously-adopted resolution to the contribution that could be made to the achievement of full employment by international measures such as the establishment of:

". . . special international investment funds or social funds designed to ease the voluntary transfer of workers under satisfactory social conditions from one industry or sector to another as required by shifts in the currents of international trade . . . and by technological change. The funds would include among their objects the financing of retraining schemes and other expenses involved in the transfer of workers from one occupation or locality to another." [21]

[21] Resolution concerning Employment Policy, point 4 (1) (*d*), ILO *Official Bulletin* No. 1, Vol. XLIV, 1961.

TRADE IN AGRICULTURAL COMMODITIES IN THE UNITED NATIONS DEVELOPMENT DECADE

PART III. TRADE IN PROCESSED AGRICULTURAL COMMODITIES *

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Chapter 8. TRADE IN PROCESSED AGRICULTURAL COMMODITIES

CHAPTER 8

TRADE IN PROCESSED AGRICULTURAL COMMODITIES

1. One of the frequent conclusions reached in Part II of this study was that developing countries might improve their balance of payments by more processing of agricultural commodities. Why is this so? How can it be done? What are the likely effects and how can they be measured? These are some of the questions that immediately come to mind. Not many of the answers are known. What follows is a first, highly tentative effort to explore the foreign-trade aspects of this important field.

2. An introductory section of this chapter will deal with definitions and with broad economic considerations. This will be followed by three sections examining, in turn (i) processed food, (ii) manufactures of textile fibres, and (iii) natural rubber, forestry and leather products. More detailed analysis of some products will draw heavily on case studies undertaken for the purpose of this report. A final section will summarize major general conclusions.

8.0. *Introduction*

3. Few agricultural commodities are consumed in the form in which they leave the primary producer. Most agricultural commodities are transformed in some way between production and use. Processing is one link in the chain of transformation. Distinction between processing and other forms of transformation depends on the stage in the sequence of transformation activities, the methods employed, and the nature of the product, but there is no rigid demarcation.

4. Food transformation is most often described as processing, whatever the method employed and however close to end-uses, but a distinction can be drawn between preservation and other forms of food processing. As a rule, processing occurs at an early

* This paper was prepared by the Secretariat of the Food and Agriculture Organization of the United Nations in connexion with item 11 of the provisional agenda on the subject, "International commodity problems". See "Interim report of the Preparatory Committee (first session)", para. 6, in Vol. VIII.

It was prepared as part of a study on Trade in agricultural commodities in the United Nations Development Decade and, in fact, constitutes Part III of that study.

The documents in that series are: "Trade in agricultural commodities in the United Nations Development Decade: Part I, A general review; Part II, "Trade in primary agricultural commodities"; Part III, "Trade in processed agricultural commodities"; and Part IV, "Agricultural trade statistics" (E/CONF.46/52). Parts I and II have been reproduced in Vol. III, and Part III in the present volume. Part IV was issued in mimeographed form only.

stage of transformation, following "handling" and preceding "manufacture". However, when the stages of transformation are few and the production methods are not capital-intensive, e.g., in the case of cordage from hard fibres, all activities are called processing. Similarly, even early transformation stages are regarded as manufacture rather than processing if capital-intensive methods are employed and if much value is added to the primary product. For instance, in the transformation of textile fibres, ginning may be described as processing, and modern spinning and weaving as manufacture.

5. Generally speaking, a processed commodity is worth more than a primary product, and a manufactured good is worth even more. In the technical language of economics, there is "value added" at each stage of production. Thus the expansion of processing and manufacturing activities raises the country's national income, which is the total of value added at all stages of production, and promotes economic growth. For exporting countries, to ship a processed or manufactured product instead of a crude one, means getting the equivalent of value added in the form of foreign exchange, and the case is described as "export transformation". If a commodity which was previously imported is produced at home, foreign exchange up to the amount of value added is saved, and the case is that of "import substitution".

6. The calculation of the net effect of export transformation and import substitution on the balance of payments presents considerable difficulties. When a developing country has to spend foreign exchange on the imports of processing equipment or raw and auxiliary materials, this expenditure must be deducted from the additional foreign exchange earned or saved by domestic processing. The calculation of this "import content" can never be very precise because the distinction between "old" and "new" uses of imported goods is seldom clear. Moreover, even if the machinery and materials are home produced, they usually have an import content inherited from some preceding stage of production, in particular from the infrastructure services. As a result, international and inter-industry comparisons may often be highly misleading.

7. The major agricultural processed goods now entering the foreign trade of developing countries and analysed in this chapter are: canned meat and fish, fish meal and oil, processed fruit; vegetable oils, oil cake and meal; manufactures of jute, cotton and wool; rubber manufactures; processed wood, pulp and paper; leather and leather manufactures.[1] In 1959-61, these commodities accounted for 6.9 per cent of the total value of exports from developing to developed regions, and for 8.5 per cent of the reciprocal imports. Between 1953-55 and 1959-61 the value of imports of processed agricultural products from developed into developing countries hardly changed. However, exports of these goods from developing to developed regions increased by almost 50 per cent, from $903 million to $1,348 million a year. As a result, the combined deficit of the developing countries on the account of processed agricultural commodities was reduced from $850 million to $409 million.

8. In all cases except jute, hard fibres and rubber, there is two-way traffic, i.e., from developing to developed countries and vice versa, in both the crude and the processed form of the commodity. This means competition all along the line, but it also presents, for developing countries, a challenge and an opportunity. The extent to which they can respond depends not only on their own efforts, but also on technical and economic considerations as well as on the attitudes and policies of developed countries.

9. The chief technical and economic considerations are transportation cost, the import content of equipment and materials, the capital intensity of the processing method, and economies of scale. Let us examine these factors in turn.

10. Transport considerations are often of decisive character. In some cases, like grains, shipment of the raw product in bulk is cheaper; in others, like meat, where processing reduces weight and volume, shipment of the processed product is cheaper. Sometimes, e.g., in the case of fish, the primary product is so perishable that it can be transported only in processed form.

11. In a competitive world market, the standard of technology applied to processing tends to be set by the most developed countries, and technologically advanced machinery tends to raise import content. Raw materials normally have no import content, but cases are known where fast economic development took place without any indigenous raw materials basis. Japan and Hong Kong are striking examples. The import content of auxiliary materials may be reduced progressively through the prior or simultaneous establishment of appropriate industries. Similarly, the development of power supply, which often presents a bottleneck, must receive early attention, and this also may involve heavy foreign exchange outlay. Given a varying amount of technical skills, it would probably be feasible for most developing countries to surmount the obstacle of import content, by buying abroad what they need for their processing industries. Whether it is advisable for them to allocate the necessary foreign exchange to this purpose, depends on the expected results.

12. High capital intensity tends to reduce the comparative advantages of developing countries. It also has a direct bearing on their foreign exchange position. In so far as it may entail borrowing abroad, the loan may have to be serviced out of value added, which would reduce the net benefit. For this reason it is sometimes suggested that export industries in developing countries should have the lowest possible capital intensity. The argument is further strengthened by the fact that capital-intensive production is not always the cheapest. Sometimes labour-intensive processes are more efficient, and in such cases developing countries with their abundant labour resources have a comparative advantage. It has even been pointed out that once developing countries had reached the stage of industrialization and substantial growth, the

[1] See Chapter 1.4 for general analysis. Other commodities, such as tea or sugar, which often necessarily undergo some processing before being exported, have either been already discussed in Part II or had to be left out of this chapter because of the absence of readily available statistical data.

optimal international division of labour could be achieved if they specialized in exporting a wide range of light industrial goods, which they would then be able to produce more efficiently at any rate than the United States.[2]

13. Economies of scale are a powerful element in reducing average cost, especially in capital-intensive industries, and thereby making prices competitive. However, given technical indivisibilities, worthwhile economies of scale can sometimes be achieved only by very high capital investment. On both grounds, therefore, economies of scale presuppose large outlets —far larger, in many cases, than the domestic market which developing countries can offer to the products of their processing industries. Clothing textiles, pulp and paper, and rubber manufactures may be exceptions. However, for most other processed products, the large market lies abroad, where they have to contend not only with price competition in the developed countries but also with the latters' import policies. Regional co-operation between developing countries is one way of increasing the size of their markets.

14. Some processed goods can be, and are, produced even now in developing countries at competitive costs, but the price structure, fiscal and trade policies in importing countries militate against processing in the primary-producing countries. Examples are discriminatory import duties favouring the raw against the processed product in the case of oilseeds, husked rice and coffee. Other examples are quantitative import controls, internal consumption taxes and, above all, support measures for domestic industry. By fostering domestic, sometimes high-cost, production, the developed countries narrow their own market for processed goods from the developing regions. Where this policy leads to measures facilitating exports, third markets may also be affected.

15. The developing countries then lose not only potential foreign exchange earnings, but also the chance of establishing processing industries on a scale large enough to make prices competitive. Indeed, in cases where it would be possible to establish a large-scale industry for the domestic market, provided a certain minimum of exports can also be counted upon, the developing countries may lose even the chance of efficient import substitution.

16. To some extent, developing countries can counteract the contrived price disadvantages on the world market by export subsidies and fiscal measures. In the case of import substitution, they can, in their turn, protect their domestic market from foreign imports by tariffs and other devices. All this is feasible, but the cost involved, particularly the social cost, may be very high and would have to be weighed carefully against the balance-of-payments advantages.

17. So much for some of the major general considerations which must enter into any developing country's decision whether or not to invest in an agricultural processing industry. Except in cases of absolute impossibility, the decision will ultimately be governed by expected net social benefit in the long and in the short run. Resources have to be allocated to those uses which are most efficient for both immediate and long-term purposes. There may be a conflict between the two: balance-of-payments problems may loom large in the immediate future, while longer-term development purposes may demand investment in infrastructure or in other economic sectors. Thus the ultimate decision will rest on the choice of the time-path of economic growth, which is a matter not so much of economic calculus as of political judgement.

18. It is to appraise and, if possible, evaluate the foreseeable economic effects of processing, especially on the balance-of-payments situation of developing countries, that the studies which follow have been undertaken. Their results will be briefly summarized at the end of this chapter.

8.1. *Processed food*

8.1.1. *Canned meat*

19. Canned meat, like all other meat and meat products, is produced and consumed mainly in the developed countries. With an annual output of about 900,000 tons and *per caput* consumption of approximately 5.4 kg., the United States accounts for a sizeable proportion of world production and consumption. The second largest consumer is the United Kingdom where in recent years home production and imports amounted to about 60,000 and 190,000 tons respectively. Some developing countries too, produce canned meat for domestic consumption and several of them are important exporters.

20. Canned meat is the most important canned food entering international trade; it also accounts for about one-fifth of the value of world exports of all meat, including live animals and meat products. In terms of quantity, the share of canned meat in total world meat trade is about one-tenth. The bulk of canned meat exports consists of pig-meat products, traded primarily among developed countries, and of beef, sold by both developing and developed countries, mainly to the latter group. (Trade flows are shown in table 3.3.4 of the Statistical Appendix.) Nearly a third of the developing countries' meat export earnings come from exports of canned meat, including meat extracts. Almost all of this is canned beef, and the remarks below will therefore refer mainly to that commodity.

21. Among developing countries, the leading exporters are Argentina, Paraguay, Brazil, Uruguay, and, in Africa, Tanganyika, Kenya, Rhodesia, Madagascar and Somalia. Meat exports are important sources of foreign exchange for all of them, and in some instances canned meat accounts for as much as 40 to 50 per cent of the country's total exports of meat and meat products. The heavy dependence of some developing countries on canned meat exports is due to, among other factors, the poor quality of their livestock, which restricts export possibilities to canned meat for uses where quality requirements are not too exacting, and to sanitary regulations in major importing countries which do not admit meat imports in other than canned or prepared form from areas

[2] See Higgins, B.: *United Nations and US Foreign Economies Policies*, Homewood, III, 1962.

infected by foot and mouth disease. Exports compete with those of Australia, Denmark, the Netherlands, France and Ireland.

22. Although Western Germany has become a market of some importance in recent years, the import trade in canned beef is dominated by the United Kingdom and the United States, which together took almost 70 per cent of world exports in 1961. Latin America exports both to Western Europe and the United States, while African exports go mainly to Western Europe.

23. Counterflows of canned meat exports from developed to developing countries left the latter in 1959-61 with net export earnings of $43.7 million from canned meat trade with developed countries—a mere $4 million more than in 1953-55.[3] Although during that period the developing countries' share of the import markets for canned meat in developed countries remained almost stationary, close to 25 per cent, the proportion of canned in their total meat exports to developed countries declined from 42 to 30 per cent—more sharply than the proportion of canned meat in world meat exports, which dropped from 25 to 19 per cent. The fall in the relative importance of canned meat in the exports of developing countries may be attributed, among other things, to strong import demand in developed countries for carcass beef, which made beef canning relatively unprofitable in countries with alternative export possibilities, and also to increasing competition from protected domestic canning industries in importing countries.

24. There is very little trade among developing countries, and centrally-planned countries are sporadic, though occasionally large-scale, importers.

25. Import duties on fresh and canned meat in the main importing countries are compared in table 8.1.1/I. With the exception of the Federal Republic of Germany, import duties in all major importing countries discriminate sharply against the processed product. In the United Kingdom, the world's largest importer of canned meat, the general rate on fresh or frozen meat was below 5 per cent of the value of the bulk of such imports in recent years, while in the case of the more expensive types of meat it may have amounted to less than one-seventh of the general rate levied on canned meat products. In the Federal Republic of Germany, the lower rates on canned meat are offset by the higher rate of turnover equalization tax levied on canned meat in containers of less than one kilogramme.

26. *Ad valorem* rates, of course, are applied not only to the value of the meat content but to the total value of the product, including the value added in processing. It would require detailed analysis to determine with accuracy the rate of protection which these tariffs entail for the meat canning industries of the importing countries; very rough calculations based on Latin American export values suggest that, for example, the difference in rates on frozen and canned meat in the United Kingdom in effect implies a level of protection of 45 to 50 per cent, or more, for the domestic canning industry against imports from Latin American sources. Moreover, since in many developing countries canning materials have to be imported, the present system of levying *ad valorem* duties on the total value of the finished product may on occasion lead to situations where a substantial portion of the import duty collected on canned meat actually falls on goods produced and exported by the importing country's own industries.

TABLE 8.1.1/I

Beef and veal import duties and controls in selected countries, 1963

	Fresh, chilled or frozen	*Canned*
United Kingdom [a]		
Preferential . . .	Free	Free
Other	$\frac{9}{3}$ to $\frac{3}{4}$d. per lb.	20 per cent
Canada		
Preferential . . .	3c per lb.	15 per cent [b]
Most favoured . .	3c per lb.	30 per cent
General	8c per lb.	35 per cent
United States . . .	3c per lb.	3c per lb. but not less than 15 per cent
Italy [c]		
Members of EEC	11.3 per cent	13.8 per cent
Others	20 per cent	23.2 per cent
Germany (F.R.) [d]		
Members of EEC	13 per cent	10 per cent
Other	20 per cent	19 per cent
Japan	10 per cent	25 per cent

[a] Boneless beef from non-Commonwealth sources is subject to a 20 per cent *ad valorem* duty; in practice, almost all of this class of imports comes from Commonwealth countries.

[b] Australia and New Zealand free.

[c] Compensation tax of two per cent is levied on imports of canned meat. All livestock and meat can, normally, be freely imported into Italy without import licences from members of the OECD, but import bans are imposed from time to time.

[d] Frozen beef: 6.5 per cent from EEC, 13 per cent from other sources. Turnover equalization tax of 6 per cent of the duty paid value is levied on canned meat in containers of less than 1 kg; for all other canned meat, meat and livestock, the rate is 4 per cent. Fresh, frozen and chilled meat as well as canned meat are subject to import licensing.

27. Import duties are frequently accompanied by other forms of protection. Quantitative restrictions and the policies of State trading monopolies are other serious obstacles to the expansion of import trade in a number of developed countries.

28. The industrial characteristics of meat canning are hard to compare on the basis of available manufacturing censuses, because these use definitions varying, in part, with the country's stage of industrialization and general industrial structure.

29. In Argentina direct capital equipment, in terms of horse-power of installed motive-power per worker in the industry, is significantly below the average of all manufacturing industries (84 per cent).

[3] It should be noted that the flow of canned meat exports to developing countries includes all canned meats. On the basis of available statistical data it is impossible to separate canned beef from other canned meats. The net export balance of the developing countries for canned beef alone would be considerably higher than the figure given here as exports from the developed countries consist largely of canned pig products.

The fuel and electricity intensity of meat canning, in terms of expenditure on these inputs per worker employed, is much the same as for all industry. Value added per person employed in canning is about 7 per cent above average.[4] In Paraguay, on the other hand, the capital intensity of the meat canning, in terms of the book value of machines, is 34 per cent, and fuel and electricity intensity some 48 per cent, above the average of all manufacturing; but by contrast, value added per person employed is only 76 per cent of the average in all manufacturing.

30. An inquiry into the cost structure of the meat processing industry in Mexico indicates that value added accounted for some 24 per cent of the value of the industry's output in 1960. This is considerably below the corresponding figure in fruit and vegetable processing. In French-speaking African countries value added by individual factories producing corned beef ranged only, according to recent studies, from 15 to 25 per cent of the value of total output.

31. The relevance of these figures for assessing the possibility of adding to these countries' foreign exchange supply through exports of canned meat is limited. In most developing countries the import content of processing is high, since cans and even labels and sealing materials must be imported. These items often account for as much as between 25 to 35 per cent of variable production cost (table 8.1.1/II), and the import content of meat canning ranges from a low of 0.1 per cent in Argentina (with its own can manufacturing industry) to about 13 per cent in Paraguay and 20 to 30 per cent in some African countries. While imported inputs might ultimately be replaced by supplies from local production, can manufacturing is a highly mechanized industry requiring skilled technicians but not a large labour force. In these circumstances there is little immediate incentive for import substitution in many developing countries, such as exporters of canned meat in Africa, though it might be possible to introduce the simpler process of refashioning cans from imported can-parts rolled out flat.

TABLE 8.1.1/II

Cost structure of corned beef production in selected plants in certain countries, 1962-63

(Percentages)

Items	*Sahara zone* [a]	*Uruguay*	*Cameroon*	*Madagascar*
Value of can	23.3	35.7	32.3	33.3
Direct production cost	15.0	14.3	14.0	16.2
Sub-total	38.3	50.0	46.3	49.5
Value of meat input	61.7	50.0	53.7	50.5
Total cost [b]	100.0	100.0	100.0	100.0

Source: FAO.

[a] Project estimates.

[b] Excluding overheads.

[4] Value added per employee is of course influenced by the prices at which output can be sold, and these prices are influenced by tariffs and other forms of protection.

32. Among the conditions for canning, the existence and improvement of livestock and of refrigeration facilities to ensure continuity of supply seem to be the most obvious. In a number of African countries the prices of livestock are as high as in any high-cost importing country and the quality of slaughter animals is generally low. In addition, some developing countries are hampered by the absence of domestic demand and by the small scale of the fresh meat industry, the by-products of which are an important input for canning in the developed and in some of the more-advanced developing countries. Some African countries are trying to adapt the product to local tastes, but no economies of scale can be expected until domestic sales of the adapted products have risen to the necessary level. In markets unused to canned meat, high protection to promote domestic production may defeat its own purpose. The cost of imported materials can be reduced only when domestic demand is sufficient to make at least the assembly of containers worthwhile. Canning costs in developing countries are often also kept high by the absence of any systematic utilization of by-products (blood, bone, horn, etc.), the inadequate organization of the supply of beef to the factories, the small scale of operations, and the high cost of transporting the finished products to the markets, domestic or foreign.

33. Prospects for international trade in canned meat will be determined largely by over-all import demand for meat. In the following, an attempt is made to quantify the prospects for increasing exports from developing to developed countries and for import substitution in developing countries.

34. According to FAO projections, the total volume of trade in meat and its products will be roughly the same in 1970 as in 1959-61 (at 1959-61 average relative prices of these products). It is likely, however, that this assumption reflects the most unfavourable situation that might arise. For the sake of illustration, canned meat exports from developing to developed countries are assumed to expand, in terms of volume, throughout the sixties at an annual rate of five per cent. The value of these additional exports has to be reduced by a specific (direct) import content of canning, which is taken to be 13 per cent. An equivalent quantity of meat exports (1.6 tons of frozen meat for each ton of canned meat) would, in agreement with the initial assumption, then cease to be exported, and the value of additional canned meat exports, net of direct import content, has to be further reduced by the value of the unexported frozen meat. Working with average unit values of exports from Latin American meat canning countries, the net foreign exchange addition resulting from such a change in the composition of exports was computed at $6 million. Import substitution would yield a gain of $4.5 million, assuming that all the 1959-61 imports of canned meat from developed countries into Latin America and Africa would be replaced, while an equivalent volume of frozen meat exports to developed countries would be lost by 1970.

35. On a more optimistic assumption, canned

meat exports to developed countries might grow between 1959-61 and 1970 in line with the estimated 27 per cent increase in the meat consumption of developed countries, without any offsetting loss of equivalent quantities of frozen meat exports. In that case the developing countries could increase their foreign exchange supply by $26 million—as against a total gain of $10.5 million ($6.0 plus $4.5 million) in the first case.

36. Given the present volume of trade in canned meat within the developing regions, import substitution on the scale assumed above would cause the greater change in the structure of trade and at the same time require the greater effort of product adaptation and consumer education. Projects in French-speaking African countries and also in Kenya aim at the expansion of intra-regional supplies. Low-grade cattle, which is the most suitable material for canning, is available in Kenya, and opportunities for export of corned beef to African and Middle-Eastern markets seem promising.

37. Any increase in exports to developed countries would require easier access to markets, which can be expected only from a reduction of tariffs and an enlargement of quotas; it would also require continuous improvement in the efficiency of production to reduce cost in face of a downward trend of prices for the main canned meats.

8.1.2. *Processed fish*

38. The categories of fishery products considered here are frozen fish; dried, salted or smoked fish; canned fish; fish meal and fish oil.

39. *Frozen fish.* Up to now, the international trade in frozen fish has been mainly between developed countries. The most important element in this trade has been the large frozen ground fish imports into the United States from Canada and the Scandinavian countries. The great opportunities for marketing high-grade luxury products in the United States have been recently recognized by a number of developing countries, especially in Central America and Asia and the Far East. These countries have built up important new industries principally for export of frozen shrimp and other crustaceans to the United States. Since these shipments are a significant source of foreign exchange earnings, they may be expected to expand as long as economic conditions in the importing countries remain favourable and no import restrictions are imposed.

40. The United States is also importing large quantities of tuna and tuna-like products to supply its tuna canning industry on the West Coast. While the bulk of these shipments originates in Japan, Peru is also supplying a fraction of these requirements. Since Peru has an interest in diversifying its industry, it can be expected to try to retain its share of this trade.

Dried, salted or smoked fish. There are four important flows in this trade.

41. (i) Nigerian imports of stockfish, unsalted cod, from Norway and to a lesser extent Iceland, have traditionally made an important contribution to the country's animal protein food supplies. Today, Nigeria is trying to develop its own fishery industry. The country will, in all likelihood, continue to import substantial quantities of stockfish for a considerable time to come to avoid serious nutritional problems.

42. (ii) Consumer preferences in other countries of Africa are for dried, salted and smoked products. There has always been a significant trade in these products between neighbouring territories. Among the largest importers of dried and smoked fish have been the Congo (Léopoldville), where these products have been traditionally marketed particularly in the mining areas, and Ghana. Angola has been supplying a large part of the requirements of the Congo, but exports of dried fish have also been of considerable significance to the economies of the former French territories bordering Lake Chad and in the Niger river area. With increased economic co-operation in this region, one can look forward to expansion of this trade in the future.

43. In Asia and the Far East, a similar trade in dried fish between neighbouring countries has been traditionally carried on. Most significant perhaps have been large imports of Ceylon originating in India, Pakistan and Aden. Strenuous efforts of the countries in this region to develop their own industries may eventually lead to a curtailment of these shipments.

44. (iii) Salted cod can be considered a staple in the countries of Southern Europe and the Caribbean area. Scandinavian countries and Canada have been the chief suppliers, with Canada concentrating its export efforts on the Caribbean. The future of the trade in salted cod is likely to be affected by a rise in income levels in Southern Europe, which may lead to a partial substitution by frozen and other higher priced products. In the Caribbean, efforts to promote the local industry and to use foreign exchange for other purposes than food imports may also result in a reduction of salted cod imports.

45. (iv) Dried or salted herring together with other herring products are enjoying particular popularity in the countries of Eastern Europe and in the USSR. They have been importing substantial amounts of these products mainly from Scandinavia and the Netherlands. Developing countries are thus not concerned with this trade.

46. *Canned fish.* There exists considerable trade in canned fish between developed countries. Norway and Portugal are the most important suppliers, while the Federal Republic of Germany and other EEC countries are among the main importers, although significant quantities are also shipped to the United States. Japan and South Africa are covering a large proportion of the import requirements for canned fish in developing countries of Asia, especially the Philippines.

47. Some developing countries are net exporters of canned fish. Morocco and Peru have the most important fish canning industry. A large part of the canned sardines exports from Morocco is directed to markets in the EEC. The future of this trade will depend on the policies adopted by the Community in the field of fisheries as well as on the success of efforts by the Moroccan industry to remain competitive.

Peruvian canned fish exports, mostly canned bonito, are shipped chiefly to the United States.

48. Future expansion of fish canning in developing countries will depend, to a large extent, on the ability of these countries to keep costs low by establishing their own canning material industries as well as adequate refrigeration facilities for the storage of raw material which must be available on regular basis.

49. *Fish meal.* There has been a phenomenal expansion in fish-meal production and trade since the end of the Second World War due to increased application of the scientific principles in the feeding of poultry and pigs. Rapidly rising demand in the high-income countries of Europe and North America has given rise to large new export industries, originally in South Africa and Angola, and more recently in Peru and Chile. These countries, together with the traditional Scandinavian producers, are supplying the bulk of world requirements. The huge United States production is mainly for its domestic needs. Statistics of trade in fish meal in 1956 and 1960 are presented in tables 8.1.2/I and 8.1.2/II.

50. Peru is today by far the most important single producer and exporter of fish meal. Its production of 1.1 million metric tons in 1962, the bulk of which was marketed abroad, represented close to two-fifths of total world output. South Africa ranks second, with a production of close to 200,000 tons, virtually all sold abroad too. In the last two years, the most important strides in increasing production, next to Peru, have been made in Chile which shared the comparative cost advantages of the two leading producers.

51. On the import side, the Federal Republic of Germany, the Netherlands and the United States have

TABLE 8.1.2/I

Trade in fish meal, in 1956 and 1960

(Exports in thousands of metric tons)

From \ To	World	Developed countries				Developing countries			Centrally-planned countries	Unallocable exports
		Total	U.S.A. Canada	West and South Europe	Other	Total	Latin America	Other		
				1956						
WORLD	**486**	**442**	**70**	**372**	—	**15**	**1**	**14**	**9**	**20**
Developed countries	*390*	*352*	*56*	*296*	—	*14*	—	*14*	*6*	*18*
U.S.A. and Canada	52	46	43	3	—	—	—	—	—	6
West and South Europe	286	251	10	241	—	1	—	1	6	10
Australia, New Zealand and South Africa	54	41	3	38	—	12	—	12	—	1
Japan	16	14	—	14	—	1	—	1	—	1
Developing countries	*92*	*89*	*14*	*75*	—	*1*	*1*	—	—	*2*
Latin America	33	32	8	24	—	1	1	—	—	—
Africa and n.e.s. countries	59	57	6	51	—	—	—	—	—	2
Centrally-planned countries	*4*	*1*	—	*1*	—	—	—	—	*3*	—
				1960						
WORLD	**961**	**843**	**109**	**714**	**20**	**40**	**17**	**23**	**21**	**57**
Developed countries	*362*	*288*	*29*	*256*	*3*	*23*	—	*23*	*17*	*34*
U.S.A. and Canada	33	31	22	9	—	—	—	—	—	2
West and South Europe	197	170	—	170	—	—	—	—	12	15
Australia, New Zealand and South Africa	126	87	7	77	3	18	—	18	5	16
Japan	6	—	—	—	—	5	—	5	—	1
Developing countries	*595*	*555*	*80*	*458*	*17*	*17*	*17*	—	*1*	*22*
Latin America	534	505	79	409	17	17	17	—	—	12
Africa and n.e.s. countries	61	50	1	49	—	—	—	—	1	10
Centrally-planned countries	*4*	—	—	—	—	—	—	—	*3*	*1*

Source: FAO *Yearbook of Fisheries Statistics;* 1957, Vol. VIII and 1960/61, Vol. XIII (International Trade).

been the best customers for fish-meal, although many other countries, including developing countries, are covering gaps in domestic requirements through purchases abroad.

52. The growth of fish meal production in Peru has had a tremendous impact on the economy of the country. Fish production, mostly of anchovy—the raw material for the reduction industry—increased from about 300,000 tons in 1956 to 6.8 million tons in 1962, all but 5 per cent of which was used for processing into fish meal. At the same time, exports of fish meal rose from 28,000 tons to 1,056 thousand tons. Foreign exchange earnings from fish-meal exports increased from $7 million to $100 million. With the expansion of the fish-meal industry came about a corresponding development in fish-oil production and exports, which is discussed below.

53. The growth of the fish-meal and fish-oil industry in Peru was only made possible by a large investment in the fishing fleet and in manufacturing plants. The number of boats and the total tonnage employed in providing the fish increased from 220 to 1,070 purse-seiners from 1956 to 1961 with a tonnage of 5,000 and 60,000 tons respectively. The mnuber of fish-meal plants in Peru rose from 27 in 1956 to 101 in 1961 with a capacity of about 1 million tons of raw material per year in 1956 and of some 13.5 million tons in 1961. In these activities between 35,000 and 40,000 people were engaged in 1961, about one-third working in the manufacturing plants and two-thirds being fishermen. In addition, other auxiliary industries were established: almost all the machinery and equipment required by the fishing fleet (except marine motors) is today supplied locally; local boat building yards are fully employed; a large proportion of the

TABLE 8.1.2/II

Trade in fish meal, in 1956 and 1960

(Exports in millions of dollars, f.o.b.)

From \ To	World	Developed countries				Developing countries			Centrally-planned countries	Unallocable exports
		Total	U.S.A. Canada	West and South Europe	Other	Total	Latin America	Other		
					1956					
WORLD	**68**	**63**	**10**	**53**	—	**2**	**n**	**2**	**1**	**2**
Developed countries	*56*	*51*	*8*	*43*	—	*2*	—	*2*	*1*	*2*
U.S.A. and Canada	7	6	6	n	—	—	—	—	—	1
West and South Europe	38	36	1	35	—	n	—	n	1	1
Australia, New Zealand and South Africa	9	7	1	6	—	2	—	2	—	n
Japan	2	2	—	2	—	n	—	n	—	n
Developing countries	*12*	*12*	*2*	*10*	—	*n*	*n*	—	—	*n*
Latin America	4	4	1	3	—	n	n	—	—	—
Africa and n.e.s. countries	8	8	1	7	—	—	—	—	—	
Centrally-planned countries	*n*	*n*	—	*n*	—	—	—	—	*n*	—
					1960					
WORLD	**84**	**75**	**10**	**64**	**1**	**3**	**1**	**2**	**2**	**4**
Developed countries	*32*	*26*	*3*	*23*	—	*2*	—	*2*	*2*	*2*
U.S.A. and Canada	3	3	2	1	—	—	—	—	—	n
West and South Europe	18	15	—	15	—	—	—	—	2	1
Australia, New Zealand and South Africa	10	8	1	7	—	1	—	1	n	1
Japan	1	—	—	—	—	1	—	1	—	n
Developing countries	*52*	*49*	*7*	*41*	*1*	*1*	*1*	—	*n*	*2*
Latin America	47	45	7	37	1	1	1	—	—	1
Africa and n.e.s. countries	5	4	n	4	—	—	—	—	n	1
Centrally-planned countries	*n*	—	—	—	—	—	—	—	*n*	*n*

Source: FAO *Yearbook of Fisheries Statistics:* 1957, Vol. VIII and 1960/61, Vol. XIII (International Trade).

packing equipment required by the fish-meal industry is supplied by Peruvian firms and new industries such as that for the manufacture of jute bags and floats for nets have sprung up.

54. The rapid growth of the Peruvian fish-meal industry has not been without difficulties. In the years 1959 and 1960, the industry faced a crisis due to the disorganization of the world market. This in turn was caused by a seeming imbalance between supply and demand. In these years supplies increased rapidly not only because of the development of the Peruvian industry, but also due to favourable fishing conditions elsewhere. Demand did not increase as rapidly as expected because of a temporary slowing down in the expansion of the Western European hog and poultry industries and because of increasing competition from other animal feedstuffs such as soyabean and meat meal, the supply of which was especially abundant in the United States. The unfavourable effects of these demand and supply factors on fish-meal prices were accentuated by speculation and inventory changes. From an average of $140 per metric ton f.o.b. Peruvian ports in 1958, fish-meal prices fell to a low of $63 per metric ton in January 1961.

55. In an attempt to restore equilibrium, certain measures were taken: the five major exporting countries (Norway, Iceland, Portugal (Angola), South Africa and Peru) joined to form a Fish-Meal Exporters' Organization and agreed on production quotas; in Peru itself a "Consorcio Pesquero del Peru" was formed to stabilize the marketing of Peruvian fish-meal; at the urgent request of Governments, an International Meeting on Fish-Meal was convened by FAO in March 1961 to discuss measures for restoring confidence in the market. During 1961 and 1962, world fish-meal prices recovered substantially, although they did not reach the high levels of 1958.

56. In the long-term, there seems to be continued scope for expansion of the world fish-meal industry. Countries with newly developed livestock industries may become large consumers of fish-meal as animal feed; countries already possessing substantial livestock industries but not using much fish-meal may turn more and more to this type of animal feed; technical improvements in fish-meal production resulting in a more refined product with little of the characteristic taste or odour may enable countries

TABLE 8.1.2/III

Trade in fish oil, in 1956 and 1960

(Exports in thousands of metric tons)

From \ To	World	Developed countries				Centrally-planned countries	Unallocable exports
		Total	U.S.A. Canada	West and South Europe	Other		
				1956			
WORLD	**288**	**248**	**25**	**223**	—	**9**	**31**
Developed countries	*270*	*236*	*22*	*214*	—	*4*	*30*
U.S.A. and Canada	74	72	6	66	—	—	2
West and South Europe	98	68	4	64	—	4	26
Australia, New Zealand, South Africa	19	19	—	19	—	—	—
Japan	79	77	12	65	—	—	2
Developing countries	*12*	*12*	*3*	*9*	—	—	—
Latin America	6	6	3	3	—	—	—
Africa and n.e.s. countries	6	6	—	6	—	—	—
Centrally-planned countries	*6*	—	—	—	—	*5*	*1*
				1960			
WORLD	**549**	**435**	**20**	**414**	**1**	**15**	**99**
Developed countries	*435*	*354*	*12*	*341*	*1*	*4*	*94*
U.S.A. and Canada	80	79	7	71	1	—	1
West and South Europe	207	110	3	107	—	4	91
Australia, New Zealand, South Africa	60	60	—	60	—	—	1
Japan	106	105	2	103	—	—	1
Developing countries	*60*	*59*	*8*	*51*	—	—	*2*
Latin America	48	48	8	40	—	—	1
Africa and n.e.s. countries	12	11	—	11	—	—	1
Centrally-planned countries	*35*	*22*	—	*22*	—	*10*	*3*

Source: FAO *Yearbook of Fisheries Statistics;* 1957, Vol. VIII and 1960/61, Vol. XIII (International Trade).

NOTES:
1. Exports to developing countries are negligible.
2. Figures do not add up exactly due to rounding.

TABLE 8.1.2/IV

Trade in fish oil, in 1956 and 1960

(Exports in millions of dollars, f.o.b.)

From \ To	World	Developed countries: Total	U.S.A. Canada	West and South Europe	Other	Centrally-planned countries	Unallocable exports
			1956				
WORLD	**69**	**59**	**7**	**52**	—	**2**	**8**
Developed countries	*65*	*56*	*6*	*50*	—	*1*	*8*
U.S.A. and Canada	16	16	2	14	—	—	—
West and South Europe	27	18	1	17	—	1	7
Australia, New Zealand, South Africa	4	4	—	4	—	—	—
Japan	18	18	3	15	—	—	1
Developing countries	*3*	*3*	*1*	*2*	—	—	*n*
Latin America	2	2	1	1	—	—	—
Africa and n.e.s. countries	1	1	—	1	—	—	n
Centrally-planned countries	*1*	—	—	—	—	*1*	*n*
			1960				
WORLD	**98**	**76**	**5**	**71**	—	**3**	**19**
Developed countries	*82*	*63*	*4*	*59*	—	*1*	*18*
U.S.A. and Canada	13	13	2	11	—	—	—
West and South Europe	39	20	1	19	—	1	18
Australia, New Zealand, South Africa	10	10	—	10	—	—	—
Japan	20	20	1	19	—	—	—
Developing countries	*9*	*9*	*1*	*8*	—	—	—
Latin America	7	7	1	6	—	—	n
Africa and n.e.s. countries	2	2	—	2	—	—	—
Centrally-planned countries	*7*	*4*	—	*4*	—	*2*	*1*

Source: FAO *Yearbook of Fisheries Statistics:* 1957, Vol. VIII and 1960/61, Vol. XIII (International Trade).

NOTES:
1. Exports to developing countries are negligible.
2. Figures do not add up exactly due to rounding.
3. n means negligible.

which already employ a lot of fish-meal to extend the period and amount of its use; the widespread occurrence of protein deficiency throughout the world should present a large potential scope for the use of high-protein fish concentrates once the difficulties connected with their manufacture have been overcome.

57. *Fish oil.* Fish oil is a by-product of other fish processing, mainly of the fish-meal reduction. The main producing countries of fish meal, consequently, are also the main producers of fish oil. (Peru produced 20 per cent of the world output in 1962.)

58. The international trade in this product is shown in tables 8.1.2/III-IV (whale oil included).

59. Developing countries increased their fish-oil exports rapidly from 1956 to 1960 (from a volume of 12,000 to 60,000 metric tons). During the same period, the value of fish-oil exports rose from $2.5 million to $9.2 million. Fish oil is exported almost exclusively to developed countries; in 1960, the main trade flow ($7.4 million) was from Latin America (Peru) to Europe; during the same year, Africa supplied $1.8 million's worth of fish oil to Europe.

8.1.3. *Processed fruit*

60. Fruit canning and pressing is an expanding sector in several developing economies and contributes an increasing share of their total exports. In Malaysia and Kenya, processed fruit has overtaken the fresh product as the main fruit export, and in China (Taiwan), the Philippines, Morocco, Israel and Cuba, the share of processed fruit is sizeable. Smaller but also growing exports of processed fruit originate in other countries of North Africa and Latin America. The most important export items are canned pineapples and citrus juices, the value of the former being three times as high as that of citrus juices. In both cases, as well as in the majority of others, developing countries have to compete with developed countries, especially the United States.

61. Table 8.1.3/I shows the main flows of international trade in processed fruit in 1960-61. Exports from developing regions, at $84 million, amounted to almost one-fifth of the world total (excluding centrally-planned countries). However, their net foreign exchange earnings on this account were only about $55 million, as they imported $29 millions' worth of

TABLE 8.1.3/I

International trade in processed fruit (SITC Group 053), average 1960-61

(Exports in millions of dollars, f.o.b.)

From \ To	World [a]	Developed countries					Developing countries
		Total	North America	West and South Europe	Oceania and S. Africa	Japan	
WORLD [a]	394.9	365.9	102.4	251.3	3.8	8.4	29.0
Developed countries	311.1	282.1	81.6	196.9	3.0	0.6	29.0
North America	117.4	102.3	47.9	53.6	0.3	0.5	15.1
West and South Europe	95.6	87.5	21.8	64.8	1.3	0.1	8.1
Oceania and South Africa	71.5	67.2	3.1	62.7	1.4	n	4.3
Japan	26.6	25.1	8.8	16.3	—	.	1.5
Developing countries [b]	83.8	83.8	20.8	54.4	0.8	7.8	
Latin America	10.2	10.2	8.1	2.0	—	0.1	.
Middle East	8.3	8.3	0.1	8.2	n	—	...
Asia and Far East	38.0	38.0	12.3	17.6	0.4	7.7	...
Africa	27.3	27.3	0.3	26.6	0.4	—	...

Source: United Nations Commodity Trade Statistics, 1960 and 1961.

[a] Excluding centrally-planned countries, and trade between developing countries for which no data were available.

[b] Exports from developing countries have been calculated by using c.i.f. import returns of developed countries and adjusting them to f.o.b. basis.

n Means negligible.

processed fruit from developed countries. This indicates the extent of possible import substitution.

62. Among the developing regions, Asia and the Far East was the main exporter, on account of shipments from Malaysia, the Philippines and China (Taiwan) to Western Europe, North America and Japan. Africa followed, with its markets practically confined to Western Europe. Most of Latin American exports went to North America, while the Middle East found its markets in Western and South Europe.

63. Demand for processed fruit, especially in developed countries, has rapidly increased in recent years. This was caused by the technological progress as well as by the changes in consumption habits and preferences following a rise in the standards of living. In the United States, the volume of processed citrus and non-citrus fruits now exceeds that marketed for fresh use. In the United Kingdom, the volume of processed and preserved fruits approaches 400,000 tons annually, while imports into the Federal Republic of Germany between 1959 and 1962 rose from 200,000 to 375,000 tons, with the import value almost doubling from $45 to $87 million. Dynamic technology leading to the development of new products or new processes for preserving quality and improved methods for transportation, storing, and handling on the one hand, and a rising consumer demand on the other hand, make it likely that the trend toward processed fruits will continue to rise.

64. Although such a trend seems to offer opportunities for developing countries, there are many technical and economic problems involved which warrant careful consideration before embarking on any definite project. First of all, fruit processing tends to be capital-intensive; the technology is not always simple and demands high labour skills. As concerns the raw material, it must be considered that not all varieties of the various kinds of fruit that may be processed are equally suitable for processing and the fresh market. Double purpose varieties, perfectly interchangeable for either outlet, exist only in the minority of cases. Although processors are able to use sometimes fruit which, because of external defects, substandard shape or size, etc., cannot be marketed fresh but is suitable for processing purposes, there is a tendency for processed and preserved fruit similar to that existing in the fresh market toward steady improvements in quality. This aim is not only achieved by the introduction of novel technological processes but also by raising the requirements for the raw material to meet specific standards. Thus, to establish a proper fruit processing industry would often presuppose considerable long-term investment in new plantings of varieties which possess the required properties.

65. The question of the import content of canning and packing materials is important for fruit processing, canning and juice manufacture in particular. In the United States, these materials account for some 19 per cent of total cost, and in Mexico for 22 per cent. In Morocco, the proportion is as high as 29 per cent; this is more than the cost of the fruit, which is estimated at only 20 per cent of total production cost. Unless, therefore, the required materials can be produced domestically, they may present a burden on the balance of payments in developing countries. Furthermore, considerable pre-investment is required for power supply, storing and transport facilities, especially in the case of frozen fruit or juice manufacture. On the other hand, such investment induced by the establishment of fruit processing industries would be to the benefit of the whole economy and more particularly of other processors of foodstuffs such as vegetable, meat or fish. China (Taiwan) provides an instructive example of such developments.[5]

[5] See Salter, C. L.: "Non-Utilized Potential in Economic Development", *Industry of Free China*, Vol. 18, No. 4, October 1962, Taipei.

TABLE 8.1.3/II

Import duties on citrus fruit and juice and on processed pineapple in selected countries in 1963

(*Percentages* ad valorem)

Items	*France (MFN rate)*	*Germany Fed. Rep.*	*EEC (Common external tariff)*	*United Kingdom (full rate)* [a]	*United State (cents)*
Fresh citrus fruit:					
Lemons	12.9	2.4	8	10	1.25 per lb.
Other	12-30.5 [c]	5.0-13 [c]	12-20 [c]	10 [f]	1 per lb.
Citrus juices:					
Concentrated juice [b]	82.6	26.6	42	[g]	35 per gallon [i]
Others	26.7-27	13-21.2	14-20	[g]	20 per gallon
Preserved pineapple	23-31.5	21.5-31.4 [d]	20-26 [e]	[h]	0.75 per lb.

[a] Fresh fruit grown in and consigned from any part of the Commonwealth is exempt, but canned fruit and sweetened juice are chargeable at a preferential rate equal to half the full rate, in respect of the added sugar content.

[b] Of more than 1.33 specific gravity.

[c] Varies with season.

[d] Containers of less than 5 kg; varies with sugar content and size of containers.

[e] Rising with sugar content.

[f] For oranges, the rate is 3.6d. per cwt.

[g] Grapefruit and orange juice are duty free. On lemon and lime juices, the duty is 15 per cent *ad valorem*.

[h] 5s. per cwt.

[i] On the unconcentrated natural fruit juice content.

66. In addition to these problems on the production side, prospects for exports of processed fruit from developing regions are uncertain. Among the developed regions, only Western Europe is a net importer of processed fruit. In 1960-61 its net trade deficit amounted to about $100 million, about a half of which was supplied by developing countries. All the other developed regions were net exporters, particularly Oceania and South Africa, with an export surplus approaching $70 million. The net export surplus of Japan amounted to nearly $20 million and that of North America to about $15 million.

67. In this situation, the possibilities of expanding processed fruit exports from developing regions seem to depend mainly on the West European market, but the competition with other developed regions makes even this market highly uncertain. The pressure of projected large increases in world fruit production will undoubtedly lead to a very keen competition between the fresh and the processed sector. Yet, processing may in certain instances offer outlets which would not otherwise exist with cost considerations in a very prominent place in any plans for the development of processing industries.

68. On the brighter side, it may be said that the income-elasticity and perhaps also the price-elasticity of demand for processed fruit, especially for juices, are high. The spread of household refrigerators in Europe is one of the main contributing factors. Thus it cannot be excluded that West European import demand will continue to grow at a similar rate as hitherto (3-4 per cent per annum) and that some increase in North American demand for products from developing regions, especially Latin America, may take place. Further improvement could result from the substitution of imports of processed fruit from developed countries and from the abolition or at least reduction of import barriers in developed and centrally-planned economies. As shown in table 8.3.1/II, tariffs on fruit imports in developed countries are sometimes high and often discriminate against the processed in favour of the fresh fruit. Restrictions in centrally-planned countries are of an administrative character and their relaxation could also be of great importance to developing countries. Thus, provided the production and trade policies of developed countries make it possible, developing countries may be able to take advantage of some of the opportunities offered by an expanding market and may gain some additional foreign exchange from the export of processed fruit items.

8.1.4. *Vegetable oils*

69. There appears to be considerable scope for expanding the processing of vegetable oilseeds in developing countries and increasing their exports. The major items in this trade are copra, groundnuts, palm kernels, linseed, castor and their oils. In recent years, exports of vegetable oils from developing countries amounted to about one-third of combined total value of world trade in oils as such and the oil equivalent of oilseeds. Statistics of exports of copra, groundnuts and palm kernel seeds and oils from developing countries in 1961 are given in table 8.1.4/I. Exports from countries listed in this table accounted for 80 per cent of world exports of copra seed, 70 per cent of copra oil, 77 per cent of groundnuts and 64 per cent of groundnut oil.

70. The share of oils in total exports of oils and seeds from developing countries was 29 per cent in the case of groundnuts, 20 per cent for copra and 14 per cent for palm kernel. During the fifties, these proportions increased, but not much. In 1961, the Philippines and Indonesia were the principal exporters of copra seed, but Ceylon was the main exporter of copra oil, followed by Malaya and the Philippines. Nigeria was the chief exporter of groundnut seed, but its groundnut oil exports were smaller than those of Senegal, which was also an important exporter of groundnut seeds.

71. The relationship between the exports of oils

TABLE 8.1.4/I

Main exports of copra, groundnuts and palm kernel seeds and oils from developing countries in 1961

(In thousands of metric tons)

Exporting country	*Seed (oil equivalent)*	*Oil*	*Oil as per cent of total seed and oil exports*
Copra (all developing countries)	1 103	280	20.5
Philippines	592	74	
Indonesia	150	—	
Malaya (incl. re-exports)	69	58	
Mozambique	39	3	
Ceylon	36	93	
Groundnuts (all countries listed below)	439	177	29
Nigeria	215	46	
Senegal	116	126	
Sudan	33	—	
Niger	28	5	
Mali	25	—	
Gambia	22	—	
Palm kernel (all developing countries)	326	53	14

Source: *Vegetable Oils and Oilseeds*, Commonwealth Economic Committee, London, 1963.

and oilseeds reflects differences in government policies. Ceylon imposed export duty on copra and its products long ago at rates favouring the exports of oil. In Senegal, a substantial crushing industry was established during the war, and prices and markets for both groundnuts and oil have been guaranteed since then by France. About 50 per cent of Senegal's groundnut exports are now in the form of oil and cake. In the Congo (Léopoldville) crushing of palm kernels for oil for both the domestic market and for export was encouraged during the fifties, and exports of oil rose from 25 to 85 per cent of the total (including kernels in terms of oil). India banned the exports of oilseeds in the early fifties, except for hand-picked selected groundnuts for the confectionery trade and minor items such as safflower and niger seed. Argentina has also banned the export of linseed since the early fifties, although in recent years limited quotas were permitted.

72. In some other countries, oilseed crushing and oil exports increased without government help. A thriving copra crushing industry developed in Singapore and Malaya, based partly on local supplies and partly on imports from Indonesia. Since the war, Malaya has always had net exports of coconut oil and from the early fifties, net exports of copra changed to net imports. In the past two years, copra crushing expanded rapidly in the Philippines and exports of oil

TABLE 8.1.4/II

Structure of costs of crude and refined coconut oil in the federation of Malaya, 1961

	Cost of equivalent quantities	*Cost of processing, by components* [a]			
		Fuel and electricity	*Packaging materials*	*Other materials*	*Value added*
1. Copra	100				
2. Crude coconut oil [b]	101				
3. Oil cake	23				
4. Difference (3 + 2) − (1)	24	3.0	3.6	3.6	13.7
Percentage composition of (4)		13	15	15	57
5. Refined oil	111				
6. Difference (5) − (2)	10	0.2	2.2	4.1	3.2
Percentage composition of (6)		2	22	40	32

Source: Federation of Malaya, *Census of Manufactures*, 1961.

[a] Calculated on assumption that inventories consisted wholly of own products.

[b] Unit value of crude oil purchased by refineries.

TABLE 8.1.4/III

Trade between developed and developing countries in fats and oils

(Average exports 1960/61, in millions of dollars, f.o.b.)

To \ *From*	*Developed countries*	*Developing countries* [a]
Oil seeds		
Developed countries	417.7	553.8
Developing countries	51.3	...
Vegetable oils and fats		
Developed countries	219.1	310.7
Developing countries	78.3	...
Sub-total		
Developed countries	636.8	864.5
Developing countries	129.6	...
Processed animal and vegetable oils		
Developed countries	62.6	21.1
Developing countries	33.3	...
Margarine		
Developed countries	64.5	0.3
Developing countries	57.2	...
Sub-total		
Developed countries	127.1	21.4
Developing countries	90.5	...
Total (all fats and oils) [b]		
Developed countries	961.4	918.9
Developing countries	265.4	147.1[c]

Source: Food and Agriculture Organization.

[a] Exports from developing countries measured as imports into developed countries and reduced by 10 per cent to approximate their f.o.b. value.

[b] Including unrefined animal oils and fats not shown separately.

[c] Average 1959-61.

in 1963 rose to 219,000 tons from 74,000 tons in 1961. This occurred despite the fact that a gradual reduction is scheduled in the tax-free quota for Philippine coconut oil imports into the United States, and that in 1963 the current quota was exceeded. Crushing of groundnuts in Nigeria increased slowly but steadily in the past decade and most of the oil was exported. In spite of these instances of rising proportion of oil exports, there has been only a very modest increase on a world-wide basis because of a rapid growth of seed exports from countries that mainly export seeds.

73. Value added by oilseed crushing in developing countries varies. As shown in table 8.1.4/II, in the Federation of Malaya in 1961, there was a difference of about 24 per cent between the price of copra and the combined value of crude coconut oil and copra cake produced from a ton of copra.

74. Per unit export values of copra and its products from the Philippines in 1956 and 1958 show a difference of about 12 per cent. According to a report issued by the U.S. Department of Agriculture in 1959, crushing costs in Senegal were between $9.80 and $12 per metric ton of groundnuts (in-the-shell basis), i.e., about 15 per cent of the value of the groundnuts.

75. Table 8.1.4/III shows trade in fats and oils in 1960/61 between developed and developing countries. If value added by processing of oilseeds in developing countries is assumed at around 15 per cent,[6] export returns to developing countries in 1960/61 could have been larger by about $80 million a year if all seeds were processed before export. However, in practice, with an increase in the proportion of exports in the form of oil and oil cake, the crushing industries in developed countries would bid up the price of oilseeds in relation to the prices of oil and meal, and the crushing profit margin would diminish both in importing and exporting countries. Some import savings would be possible through the expansion of refining and hydrogenating capacities in developing countries, and this would be a natural type of evolution for the future in countries that have a sufficiently large market for margarine or other relatively highly processed fats and oils to justify the necessary investment. Imports into developing countries of processed oils averaged $90 million in 1960 and 1961, which is an indication of the possibilities of import substitution.

76. Since in most developing countries the domestic market for vegetable oils and oil cake is rather small and is expected to remain so for some years to come, the oilseeds industries in these countries will continue to depend largely on exports. Therefore, the question of profitability of oilseed crushing industries in developing countries can be reduced to a matter of comparative costs of local and overseas processing. It appears that in recent years large crushing firms in developed countries made very little profit on the crushing process itself. The decisive factor was success in buying and blending of materials, and in these operations crushers in developed countries have very marked advantages. They can draw on supplies of various kinds of raw materials from a variety of sources as prices and demand change. But even assuming identical conditions on the side of raw material supply, crushers in developing countries appear to be still at a disadvantage with regard to the end products of their industry. With large crushers in developed countries, oil and cake are the raw materials for further manufacturing processes, including the margarine, soap and compound feeding-stuffs. The prices of these commodities fluctuate much less than those of oil and cake, which are the end products of crushers in developing countries. Thus, it seems that the competitive strength of crushers in developing countries would have to depend on lower costs of processing and the only favourable factor might be the availability of cheap, unskilled labour. In crushing, however, capital charges are the main item in cost, and it should be noticed that cheap labour does not necessarily mean low labour costs. Similar considerations apply also to refining as distinct from basic extraction.

77. Import duties on tropical seeds and oils in selected developed countries are shown in table 8.1.4/IV. As regards barriers against vegetable oil

[6] Further investigation would be necessary to confirm or modify this figure.

TABLE 8.1.4/IV

Import duties on tropical oilseeds and oils 1962-1963

(*Percentages* ad valorem)

	EEC	*Australia*	*Denmark*	*Finland*	*Norway*	*Sweden*	*Switzerland*	*U.K.*	*U.S.A.*	*Canada*	*Japan*
Oilseeds											
Copra	—	—	—	74	—	—	0.1	10	—	—	—
Palm kernels	—	—	—	...	—	—	0.1	10	—	—	—
Groundnuts	—	—	—	48	—	—	0.1	10	26-49	—	20
Oils											
Coconut oil	5-15	12	4-5	6-97	...	0 + (47) [a]	1-18	15	7	10-17	10
Palm oil	5-14	12	0-5	10-42	8	0 + (50) [a]	1-10	10	—	10-20	10
Palm kernel oil	5-15	12	4-5	10-104	...	0 + (42) [a]	1-18	10	3	10-20	10
Groundnuts oil	5-15	12	4-5	6	...	0 + (37) [a]	1-10	15	33	10-20	...

Source: General Agreement on Tariffs and Trade (GATT) COM. III, Expansion of Trade.

[a] Import fees.

exports, Commonwealth countries have free access to the United Kingdom market, and African countries associated with France can rely on selling certain quantities in France at preferential terms. For the rest the tariffs of developed countries become the more onerous the higher the stage of processing. Additional restraints, such as the special processing tax in the United States, quotas and importing monopolies, in some countries operate similarly as obstacles to exports of the processed commodities from developing countries.

78. Trade between developing countries is also impeded by competing attempts to become independent of imports in the national oil economies, and by customs tariffs which, in the more advanced countries, protect the higher stages of processing.

79. These trade barriers combine with the technical and other considerations concerning economies of scale, location and access to a wide range of supplies, and the generally slow rate of agricultural improvement in developing countries. Together, they cast some doubt on the possibility of significant increase, in the present decade, in the ratio between the exports of oil and those of seeds in these countries. To make the best of the situation, tax and trade policies in developing countries might be shaped along the lines of more successful countries, as mentioned at the beginning of this section.

8.1.5. *Other processed food*

80. A number of food products other than those discussed above are now processed in developing countries, or could be in the future. The manufacture of soluble coffee, or sugar refining, are two obvious examples. Unfortunately, the kind of detailed information without which no analysis is possible, is either not available at all or not readily so. If some food processing industries are omitted from this study, it is, therefore, not for any lack of recognition of their actual or potential importance to many countries, but for lack of data and also of time.

81. In three cases—grains, rice and cocoa—it has at least been possible to assemble some of the basic statistics of present world trade in processed products and to present a few general observations on the prospects of processing industries in developing countries.

82. (a) *Processed Grains.* The development of processing industries based on grains offers developing countries a long-term chance of foreign exchange savings. To provide livestock with balanced feed mixture at low cost is an important means of increasing livestock production and of reducing the prices of various animal products. The setting up of feed mixing plants may constitute a major step in that direction.

83. The UN/FAO World Food Programme is at present exploring this possibility in a number of countries by providing grains to be mixed with locally produced ingredients such as cotton-seed cakes, fish meal, minerals, etc. In some cases, feed-mixing mills are being supplied under the auspices of the Freedom from Hunger Campaign. It is hoped that this will lead in due course to the establishment of a compound industry and to the growth of national markets for feedstuffs in developing countries.

84. Another opportunity for processing industries in such countries is offered by the growing consumption of wheat products (bread, biscuits, macaroni, breakfast foods, etc.). Between 1955 and 1960, 29 new flour mills were built in 19 different countries, which previously had few or none.[7] In many instances, milling by-products are used as animal feed, which increases the profitability of the industry. Countries which formerly maintained a regular flow of flour and biscuit imports (e.g., Ghana) are now replacing some of them by wheat, and this may have a favourable effect on their balance of payments, depending on local circumstances. Table 3.1.1.b in the Statistical Appendix shows trade in wheat flour in 1953-55 and 1959-61.

85. Exports from developing countries represent only a fraction of total world flour exports and have, moreover, been declining sharply. In 1953-55 the developing countries' share in total world exports was 10 per cent in terms of volume and 14.6 per cent in terms of value; in 1959-61 the corresponding percentages were 3.4 and 4.9. During the same period the developing countries' imports rose from 3,426 to 4,412 thousand tons of wheat equivalent, and their share in both the volume and the value of world imports dropped from 75 per cent to a little less than 70 per cent.

86. Latin American countries export almost exclusively to other countries in the same region, while African exports go mainly to Western and Southern European markets.

87. The imports of Latin America originate mainly in the United States and Canada, and those of the African region both in North America and in West and South Europe.

88. (b) *Rice Bran.* Rice itself is used in the manufacture of a number of products, such as rice flour, starch, beer and saké, but rice bran is the only by-product of commercial importance. Though long neglected for a number of technical and economic reasons, rice bran has considerable nutritive value, being rich in fat, protein and vitamin, and it is now being increasingly used as a feedstuff for livestock and poultry. Rice bran can also provide an important amount of oil (usually 10 to 17 per cent of its weight, unrefined). The refined oil is used in shortening, margarine, or as cooking oil, and the crude oil in soap manufacture.

89. World production of rice bran is only a small fraction of its potential because of serious milling, marketing and storage difficulties. The main impediment lies in the type of small mill, often manually operated, which is common to many rice-producing areas, and which does not permit separation of the bran from the inedible husk. Nevertheless, interest in rice bran has been stimulated in recent years by the growth of local feed requirements in rice-producing countries and by a greater appreciation of the value

[7] See International Wheat Council, *Review of the World Wheat Situation 1960*, table 38, p. 67.

of rice by-products as export earners or as substitutes for imported feeds or vegetable oils.

90. International trade in rice bran has expanded since 1950 but is still small; at present, exports are worth some $12 million a year. In 1959-61, Burma was the biggest exporter of rice bran, followed by Cambodia and India, and the main market was the United Kingdom. The tendency for producing countries to use more of their bran for their own feed and oil-extracting purposes limits the supply available for the world rice bran market in the short-run, but the gradual increase in production as more modern mills are installed should raise the amount entering commercial channels and eventually provide more adequate supplies for export too.[8]

91. (c) *Cocoa Products*. Tables 8.1.5/I and 8.1.5/II show trade in semi-manufactured cocoa products in 1953-55 and 1959-61. These products include cocoa butter, cocoa powder, cocoa cake, cocoa paste and liquor and milk crumb, and are expressed in cocoa bean equivalent.

92. Cocoa is grown exclusively in developing countries. Exports of cocoa products by the cocoa-growing developing countries expanded by about 85 per cent from 40,000 tons in 1953-55 to 75,000 tons in 1959-61. Exports are mainly directed to developed countries, particularly to North America and Western Europe. About 80 per cent of total exports from developing countries originate in Latin American countries (Brazil is the main exporter, followed by the Dominican Republic) and 20 per cent in two African countries, Ghana and Cameroon.

93. In terms of value, developing countries exported $41 million in 1959-61, of which about $40 million went to developed regions. The greater part of world trade in processed cocoa products consists of products manufactured from imported beans by the developed countries, particularly Western Europe.

94. An increase in primary processing of cocoa beans in producing countries, i.e., breaking of cocoa

[8] See: "Rice Bran: Utilization and Trade", *FAO Monthly Bulletin of Agricultural Economics and Statistics*, January 1964.

TABLE 8.1.5/I

Trade in cocoa products

(Exports in thousands of tons of bean equivalent)

From / To	World	Developed countries			Developing countries		
		Total	North America	West and South Europe	Total	Latin America	Africa
1953-55 AVERAGE							
World	137.3	96.9	7.1	89.8	40.4	32.7	7.7
Developed countries	127.1	88.8	5.3	83.5	38.3	30.6	7.7
North America	50.2	30.8	3.2	27.6	19.4	19.4	—
West and South Europe	69.4	51.7	1.9	49.8	17.7	10.0	7.7
Australia, N. Zealand, South Africa	5.5	4.8	0.1	4.7	0.7	0.7	—
Japan	2.0	1.5	0.1	1.4	0.5	0.5	—
Developing countries	7.6	5.5	1.8	3.7	2.1	2.1	—
Latin America	4.6	2.5	1.1	1.4	2.1	2.1	—
Middle East	0.9	0.9	0.2	0.7	—	—	—
Asia and Far East	1.9	1.9	0.5	1.4	—	—	—
Africa	0.2	0.2	—	0.2	—	—	—
Centrally-planned countries	2.6	2.6	—	2.6	—	—	—
1959-61 AVERAGE							
World	200.8	126.3	2.2	124.1	74.5	61.2	13.3
Developed countries	188.6	115.7	1.3	114.4	72.9	59.6	13.3
North America	76.4	39.0	1.0	38.0	37.4	33.2	4.2
West and South Europe	101.9	66.8	0.2	66.6	35.1	26.0	9.1
Australia, N. Zealand, South Africa	6.6	6.2	—	6.2	0.4	0.4	—
Japan	3.7	3.7	0.1	3.6	—	—	—
Developing countries	6.7	5.4	0.9	4.5	1.3	1.3	—
Latin America	3.0	1.8	0.4	1.4	1.2	1.2	—
Middle East	2.0	1.9	—	1.9	0.1	0.1	—
Asia and Far East	1.0	1.0	0.5	0.5	—	—	—
Africa	0.7	0.7	—	0.7	—	—	—
Centrally-planned countries	5.5	5.2	—	5.2	0.3	0.3	—

Source: Trade statistics of the countries concerned.

NOTE: Centrally-planned countries do not export any cocoa products.

TABLE 8.1.5/II

Trade in cocoa products

(Exports in millions of dollars, f.o.b.)

From / To	World	Developed countries			Developing countries		
		Total	North America	West and South America	Total	Latin America	Africa
1953-55 AVERAGE							
World	114.5	90.4	7.7	82.7	24.1	20.8	3.3
Developed countries	106.9	84.2	6.4	77.8	22.7	19.4	3.3
North America	29.7	18.0	3.3	14.7	11.7	11.7	—
West and South Europe	69.5	59.6	2.7	56.9	9.9	6.6	3.3
Australia, N. Zealand, South Africa	5.5	4.9	0.2	4.7	0.6	0.6	—
Japan	2.2	1.7	0.2	1.5	0.5	0.5	—
Developing countries	5.7	4.3	1.3	3.0	1.4	1.4	—
Latin America	3.4	2.0	0.3	1.7	1.4	1.4	—
Middle East	0.9	0.9	0.2	0.7	—	—	—
Asia and Far East	1.2	1.2	0.8	0.4	—	—	—
Africa	0.2	0.2	—	0.2	—	—	—
Centrally-planned countries	1.9	1.9	—	1.9	—	—	—
1959-61 AVERAGE							
World	137.5	96.6	1.4	95.2	40.9	33.5	7.4
Developed countries	130.7	90.4	0.9	89.5	40.3	32.9	7.4
North America	36.3	18.7	0.7	18.0	17.6	15.3	2.3
West and South Europe	86.0	63.7	0.1	63.6	22.3	17.2	5.1
Australia, N. Zealand, South Africa	4.9	4.5	—	4.5	0.4	0.4	—
Japan	3.5	3.5	0.1	3.4	—	—	—
Developing countries	4.2	3.7	0.5	3.2	0.5	0.5	—
Latin America	1.6	1.2	0.2	1.0	0.4	0.4	—
Middle East	1.6	1.5	—	1.5	0.1	0.1	—
Asia and Far East	0.5	0.5	0.3	0.2	—	—	—
Africa	0.5	0.5	—	0.5	—	—	—
Centrally-planned countries	2.6	2.5	—	2.5	0.1	0.1	—

Source: Trade statistics of the countries concerned.

NOTE: Centrally-planned countries do not export any cocoa products.

beans into butter, powder or paste, could make only a small contribution to their foreign exchange earnings. The main advantage of such an industry could be in making possible more complete utilization of sub-standard beans not fit for export. The value added to standard grade beans, however, is comparatively small, and the industry is not labour-intensive. Nevertheless, it is likely that the share of cocoa butter and butter and powder in exports will increase.

95. Processing would assume greater economic significance to the cocoa producing countries if complete chocolate industries could be established. In the immediate future, however, this would be difficult because of the absence of other primary products, such as milk, nuts, etc., as well as of ancillary industries and skilled labour.

96. In any event, climatic conditions and the small size of domestic markets for chocolate products are likely to impede the development of complete chocolate industries in developing countries unless encouraged by government subsidies and other forms of aid.

8.2. *Manufactures of textile fibres*

8.2.1. *Hard fibre manufactures*

97. Since the last war, the manufacture of cordage and other hard fibre products has been expanding rapidly in Latin America, particularly in Mexico and Cuba, and more recently in Haiti, the Dominican Republic and Brazil. More than half the volume of sisal and henequen exported from this region is now in processed form. Despite a shortage of modern machinery, the abundance of cheap fibre and the low cost of labour make Latin American cordage mills competitive with those of North America, whither most exports are directed. Since 1960, cordage shipments from Cuba have been sent chiefly to centrally-planned countries, especially the USSR.

98. Table 8.2.1/I shows the volume and value of exports of hard fibre manufactures from the main Latin American producing countries in 1953-55 and 1959-61. In the intervening period, the value of these exports increased by about 60 per cent to approximately $20 million a year, of which $6 million are

TABLE 8.2.1/I

Exports of hard fibre manufactures from the main Latin American producing countries, 1953-55 and 1959-61 averages

	1953-55		*1959-61*	
	Thousand metric tons	*$ million*	*Thousand metric tons*	*$ million*
Cuba	2.4	0.9	5.4	1.6
Dominican Republic	—	—	1.0	0.3
Haiti	—	—	1.6	0.5
Mexico	46.9	11.1	75.1	17.2
TOTAL	49.3	12.0	83.1	19.6
of which to:				
Developing countries	1.5	0.4	0.4	0.1
Centrally-planned countries	—	—	1.5 [a]	0.4 [a]

Source: Trade statistics of the countries concerned.

[a] Exports from Cuba to centrally-planned countries are estimates; in 1961 they amounted to 4,400 tons valued at $1.1 million.

TABLE 8.2.1/II

Composition of gross value of output and import content in hard fibre manufacturing in Mexico, 1955

(Percentages)

Items	*Total*		*Import content*	
Raw fibre	60		0.5	
Fuel and power	2		1.0	
Other net inputs	6		2.0	
Total inputs		68		3.5
Labour	11		—	
Profit	10 [a]		—	
Net value added	21			
Capital depreciation	11 [a]			5.5
Gross value added		32		
Gross value of output		100		9.0

Source: Censo Industrial 1956 (Información Censal 1955), Resumen General Secretaria de Industria y Comercio, Dirección General de Estadística, México, 1959.

[a] Estimates.

estimated to be gross value added by manufacture. In addition, large quantities of hard fibre bags and sacks used for packing sugar, coffee and other export crops, as well as some cordage used in local industry and commerce, replaced imported cordage and jute goods on which foreign exchange might otherwise have had to be spent.

99. In Asia and the Far East, existing cordage industries failed to grow. Some abaca manufactures were exported from the Philippines to the United States and developing countries in the Far East, but these exports have been almost stationary since the war. Their contribution to the Philippine balance of payments amounted to less than $2 million a year, and the value added by manufacture did not exceed $0.6 million.

100. Imports of cordage into developing regions, especially in Africa, increased only slightly between 1953-55 and 1959-61, as shown in table 6.4/I, chapter 6 of this study. These imports originated almost exclusively in developed countries, partly because of preferential customs treatment, as in the case of imports into East Africa from the United Kingdom, and partly on account of the proximity of European or Japanese suppliers. The potential import substitution effect for the developing regions as a whole can be estimated at $2.5-3 million.

101. Conditions in developing countries which grow the raw material lend themselves well to the manufacture of cordage and sacks from hard fibres. The industry is neither power-intensive nor capital-intensive, technology is or can be simple, and economies of scale are negligible. Raw material cost accounts for a considerable part of total costs of production, and since spinning mills can be located near plantations, transportation cost is practically nil. The gross value added by manufacture varies between one-half and two-thirds of the value of raw fibre. The import content of the finished product consists mainly of depreciation and fuel costs, and probably does not exceed 10 per cent of the gross value of output.

102. The post-war success story of the Mexican cordage industry may serve as an example of potential opportunities elsewhere.[9] Though old established, the industry had suffered a decline early in the century, and did not begin to expand again until the end of the Second World War. During the nineteen-fifties, its consumption of henequen doubled, while its exports of cordage almost trebled. Mexican mills employ about 100 workers each and produce an average of about 1,500 tons of henequen manufactures a year. Average capital investment amounts to $200,000 per mill, or some $2,000 per worker. The value of output is about $375,000 per mill and thus $3,750 per man employed. The percentage composition of the gross value of production and its import content are shown in table 8.2.1/II. It appears that processing adds some two-thirds to the value of raw fibre and that domestic factors of production alone add about 50 per cent. Thus for every dollar's worth of fibre exported in the manufactured rather than in the raw state, Mexico earns an additional 50 cents in foreign exchange.

103. Judging by the experience of Mexico, there is little difficulty in setting up cordage mills where there is a plentiful supply of raw fibre and an abundant labour force. Training workers seems to create few problems, and the low level of wages obviates the need for the latest machinery. Further rapid growth can therefore be expected in Brazil which, like Mexico, may develop a considerable export surplus of hard fibre products. In Africa, the first cordage mill is to be established in Tanganyika in 1964, and other countries could easily follow if the necessary capital were forthcoming. Similarly, an expansion could be anticipated in Asia and the Far East.

104. Assuming that these developments will take place, sisal and henequen from Latin America could be exported mainly in the form of cordage; only fibre

[9] Another example is Portugal which, though not a developing country, presents several features characteristic of developing countries; the growth of its cordage industry during the fifties paralleled that of Latin American industries.

for padding, carpets and building boards need be shipped in the raw state. This would raise Latin American exports of cordage to 200,000-250,000 tons by 1970. Exports of sisal cordage from Africa to other regions could reach 30,000-80,000 tons, while those of abaca cordage from Asia and the Far East are unlikely to exceed 15,000-20,000 tons a year. A deficit of up to 5,000 tons of sisal cordage in Asia and the Far East is likely to be met by Latin American or African supplies. Africa also appears as the most probable source of 10,000-12,000 tons of cordage imported into the Middle East.

105. Outlets in centrally-planned countries depend largely on government decisions. Immediately after the last world war, the Soviet Union took substantial quantities of Mexican twines, but these imports stopped abruptly in 1949. Only negligible quantities of cordage were imported into centrally-planned countries during the fifties, and it was only in the early sixties that Cuba began to export to these countries. Recent negotiations with East African Governments might result in an exchange of capital goods for a small flow of sisal cordage to Eastern Europe by the late sixties.

106. In developed regions, new markets for hard fibre products from developing countries will also be difficult to find without co-operation on the part of the importing countries. In the United States, imports of binder and baler twine are admitted free, and import duties on other cordage are relatively low. Pressure from US cordage producers for restrictions on imports of Latin American twines has hitherto been resisted. In Western Europe and Japan, however, imports of hard fibre manufactures are generally subject to tariff and, in some cases, quantitative restrictions. Table 8.2.1/III shows that customs duties increase with the degree of manufacture.

107. It follows that policies designed to foster manufacturing in developing regions are unlikely to succeed unless developed countries agree to lower the barriers against imports of hard fibre products. Even then, however, the possible increase in annual foreign exchange earnings of developing countries from this source is not likely to exceed $25-30 million by 1970, at 1959-61 prices. Some $19-24 million would accrue to Latin America, $3-3.5 million to Asia and the Far East, and $2.5-3 million to Africa. Such a contribution, therefore, can be described as only very modest.

TABLE 8.2.1/III

Tariffs on imported manufactures of hard fibres in selected countries

(*Percentages* ad valorem)

Items	*United Kingdom*	*France*	*EEC*	*Japan*
	For non-Commonwealth countries	*For countries outside the French Community*	*Common external tariff*	
Yarns	7.5	13	10	10
Cordage	15.0	14-16	15	15
Nets	20.0	16.7	14-19	10
New bags and sacks	20.0	23.0	15	22
Fabrics	20.0	20.8	20	10
Carpets	20.0	20-23	20-23	30

Source: GATT COM.III/119, 21 October 1963.

8.2.2. *Cotton manufactures*

108. During the post-war period, developing countries greatly expanded their cotton processing capacity and a number of them, particularly in Asia and the Far East, became substantial exporters of cotton textiles. The total volume of cotton manufactures shipped from developing to developed and centrally-planned regions increased by some 5 per cent a year, gathering momentum in the late fifties. In spite of this, in 1959-61, developing countries as a whole still remained large-scale net importers of cotton textiles from the rest of the world. In fact, the volume of their imports from developed and centrally-planned regions rose with industrialization, as newly established weaving and knitting sectors purchased foreign yarns. Net imports, however, declined from 300,000 tons in 1953-55 to 235,000 tons in 1959-61, and the deficit on cotton textile account was reduced from $773 million to $591 million during the same period (see tables 8.2.2/I and 8.2.2/II).[10]

109. In 1953-55, the only exporters of note were India, with its old-established cotton industry, and Hong Kong, with its newly founded mills. By 1959-61, Pakistan and UAR had emerged as major exporters, while China (Taiwan), Mexico, Israel and South Korea had laid the foundations of viable export industries. The most striking feature of the pattern of exports from developing regions during the fifties was the shift from intra-trade to markets in developed countries. Between 1953-55 and 1959-61, exports to developing countries rose by barely 6 per cent, while exports to developed and centrally-planned regions quadrupled. On the import side, there was a considerable increase in purchases of cotton tissues from mainland China, while those from developed regions declined.

110. In 1959-61, the largest flow of textiles from developing to developed countries originated in Hong Kong. Its tissues found especially good markets in the United Kingdom, where they profited from Commonwealth preferences, rising demand, and the partial obsolescence and high overheads of Lancashire's textile industry. Hong Kong garment-makers concentrated on exports to the United States; the price and quality of the garments were such that the American importers ordered them in large quantities.

111. India's markets in developing countries shrank because of self-sufficiency policies and competition from Chinese and Pakistani products. Indian textiles, like those from Hong Kong, found an expanding outlet in the United Kingdom, but this proved insufficient to offset losses in developing

[10] These tables include: yarn and thread; standard piece-goods; knitted fabrics; tulle, lace, ribbons and embroidery; felts, cables, rope, twine and other special products; blankets and rugs; household linen; carpets and rugs; all cotton hosiery and articles of clothing. Imports into developing countries are based on the export statistics of countries of origin. Both export and import statistics are reported at f.o.b. values.

TABLE 8.2.2/I

Trade of developing countries in cotton manufactures

(In thousands of metric tons)

	World		*Developed countries*		*Developing countries*		*Centrally-planned countries*	
	1953-55	*1959-61*	*1953-55*	*1959-61*	*1953-55*	*1959-61*	*1953-55*	*1959-61*
Exports from developing countries to:	165.3	266.8	30.3	119.2	132.4	141.0	2.6	6.6
Hong Kong	46.5	93.2	6.7	60.5	39.8	32.7	—	—
India	103.5	91.1	18.6	33.6	84.9	57.1	—	0.4
Pakistan	0.6	33.2	—	5.4	0.6	27.8	—	—
UAR (Egypt)	9.9	24.1	2.6	9.7	4.7	8.4	2.6	6.0
China (Taiwan)	—	12.0	—	3.6	—	8.4	—	—
Other developing countries	4.8	13.2	2.4	6.4	2.4	6.6	—	0.2
Imports into developing countries from:	466.4	501.0	312.0	290.0	132.4	141.0	22.0	70.0

countries. Pakistan became a large-scale supplier of cotton yarns to weaving and knitting mills in Asia and the Far East, and also captured a share of the United Kingdom market for tissues. The UAR, which is the only developing country with sizable export outlets in Eastern Europe, greatly increased its shipments of yarns to the Federal Republic of Germany and Scandinavian countries, as well as to the German Democratic Republic and Czechoslovakia, while finding a substantial market for its tissues in the United States. Exports from China (Taiwan), which did not begin until the late fifties, were directed chiefly to developing countries in Asia and the Far and Middle East, but a promising market for tissues and made-up articles was also found in the United Kingdom. Mexico, Israel and South Korea supplied mainly neighbouring countries in their respective regions, but they too found some outlets in the United States, the United Kingdom and the European Economic Community.

112. *Imports of cotton textiles* into developing regions from the rest of the world increased from 334,000 tons in 1953-55 to 360,000 tons in 1959-61 because of the rising domestic demand. Imports of yarn from Japan showed the greatest increase, while purchases of Japanese tissues rose at the expense of British and other West European competitors. China (mainland) found large export markets for its tissues in Indonesia and elsewhere in Asia and the Far East, displacing imports from developed countries, from India and from Hong Kong.

113. The raw cotton contained in exports of manufactures from developing to developed and centrally-planned countries amounted to about $27 million in 1953-55 and $91 million in 1959-61, and value added by processing is estimated at $25 million and $87 million respectively. Imports of cotton textiles into developing regions from the rest of the world were worth some $825 million in 1953-55 and $770 million in 1959-61, of which about $550 million and $500 million respectively can be imputed to value added by manufacture. Considerable import substitution therefore took place during the fifties. In 1959-61, some $50 million, which would otherwise have been spent on imports of cotton manufactures, is estimated to have been saved in this way.

114. Until the Second World War, cotton-producing developing countries had to rely almost

TABLE 8.2.2/II

Trade of developing countries in cotton manufactures

(In millions of dollars, f.o.b.)

	World		*Developed countries*		*Developing countries*		*Centrally-planned countries*	
	1953-55	*1959-61*	*1953-55*	*1959-61*	*1953-55*	*1959-61*	*1953-55*	*1959-61*
Exports from developing countries to:	245.5	370.2	48.2	166.8	194.0	193.1	3.3	10.3
Hong Kong	77.1	135.0	12.9	86.2	64.1	48.7	0.1	0.1
India	145.2	138.8	27.0	49.8	118.2	88.6	—	0.4
Pakistan	0.5	28.7	—	6.5	0.5	22.2	—	—
UAR (Egypt)	13.3	35.8	3.5	11.5	6.6	14.7	3.2	9.6
China (Taiwan)	—	14.3	—	4.6	—	9.7	—	—
Other developing countries	9.4	17.6	4.8	8.2	4.6	9.2	—	0.2
Imports into developing countries from:	1 018.3	961.1	792.0	675.0	194.0	193.1	32.3	93.0

Source: UN Commodity Trade Statistics and *National Trade Statistics.*

TABLE 8.2.2/III

Cotton textile machinery installed and capable of operation in selected developing countries

	Spindles (Thousands)		*Looms (Numbers)*	
	1951	*1961*	*1951*	*1961*
Burma	8	42	—	392
China (Taiwan)	—	450	—	12 800
Hong Kong	82	618	2 000	19 917
India	10 534	13 985	198 473	206 525
Indonesia	20	208	105	2 500
Iran	160	646	2 700	12 336
Iraq	21	52	—	1 307
Israel	45	246	487	4 730
Lebanon	67	75	1 250	2 100
Pakistan	169	1 998	9 584	30 000
Philippines	—	540	600	12 000
South Korea	305	479	3 613	17 861
South Viet Nam	85	88	—	7 100
Syria	27	133	1 642	4 557
Thailand	18	90	672	6 531
Congo	49	71	2 000	2 021
Ethiopia	31	79	...	1 459
Nigeria	—	44	—	1 126
Cuba	80	120	2 458	3 000
El Salvador	47	73	900	1 630

Source: International Federation of Cotton and Allied Textile Industries, Zurich.

completely on imports of cotton manufactures. The only exception was India, where a textile industry was already firmly established before the war. During the post-war period, however, cotton manufacturing spread to a large number of developing countries, and textile mills grew rapidly, as illustrated by table 8.2.2/III. The existence of a local supply of raw material and the presence of a labour force suitable for training encouraged the setting up of mills. Capital was often provided by foreign firms or Governments, either in the form of private investment, loans, or inter-government aid. Expansion was favoured by rising demand in domestic markets, most of which were heavily protected, and by government policies designed to promote industrialization. The main obstacles lay in a scarcity of managerial and technical skills, and in a lack of adequate transport facilities, distribution channels and sources of power.

115. Cotton mills tend to be less capital-intensive, and to use less fuel and power per worker, than the average manufacturing plant in developing countries; the value which processing adds to raw cotton, however, is also smaller than the value added to raw materials in other industries. This is illustrated by the following data for India and Pakistan:

	Value per person employed as percentage of the value for manufacturing industry as a whole		
	Fixed assets	*Fuel and electricity consumed*	*Value added*
India	60	72	78
Pakistan	79	86	80

116. The low capital and power intensity, and the relatively low wage rates, give developing countries a comparative advantage in the manufacture of all staple types of cotton goods, including hosiery and knitted underwear. Raw cotton accounts for a high proportion of total manufacturing costs, and transportation costs are negligible in those countries which process their own cotton crop. Gross value added by manufacturing tends to be of the same magnitude as the cost of raw fibre. The import content of the finished textiles consists chiefly of the cost of capital, fuel, chemicals and dyes;[11] it rarely exceeds 25 per cent of the gross value of output.

117. An outstanding example of the post-war development of cotton manufacture in a cotton-growing country is provided by Pakistan, where the first mills were established after the partition of India. Expansion was very rapid during the fifties, the volume of raw cotton processed rising from 22,000 tons in 1950 to 230,000 tons in 1960. Between 1950 and 1955 the industry concentrated on the domestic market, and local cotton goods gradually replaced imported textiles. In 1955 Pakistan entered the export field, becoming a net exporter in the following year. Since 1959 it has been one of the world's leading exporters of cotton yarns. In 1960, Pakistan's cotton mills numbered 165 and employed an average of 925 workers each. Fixed assets were approximately $116 million, or $722 per person employed. The gross value of output was estimated at $212 million, or $1,635 per worker. The percentage composition of gross output and its import content are shown in table 8.2.2/IV. This suggests that processing added about 130 per cent to the value of raw cotton, domestic factors of production alone being responsible for about 85 per cent.

118. Thus, for every dollar's worth of cotton exported in the form of textiles rather than as fibre, Pakistan appeared to earn an additional 85 cents of foreign currency. This figure, which is an average for the industry as a whole, is somewhat higher than the average added by spinning only (yarns) and a good deal lower than the average added by weaving and knitting (tissues and hosiery products). In actual fact, however, net export earnings from the sale of cotton textiles were considerably lower than the above estimates suggest, owing to the incidence of taxation, and to the operation of the export bonus scheme, so that the price margin of cotton textiles over raw cotton exported from Pakistan in 1959-61 was only some 45-50 per cent.

119. Large-scale industries making textiles chiefly for export also grew up in a number of developing countries which do not produce any raw cotton. By far the most important of these is Hong Kong, where mill consumption of cotton rose from 21,000 to 70,000 tons, and exports of cotton manufactures from about 50,000 to over 105,000 tons, between 1950 and 1960. Most of Hong Kong's cotton mills were established between 1948 and 1950, when, in view of the political

[11] This does not apply to countries where the cotton processed is imported, e.g., Hong Kong and China (Taiwan). In these countries the import content of domestic cotton textiles varies between one-half and two-thirds of the total gross product.

TABLE 8.2.2/IV

Composition of gross value of output and import content of cotton manufacturing in Pakistan, 1959-60

(*Percentages*)

Items	*Total*		*Import content*	
Raw cotton	43			
Cotton yarns, cotton tissues, man-made fibres	3		2	
Fuel and power	5		3	
Other inputs	7		5	
Total inputs:		58		10
Labour	17			
Depreciation, interest and profit	25		10	
Gross value added . . .		42		10
Total value of output . .		100		20

Source: Census of Manufacturing Industries, 1959-60. Central Statistical Office, Government of Pakistan.

NOTE: Spinning, weaving and knitting are treated together.

events on the mainland, many Chinese entrepreneurs decided to spread their investments. As part of this policy, they diverted to Hong Kong shipments of textile machinery already ordered, or purchased additional quantities of textile equipment to be delivered to Hong Kong.[12] In 1955-56, there were 17 spinning mills with an average of 18,000 spindles each, and some 7,000 power looms were installed and capable of operation. Of these, the 19 weaving mills possessed about 2,200 looms, or an average of 110 per mill. By 1963, the number of spinning mills had increased to 26, with an average of 23,000 spindles each, and the total number of looms had reached almost 20,000.

120. Machinery in Hong Kong spinning mills is for the greater part as up to date and as efficient as can be found anywhere in the world, and housed in modern factory buildings. Some mills are also equipped for weaving, for which they utilize the latest type of automatic looms. Recently, one of the spinning mills acquired a modern unit for the pressure dyeing of yarns in packages. Some big factories have been equipped with carding and combing machines, drying chambers for drying the dyed yarns, and self-packing machines.[13] Garment-making and knitting, which existed as cottage industries before the war, were also modernized. Between 1956 and 1959 most of the Colony's 14,000 industrial sewing machines had been replaced by high-speed machines turning out skirts, pyjamas, women's blouses, brassières and other articles. The modernization of the knitting industry dates from about 1953; it now produces shirts and underwear, socks, towels and—an especially important item—gloves. Costs of production in Hong Kong therefore compare favourably with those in developed countries, and since a very high proportion of the capital is now of local origin, the reward accruing to domestic factors of production is higher than in most other developing countries. The value added to raw cotton processed in Hong Kong can be estimated at some 170 per cent, and domestic factors probably contribute about 120-130 per cent. Since the cotton used is imported, however, its cost must be deducted from the export earnings of Hong Kong mills.

121. Prospects for further growth in cotton manufacturing appear favourable in a large number of developing countries. In the majority of cases, the supply of raw material presents few problems, increased area and improved techniques pointing to larger crops. Domestic demand for clothing and textiles is also rising with population trends and higher levels of national income. An adequate labour force is available in most developing regions, and capital for expanding capacity may be obtained through foreign credit or aid. Finally, more efficient use of machinery, which is a prime requisite for a viable cotton industry, can be achieved through the training of both labour and management. The great majority of new textile industries[14] enjoy some form of government assistance and protective legislation. Continued growth therefore seems assured for such recently established industries as those of Pakistan, the UAR, Mexico and Brazil, and, at a somewhat slower pace, for those of India, South Korea, Argentina and of Central American cotton producing countries.

122. For those countries which have to import part or all of the cotton they process, and which depend on export markets for a higher proportion of their textile output, e.g., Hong Kong, China (Taiwan) and Israel, prospects are more uncertain. The spread of cotton processing to an ever-increasing number of developing countries may reduce their outlets for yarns and staple fabrics, and though developed regions have undertaken to purchase larger quantities of cotton textiles under the 1962 GATT Long-term Arrangement for cotton textiles, their imports may not expand as rapidly as production potential in developing regions.

123. In their efforts to achieve greater savings or earnings of foreign exchange, the cotton textile industries of developing regions are faced by two serious obstacles. The first is represented by competition from man-made fibres, which is reflected in a slowing down of expansion in world cotton consumption, and in some downward pressure on prices. In the developing countries themselves, too high a degree of protection, and too wide a price margin between domestic and export prices, may raise the cost of domestic textiles to the point where man-made fibres are substituted for cotton. The second obstacle lies in the prohibitive import barriers erected by the most developed countries against textiles from developing regions. Examples of such barriers, which rise sharply with the degree of manufacture, are shown in table 8.2.2/V.

124. Assuming that cotton textiles made in developing regions could be rendered fully competitive with man-made fibre products, and that developed countries could agree to some lowering of trade

[12] Szczepanik, E. *The Economic Growth of Hong Kong*, Oxford University Press, 1958, p. 107.

[13] Szczepanik, E. *op. cit.* pp. 108-109.

[14] That of Hong Kong is a notable exception.

TABLE 8.2.2/V

Tariffs on imported cotton manufactures in selected countries

(*Percentages* ad valorem)

	United States	*United Kingdom*	*Sweden*	*France*	*EEC*	*Japan*
		For non-Commonwealth countries		*For countries outside the French Community*	*Common External Tariff*	
Yarns	5-35	7.5	8-13	10.8	8	5-7.5
Woven fabrics	11-30	17.5	13	16.1-18.1	14-19	10-20
Undergarments, knitted or crocheted . . .	17-42.5	20-25	15	21R	21	20-30
Outergarments, knitted or crocheted . . .	25-50	20-25	15	21-24R	16-17	25-30
Undergarments, woven	10-42.5	20-25	15	20-22.5R	18-20	21-30
Outergarments, woven	10-42.5	17.5-25	13-18	20-22.5R	18-20	20
Blankets	15-22.5	20	13	19	19	20-30

Source: GATT, Com. III/119, 23 and 28 October 1963.

barriers, it would be possible, by 1970, for developing countries to export some $200-250 millions' worth of cotton textiles to developed and centrally-planned regions. Of this total, about $95-120 million would represent value added by manufacture. At the same time, import substitution could probably reduce the import bill for cotton textiles by roughly $75-100 million. The total contribution of cotton and cotton textiles to the net export earnings of the developing world could therefore reach the neighbourhood of $175-200 million.[15]

8.2.3. *Wool manufactures*

125. Unlike the volume of other fibre products, the volume of wool textiles exported from developing countries failed to increase during the post-war period. Moreover, developing regions remained considerable net importers of wool textiles from developed countries. Statistics of world trade in wool manufactures are given in tables 8.2.3/I and 8.2.3/II.[16]

126. In Latin America, the attempt to export wool in the form of semi-manufactures, mainly tops, met with little success. The West European market, which absorbed important quantities just after the war, shrank with economic recovery, while Japan developed its own combing sector. It is true that large increases in the demand for tops in China (mainland) almost offset losses in developed countries, but this demand is generally considered purely temporary. Prices of crossbred tops declined in line with those of River Plate wools, so that the value of tops exported from Latin America to developed and centrally-planned countries fell from $34 million in 1953-55 to $24 million in 1959-61. During this period, the value added by manufacture was roughly $5-6 million, so that the processing industry maintained its export earnings while the primary product, wool, did not.

127. Exports of wool carpets from the Middle East increased in both volume and value, those to developed countries rising at a particularly fast rate. Since supply could not keep up with the rapidly expanding demand created in Western Europe by higher standards of housing, the price of "Persian" carpets was also forced up, so that the value of carpets exported from the region rose by much more than the weight. Shipments to developed and centrally-planned countries increased from $10 million to $17 million, of which added value accounted for about $6.5 million and $13 million respectively.

128. Exports of wool textiles from Africa tended to diminish during the fifties, as flocks declined and domestic wool consumption increased with population growth. The total value of wool textiles, chiefly rugs, exported to developed countries therefore fell from $2.1 million to $1.1 million, and the value added by manufacture from about $1.5 million to $0.6 million.

129. In Asia and the Far East, flocks increased sufficiently to permit substantial expansion in the volume of wool processed locally, and the volume of wool manufactures exported increased during the fifties. The increment reflected growing purchases by other developing countries and by China (mainland) of yarns and tissues from Hong Kong. The volume of exports to developed countries, in which rugs and carpets still predominated, failed to increase, but its value rose considerably with the improvement in the quality of products shipped, and with the upward trend of carpet prices in Western Europe. Exports to developed countries and China (mainland), valued at $8 million in 1953-55, reached $10.5 million in 1959-61, the added value rising from an estimated $4.5 million to some $7.5 million during the same period.

130. The raw wool contained in the exports of

[15] This total has been arrived at by adding exports of cotton ($650-700 million) to exports of cotton textiles ($200-250 million), and subtracting imports of cotton and cotton textiles ($675-750 million). Imports of capital and other inputs used in the cotton textile industries of developing countries have been ignored.

[16] These tables include: tops, yarns, tissues and other household textiles such as carpets and blankets. Clothing has been added whenever the item could be identified and both value and wool content worked out with a general conversion factor (see "Per Caput Fibre Consumption Levels 1948-1958" FAO *Commodity Bulletin* No. 31 p. 176). Noil, waste and rags have been excluded. Imports into developing countries are at c.i.f. values, while exports from developing countries are reported at f.o.b. values. Re-exports to countries in the same region have not been included in order to avoid double counting.

TABLE 8.2.3/I

Trade of developing countries in wool manufactures

(Metric tons of wool content)

	Latin America [a]	*Middle East* [b]	*Asia and Far East* [c]	*Africa* [d]	*Total*
1953-55 Average					
Exports to:					
World	13 900	2 286	2 661	504	19 351
Developed countries	12 645	1 711	2 098	376	16 830
U.S.A. and Canada	860	535	350	—	1 745
West and South Europe	10 137	1 176	1 608	376	13 297
Other developed countries	1 648	—	140	—	1 788
Developing countries	876	575	563	128	2 142
Centrally-planned countries	379	—	—	—	379
Imports from:					
Developed countries	3 400	8 120	16 421	9 346	37 287
Centrally-planned countries	—	—	90	—	90
1959-61 Average					
Exports to:					
World	12 424	3 144	2 837	166	18 571
Developed countries	9 450	2 653	2 003	166	14 272
U.S.A. and Canada	640	515	338	—	1 493
West and South Europe	8 523	2 122	1 554	166	12 365
Other developed countries	287	16	111	—	414
Developing countries	459	441	728	—	1 628
Centrally-planned countries	2 515	50	106	—	2 671
Imports from:					
Developed countries	3 932	13 373	18 574	6 973	42 852
Centrally-planned countries	28	87	14	17	146

Source: National trade statistics.

[a] For exports, only Argentina, Brazil, Uruguay.

[b] For exports, only Iran.

[c] For exports, only India, Hong Kong, Malaysia, Pakistan, China (Taiwan).

[d] For exports, only Algeria, Morocco, Tunisia.

manufactures from all developing to developed and centrally-planned countries declined from $31.5 million in 1953-55 to $24 million in 1959-61, while the value added by processing increased from $21.5 million to $27 million.[17] Imports of wool textiles from developed and centrally-planned regions were, however, on a considerably larger scale than exports to these regions, and they rose from 37,000 to 43,000 tons between 1953-55 and 1959-61. Their value, however, declined from $123 million to $103 million, as imports of tops and worsted yarns replaced imports of tissues, blankets and clothing. Value added by manufacture of these imported goods is estimated to have accounted for some $50 million in 1953-55 and $20 million in 1959-61; some degree of import substitution through processing therefore took place during the fifties, the value added by weaving and knitting accruing to factors in developing instead of those in developed regions. In 1959-61, at least $30 million, which would otherwise have been spent on imports of wool textiles, can be estimated to have been saved in this way.

131. The setting up and expansion of wool textile mills, especially in the worsted sector, appears to present far greater problems than the establishment of cotton mills, since the machinery is more specialized and the raw material less homogeneous, so that more skill is required of labour. Experience in Latin America, and even in developed countries such as Australia and New Zealand, has shown that it is difficult to produce wool textiles economically in countries without a solid industrial basis.[18]

132. In Latin America, there was little or no expansion in wool textile activity during the fifties, a decline in Argentina offsetting increases elsewhere. This is brought out by the following statistics of mill consumption in Argentina, Uruguay and Brazil:

	Argentina	*Uruguay*	*Brazil*
	Thousand metric tons, clean basis		
1953-55 average	30.5	16.8	12.9
1959-61 average	23.4	18.5	15.7

133. High protective tariffs, and government assistance to mills, enabled most wool-producing countries in Latin America to expand their wool textile capacity (see table 8.2.3/III), and some degree of import substitution took place. Owing to the high cost of imported machinery and other materials, and

[17] These estimates differ from those shown in chapter 6, because they take account of waste arising from manufacture.

[18] Harcourt, G. C., and Whitehead, D. H. "The World Textile Industry", Chapter 13, Alex Hunter (Ed.), *The Economics of Australian Industry*. (Melbourne, Melbourne University Press, 1963).

TABLE 8.2.3/II

Trade of developing countries in wool manufactures

(In thousands of dollars)

	Latin America [a]	*Middle East* [b]	*Asia and Far East* [c]	*Africa* [d]	*Total*
1953-55 Average					
Exports to:					
World	38 380	13 183	9 264	2 099	62 926
Developed countries	32 793	9 784	7 739	1 957	52 273
U.S.A. and Canada	2 328	2 932	1 878	—	7 138
West and South Europe	25 858	6 852	5 430	1 957	40 097
Other developed countries	4 607	—	431	—	5 038
Developing countries	4 561	3 399	1 525	142	9 627
Centrally-planned countries	1 026	—	—	—	1 026
Imports from:					
Developed countries	15 855	37 332	44 865	24 532	122 584
Centrally-planned countries	—	—	160	—	160
1959-61 Average					
Exports to:					
World	25 365	20 250	12 949	1 064	59 628
Developed countries	18 563	16 783	9 542	1 064	45 952
U.S.A. and Canada	1 248	2 493	3 106	—	6 847
West and South Europe	16 750	14 130	5 907	1 064	37 851
Other developed countries	565	160	529	—	1 254
Developing countries	1 827	3 200	2 457	—	7 484
Centrally-planned countries	4 975	267	950	—	6 192
Imports from:					
Developed countries	15 915	39 813	24 653	22 320	102 701
Centrally-planned countries	33	128	23	27	211

Source: National trade statistics.

[a] For exports, only Argentina, Brazil, Uruguay.

[b] For exports, only Iran.

[c] For exports, only India, Hong Kong, Malaysia, Pakistan, China (Taiwan).

[d] For exports, only Algeria, Morocco, Tunisia.

to the scarcity of skilled labour, however, processing proved relatively expensive, and domestic wool textiles had to be marketed at prices which discouraged consumption. Consequently, the volume of wool manufactures available to Latin American consumers remained stationary at some 72,000 tons (clean basis), while the population increased from 176 to 203 million between 1954 and 1960.[19]

134. In other developing regions, the principal modern wool textile industry is in India, where there is an adequate entrepreneurial element and financial resources, and where the labour force is skilled in the traditional textile crafts of the country. Indian woollen and worsted mills enjoy a protected domestic market, and benefit from external economies resulting from general industrial development. They now process 5,000 tons of raw wool, compared to 4,000 tons in the early fifties,[20] and export small quantities of tissues and blankets to other developing countries. Expansion in the wool textile industry has contributed to the economic growth of India, but its contribution to the country's foreign exchange reserves was not significant. India is not a producer of the apparel wools used in woollen and worsted spinning, and consequently has to import large quantities of fine wool and tops, as well as oils and other chemicals used in wool processing. Capital costs form a higher proportion of the total gross product in the wool textile industry than in the cotton or jute industries. Value added accruing to domestic factors of production is therefore relatively small, and the effects of import substitution or increased exports of wool textiles on the Indian balance of payments was probably small.

135. Wool textile mills using advanced techniques have recently been established in Israel, Hong Kong and China (Taiwan), but these still operate on a very small scale; their annual consumption ranges from 100,000 tons in China (Taiwan) to 600,000 tons in Israel. These industries process chiefly imported wool and tops, and with the exception of the Hong Kong glove industry, their main outlet is the domestic market, although they have now begun to export wool textiles to other developing countries, and even to developed regions. In all these three cases the industry has benefited from the immigration of experienced entrepreneurs and highly skilled labour often with a long tradition of wool manufacture. All three industries, moreover, found it relatively easy to finance the building and extension of wool mills through remittances from abroad. None of these conditions is likely to be repeated elsewhere, so that

[19] "Per Caput Fibre Consumption Levels", *Commodity Bulletin* No. 31, FAO, Rome, 1960, and *Monthly Bulletin of Agricultural Economics and Statistics*, Vol. II, No. 1, FAO, Rome, January 1962.

[20] This excludes an annual consumption of some 6,000 tons by craftsmen using traditional methods.

TABLE 8.2.3/III

Wool textile machinery installed and capable of operation in selected developing countries

(*Numbers*)

Developing countries	Combs		Spindles				Looms (excl. carpet looms)	
	Rectilinear [a]		Worsted Continuous [b] (Thousands)		Woollen Self-acting [c] (Thousands)		Non-automatic [d]	
	1951	1960	1951	1960	1951	1960	1951	1960
Argentina . .	...	2 140	...	275.0	...	—	...	9 300
Uruguay . .	363	550	39.0	63.2	55.5	39.5	773	1 050
Brazil. . . .	—	—	160.0 [e]	189.5	40.0 [e]	51.6	...	4 444
Israel . . .	—	—	5.1	18.4	13.0	20.8	458	960
India	41	106	58.9 [f]	117.5	64.9 [f]	74.2	2 148	2 066 [g]
Hong Kong .	—	—	—	15.7	—	—	—	27

Source: Annual wool questionnaire: Commonwealth Economic Committee and International Wool Textile Organization.

The number of combs, spindles and looms has been converted to a common basis with the help of the following conversion factors:

[a] 1 noble comb equivalent to 2.8 rectilinear combs.

[b] 1 self-acting (mule) spindle equivalent to 0.714 continuous spindles.

[c] 1 continuous spindle equivalent to 1.6 self-acting spindles.

[d] 1 automatic loom equivalent to 1.33 non-automatic looms.

[e] Year 1952.

[f] Year 1950.

[g] Including carpet looms.

the experience of the three industries listed above is no guide to prospects for wool textile mills in other developing countries. Moreover, the small scale of their output and the high import content of their products make it unlikely that they will develop into more than marginal earners or savers of foreign exchange for their national economies.

136. More representative examples of wool processing in developing regions can be found in the handicraft industries of the Middle East, Asia and the Far East and of North Africa, which consume chiefly domestic wools to produce clothing for local consumption as well as rugs and carpets for export. The most important case is that of Iran, which processes some 7,000 tons of wool per annum, and in India, where "domestic" wool consumption is estimated at 6,000 tons a year; Algeria and Morocco follow with an annual consumption of 4,000 to 4,500 tons each. Although increasing use is made of machine-spun yarns in these industries, hand methods still prevail in weaving. The scale of firms is small, and female and juvenile labour is extensively employed, particularly in the manufacture of knotted carpets. Consequently, the level of overheads and labour costs is relatively low, and profits relatively high, particularly where the final product is exported to a developed region. The import content of such wool manufactures is limited to the capital costs, and possibly to the cost of chemicals, contained in the value of machine-spun yarn used; in the case of oriental carpets, it can be estimated at less than 5 per cent of gross output. Since raw wool accounts for no more than 25 per cent of the export value of such carpets, value added accruing to domestic factors of production can be tentatively put at 70 per cent. Consequently, every dollar's worth of carpet wool manufactured before export can earn a further 2.5 to 3 dollars of foreign exchange.

137. Prospects for expanding woollen and worsted manufactures during the sixties appear most favourable in Israel and Hong Kong, and in those countries of Latin America and the Far East which have sizable domestic markets for wool textiles, e.g., Brazil and India. Import substitution is likely to make considerable headway in these countries, but it will probably take the form of a shift from tissues and clothing to tops and yarns rather than of a fall in the volume of wool goods imported. No significant increases can, however, be contemplated in the volume of wool textiles exported from developing to developed countries. Exports of tops from Latin America to developed and centrally-planned countries are unlikely to rise above the levels reached in 1959-61, while any exports of tissues and knitwear from Israel and Hong Kong are likely to be small. Wool textile mills in

TABLE 8.2.3/IV

Tariffs on imported wool manufactures in selected countries

(*Percentages* ad valorem)

	United States [a]	United Kingdom	France	EEC	Japan
		For non-Commonwealth countries	For countries outside the French community	Common external tariff	
Tops	4	10	2.3-3	3	5
Woollen yarn .	15	7.5-10	4.5-10	5-8	10
Worsted yarn .	15	7.5-10	4.1-10R	5-10	10
Fabrics	14-60	17.5	13-18R	13-18	20
Knitwear:					
Underwear .	13.5	20-25	21R	21	25-30
Outerwear. .	...	20-30	21-22	21	25-30
Socks . . .	20	20	22	22	20
Gloves . . .	35	20-30	23	24	20
Rugs, knotted .	...	[b]	32-47.3R	24-40	30

Source: GATT COM.III/119, 23 and 28 October 1963.

[a] In addition to the *ad valorem* rates shown, wool textiles imported into the United States carry the following specific duties on their content of raw wool (cent per lb.): tops, 27.75; yarns, 30.00; knitted goods other than: gloves, 30.00; fabrics, 37.50; gloves, 40.00.

[b] 4s. 6d., or 63 cents, per square yard. R = Quantitative restrictions.

developed countries not only have a comparative advantage in costs of production; in most cases, they are also protected by substantial import duties which increase sharply with the degree of manufacture, and occasionally by quantitative restrictions on imports.

138. The outlook for increasing exports from developing to developed regions is probably more favourable in the case of wool manufactures made by traditional handicraft methods, and more particularly in the case of knotted carpets. The capital required for expanding production is relatively modest, and the labour supply abundant, so that the limit to production is set chiefly by wool supplies. Demand in developed countries has been growing rapidly in recent years, and is likely to grow even faster in the late sixties. If these countries could be prevailed upon to lower the tariff barriers erected against imports of oriental carpets, exports of such carpets from developing regions might reach some $50-80 million, of which $35-53 million would represent value added by processing.[21]

139. Assuming that $15-20 million of tops and other wool products, of which $6-7 million representing manufacturing costs, would continue to be exported to developed and centrally-planned countries, the total value of wool textile exports from the developing world would reach $65-100 million; of this, $41-60 million would come from manufacture. Import substitution could probably reduce the value of wool textile imports by some $10-15 million, but an extra $5 millions' worth of raw wool might have to be purchased from developed countries, so that the foreign exchange earned or saved through the expansion of wool processing would amount to about $45-70 million. Thus, the total contribution of wool and wool textiles to the net export earnings of the developing world could reach some $185-270 million.[22]

8.3. *Rubber, forestry and leather products*

8.3.1. *Rubber manufactures*

140. International trade in rubber manufactures increased by over 60 per cent during the second half of the fifties, and the expansion was accompanied by a change in the direction of trade flows as shown in table 8.3.1/I.

141. Developed countries are still by far the largest, indeed almost the only, exporters but their intra-trade expanded much more sharply than their exports to developing countries, so that the latter, as a group, ceased to be the world's main importers. Nevertheless, the developing countries' imports are still large and growing. Allowing about $15 million for annual net imports of footwear wholly or partly of rubber, and for other categories not included in table 8.3.1/I, the developing countries' net imports of rubber manufactures from developed countries probably did not fall far short of $300 million in 1959-61. This means

TABLE 8.3.1/I

Exports of rubber manufactures from developed and developing countries, averages 1953-55 and 1959-61

(In millions of dollars)

Exports From	To	*Developed countries*	*Developing countries*	*Centrally-planned countries*	*World*
Developed countries	1935-55	152	234	2	388
	1959-61	332	282	9	623
Developing countries	1953-56	2	6	—	8
	1959-61	8	6	—	14
TOTAL	1953-55	154	240	2	396
	1959-61	340	288	9	637

Source: United Nations, *Commodity Trade Statistics* and national trade statistics.

NOTE: The table comprises main classes of rubber manufactures, including tyres and tubes, listed in SITC Division 62. This Division does not, however, include footwear wholly or partly of rubber nor certain other categories of goods made of rubber. It is believed, on the basis of very incomplete statistics, that exports of rubber manufactures not included in SITC 62 might have amounted in 1961 to about $80 million from developed countries (of which about a third to developing countries) and about $20 million from developing countries, mainly Hong Kong and India (of which about two-thirds to developed countries). Exports of rubber footwear from five selected developed countries (France, Italy, Japan, U.K. and U.S.A.) increased from $23.9 million in 1955 to $53.7 million in 1961, and exports from two selected developing countries (Hong Kong and India) from $11.9 million to $14.2 million.

that, of some $1,000 million foreign exchange earnings from crude rubber exports to developed countries, developing countries spent about 30 per cent on importing goods made wholly or partly of the same product or its synthetic substitutes. The biggest single item in most cases is tyres and tubes, which sometimes account for as much as 80-90 per cent of total imports, both in major rubber producing countries, like Ceylon, Indonesia and Thailand, and in non-producing countries like Madagascar and Ecuador.

142. This looks therefore like a *prima facie* case for large-scale import substitution. Yet the characteristics of the industry are such that large-scale import substitution might, in certain cases, only improve the balance-of-payments situation in the long run.

143. A large part of the output of the rubber manufacturing industry in the leading developed countries consists of tyres and tubes. However, the modern rubber goods industry, using the various synthetic elastomers as well as natural rubber, is notable for the great and increasing number and variety of its products based not only on the resilience of rubber but also on numerous other qualities—imperviousness to liquids and gases, resistance to corrosive chemicals, toughness under abrasion, stickiness and flexibility. The industry is predominantly a maker of components and equipment for other industries. Few if any factories run entirely without belting, hose or other equipment and few if any engineering products are entirely devoid of rubber. Rubber is also used notably in clothing, mattresses, floor coverings, toys, sports goods, hygienic and medical articles.

144. In developing countries, which by definition are less industrialized, the demand for rubber goods

[21] These estimates differ from the ones given in chapter 6, Section 2, because they take processing waste into account.

[22] This total has been arrived at by adding exports of wool ($250-300 million) to exports of wool textiles ($65-100) and subtracting imports of wool and wool textiles. Imports of capital and other inputs used in the wool textile industries of developing countries have been ignored.

TABLE 8.3.1/II

Breakdown of raw materials content and cost of tyres production in India

	Percentages of	
	Weight	*Value*
Rubber (natural and/or synthetic)	50	27.5
Fabric (rayon cord)	17	38.5
Carbon black	18	4.5
Bead-wire, etc.	15	10.9
Total raw materials	100	81.4
Labour		1.6
Overheads, depreciation, bonus, etc.		17.0
TOTAL		100.0

Source: Economic Weekly, Bombay, 24 November 1962, based on Tariff Commission Report, 1958.

is smaller and less highly differentiated and so also is the output of the rubber goods industries in those developing countries which have them. The main products in developing countries are rubber footwear which can be made with relatively simple methods, and tyres and tubes for which there is a large market.

145. On the whole, the industry is highly capital-intensive and uses complex technical methods; in the case of its major product, tyres and tubes—which is also the product most in demand in developing countries—the cost of rubber is only a relatively small part of total cost. In developed countries with high labour costs, the cost composition may be somewhat different from that given in table 8.3.1/II for India; but in the context of possible import substitution in developing countries the figures may be taken as widely relevant.

146. On this calculation, the biggest cost item is fabric. Rubber accounts for a little over a quarter of total cost, and labour for a very small percentage. Because of the superiority of high tenacity rayon and nylon over cotton, it is doubtful if it would be rational to use cotton in tyres. The import content of tyres produced even in rubber-growing countries would, therefore, appear to be high and the labour content low.

147. In these circumstances, the development of tyre production in rubber-growing countries might not lead quickly to an improvement in their balance-of-payments position unless rayon or nylon is also produced. Some gain in foreign exchange would,

TABLE 8.3.2/I

World trade in sawn softwood,[a] 1953-55 and 1959-61 averages

(Exports in millions of cubic metres and millions of dollars, f.o.b.)

From \ *To*	*World*		*Developed countries*		*Developing countries*		*Centrally-planned countries*	
	1953-55	*1959-61*	*1953-55*	*1959-61*	*1953-55*	*1959-61*	*1953-55*	*1959-61*
VOLUME								
World	29.10	35.00	24.14	29.30	3.17	3.25	1.76	2.45
Developed countries	23.80	27.00	21.09	24.49	2.03	1.83	0.65	0.68
North America	11.00	12.40	10.21	11.72	0.79	0.68	n	—
West and South Europe	12.60	14.40	10.81	12.72	1.14	1.01	0.65	0.68
Developing countries	1.40	1.33	0.60	0.47	0.80	0.86	—	—
Latin America	1.40	1.29	0.58	0.47	0.80	0.81	—	—
Africa and n.e.s. countries	n	0.04	n	—	n	0.04	—	—
Centrally-planned countries	3.90	6.70	2.45	4.36	0.34	0.56	1.11	1.77
VALUE								
World	1 140.7	1 233.0	940.7	1 027.0	126.9	120.0	73.2	86.0
Developed countries	919.8	958.0	815.0	866.9	78.7	65.8	26.2	25.4
North America	408.3	412.0	378.7	389.1	29.4	22.7	0.2	—
West and South Europe	505.3	538.0	433.6	474.6	45.7	37.7	26.0	25.4
Developing countries	59.0	55.0	25.5	19.6	33.5	35.3	—	n
Latin America	57.5	53.1	24.5	19.6	33.0	33.4	—	n
Africa and n.e.s. countries	1.2	1.5	0.7	—	0.5	1.5	—	—
Centrally-planned countries	161.9	220.0	100.2	140.7	14.7	19.1	47.0	60.2

Source: FAO, United Nations (UN) and Organization for Economic Co-operation and Development (OECD) Statistics.

[a] Including boxboards.

n = negligible.

NOTE: Figures do not add up due to rounding.

however, be achieved by increasing the proportion of natural rubber used.

148. As a long-term proposition, however, the domestic production of tyres for the strongly expanding markets of developing countries does promise a saving of foreign exchange, especially if other ingredients are produced domestically. Market expansion is so vigorous, in fact, that in spite of the large minimum size of tyre factories, many developing countries can, even now, provide sufficient outlets for at least one factory.

149. The greatest savings of foreign exchange in developing countries as a whole might come from preferential trade among them both in rubber and in other raw materials for tyre and tube making and in the tyres and tubes themselves. Thus rubber growing countries manufacturing tyres might import fabric from other developing countries and fabric making countries manufacturing tyres might import natural rubber; both groups of countries might export tyres and tubes to other developing countries. It may also be possible to achieve important cost reductions through oil extension.

150. Another branch of rubber manufacture which holds out more immediate prospects of foreign exchange gains is the production of rubber footwear. The technology used in this case need not be complex and natural rubber is the main component. Several developing countries already produce rubber footwear for their own consumption and, in some cases, even for export. Hong Kong, for example, is among the world's leading exporters. There would appear to be some immediate scope here for both foreign exchange savings and earnings, at least in rubber-producing countries.

8.3.2. *Sawnwood and plywood*

151. Among the processed forestry products entering international trade, the most important ones are sawnwood and plywood, which are discussed in this section, and pulp and paper which will be examined in the following section of this chapter.[23]

152. Softwood originates mainly in the northern temperate coniferous belt and in sawnwood form it is used mainly as construction timber. Broadleaved or hard wood, however, is logged in the tropical parts of

[23] More detailed analysis of forestry products is presented in another FAO contribution to this Conference under the title *Prospects for Expanding Forest Products Exports from Developing Countries.*

TABLE 8.3.2/II

World trade in sawn hardwood, 1953-55 and 1959-61 averages

(Exports in millions of cubic metres and millions of dollars, f.o.b.)

From \ To	World		Developed countries		Developing countries		Centrally-planned countries	
	1953-55	1959-61	1953-55	1959-61	1953-55	1959-61	1953-55	1959-61
VOLUME								
World	3.11	4.20	2.35	3.01	0.55	0.74	0.22	0.45
Developed countries	1.63	1.88	1.43	1.59	0.18	0.19	0.02	0.11
North America	0.54	0.60	0.51	0.56	0.03	0.03	n	0.01
West and South Europe	0.81	0.96	0.69	0.77	0.11	0.11	0.01	0.08
Japan	0.22	0.26	0.20	0.22	0.02	0.02	n	0.02
Developing countries	1.23	1.78	0.87	1.30	0.35	0.44	0.01	0.03
Latin America	0.25	0.18	0.12	0.14	0.13	0.04	—	n
Asia and Far East	0.66	1.03	0.45	0.69	0.20	0.32	n	0.02
Africa and n.e.s. countries	0.31	0.57	0.29	0.48	0.02	0.08	n	0.01
Centrally-planned countries	0.25	0.54	0.05	0.12	0.02	0.11	0.19	0.31
VALUE								
World	199.6	254.5	148.5	184.2	36.5	43.7	14.5	26.5
Developed countries	99.0	119.7	87.5	102.2	10.2	11.3	1.4	6.2
North America	36.0	43.9	34.1	41.1	1.7	2.2	0.2	0.6
West and South Europe	43.6	51.8	37.1	41.9	5.8	5.7	0.8	4.1
Japan	15.9	19.5	14.3	16.8	1.3	1.3	0.3	1.5
Developing countries	83.3	102.3	58.0	74.8	25.0	25.7	0.4	1.8
Latin America	18.6	11.1	8.9	8.6	9.8	2.4	—	0.1
Asia and Far East	46.1	60.1	31.8	40.3	14.0	18.6	0.3	1.2
Africa and n.e.s. countries	18.4	30.7	17.3	25.9	1.0	4.2	0.1	0.5
Centrally-planned countries	17.3	32.5	3.1	7.2	1.4	6.8	12.8	18.5

Source: FAO, United Nations and OECD Statistics.

NOTES: n = negligible.
Figures do not add up due to rounding.

Latin America, Africa and Asia and used for construction, for furniture and other special uses. About one-tenth of the products of world saw-milling and plywood industries is sold in international markets.

153. As shown in table 8.3.2/I, the volume of world trade in sawn softwood in 1959-61 was 20 per cent higher than in 1953-55, but the increase in value was only 8 per cent. The volume of exports from developing countries, chiefly Latin America, decreased from 1.4 to 1.3 million cub. m., while the value of these exports declined from $59 million to $55 million. The volume share of developing countries in world trade in sawn softwood was only 5 per cent in 1953-55 and 4 per cent in 1959-61. Moreover, only 43 per cent of their exports in 1953-55 and 36 per cent in 1959-61 went to developed countries; the remainder was traded between developing countries themselves. Their net imports from the rest of the world increased from 1.8 million cub. m. to 1.9 million cub. m.

154. Trade in sawn hardwood was much more important to developing countries. As shown in table 8.3.2/II, their volume share was 40 per cent of world total in 1953-55 and 42 per cent in 1959-61. The volume of exports from developing countries increased by 45 per cent, i.e., more than world total (35 per cent), and the value of these exports went up by 23 per cent from $83 million in 1953-55 to $102 million in 1959-61. About three-quarters of hard sawnwood exports from developing regions were directed to developed countries. The net exports from developing countries to the rest of the world increased from 0.68 million cub. m. to 1.04 million cub. m.

155. Table 8.3.2/III shows that exports of plywood from developing countries also increased faster than world total. Their volume rose from 0.08 million cub. m. in 1953-55 to 0.36 million cub. m. in 1959-61, and the value from $12 million to $33 million. As a result, the share of developing countries in the volume of world exports went up from 10 to 23 per cent, and their net imports in 1953-55 turned into net exports in 1959-61.

156. To sum up, the developing countries' net balance of trade in sawnwood and plywood with the rest of the world changed from a deficit of about $25 million in 1953-55 to an export surplus of about $3 million in 1959-61. Apart from other reasons, this was due to an expansion of wood processing in developing countries. The main characteristic features of this industry are summarized below.[24]

[24] See: Westoby, J. "Forest Industries in the Attack on Economic Under-Development", *Unasylva*, Vol. 16 (4), No. 67, FAO, Rome, 1962.

TABLE 8.3.2/III

World trade in plywood, 1953-55 and 1959-61 averages

(Exports in millions of cubic metres and millions of dollars, f.o.b.)

From \ To	World		Developed countries		Developing countries		Centrally-planned countries	
	1953-55	1959-61	1953-55	1959-61	1953-55	1959-61	1953-55	1959-61
VOLUME								
World	0.79	1.59	0.64	1.34	0.10	0.19	0.05	0.06
Developed countries	0.61	1.05	0.52	0.93	0.06	0.09	0.03	0.03
North America	0.06	0.13	0.05	0.13	n	n	—	—
West and South Europe	0.40	0.54	0.33	0.46	0.04	0.05	0.03	0.03
Japan	0.15	0.38	0.14	0.34	0.01	0.03	—	—
Developing countries	0.08	0.36	0.05	0.28	0.03	0.08	—	—
Latin America	0.02	0.03	n	0.02	0.02	0.01	—	—
Asia and Far East	0.01	0.22	0.01	0.17	n	0.05	—	—
Africa and n.e.s. countries	0.04	0.09	0.04	0.08	0.01	0.02	—	—
Centrally-planned countries	0.10	0.19	0.07	0.13	0.02	0.02	0.02	0.03
VALUE								
World	119.4	215.4	97.8	184.6	15.3	23.2	6.2	7.6
Developed countries	95.5	161.5	82.1	143.7	9.3	13.8	4.1	3.9
North America	11.8	19.9	10.8	19.2	1.0	0.8	—	—
West and South Europe	58.5	75.9	49.0	64.8	5.3	7.1	4.1	3.9
Japan	24.3	65.6	22.0	59.7	2.3	5.9	—	—
Developing countries	12.0	33.4	8.1	26.3	3.9	7.1	—	—
Latin America	3.0	3.6	0.5	2.1	2.5	1.4	—	—
Asia and Far East	1.1	17.5	0.7	13.7	0.4	3.8	—	—
Africa and n.e.s. countries	6.9	8.3	5.9	6.8	0.9	1.5	—	—
Centrally-planned countries	11.9	20.6	7.7	14.6	2.1	2.4	2.1	3.6

Source: FAO, United Nations and OECD Statistics.

NOTE: Figures do not add up due to rounding.

157. The size of sawmills varies from small, often mobile units in the forest, producing a few cubic metres a day for local needs, to highly mechanized mills with an annual capacity of several hundred thousand cubic metres, producing for export or serving large consumption centres. All have their place; optimum size and location can be determined only in the context of raw material supply, markets served, and communications between the two. Communications are the main factor determining location, in view of the high cost of transporting the raw material to the mill and the finished product to the market. Value added in processing is small in comparison with other forest industries and economies of scale are not of decisive importance. The cost of logs delivered to the mill normally represents 50 to 70 per cent of mill production costs, and an adequate stock of logs is necessary to assure continuous operation and ability to avoid production delays. As a result, working capital needs are heavy, often amounting to as much as fixed investment.

158. Labour requirements vary widely, depending on the degree of mechanization and the type of material sawn. To produce one cubic metre of sawn softwood in a mill of 10,000-15,000 cub. m. of annual capacity in a less developed European country requires 10 to 14 man-hours; in a larger mill of 20,000-35,000 cub. m. of annual capacity, only 7 to 10 man-hours are needed. The more homogeneous the log intake, the greater the possibilities of mechanization and labour-saving, and therefore, labour productivity is normally much higher in softwood mills than in those sawing hardwood. In predominantly coniferous forest areas of North America, the USSR and Northern Europe, softwoods account for 85-95 per cent of the raw material for saw-milling, as compared with 10-40 per cent in Asia, South America and Africa.

159. Developing countries would benefit if a greater proportion of their tropical timbers could be processed before export [25] and several countries have already successfully adopted measures to favour exports of sawnwood instead of logs. There are limits, however, to what can be achieved in this direction. In the past, many developing countries, e.g., in West Africa and Central America, built up a considerable export of hardwood logs, and sometimes also of sawn hardwood, while the domestic market absorbed little or no sawnwood. Today, domestic markets for sawnwood are beginning to grow, and while to some extent this demand would be met by inferior species and lower grades of the superior species, the growth in domestic demand, though calling for some planning, allows a wider use of the mill production and justifies larger-scale plant with the attendant benefits.

160. Some 25 to 50 per cent of the raw material entering the sawmill leaves it in the form of slabs, edgings and sawdust, which, at one time wasted, today can be almost all industrially utilized. The slabs and edgings can be chipped for pulp or board manufacture, also the sawdust and shavings can be utilized in wood-processing industries. The possibility of utilizing sawmill residues has already considerably modified the economics of saw-milling in developed countries and often stimulated the integration of forest industries. So far, these potentialities have scarcely been realized in developing countries. Most of them are not yet ready for creating large integrated forest industry complexes, but they could initiate small industries utilizing mill residues for manufacturing particle board, fibreboard and blockboard for constructional purposes. When a new sawmill is planned, associating with it from the outset such a related enterprise may raise both its prospective financial return and its social impact.

161. World plywood production, around 3 million cub. m. in 1938, today exceeds 15 million cub. m. There has been a great expansion in the use of both utility softwood plywood in construction, and hardwood plywood for panels, doors, table tops and similar purposes. This expansion was stimulated by the development of improved glues, better surface treatment and new uses which resulted in a more favourable price trend of plywood as compared with sawnwood.

162. The most important factor in the location of plywood mills is the availability of large-diameter logs of good form and quality, whether indigenous or imported, suitable for peeling or slicing. Much of the plywood industry in Europe and Japan has been based on imported tropical hardwoods. With large size logs becoming progressively scarcer, the industry is now making use of smaller diameter and lower quality logs. The transformation coefficient in plywood manufacture is fairly low, so that losses on conversion amount to 50-70 per cent (40-60 per cent in veneer manufacture). The residues are used as fuel in the plants, for hot presses, driers, etc., but a commercial outlet for them can considerably increase the profitability of the industry. This explains the tendency toward integration of plywood, particle board and blockboard manufacture. By integrating the plywood and particle board industries, the residues in plywood manufacture are immediately utilized, while particle boards, in turn, are frequently veneer-faced. As both industries serve the same consuming sectors, construction and furniture manufacture, marketing economies can be achieved by integration.

163. The cost of raw material in plywood manufacture represents 30-50 per cent of total production costs; other important materials are adhesives, such as resins, casein, blood albumen, soyabean, etc. Capital investment is estimated at $100-150 per cubic metre of annual capacity. Economies of scale relate mainly to power and presses; only mills using large quantities of homogeneous material and manufacturing standard products can fruitfully employ mechanical handling and some automation. Labour requirements per cubic metre of output depend upon the degree of mechanization, log sizes, average thickness of veneer, need for patching, and so on. In less developed countries, more than 10 man-hours per cubic metre may be added if circumstances favour heavy reliance on manual handling. The proportion of skilled labour ranges from 20 to 35 per cent.

[25] Projections of net export earnings from all processed forestry products are given in chapter 2.2 of this study.

TABLE 8.3.3/I

World trade in pulp and paper, 1953-55 and 1959-61 averages

(Volume of exports in thousands of metric tons)

From \ To	World	Developed countries				Developing countries				Centrally-planned countries
		Total	North America	West and South Europe	Oceania, S. Africa and Japan	Total	Latin America	Middle East, Asia and Far East	Africa and n.e.s. countries	
1953-55										
WORLD	15 888	13 504	6 891	5 958	655	1 853	1 060	664	129	531
Developed countries	15 460	13 414	6 891	5 868	655	1 787	1 053	616	118	259
North America	7 979	7 315	6 262	867	186	654	482	131	41	10
West and South Europe	7 403	6 062	629	4 981	452	1 094	571	454	69	247
Oceania, S. Africa and Japan	78	37	—	20	17	39	—	31	8	2
Developing countries	57	11	—	11	—	46	4	31	11	—
Latin America	4	—	—	—	—	4	4	—	—	—
Middle East, Asia and Far East	31	—	—	—	—	31	—	31	—	—
Africa and n.e.s. countries	22	11	—	11	—	11	—	—	11	—
Centrally-planned countries	371	79	—	79	—	20	3	17	—	272
1959-61										
WORLD	21 274	17 733	7 345	9 434	954	2 771	1 391	1 121	259	770
Developed countries	20 536	17 359	7 344	9 061	954	2 546	1 328	981	237	631
North America	9 866	8 723	6 787	1 561	375	1 125	743	321	61	18
West and South Europe	10 268	8 410	542	7 424	444	1 259	580	516	163	599
Oceania, S. Africa and Japan	402	226	15	76	135	162	5	144	13	14
Developing countries	133	50	—	50	—	83	33	34	16	—
Latin America	47	14	—	14	—	33	33	—	—	—
Middle East, Asia and Far East	33	—	—	—	—	33	—	33	—	—
Africa and n.e.s. countries	53	36	—	36	—	17	—	1	16	—
Centrally-planned countries	605	324	1	323	—	142	30	106	6	139

Source: Food and Agriculture Organization.

164. Plywood manufacture offers to developing countries similar opportunities to those of saw-milling. In some of these countries, a trend has recently developed toward establishing simple plants, making veneer, which supply local or overseas plywood plants. Such mills require little investment, and can operate on a limited supply of veneer logs.

165. Blockboard, laminated board, etc., belong to the broad category of plywood. Blockboard can be manufactured almost manually, with only limited equipment. This line of industry is of considerable interest to many developing countries.

8.3.3. *Pulp, paper and paperboard*

166. About 16 per cent of world production of wood pulp, newsprint, other paper and paperboard enters international trade. The quantities and values of these products traded in 1953-55 and in 1959-61 are shown in tables 8.3.3/I and 8.3.3/II. Between the two periods total world exports increased by 34 per cent, from 15.9 million to 21.3 million metric tons. These exports originated almost exclusively in developed countries, mainly the United States and Canada, and Western and Southern Europe. Developing countries exported only very small quantities, 57,000 tons in 1953-55 and 133,000 tons in 1959-61, and these went mainly to other developing countries within the same region. Developing countries' imports of pulp and paper from the rest of the world rose from 1.8 million tons in 1953-55 to 2.7 million tons in 1959-61, of which Latin America absorbed about 50 per cent. In terms of value, out of a world total of $2,541 million in 1953-55 and $3,122 million in 1959-61, developing countries' exports to the rest of the world accounted for $2 million and $9 million in the two periods, while their imports from the rest of the world were as high as $313 million and $434 million respectively.

TABLE 8.3.3/II

World trade in pulp and paper, 1953-55 and 1959-61 averages

(*Value of exports in millions of dollars, f.o.b.*)

From \ To	World	Developed countries				Developing countries				Centrally-planned countries
		Total	North America	West and South Europe	Oceania, S. Africa and Japan	Total	Latin America	Middle East, Asia and Far East	Africa and n.e.s. countries	
1953-55										
WORLD	2 541	2 118	1 104	900	114	325	173	128	24	98
Developed countries	2 456	2 103	1 104	885	114	309	171	116	22	44
North America	1 284	1 174	1 007	137	30	108	80	21	7	2
West and South Europe	1 154	922	97	743	82	191	91	87	13	41
Oceania, S. Africa and Japan	18	7	—	5	2	10	—	8	2	1
Developing countries	14	2	—	2	—	12	1	8	3	—
Latin America	1	—	—	—	—	1	1	—	—	—
Middle East, Asia and Far East	8	—	—	—	—	8	—	8	—	—
Africa and n.e.s. countries	5	2	—	2	—	3	—	—	3	—
Centrally-planned countries	71	13	—	13	—	4	1	3	—	54
1959-61										
WORLD	3 122	2 563	1 066	1 345	152	449	211	193	45	110
Developed countries	3 007	2 507	1 066	1 289	152	410	203	166	41	90
North America	1 440	1 271	987	229	55	166	110	47	9	3
West and South Europe	1 495	1 201	77	1 049	75	210	92	89	29	84
Oceania, S. Africa and Japan	72	35	2	11	22	34	1	30	3	3
Developing countries	24	9	—	9	—	15	5	7	3	—
Latin America	7	2	—	2	—	5	5	—	—	—
Middle East, Asia and Far East	7	—	—	—	—	7	—	7	—	—
Africa and n.e.s. countries	10	7	—	7	—	3	—	—	3	—
Centrally-planned countries	91	47	—	47	—	24	3	20	1	20

Source: Food and Agriculture Organization.

167. The pulp and paper industry has grown rapidly in recent years.[26] During the decade 1950 to 1960, world production of pulp rose from 34 million tons to 59 million tons, and of paper from 43 million tons to 74 million tons.

168. This industry is much more heavily localized than saw-milling mainly because, although wood costs represent the main item in total production costs and a cheap wood supply is essential, other materials and production factors are of considerable importance. For instance, non-integrated paper production operating on purchased pulp, and production using a substantial amount of waste paper or non-wood fibres, are not tied to the wood supply. The pattern of production costs varies considerably with the process used, the size of plant, the location, and according to whether the process is integrated (e.g., pulp and paper) or not. The typical cost structure in this industry is summarized in table 8.3.3/III.

169. While wood costs represent one-third to one-half of total production costs, it will be observed that, first, capital charges are high; secondly, process chemicals assume a considerable importance, especially for bleached grades; thirdly, power, steam and water represent a very important element; and fourthly, labour costs are relatively small.

170. Wood costs have an important, but not, as in saw-milling, a dominant influence on total costs. The wood costs shown in table 8.3.3/III are for wood delivered mill; labour represents the major element in this cost. Thus while the mill operation itself is not labour-intensive, the associated forest extraction operations are so. Investment needs for this industry are certainly heavy. Typical requirements (fixed investment in the mill only, excluding working capital and

[26] See: Westoby, J. C. "Forest Industries in the Attack on Economic Underdevelopment", *Unasylva*, Vol. 16 (4), No. 67, FAO, Rome, 1962. Further discussion in this section is mainly based on this article.

TABLE 8.3.3/III

Relative importance of various cost items in the production of pulp and paper

(Percentage of the total production cost at the mill)

	Fibrous raw material	*Chemicals*	*Other materials*	*Power, steam, water*	*Labour, including repair*	*Super-vision overhead*	*Capital costs*
Mechanical pulp integrated . .	40	—	3	21	7	5	24
Chemiground wood integrated. .	29	12	3	18	7	5	26
NSSC—pulp [a] *(broadleaved wood) integrated:*							
Unbleached	36	3	4	12	9	5	31
Bleached	32	18	3	10	7	4	28
Sulphate pulp [a] *non-integrated:*							
Unbleached conifers	50	4	3	2	7	6	28
Bleached:							
Conifers	43	12	3	4	6	5	27
Broadleaved wood . . .	35	14	3	5	8	6	29
Straw	32	15	3	5	8	7	30
Newsprint, integrated mechanical pulp	39	—	4	15	9	5	28
NSSC [a]*—corrugating board integrated*	31	3	5	13	9	5	34

Source: Westoby, J. C.: *op. cit.*

[a] With recovery of chemicals; NSSC = neutral sulphite semichemical process. Production capacities: about 100 tons per day.

any necessary infrastructural investment) for medium-sized mills of 100 tons per day capacity (or 30,000 tons per year) in a less developed country range from $12 million to over $20 million, depending on location, process and production programme. More than one-half of this investment consists of equipment, engineering fees, etc., normally requiring foreign exchange outlay in a less developed country. By contrast, pay-out time (total investment divided by annual gross output) is not long, ranging from eighteen months to three years.

171. There are a number of indivisibilities in the technological process which make for sizable economies of scale. These are particularly pronounced for newsprint and for kraft pulp and paper. A general indication of the variation of capital costs with size of mill for some typical mills is given in table 8.3.3/IV. Given the high impact of capital charges on production costs, a small mill must enjoy compensating advantages to compete successfully with a larger rival.

TABLE 8.3.3/IV

Influence of type and size of pulp and paper mills on fixed investment

Mill type	*Daily capacity, metric tons*			
	25	*50*	*100*	*200*
	Fixed investment in $1 000 per daily ton			
Non-integrated				
Unbleached chemical pulp	235	175	135	105
Bleached chemical pulp	325	240	190	150
Integrated				
Unbleached paper . .	300	230	180	140
Bleached paper . . .	390	295	235	185

Source: Pulp and paper development prospects in Asia and the Far East, Bangkok, 1962.

172. Power requirements are high, normally from 350-550 kilowatt-hours per ton of bleached sulphate pulp to 1,700-2,000 kilowatt-hours per ton of newsprint hence the importance of cheap power supplies, especially for mechanical pulp and newsprint. Conversely, this industry, as a major industrial consumer, can assure power developments a needed outlet, thus influencing the feasibility of projected hydro-works.

173. The fresh-water requirements in pulp and paper manufacture are quite high, especially for bleached grades of chemical pulp and certain special papers. Typical needs (in cubic metres of water per ton of pulp or paper) are: groundwood, 50; unbleached sulphate pulp and kraft paper (integrated with pulp), 250-300; bleached pulp, 400; newsprint (integrated with groundwood), 100; tissues and fine paper, 150. An integrated paper mill with a daily output of 100 tons consumes about 40,000 cubic metres of water, which equals the needs of a city of some 150,000 inhabitants; in Finland forest products industries account for about 80 per cent of the entire water consumption.[27]

174. For the production of chemical pulp considerable quantities of chemicals are required, both for cooking and bleaching. Thus, as a result, for every 1,000 tons of bleached pulp produced, about 250 tons

[27] Tötterman, Harald, "Die Wasserfragen der finnischen Zellstoff- und Papierindustrien", *Paperi ja puu*, 43 (4), 1961.

of chemicals are consumed. This shows the importance, so far as chemical pulp operations are concerned, of convenient access to the basic materials.

175. The bringing of large quantities of raw materials to the mill, and the shipping of the finished product, entails a considerable transport problem. Thus, for a 100 ton per day mill, daily transport tonnage may average 500 to 1,000 tons, and considerably exceed these figures at peak periods. Thus, not only is good transport organization necessary, but expenditure may be required on transport facilities, such as roads, rail, harbours, and trucks. This point also serves to underline the intimate relationship between pulp and paper development and general infrastructural development.

176. Space precludes a detailed discussion of available pulping processes, and of the fibrous materials to which each is specially adapted. It is sufficient to mention here that, even though the major part of the world's pulp and paper is still made from traditional coniferous species, there are very few timbers, coniferous or broadleaved, which cannot today be pulped by one or other of the available processes, and that there are processes suited to a wide variety of non-wood materials, including bamboo, esparto and other grasses, cereal straw and bagasse (sugar-cane waste). It should be added, too, that one of the cheapest sources of fibre for paper-making is waste-paper, which can replace fresh fibre to a considerable extent in many grades, and wholly in some grades of paperboard. Thus, in Western Europe, no less than 25 per cent of paper consumed is recovered for re-manufacture, and waste paper accounts for 36 per cent of the fibre furnish of paper grades other than newsprint and kraft paper. The cost of waste-paper is made up largely of collection and sorting costs; hence the higher and more concentrated the consumption of paper, the cheaper is waste-paper as a raw material. With consumption rising rapidly in developing countries, the opportunities for utilizing waste-paper are growing, and there are very many countries which could already support a small but economic paperboard production based on this material.[28]

177. Though labour requirements for pulp and paper manufacture are modest, a fairly high proportion ranging from 35 to 45 per cent must be skilled, which shows the need for schemes of intensive mill training when starting new projects in the developing countries.

178. The characteristics of the pulp and paper industry already described may have given the impression that there is no possible scope for small-scale operations, for mills of 5 to 10 tons/day, for example. This is not so. Even in the industrialized countries, small mills often play an important role in the production of some specialty papers, such as cigarette, currency papers, strawboards, tissues and other grades of paper and board for local consumption. Thus, while it would clearly be mistaken policy to plan the long-term development of the pulp and paper industry mainly on the basis of small-scale mills, such mills can sometimes play an important part in the industry.

[28] Prospects for pulp and paper during the United Nations Development Decade are discussed, together with other processed forestry products, in chapter 2.2 of this study.

8.3.4. *Leather and leather products*

179. The developing countries export about three times as much leather to the developed countries as they import from them. Their exports of undressed hides and skins to developed countries are, however, three times as valuable as their leather exports in the same direction, while their imports of hides and skins from developed countries are significantly smaller than their leather imports (see table 8.3.4/I). As regards leather products other than footwear, the imports from developed countries (about $8 million in 1959-61) greatly exceed the opposite flow ($1 million).

180. Considering some of the leading leather exporters among the developing countries, it appears that on the whole the ratio of their exports of hides and skins to their leather exports increases as the value of their leather exports declines. Leather exports are concentrated to a much greater extent than exports of the raw material.

181. India has developed a large tanning industry which processes cattle hides, calf-skins and especially sheep, lamb, goat and kidskins in quantities that are large by international standards. Pakistan is one of the world's largest tanners of cattle hides.[29] India has

TABLE 8.3.4/I

Trade in leather, tanned hides, and hides and skins between developing and developed countries

(In millions of dollars, f.o.b.)

Exports from:	*Leather and tanned hides* [a] (1)	*Hides and skins undressed* [b] (2)	(2) : (1)
Main developing countries exporting leather (1961) of which:	*63.91*	*51.70*	*0.81*
India	53.17	17.32	0.32
Morocco (1960)	3.06	1.43	0.47
Pakistan	2.39	12.98	5.39
Uruguay	2.29	13.93	6.08
Kenya	1.86	4.30	2.34
Mexico	0.75	—	—
Madagascar	0.39	1.74	4.46
Developing countries to developed countries (1959-61)	63	197 [c]	3.12
Developed countries to developing countries (1959-61)	22	15 [c]	0.68

Source: United Nations, *International Trade Yearbook*, 1961 and FAO estimates.

[a] Excluding furskins dressed and leather footwear.

[b] Excluding furskins.

[c] Including furskins undressed.

[29] In 1958, Pakistan tanneries processed more than 4.5 million hides, which was about as much as the combined input of Canada and Australia in that year, no account being taken of the qualities of the hides. India's output of chrome and vegetable tanned hides in 1959 had increased by over half since 1954. Cf. Commonwealth Economic Committee, *Raw Hides and Skins*, London, 1960.

TABLE 8.3.4/II

Capital and fuel intensity of leather industries in relation to total manufacturing

Industry	*Machinery per worker*		*Fuel and electricity per person employed*	
	Pakistan [a] *(1960)*	*Brazil* [b] *(1950)*	*Pakistan* [a] *(1960)*	*Brazil* [b] *(1950)*
Leather tanning and finishing	0.564	1.24	0.379	0.91
Footwear, excluding rubber	0.471	0.15	0.603	0.24
Other leather products .	0.376	0.11	0.252	0.27

Sources: Pakistan: Census of Manufacturing Industries, 1960, Central Statistical Office (Karachi). Brazil: VI Recenseamento Geral do Brasil 1950, Censo Industrial (Rio de Janeiro 1957).

[a] Only larger establishments covered.

[b] All establishments included.

also built up a significant export trade in leather, largely in rough tanned hides and skins which are shipped to the United Kingdom and other European countries. Leather was the largest single item in Indian exports to the Federal Republic of Germany and France in 1961. The Indian export trade is based partly on imported hides from South-East Asian countries. Indian exports, which consist largely of small-size hides lightly tanned (East Indian kips), are stripped and retanned in certain of the importing countries.

182. Leather is also traded between developing countries. India, for example, exports to the Middle East where leather using industries (e.g., in Iraq) are partly built up on leather supplies from India.

183. Footwear and other leather goods (travel goods, sports goods incorporating leather, industrial leather goods, fancy goods, etc.) are exported by several of the developing countries with tanning industries, namely, Morocco, Senegal, India and Pakistan, United Arab Republic, Israel and the former Federation of Rhodesia and Nyasaland.

184. As to the industrial characteristics of the leather and leather goods industries, tanning is typically much more capital-intensive than the production of shoes or other leather products. The capital and fuel intensity in the industry's three main branches, expressed as a proportion of the capital and the fuel intensity of all manufacturing, is indicated in table 8.3.4/II for Pakistan and Brazil.

185. In Pakistan, value added, as a proportion of the value of production, was highest for footwear (42 per cent) and lowest in tanning (19 per cent). It appears also that inputs of chemicals into tanning form a higher proportion of industrial inputs than in footwear or other leather goods production (chemicals purchased by tanneries in Pakistan and Morocco formed 11 and 12 per cent of their total purchases of inputs). To the extent that tanning agents, sulphuric acid, sodium bicarbonate, dyes and pigments have to be imported, the import component of tanning may become rather high.[30]

186. The developing countries as a group import considerable amounts of footwear. Developing countries of Africa imported $65 million, and Latin American and Asian countries $17 millions' worth of footwear (including rubber and textile footwear) a year on the average in 1959-61. Some intra-trade between developing countries is included in these figures, nevertheless the major part can be assumed to have originated in developed countries, mainly in Europe.[31]

187. One of the reasons for the large imports of leather and leather goods, particularly in Africa, is the insufficient local supply of leather.[32] There are numerous rural tanneries in many developing countries but their techniques are often primitive. Mechanical tanneries are few and their total production capacity is small. In view of the considerable imports of leather and leather footwear and of the growing demand for the latter, efforts to increase leather and footwear production along modern lines could result eventually in substantial savings of foreign exchange.

188. Apart from expanding leather production for internal consumption, investigations could be made in some of the main exporting countries in order to determine to what extent hides and skins could be partially processed for export. Rising labour costs in developed countries and low labour costs in developing countries might offer an opportunity to undertake partial processing of hides and skins, which in turn could lead to higher income from exports. There are, however, many obstacles to expanding exports of partially processed or finished leather from developing countries.

189. On the production side, the improvement of the quality of the raw material is of primary importance. Badly tended and inefficiently killed and flayed animals yield hides and skins of inferior quality and low value. Faulty curing and packing add to the disadvantages of leather industries in developing countries. Modern tanning methods, which may be more capital-intensive than the average of national manufacturing and which may make heavy demands on imported chemical materials, would presumably be needed if the export of leather, especially fully tanned leather, is to be stepped up from the developing countries.

190. On the demand side, the increasing use of synthetic substitutes must be first noted, which is progressively reducing the size of the market for leather, especially heavy sole leather. Rubber, plastics, textile and chemical materials, including nylon, have in the past decade encroached on the market for leather in industries producing footwear, fancy and travel goods, gloves, military equipment and coachwork and furnishings. The invention of the pasting system which increases the usable area of leather also

[30] In Colombia (1953), imports as a percentage of raw material inputs (excluding customs duty) were 19.8 per cent in the tanning industry and 9.4 per cent in other leather manufactures (excluding footwear).

[31] United Nations, *Yearbook of International Trade Statistics, 1961.*

[32] Mittendorf, H. J. and Louwes, H. J.: *Hides and Skins Marketing in Africa and the Near East*, FAO, Rome, 1963. This study deals in detail with the problems of hides and skins processing in developing countries and provides the basis for most of the conclusions included in this section.

TABLE 8.3.4/III

Import duties on leather and leather manufactures 1962-63

(*Percentages* ad valorem)

	European Economic Community	*Austria*	*Denmark*	*Finland*	*Norway*	*Sweden*	*Switzerland*	*United Kingdom*	*United States*	*Canada*	*Japan*
Finished leather											
Bovine cattle	9-10	0-13	10	14-20	...	0-7	...	10-20	5½-12½	0-25	15-20
Sheep and lamb skin	0-10	0-10	0-10	14-20	...	0-7	...	10-15	8-10	0-25	15-20
Goat and kid skin	0-10	0-10	0-10	14-20	...	0-7	...	10-15	8-12½	0-25	15-20
Other kinds	8-9	0-10	25	14-20	...	...	...	10-12	10-15	0-25	15-25
Leather Footwear	16	25	25	14-20	...	...	...	10-20	5-20	...	27
Leather goods											
Luggage, handbags, purses	15-17	20	22½	15-30	30	13	8-9	15-22½	14-20	22½	20-40
Gloves, etc.	14-20	16-24	15-27½	16-30	15-25	8-12	3-24	20-30	12-82	10-25	20-40
Other articles	14	18	15-22½	25-30	15	8	3-11	20-25	6-16	...	25

Source: GATT, COM.III/49, 21 October 1963.

contributes to the reduction of demand. The mechanization of agriculture, which has reduced the demand for harness, and supply developments in importing countries, which are influenced by changes in the size of livestock and in the volume of slaughtering, are other factors limiting the prospects of leather exports from developing countries.

191. As a result of these developments, there is a highly competitive situation in import markets, which has already forced a large number of marginal tanneries in developed countries to close down because of uneconomic production.[33] The experience of tanneries in some developing countries suggests that it is particularly difficult to compete with the large quantities of uniform leather offered by tanneries in the developed countries. Most shoe factories, which use more than 70 per cent of the total supply of leather, are highly mechanized and planned on large scale. They are consequently interested in large quantities of uniform leather of high quality. Further obstacles are the result of changing fashions. Tanners in developing countries may not find it easy to adopt their leather production in type and colour to the rapidly changing demands of the leather goods industry in Europe and the United States.[34]

192. Imports of raw hides and skins are admitted duty free to the markets of developed countries, while on processed products the import duties are generally substantial (see table 8.3.4/III). Since in some instances even an import duty of not more than 5 per cent could make exports of processed leather from developing countries uneconomical, reductions of import duties could facilitate the expansion of leather processing industries in developing countries. However, such reductions would certainly be difficult to obtain in view of the already precarious situation of the domestic tanning industries in importing countries. At the same time, in the developing countries themselves, import duties and taxes could be reviewed in order to establish whether they stimulate or hinder the exports of partially and fully processed hides and skins. In some developing countries, salt and imported tannery materials as well as the processed hides and skins for export are so heavily taxed that there is no incentive to export the partially or fully processed product.

193. On the whole, therefore, it seems advisable to direct leather production in the initial stages to meet domestic needs in the developing countries. Export promotion could start with pickled and lightly tanned hides and skins instead of fully processed leather. The success of any export drive will depend in the first place on efficient commercial and marketing arrangements. The establishment of sales co-operatives or associations to investigate market demand in importing countries, to contact potential buyers, to provide current market information, and to conduct sales promotion campaigns in importing countries, could be of invaluable assistance.

8.4. *Conclusions*

194. The major difficulty in drawing any general conclusions from the studies of the characteristics and prospects of processing industries in developing countries lies in the lack of adequate, let alone comparable, data. Even though the descriptive studies above had the benefit of some special industry investigations, a general judgement on the industrial characteristics of processing still has to rely largely on the summary and highly aggregative data of national censuses of industrial or manufacturing production. The defects of these data for the purpose at hand are illustrated by the General Note to table 8.4/I.

(a) *The industrial characteristics of processing*

195. An attempt is made in table 8.4/I to summarize the evidence on four key coefficients in selected processing activities in ten developing countries. The capital and fuel (and electricity) intensities of a given commodity output vary, among other

[33] *The Hides and Skins Industry in Europe*, 1960 Statistics, OECD, Paris, 1961.

[34] Mittendorf, *op. cit.*, pp. 44-50.

TABLE 8.4/I

Industrial characteristics of the selected processing industries in developing countries: the capital intensity, fuel intensity and size of establishment in selected industries relative to total manufacturing

Characteristic coefficients	*Ratio between the coefficients for selected industry and for total manufacturing industry*	*Footwear (leather)*	*Jute textiles*	*Rubber products (excluding fibres)*	*Leather tanning and finishing*	*Meat and fish canning*	*Wood processing*	*Cotton textiles (spinning and weaving)*	*Vegetable oils*	*Rubber tyres and tubes*	*Paper*
I. Fixed assets per person employed [a]	0-0.5	P, B	I	I	I	M					
	0.5-1.0		P	B	P, B	Y, B	Z, F, B	I, P, B			
	1.0-1.5						Y		I, F		
	1.5-2.0									B	
	2.0-							Y	E, B, Z	I	I, P, B
II. Machinery per worker [b]	0-0.5	P, B	I	I	I	A, M	F	I			
	0.5-1.0		P		P	B	Y	P, B			
	1.0-1.5			B	B	Y			I, F		
	1.5-2.0						B				
	2.0-							Y	E, B	B, I	I, P, B
III. Fuel and electricity per worker [c]	0-0.5	U	I	A	I, P		B				
	0.5-1.0	P	P	I		A	Y, U	I, P			
	1.0-1.5			B	U	Y, M	Z, F				
	1.5-2.0									I, B	B
	2.0-							Y	I, F, E, Z, U	A	I, P, A
IV. Persons employed per establishment	0-0.5	U			P	B					
	0.5-1.0	P			I, U		F, B		I, E		
	1.0-1.5	B		I	B	A			F, U		
	1.5-2.0					M	Y, U				B
	2.0-		I, P	A, B		Y	Z	I, P, B, Y	B, Z	I, A, B	I, P, A

EXPLANATIONS TO TABLE 8.4/I

Country key and year of census		*Class of degree industrialization* [d]
A = Argentina	1954	II
B = Brazil	1950	IV
E = Indonesia	1960	IV
F = Philippines	1959	IV
I = India	1959	IV
M = Mexico	1956	III
P = Pakistan	1959/60	IV
U = Burma	1957/58	IV
Y = Paraguay	1955	IV
Z = Mozambique	1960	IV

GENERAL NOTE:

The data upon which this table is based were taken from national censuses of industrial production. Comparisons were made between industry data and those relating to the manufacturing sector of industry. The censuses differ in their scope of enumeration. Argentina, Brazil and Paraguay attempted to include all establishments. Burma sought to count all establishments in towns. The remaining countries counted a narrower set of establishments: India—a limited number of industries and, within them, typically factories employing 50 or more persons and utilizing power, or 100 or more without power; Indonesia—establishments employing 10 or more persons and using power; Mexico—establishments with production exceeding 10 thousand pesos in value; Mozambique—establishments employing 5 or more persons; Pakistan—establishments using power and employing 20 or more persons; Philippines—establishments employing 20 or more persons. While some censuses add data covering further sectors of manufacturing, details needed for this analysis could not be derived for these.

[a] Assets at book (or commercial) value in domestic currency.

[b] For Argentina, Indonesia, Brazil: horsepower of installed capacity. For the remaining countries: values in domestic currency.

[c] Expenditure on fuel and electricity in local currency.

[d] United Nations, *Patterns of Industrial Growth 1938-1958*, New York, 1960, p. 437.

things, with the relative prices of substitutable factors of production. So as to eliminate this particular variation from the comparisons as far as possible, each of the four sets of coefficients assembled in table 8.4/I are expressed as ratios between the coefficients for particular industries and the average coefficients of any country's total manufacturing sector. The resulting relative coefficients—of capital intensity, fuel and electricity intensity and size of establishment —were then classified in ranges.[35] The industry or commodity columns are arranged in increasing order of relative fixed assets per employee coefficients.

196. As regards fixed assets per person employed, three of the ten activities listed lie well above the national averages for all manufacturing industries: vegetable oils, rubber tyres and paper.

197. The capital/labour ratio (machinery per worker) may be a better indicator of capital intensity of production than the first coefficient, which involves also other assets such as land, buildings and transport equipment. Both ratios vary with the degree of capacity utilization, and instances of excess capacity

[35] To clarify this with an example, one may consider the entries in the top left-hand cell of the table. They refer to fixed assets per person employed in footwear production in Pakistan (P) and Brazil (B), expressed as ratios of the average value of fixed assets per employee in the two countries' manufacturing sectors. In Pakistan, the industry coefficient was Rupees 2,085, while on the average of all Pakistan, manufacturing assets valued at Rupees 4,365 were available per employee, giving a ratio of 0.471.

in the industries of developing countries are numerous. Capital intensity in its turn may be taken as a reasonable indicator of an industry's relative economies of scale. To interpret this second part of the table, it needs to be remembered that the censuses of India, Pakistan, the Philippines and Indonesia cover only larger establishments [36] and that Argentina and Mexico belong, on the United Nations classification, to higher classes of industrialization than the remaining countries in the table.[37] Therefore, the evidence from Brazil and Paraguay, both belonging to the group of least-industrialized countries and both having censuses designed to cover all establishments irrespective of size, may convey a better picture of the industrial characteristics of the selected processing activities as a whole in relation to total manufacturing in developing countries. On the evidence of the capital/labour ratio, too, rubber tyres, vegetable oils and paper everywhere seem the most capital-intensive of the examined products, but in Brazil "other rubber products", "leather tanning" and "wood processing" were also capital-intensive above the average of manufacturing, as were cotton textiles in Paraguay. It ought to be added that the table excludes some of the most capital-intensive processed products, such as refined sugar which Indian data show to have been in 1959 four times as capital-intensive as paper, or pulp and newsprint production.

198. The relative ratio of expenditure on fuel and electricity per worker (part III of the table) agrees reasonably closely with the pattern of relative capital intensity.

199. As regards the size of establishment, finally (part IV of table 8.4/I), seven of the ten industries appear to lie above the average of all counted manufacturing establishments. Where this is so it points to a relatively heavy use of managerial resources and, in some cases, to the existence of monopolies or oligopolies.[38]

200. The order of capital and power intensity of the selected products is partly explained by the stage of development of the various economies in relation to available technology. Footwear, for instance, is typically produced by artisan methods, while rubber tyres can be made only by reasonably standardized capital-intensive processes. Progress in the leather footwear industry, to the stage, say, where it could successfully compete in the markets of developed

[36] See table 8.4/1, General Note.

[37] See United Nations, *Patterns of Industrial Growth 1938-1958*, New York, 1960, pp. 68, 446.

[38] Thus the Indian census counts seven firms in the tyres and tubes sector, while Brazil had four. Ten firms produce vegetable oil in the Philippines, eight produce paper in Pakistan, three produce leather goods other than footwear in Burma.

TABLE 8.4/II

Comparison of industrial characteristics of successive stages of processing

Industry	*Machinery per worker* [a]		*Fixed assets per person employed* [b]		*Fuel and electricity per worker* [c]		*Value added per person employed* [c]	
	Philippines	*Brazil*	*Philippines*	*Brazil*	*Philippines*	*Brazil*	*Philippines*	*Brazil*
1. *Forestry products:*								
Sawmills	0.351	4.1	2.223	31.2	0.565		3.612	
Plywood, veneer	0.276	3.3	6.404	35.7	0.343		4.765	
	Paraguay	*Brazil*	*Paraguay*	*Brazil*	*Paraguay*	*Brazil*	*Paraguay*	*Brazil*
2. *Cotton:*								
Ginning and preparation	163.2	9.44	265.3	63.12	4.52		64.8	
Spinning and weaving	139.3	1.65	232.9	23.51	6.74		96.5	
	India		*India*		*India*		*India*	
3. *Vegetable oils:*								
Crushing of seeds	3.49		4.65		1.12		3.56	
Edible oil refining	1.52		2.38		0.57		3.17	
	Pakistan		*Pakistan*		*Pakistan*		*Pakistan*	
4. *Leather:*								
Tanning and finishing	1.63		3.5		0.162		2.77	
Footwear	1.36		2.1		0.258		5.03	

Sources: National Censuses, cf notes to table 8.4/I.

[a] Brazil: hp of motive power; Paraguay: commercial value in thousand Guaranies. Philippines: value in thousand Pesos. India: in thousand Rupees. Pakistan: in thousand Rupees.

[b] Value in thousands of national currency.

[c] In thousands of national currency.

countries, would change the absolute and possibly also the relative capital and power intensity of these products. The ranking similarly reflects the relation between the early and the more advanced stages of processing that is typical of developing economies—and not of them alone. Table 8.4/II shows the primary processing of forestry products, cotton, vegetable oils and leather in the countries under review to be more capital-intensive than are the advanced stages of transformation. In three out of the selected four cases, fixed assets per person employed are higher in primary processing, but, as regards consumption of fuel and electricity per worker, the evidence is inconclusive. Value added is normally larger in the latter stages of transformation—thanks, in part, to the higher levels of protection enjoyed by products at the more advanced stages of processing.

201. A further significant aspect of the production of processed commodities is their relation to other industrial outputs. As consumers of industrial (intermediate) outputs, these industries may enlarge the markets for existing or projected industries, or they may rely on imports. As suppliers of intermediate inputs to other industries, the industry's profitability depends on the existence and scale of customer industries. The input-output data needed for an adequate picture of these relations are generally not available in developing countries; from fragmentary material [39] a few general conclusions may be drawn for the commodities examined in table 8.4/I.

202. Omitting agricultural inputs, the textile industry makes its main industrial purchases from the chemical industry, and its main sales of intermediate goods are to the footwear and clothing, food, rubber and leather industries. The industrial consumption of footwear producers is drawn from the wood and cork industries, and from leather, rubber and chemicals. Intermediate outputs from the wood and cork industry go to furniture, chemical and metallurgical industries, while its inputs come mainly from the mechanical and metallurgical industries (omitting again the agricultural origin of basic materials). The paper industry is heavily dependent on chemical and textile inputs, and sells inputs to the printing, chemical, cement, ceramics and glass, tobacco and food industries. Leather production also depends on chemicals and textiles, while its output goes mainly to footwear. The main inputs into rubber from other manufacturing industries are chemicals and textiles, and intermediate rubber goods go predominantly into footwear and clothing and to the metallurgical industries. Of the industries here mentioned, chemicals, textiles, paper and rubber occupy particularly important positions in the system of inter-industrial exchanges. Chemicals, paper and certain textiles (cord and canvas for tyres) are typically imported as intermediate goods. It should be added that in the experience of the country from which these indications are derived, the percentage difference between the factory value in the country of origin and at the destination of the imports was about twice as great for intermediate as for end goods (40 as compared with 19 per cent, excluding customs duties).[40]

TABLE 8.4/III

Flows of trade in selected processed agricultural commodities

(Average 1959-61, in millions of dollars, f.o.b.)

	From developed to developing countries		*From developing to developed countries*	
Group I				
Processed wood	91		121	
Canned meat	66		110	
Canned fish [a]	50		25	
Fish meal	3		49	
Fish oil	n		9	
Processed fruit	29		84	
Oils	78		310	
Oil cake and meal	13		190	
Leather	22		63	
Total		352		961
Balance		−609		
Group II				
Pulp and paper	410		9	
Leather manufactures	8		1	
Rubber manufactures	282		8	
Cotton manufactures	589		124	
Jute manufactures	13		199	
Wool manufactures	103		46	
Total		1 405		387
Balance				−1 018
Groups I and II		1 757		1 348
Balance				−409

[a] Estimated.

203. The preceding discussion showed that several forms of processing of agricultural commodities are decidedly capital-intensive by the standards of existing manufacturing sectors in developing countries. In some cases where capital endowment per worker now lies below the average for manufacturing, the coefficient may be expected to rise as industry is developed to replace imports on a larger scale or to expand into foreign markets. In the present situation of many developing countries, capital intensity appears to be greater in the elementary than the more advanced stages of processing the same commodity. The available data also establish a presumption of relatively considerable economies of scale in several of the processing activities. The fuel and electricity coefficients appear, on the evidence presented, to be even more uniformly above the manufacturing average. Processing activities depend heavily on a variety of inputs which developing countries typically import, especially chemical products and paper and textile goods.

[39] The following paragraph is based on the input-output table for Colombia (1953). See United Nations, *Analyses and Projections of Economic Development*, III. The Economic Development of Colombia, Geneva, 1957.

[40] United Nations, *op. cit.*, p. 246.

TABLE 8.4/IV

Influence of pulp and paper mill size upon investment and capital costs in the Far East

Mill size: tons/day:	*Fixed investment 1 000 dollars/daily ton*				*Capital costs dollars/ton*			
	25	*50*	*100*	*200*	*25*	*50*	*100*	*200*
Pulp								
Hardwood bleached	290	225	180	135	150	117	93	70
Bagasse unbleached	220	170	130	100	115	88	67	52
Bagasse bleached	295	230	180	140	153	119	93	73
Papers								
Hardwood unbleached	280	215	170	130	145	111	88	67
Hardwood bleached	345	275	215	170	179	143	111	88
Bagasse unbleached	285	225	175	135	148	117	91	70
Bagasse bleached	360	285	225	175	187	148	117	90
Newsprint								
Conifers groundwood	195	170	145	120	102	88	75	62

Source: Pulp and Paper Prospects in Asia and the Far East, FAO/United Nations, Vol. I, p. 110.

204. From all this, two general conclusions may tentatively be drawn. On the side of supply, it would not seem reasonable to expect processing of several leading agricultural outputs of developing countries to expand so much and so quickly that existing trade balances (as shown in table 8.4/III) are drastically changed. Processing is not always, or even as a rule, technologically simple or intensive in relatively abundant factors of production. On the side of demand, the direct and indirect capital requirements of processing industries often make development profitable only if the size of the market is greater than domestic outlets. By systematically facilitating the access of processed commodities from developing countries, developed and centrally-planned, as well as developing countries, could improve the conditions for the growth of processing industries in developing economies.

205. Even so, imports of this kind are often marginal in developed countries, and as such unstable and subject to wide price fluctuations. For a small developing country whose foreign exchange earnings depend largely on one product only, more export transformation may mean jumping from the frying pan into the fire. Between 40 and 62 per cent of the export earnings of Niger, Dahomey and Mali, for instance, are attributable to one single oilseed group and products derived from it; but since the Korean war the average annual fluctuation [41] in the price of copra has been 11 per cent and of coconut oil 13 per cent, of groundnuts 9 per cent and of groundnut oil 12 per cent, in spite of better storage facilities for the oil.

206. Where processing is mainly for import substitution and must remain so because of the difficulties of access to the protected markets of developed countries, economies of scale are of the essence. Few developing countries, for instance, have at present a domestic market big enough to absorb anything like the minimum output of 2,000 cub. m. of plywood which is estimated to be the lowest economic capacity for plywood production from broadleaved trees. The cost of plywood production declines significantly with increased production up to an annual output of 30,000 cub. m., which is far in excess of the current production in plywood exporting developing countries, such as Ghana, Nigeria, Lebanon, and the Republic of Korea. Another example, from the pulp and paper industry, is illustrated in table 8.4/IV.

(b) *The prospects to 1970*

207. In assessing very tentatively the order of magnitude of the increase in the foreign exchange supply of developing countries that may result from expanding their processing activities, a distinction has to be made between processing primarily for import substitution and processing primarily for export. These are, roughly, the two groups distinguished in table 8.4/III. Processed wood, meat, fish and fruit, processed oilseeds and leather and possibly leather manufactures seem to offer the best chances for export transformation. The import substitution group includes pulp and paper, rubber manufactures, wool manufactures and cotton manufactures. If the commercial policy of developed countries on the subject of manufactured cotton imports changed, a very much larger contribution to the foreign exchange supply could be foreseen than present outlook permits. To the primarily import replacing outputs one should also add cocoa products and certain milling by-products.

208. A crude estimate leads to an over-all sum of no more than a few hundred million dollars as the total increase in foreign exchange to be expected by 1970 from processing agricultural commodities. This addition to foreign exchange supplies would depend upon easier access for processed exports into developed countries and upon an efficient development of processing activities in the developing countries.

209. Several of the processed agricultural commodities are, in fact, intermediate goods for which

[41] Calculated as the difference between successive years' prices, expressed in each case as a percentage of the higher price and divided by the number of years −1.

the price elasticity of demand in the medium run may be expected to be greater than for final goods. Against this, however, must be weighed the economic advantages of processing some basic commodities either near the consuming markets (e.g., mixing animal feeds to suit national demands) or in integrated factories which transform relatively crude products down to the final stage. Integrated production in developing countries may not be competitive in world markets, because it is often highly intensive in capital and skills.

210. The typical tariff structure of developed countries, as illustrated in table 8.4/V, discriminates against products at successive stages of transformation.[42] Table 8.4/V classifies seven groups of products by three stages of transformation, stage III being the highest (e.g., plywood as against veneer sheets in stage II and wood roughly squared in stage I). The effect of this progression of tariff rates varies as between commodities, largely according to the differences in freight rates for the crude commodity and the equivalent quantity of its processed derivatives. Nor are tariffs the only means of protecting markets and raising the prices at which protected producers ean sell their output. Taken purely as an example, the case of imports of groundnuts, groundnut oil and cake may illustrate the point with the help of United Kingdom tariff rates and 1959/61 unit values of imports. The United Kingdom full customs duty on groundnuts and oilcake is 10 per cent. On groundnut oil it is 15 per cent. This tariff difference affords the British vegetable oil refining industry a protection of 41 per cent [43] against non-Commonwealth producers of refined groundnut oil. In the production of crude groundnut oil, on the other hand, a commodity with a much lower unit value of imports into the United Kingdom, the tariff fails to offset the full difference between the unit value of imports of one ton of groundnuts and the smaller import value of the crude oil and oilcake that can be derived from the ton of groundnuts. The bulkiness of the primary product compared with the equivalent quantity of the derived products explains part of this difference between the import values of primary and processed product. Further explanation may be sought in quality differences, and in price fluctuations that occur within a year and cannot be eliminated from data based on annual averages of price and quantity. But to the

TABLE 8.4/V

Tariffs on imports of processed agricultural commodities into developed countries in 1962/63

(*Percentages* ad valorem)

	EEC	*United Kingdom* [a]	*United States*
Stage I			
Wood and wood products.	5	10	0
Jute, raw and manufactures	0	0-20	0-15
Cotton, raw and manufactures	0	0	0-8
Hides, skins, leather and leather manufactures . .	0	0-10	0-4
Tropical oilseeds and oils	0	10	0-49
Fruit (citrus) and juices. .	12-20 [b]	3/6d/cwt [b]	1c/lb.
Preserved pineapples . . .	—	—	
Stage II			
Wood and wood products	10	10	1-16⅔
Jute, raw and manufactures	10	10-15	18-22
Cotton, raw and manufactures	8	7½	14
Hides, skins, leather and leather manufactures . .	0-10	10-20	5½-15
Tropical oilseeds and oils .	0-10	10-15	..
Fruit (citrus) and juices . .	19-20	..	17c/gallon
Preserved pineapples . . .	20	4 [c]	0.75c/lb.
Stage III			
Wood and wood products .	15	10-20	14-40
Jute, raw and manufactures	11-24	17½-20	2-14
Cotton, raw and manufactures	14-24	10-25	10-65
Hides, skins, leather and leather manufactures . .	14-20	10-30	5-82
Tropical oilseeds and oils .	5-15	10-15	3-33
Fruit (citrus) and juices . .	42	..	35c/gallon [d]
Preserved pineapples . . .	26	10	0.75c/lb.

[a] Full rate.

[b] Varies with season.

[c] And surcharge on sugar content.

[d] On unconcentrated natural fruit juice content.

NOTES TO TABLE 8.4/V

Wood and wood products
- *Stage I.* Wood in the rough and wood roughly squared or half squared but not further manufactured.
- *Stage II.* Wood sawn lengthwise, sliced or peeled but not further prepared, exceeding 5 mm thick and veneer sheets and sheets for plywood not exceeding 5 mm thick, whether or not reinforced with paper or fabric.
- *Stage III.* Plywood, blockboard, laminboard, battenboard and similar laminated wood products (including veneered panels and sheets), inlaid wood and wood marquetry.

Jute
- *Stage I.* Raw jute.
- *Stage II.* Yarn.
- *Stage III.* Woven fabrics, sacks, carpets and rugs.

Cotton
- *Stage I.* Cotton, not carded or combed.
- *Stage II.* Yarn.
- *Stage III.* Woven fabrics, ribbons, tulle, lace, embroidery, undergarments outergarments, blankets, bed and table linen, other made-up articles.

Leather
- *Stage I.* Hides and skins.
- *Stage II.* Finished leather.
- *Stage III.* Leather footwear, luggages, handbags, purses, gloves, and other articles.

Tropical oilseeds and oils
- *Stage I.* Copra, palm kernels, groundnuts.
- *Stage II.* No items.
- *Stage III.* Coconut, palm, palm kernel and groundnut oils.

Citrus fruit and juice
- *Stage I.* Fresh fruit.
- *Stage II.* Other juice than Stage III.
- *Stage III.* Concentrated juice.

Pineapple
- *Stage III only* Preserved pineapples.

[42] See also GATT, *Basic Instruments and Selected Documents*, Tenth Supplement, March, 1962, pp. 175-199 and Eleventh Supplement, March, 1963, pp. 169, 176, 188.

[43] The value that can be added by protected refiners—producing oil and oilcake—to the groundnuts, expressed as a percentage of the pre-tax difference between the unit value of groundnuts imports and the unit values of the equivalent quantities of imported refined oil and cake, reduced by unity.

extent that such explanations are not exhaustive, it appears that developing countries, given present volumes of production and prices, may be competitive at the lower stages of vegetable oil refining in markets having import prices and tariff levels similar to those of the United Kingdom. The removal of quantitative restrictions and mixing regulations and the establishment of efficient vegetable oil refineries in developing countries may thus lead to a considerable change in the composition of their exports in the oils and fats sector.

211. Shipping freights have been mentioned as an important factor in the changes of transforming the exports of developing countries. The absolute level of the freights for processed commodities reflects the degree of protection which distance allows to industries processing local primary commodities for consumption in developing countries. As regards exports of processed or crude products, it is the relative freight rate for equivalent quantities of a primary product in different stages of processing that matter. Processors in developing countries are helped in their export efforts, to the extent that freight rates are lower for the processed than for the equivalent quantity of the unprocessed commodity; and *vice versa*.

212. More than one-half of the possible addition processing might make to the foreign exchange supply of developing countries by 1970 would probably be attributable to import substitution. The other half might be earned from developed countries, and, if the additional exports can be spread over a large number of developed countries, even a sharp reduction or elimination of the tariff differential between crude and simply processed commodity imports should place no heavy burden upon importers in terms of their own individual balances of payments or the redundance of resources that might be created.

213. Import substitution, in this context, must be regarded as occurring, on balance, within the developing regions. Import substitution in one developing country at the expense of another is a common and natural phenomenon. Examples abound in Asian cotton manufacture, or in sugar refining or jute manufacturing. Generally speaking, trade liberalization within the developing world itself could contribute much to the national allocation of scarce resources, and full capacity utilization. This applies especially to the newer products, which can now include many of the processed commodities and should include increasing more of them as these economies develop. Table 8.4/VI shows not merely how little trade there

TABLE 8.4/VI

Intra-trade of developing regions, 1957 and 1961: values as percentages of total exports

From \ To	*Same region*		*Other developing countries*		*With all developing regions*	
	1957	*1961*	*1957*	*1961*	*1957*	*1961*
Asia	32	28	8	7	40	35
Latin America . . .	9	6.7	9	11	18	17.7
Central Africa . . .	3.5	3.8	6	6	9.5	9.8
Middle East	12.8	10.9	13	12	25.8	22.9
All developing countries					24.3	22

Source: United Nations, *Monthly Bulletin of Statistics*.

is now among developing countries, but also that the proportion of exports from developing to other developing countries has declined since 1957. The main reason is that the rate of growth has been slower in developing countries than in their export markets in the developed world. Another reason is that developing countries tend to industrialize along the same lines, so that they come to compete with each other. There are, to be sure, rational causes for some of this parallelism in development; but in the effect, trade restrictions which are forced upon developing countries by balance-of-payments deficits combine with protectionist policies to keep trade among the developing regions well below what it should be if it were to make the maximum possible contribution to their economic growth. The obligation to observe rules of non-discrimination in their import policies and tariffs may stand in the way of regional movements toward initially balanced trade liberalization among developing countries. If such schemes were encouraged and possibly helped by regional payments funds to limit the short-term drain on foreign exchange resources in participating countries, discriminatory schemes for trade liberalization in specified commodity groups might be constructed. They may be so formed as to prevent a reduction in the employment of existing competing industries in the participating countries and give access to other producers in developing countries to any increases in the size of the market and also to that share of the market which is presently supplied by developed countries. Schemes of this nature may help to improve the chances and reduce the cost of import substitution in the developing countries.

MEMORANDUM SUBMITTED BY THE DELEGATION OF THE SOCIALIST FEDERAL REPUBLIC OF YUGOSLAVIA

TRADE IN MANUFACTURES AND SEMI-MANUFACTURES (AGENDA ITEM 12)

I

1. The accelerated development of productive forces and the rapid expansion of trade are the concern of the international community as a whole. The immense progress which is being achieved in the field of science and technique makes both specialization and integration imperative to a growing extent and, therefore, calls for an ever greater expansion of markets and linking up of national economies. Under such conditions, the market, and foreign trade in particular, are essential factors in the development of production, in the same way as production growth contributes in its turn to the expansion of the market.

2. The actual trends, however, are not in line with these requirements. The existing extremely large differences in the levels of economic development, which are steadily widening, slow down the more intensive linking up of economies and the achievement of a more rational international division of labour. The aspirations towards the establishment of an integrated world market are thwarted by tendencies to divide this market through discriminatory practices, tariff barriers, quantitative restrictions and other obstacles.

3. The rapid overcoming of the differences in economic development levels and the removal of obstacles to intensive, all-round international trade are in the interest of both the developing and the developed countries. This would ensure the optimum utilization of the developed countries' available resources and the further growth of their exports, as the developing countries represent a potentially very large market for them. Owing to their very limited export earnings, however, the developing countries are not in a position to increase adequately their purchases from the developed countries.

4. It is generally accepted that industrialization and diversification of production are the fundamental means that the developing countries should resort to in order to solve this problem. The primary factor in overcoming the lag in industrial development and export increase is the internal action taken by the developing countries themselves. In this respect the serious efforts made by these countries are already producing results. However, no matter how great they are, such efforts can be fully effective only if they are supported by appropriate action from without.

5. The accelerated industrialization of the developing countries depends indirectly upon the import of capital goods and industrial raw materials from the developed countries. Export earnings are necessary for the payment of such imports; but the developing countries can secure only part of them by exporting their primary commodities, since their export trade in such commodities increases very slowly. The developing countries must therefore increase as rapidly as possible their earnings from the export of manufactures and semi-manufactures. On the other hand, the growth of industrial exports should help increase the volume and profitableness of production and thereby also contribute to the acceleration of economic development as a whole.

6. According to the report of the Secretary-General of the United Nations Conference on Trade and Development,[1] it is estimated that the developing countries should increase their industrial exports six times by 1970 and secure earnings in the amount of 12,000 million dollars. Such an expansion would mark the beginning of a wider participation of the developing countries in the industrial products trade and in the process of changing the international division of labour. The export increase thus achieved would nevertheless amount only to 4 to 5 per cent of the total increment in the consumption of manufactures in the developed countries in the period 1961-70.

7. The efforts made by the developing countries to increase their industrial exports are met in the developed countries, as a rule, not only by lack of understanding and active support, but also by strong obstacles of all kinds, including tariff and non-tariff barriers, of a discriminatory nature. The removal of these barriers and the extending of active support on a long-term basis by the developed countries are a vital and immediate requirement for the developing countries. The developed countries should make possible a rapid increase in their imports of industrial products from the developing countries; to this end, they should accelerate the adjustment of their economies, open their markets and take positive measures of benefit to the developing countries. The rate of growth of the industrial products imports from the developing countries to the developed ones should be considerably higher than the over-all rate of growth of the latter's imports.

In this connexion, Yugoslavia supported and continues to support the Programme of Action initiated by the developing countries within the General Agreement on Tariffs and Trade (GATT), the adoption of which is being postponed by the developed countries without justification. On the other hand, Yugoslavia feels that the forthcoming GATT tariff negotiations cannot bring greater benefits to the developing

[1] Printed in Vol. II of this series.

countries, especially if in the course of these negotiations the developed countries fail to further meet such demands of the developing countries as are directed particularly towards the expansion of their industrial exports.

8. It is essential that the closest links, co-operation and mutual assistance be established among the developing countries with a view to ensuring the overall and rapid growth of mutual trade in industrial products.

9. The developing countries have set forth, jointly or individually, their position on the problems and measures designed to promote the export of industrial products. The Report of the Secretary-General of the United Nations Conference on Trade and Development contains a consistent programme of action in this direction. For its part, the delegation of the Socialist Federal Republic of Yugoslavia has tried to set forth in this memorandum its views on the relevant questions of the promotion of exports of manufactures and semi-manufactures from the developing countries, because it is convinced that the measures it supports are conducive to a more rational international division of labour and a better utilization of the natural and human resources of both the developing and the developed countries.

II

10. The following should be ensured as a minimum, i.e., should constitute the immediate aim:

(*a*) The developed countries should not increase existing tariffs and other barriers and should not erect new ones;

(*b*) They should gradually abolish all non-tariff barriers within an agreed period of time, which should be as short as possible, and they should remove immediately those non-tariff barriers which discriminate against imports from the developing countries;

(*c*) They should reduce, independently of the general tariff reduction, those tariffs which disproportionately differentiate in favour of semi-manufactures and manufactures as compared to the raw materials originating from the developing countries from which such products are manufactured; in other words, they should improve the structure of their customs tariffs in favour of the developing countries.

11. In the forthcoming GATT tariff negotiations the interest of the developing countries to increase their exports of industrial products should be duly taken into account. The developed countries should reduce their tariffs on industrial products of export interest to developing countries and they should not exclude such products from tariff reductions, i.e., they should not include them on their lists of "exceptions".

12. In their trade and in their economic relations in general with the developing countries, the developed countries should not insist upon reciprocity of concessions.

13. Measures aimed at a general tariff reduction and the abolition of non-tariff barriers cannot by themselves provide adequate assistance to the industrial exports of the developing countries, owing to the very large economic disparity between the developing and the developed countries. Consequently, the developed countries should grant preferences to the developing countries.

(*a*) Preferences should be granted by all the developed countries to all the developing ones;

(*b*) Preferences should cover all semi-manufactures and manufactures originating from the developing countries;

(*c*) The preferential margin should amount to 50 per cent of the most-favoured-nation duty on each product; however, when the most-favoured-nation duty is 7 per cent or below, the preference should completely abolish the duty;

(*d*) Preferences should be granted to the developing countries for a minimum of ten years, with effect from the moment individual countries begin to export the products for which they have been granted preferential treatment;

(*e*) Exceptionally, the developed countries could establish tariff quotas for certain products, should the unlimited preferential treatment extended to some commodities result in too rapid a rise of imports, adversely affecting the domestic production of a developed importing country. For quantities exceeding the preferential tariff quota, the developed importing countries would reimburse to the developing exporting countries an amount equivalent to the difference between the preference and the duty. Preferential tariff quotas would be automatically enlarged from year to year by a percentage agreed upon through consultations between the developed and the developing countries. If necessary, agreement, either on a more equitable distribution of the preferential tariff quota among the developing exporting countries or with regard to the participation of countries appearing for the first time on the market as exporters of a given product, would also be reached through such consultations;

(*f*) In justified and limited cases, the developed countries would have the right to exclude from preferential treatment products the import of which at preferential tariff rates could cause sudden and serious disturbances in their market. Such exceptions would be determined for each developed country individually through consultations between the developed and the developing countries on an equal footing. Such exceptions would remain valid for a maximum of three years after which they would be re-examined by means of consultation procedures. The developed countries would reimburse to the developing exporting countries amounts equivalent to 50 per cent of duties charged on products excluded from preferential treatment;

(*g*) A general preferential treatment extended to all the developing countries would gradually be substituted to the existing preferential systems;

(*h*) All consultations on preferences would take place within the framework of the body which will emerge from the United Nations Conference on Trade and Development as being competent to deal with the question of preferences. The general functioning of the preference system would be reviewed periodically within that body.

14. The establishment of up-to-date industries in the developing countries and the expansion of their

industrial exports to the developed countries should be accelerated through the intensification of industrial co-operation between the developing and the developed countries.

The developed countries should further in a systematic and organized way the co-operation of their industries with those of the developing countries.

The developed industrial countries should extend full assistance to the industries of the developing countries by helping them, under acceptable and mutually beneficial terms, to acquire industrial processes and technical knowledge and to secure licences, know-how, engineering, industrial tools, etc., as well as to introduce modern technology and standardization. The industries of the developed countries should strive to import in increasing quantities assembling parts, semi-manufactures, intermediate products, etc., from the developing countries, on the basis of long-term co-operation agreements.

15. The developed countries should take all the necessary legal, commercial, organizational and other measures aimed at facilitating on their own territory the commercial activities of industries of the developing countries.

As a minimum, the developed countries should grant to the industries of the developing countries the same treatment (legal, administrative, etc.) as the one applied to their domestic industries with respect to the establishment of agencies, offices, consignment stocks, maintenance and repair services, etc.

The developed countries should grant to the industries of the developing countries the same favourable treatment as the one enjoyed by their domestic firms in respect of government and public purchases and tenders (for public utilities, public works, etc.).

16. The developed countries should respect the developing countries' need for and right to promote their industrial products exports through subsidization and they should refrain from levying special taxes or taking other measures impairing or frustrating such efforts on the part of the developing countries.

17. Regular consultations should be held on an equal footing between the developed and the developing countries within the framework of the appropriate United Nations and other international bodies in respect of the fulfilment of mutual obligations and for the purpose of removing possible difficulties and solving disputes arising from the economic co-operation between the developed and the developing countries.

III

18. The appropriateness of establishing closer economic co-operation among the developing countries on a regional and sub-regional basis, or among individual countries, is generally accepted. By co-ordinating their economic plans, developing mutual financing, implementing joint projects, co-operating in the fields of industry and transport, extending mutual technical assistance, etc., the developing countries can accelerate their industrialization and increase their exports of industrial products.

In establishing such links, the developing countries should take into account the interests of other developing countries which are not members of regional and similar groupings.

The United Nations bodies, agencies and Funds should assist the regional and similar groupings of developing countries in the implementation of their national or joint plans and programmes.

19. The developing countries are entitled to apply preferential treatment in their mutual trade, while they are under no obligation to extend it to their trade with the developed countries.

Such treatment may take the form of tariff preferences and other facilities.

20. The developed countries should extend special assistance (financial, technical and other) to the least advanced of the developing countries in order to promote their rapid industrialization and enable them to export their industrial products.

21. Developing countries which have already attained a specific degree of industrialization should also extend in the field of industrialization the greatest possible aid to the least advanced of the developing countries by co-operating with them in the setting up of their plans and projects and by granting them credits and technical and other assistance.

PROBLEMS AND PROSPECTS IN THE EXPORT OF MANUFACTURED GOODS FROM THE LESS-DEVELOPED COUNTRIES*

By Raymond Vernon

In the past two or three years, economists and policy-makers have begun to press the view that the continued growth of the less developed world may depend upon a great expansion in its exports of manufactured goods. A decade ago, the idea would have seemed improbable; today it has achieved the status of conventional wisdom.

In part, the new emphasis has arisen out of the faint glimmerings of a trend in this direction;[1] though the volume of manufactured exports from the less developed countries is distressingly low, hopes for a change have been stimulated by cases such as Israel, Yugoslavia, Mexico and Pakistan, whose exports of manufactured goods have lately broadened in type and increased in volume.[2]

In part, however, economists and policy-makers have been pushed to the new emphasis *faute de mieux*. The prospect of meeting the growing import needs of the less-developed countries by means of increased private investment, increased foreign aid, or increased raw material exports seems limited. And the possibility of avoiding these growing needs through the more rapid domestic development of import-replacing industries also appears to offer only a partial escape from the problem. Substitution cannot be forced too rapidly without exposing the economy to the peril of swiftly increasing costs. Besides, many import-replacing industries contribute little to net savings of foreign exchange because they are themselves forced to rely heavily on imports as a source of intermediate materials and of capital equipment.[3] Industries of this sort not only save little foreign exchange; they also face the threat of shutdown whenever imports have to be curtailed to deal with an exchange stringency.[4]

Largely by a process of elimination, therefore, the less-developed nations have been led to focus upon the possibilities of the increased exports of manufactured products. What we shall suggest here is that they are focusing upon a set of possibilities which are very real indeed. The first step toward the exploitation of these possibilities is a proper recognition of the nature of the possibilities and obstacles to be overcome.

THE NATURE OF THE PRODUCT

It would be misleading to talk about the problems and prospects for exports of manufactured products from the less-developed areas, without distinguishing sharply among various categories of manufactured exports. Any such classification unavoidably tends to do a certain violence to reality by forcing a great variety of different commodities into a few ill-fitting boxes. Nevertheless, it helps to think of three major categories of such manufactured exports, each with its special set of opportunities and risks.

Exports based on raw materials. In some ways the easiest and most "natural" path for the expansion of manufactured exports on the part of the less-developed countries is through the processing of materials hitherto shipped out in raw form. For products which lose considerable weight in processing, the possibility is especially evident; but even if there is no clear economic reason for processing at the source, the mere possession of the material raises the processing question. Accordingly, plans for the processing of exportable materials usually take a high place in the strategy of the less-developed countries.

In evaluating the prospects for manufacture and export in products of this sort, however, it is well to bear in mind the supply and demand characteristics for different types of processed materials. It is almost gratuitous to point out that products in which there is a fast-growing world demand, other things equal, are to be preferred to those that are stagnant; it is perhaps a bit less superfluous to observe that the supply side also needs attention. On the supply side, for instance, it is important to make a distinction between two kinds of products: items like coffee, cocoa, peanuts, and edible oils, where entry is easy, partly because the product can be grown or extracted in many areas and partly because the unit investment required for growing or for processing the product is fairly low; and products such as petroleum, bauxite and iron ore, where entry is more difficult because of the high, lumpy costs of extraction and processing.

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* The attached paper by Professor Raymond Vernon, Ph.D., of Harvard University was submitted to the Conference in the belief that its contents would be of considerable interest to Governments. The views expressed in the attached paper are not necessarily those of the Secretary-General of the Conference.

[1] Among the best summaries of recent world trade patterns is the well-known series of annual reports published by the General Agreement on Tariffs and Trade under the title *International Trade* [year]. For a recent summary of main trends shown by these data, see Alfred Maizels, *Industrial Growth and World Trade* (Cambridge: Cambridge University Press, 1963).

[2] From *United Nations Yearbook of International Trade Statistics* for the years 1957 and 1961, and Maizels, *op. cit.*, pp. 75, 76. See also *Measures for Expansion of Markets in Developed Countries for the Exports of Manufacture of Developing Countries*, E/CONF.46/PC/20, Table 1, p. 5.

[3] The strength of this force is suggested by data in Maizels, *op. cit.*, pp. 70, 75. According to Maizels, capital goods and intermediate products represented only 40 per cent of the imports of a group of semi-industrial countries in 1929, while the comparable figure for those countries in 1955 was 69 per cent.

[4] The point is stressed by Raúl Prebisch in his "Economic Development or Monetary Stability: The False Dilemma", in United Nations, *Economic Bulletin for Latin America*, Vol. VI, No. 1, March 1961, p. 5.

The dichotomy is, of course, a trifle forced. There are many cases which do not fall clearly in either category. But the working distinction is useful enough. It brings home the fact that high elasticities and competition on the supply side can continue to bedevil the country which specializes in the processing and export of some kinds of raw materials. Though the exports are processed, price stability and favourable terms of trade are not necessarily assured. The strategic question for developing countries, therefore, is to determine, in light of the supply and demand characteristics of its raw materials, whether scarce capital resources are better used in the promotion of other exports than in the processing of those materials.

Exports based on internal markets. A second category of manufactured product which is a candidate for export by the less-developed countries consists of articles produced as replacements for imports. We have already observed that the pattern of imports of the less-developed countries has changed drastically in recent decades; imports of manufactured consumer goods have declined in relative importance while other categories have grown, reflecting the swift rise of consumer goods production in those areas.

As the domestic manufacturing of import-replacing products has expanded, the probability is that unit costs of production have declined. The evidence on the point is fairly sparse; but there is every reason to assume that the achievement of internal and external economies of scale must have brought down unit production costs of many products.

In cases of this sort, it would be too much to expect the immediate appearance of an export surplus, available to be shipped to other markets. Even if oversized plants are being operated at less than apparent capacity, as is so very often the case, various domestic bottlenecks tend to hold down output in these infant industries while a voracious domestic demand tends to absorb what is produced. None the less, at this stage, the first great barrier to exports has been overcome: an enterprise exists in the country, capable of producing items for which demand may exist in other countries.

A number of less-developed countries now possess the nucleus of manufacturing industry in the consumer field, which is potentially capable of producing for outside markets. To be sure, the specifications, design, or packaging of the products of these industries may be inappropriate as they stand, especially for consumers of the advanced countries. Industries of this sort, therefore, may be producing items that are suitable for the markets of other less-developed countries before they are in a position to produce for advanced country markets. But enough experience already exists to suggest that the problems of quality control, standardization, and assured supplies, which are so important for marketing in the advanced countries, are not insurmountable for producers in the less-developed areas.

Products based on external markets. The most interesting potentialities for manufactured exports, however, may lie in a quite new direction; much more than in the past, such exports may stem from certain cost advantages of the less-developed countries in the production of manufactured goods, principally for the markets of the advanced areas.

It may seem a trifle odd to speak of cost advantages for manufacturing in the less-developed countries. Many obvious factors handicap such areas as location sites for the export of manufactured goods to the markets of advanced countries. These factors include the uncertainties, high costs, and long time periods associated with the international movement of goods; the paucity of external economies, such as adequate power and skilled labour; the ignorance of entrepreneurs in the less-advanced areas regarding the market conditions for manufactured products abroad; and the reciprocal ignorance of entrepreneurs in the advanced countries of conditions in little-known and distant areas overseas.

Some of these problems, however, are becoming much less formidable. The time-cost of overcoming ignorance and of transmitting technology has shown especially spectacular declines. As a result of swift air travel, key members of the firms of advanced countries can travel to distant areas at greatly reduced time-cost to the firm, searching out possibilities for trade and investment. By the same token, the transfer of technology, which so often demands face-to-face communication between the recipient of the technology in the less-developed country and the purveyor of the knowledge from the advanced area, can be achieved in a fraction of the total time that was involved in the pre-air age. Our trade, communications, and investment patterns have not yet begun to reflect the full consequences of this change.

If the reduced time-costs of face-to-face communication were the only ameliorating factor facing the less-developed countries, their prospects for the export of manufactured products would not be greatly improved. The attendant phenomenon, however, has been a sharp reduction—at any rate, a sharp potential reduction—in the time involved in shipping manufactured products to the markets of the developed countries. Economists as a group have generally assumed that in providing goods for the market, availability in terms of time can readily be converted into an element of cost; that, if need be, a product can be stockpiled close to the market to satisfy urgent demands. Hence the ultimate analysis has been thought of in terms of cost and price.

The assumption that a product can be warehoused for anticipated sales near its future market may be realistic for a wide range of products in international trade. But many manufactured products are designed for so specific a time and place that they cannot be thought of as fungible, hence, as capable of being stockpiled for rapid availability in the outlets of the advanced country. In the field of textiles, sporting goods, toys, consumer hard goods, and consumer electronics among others, designs change from season to season, sometimes from order to order. Oftentimes, therefore, the relevant product being demanded by the distributor is a product-by-a-time-certain. Sources of supply so remote that they are incapable of receiving the specifications, providing the samples, and delivering the product within the given time period simply cannot be regarded as relevant to the needs of

the buyer; such sources simply relate to another market. As a result, most parts of the under-developed world have been handicapped in the manufacture of some lines of consumer goods.[5] Hence the importance of the introduction and rapid growth of air freight.[6]

Here and there in the world, some industry or some area has moved out ahead to exploit these new developments; the post-war illustration *par excellence*, is, of course, that of textiles. But the kind of product likely to be involved in such a trend in the future can be stated in more general terms, according to its economic characteristics. Such products would tend to be high in value by weight and cubic content, justifying the relatively high cost of air freight. They would tend to have some significant element of labour cost in their total production, justifying the search for a low-cost location in the less-developed areas. They would tend to have a certain price elasticity, thus creating an incentive to look for lower-cost locations. (If the price elasticity were very high, it would not require much labour-cost advantage to persuade producers to take up a new location; but if the price elasticity were lower, the labour-cost advantage would presumably have to be much larger.) Finally, such products would be of the sort which did not require the kinds of external economies characteristically lacking in less-developed areas, such as skilled repairmen and reliable power.

This is a formidable set of limiting conditions. But there are various types of product that survive the check. The problem is to establish all the other conditions that lead to the selection of the less-developed area as the locus of production.

THE OBSTACLES TO EXPORT

When the exports of a nation are depressed, there are a score of different causes which may account for the pattern. Some of these causes may stem out of the protectionist policies of the importing nations; some may be due to the inadequacies of the existing exporting or importing machinery; and some may be the result of policies imposed by the prospective exporting country itself.

We begin here with the assumption that the prospective exporting country, in its general policies, has gone as far as it can to promote the export of manufactured goods. Our job, therefore, is to define the obstacles that these exports may confront either because of policies in the importing countries or because of shortcomings in the machinery for exporting and importing goods.

Despite the initial assumption, a proper sense of reality demands that we recognize the overwhelming importance of the policies that lie in the hands of the prospective exporting country. The monetary, fiscal, exchange rate or incomes policy of any nations profoundly affect the volume of its exports. The entrepreneur who operates in an inflating economy, for example, will be hesitant to cultivate export markets, since he would have to count on successive devaluations in order to maintain his position in such markets. A country with an overvalued exchange rate may be discouraging exports, whether or not inflation also exists. And a nation whose incomes policy generates an expansive domestic demand may discourage exports by constantly pre-empting the total output, so that there is nothing available to offer outside markets.

One need not assume, on the other hand, that the less-developed countries are clearly wrong whenever they impose policies that discourage exports. The objectives of the less-developed countries are not simple; in addition to the aim of increasing foreign exchange earnings, these aims may include the discouragement of internal inflation, the building up of government revenue, the redistribution of domestic incomes, and so on. Sometimes one objective dominates, sometimes another; and the changing priorities determine whether exports are to be encouraged or not. Still, a realistic view of the problem of promoting exports from the less-developed countries demands a proper recognition of the complexity of the issues and of the extent to which solutions may be influenced by the less-developed countries themselves.[7]

Nevertheless, if questions of price were the principal obstacle to increased manufactured exports from the less-developed world—if lower prices were not only the necessary condition but also the sufficient condition for sharply increased exports—one suspects that the past record of the under-developed countries in this field would have been much less dismal than in fact it has been. There have been numerous extensive devaluations among less-developed countries in the past decade, with little evidence that they have stimulated manufactured goods exports, even on a transitory basis. Besides, export prices can be lowered by a variety of devices short of a total devaluation, such as the use of multiple exchange rates and of direct or indirect subsidies. And the less-developed areas have shown no inhibitions in using analogous devices when the advantages in their use was clear. One is led, therefore, to look for other obstacles blocking the expansion of manufactured exports.

The problem of ignorance. As was intimated earlier, there are many reasons for supposing that ignorance of opportunity is a major hurdle confronting the potential exporters of the less-developed countries. No one, so far as I know, has systematically surveyed the business horizons of industrial entrepreneurs in the less-developed world. But there is not much doubt as to what such a study would show.

Most entrepreneurs in under-developed areas simply are not aware of the market conditions for fabricated products in overseas markets. The reasons

[5] For a discussion of the importance of this factor in serving United States markets, see Benjamin Chinitz, *Freight and the Metropolis* (Cambridge, Mass.: Harvard University Press, 1960), pp. 104, 124-127, 163.

[6] By 1960, air freight on scheduled lines had reached a world total of over 660 million ton-miles, and was growing at a rate of about 30 per cent annually. Aviation Studies International, Ltd., *Freight Traffic Records, Aviation Report Supplement No. 128* (London: 1963). See also S. H. Brewer, *The North Atlantic Market for Air Freight* (Seattle: University of Washington, 1962).

[7] It has been strongly argued, for instance, that the disconcerting export performance of India from 1947 to 1961 was due in large part to Indian domestic policies. For data describing this performance, see Bhabatosh Datt and others, *Economic Development and Exports* (Calcutta: The World Press Private Ltd., 1962), pp. 194-211; and Benjamin Cohen, *A Study of the Export Policies of the Indian Government*, 1951/52 to 1965/66 (unpublished Ph.D. thesis submitted to Harvard University, June 1963).

for this ignorance have to do in part with the origins of the entrepreneurs producing manufactured products in the less-developed countries. Enough studies have been done to suggest the existence of a pattern: these entrepreneurs typically have been drawn from commercial groups which at some earlier stage had a good deal to do with the handling of imported products.[8] They began, therefore, with some intimate knowledge of the character and dimensions of the domestic market, plus capital and commercial experience. As their livelihood was threatened by the imposition of import restrictions, they salvaged their fortunes by entering into production for the domestic market.

There is no reason why a group with such origins should know anything about the prospects and problems of marketing manufactured products abroad. Much more sophisticated and experienced producers in the advanced countries commonly manifest an extraordinary measure of ignorance regarding obvious opportunities abroad. Accordingly, confronted with an opportunity at home about which they knew something and possible opportunities abroad about which they knew nothing, the entrepreneurs in the less-developed countries would turn first to the domestic market; and they would be expected to make this choice even if exports were a possible from the first.

It cannot be emphasized too much that the problem of ignorance in the export of manufactured products may be utterly different in degree from that relating to materials in their raw or early processed state. Most materials of consequence are either exported through vertically-integrated foreign organizations (as in the case of petroleum or copper) or else command a public market with widely publicized quotations (as with coffee, cocoa, sugar, and the like). Where the producer is part of a vertically-integrated operation, the problem of ignorance usually does not exist; in such cases, the organization usually has its own marketing channels. Where the producer is not part of a vertically-integrated operation, he is usually a cog in a large-scale movement so large that it can collectively support an elaborate apparatus of wholesalers and shippers between the original seller and the ultimate buyer. In practice, therefore, the producer of raw materials in the less-developed areas need only present his product at the threshold of the international market; from that point on, the established apparatus of trade picks it up and completes the process of delivery.

In manufactured products, however, the problem of ignorance on the part of the seller is much more critical. The product being offered by the seller may not be regarded as interchangeable with the offerings of many other producers. Accordingly, no open price or organized market may exist, prepared to accept the product at the threshold.

Of course, there have been cases in which less-developed countries have developed an export market in a manufactured product, without having to take the initiative in export sale. Some unique small-volume commodities, such as products falling in the folk-art category, have been exported. So have some commodities falling in the category previously described as "products based on export markets", such as grey cloth, frozen shrimp, and low-priced pottery—mass-produced, large volume, manufactured commodities where small differences in price are of the essence to the buyer. But the folk-art type of output has limited supply elasticities and limited markets; and the grey-cloth type of case, while promising, also has its limitations and its risks, such as the terms-of-trade high-supply-elasticity problems which are ordinarily associated with raw materials.

Accordingly, the problem of overcoming ignorance still remains, representing a hurdle to the effective expansion of exports of manufactured products on the part of the less-developed countries.

The risk issue. Another kind of problem inhibiting exports of manufactured products from the less-developed areas has to do with the level of acceptable risk for entrepreneurs operating in those areas.

At home, such entrepreneurs often confront a market characterized by suppressed demand, extensive import restrictions, and limited domestic competition. There may be risks; but the risks are much less on the demand side than on the supply side.

When selling in world markets, on the other hand, the risks on the demand side tend to be of another order of magnitude. The first of these risks is related to the problem which we have just discussed, that of overcoming ignorance. If an exporter is unaware of the dimensions of the market he hopes to penetrate, he has no basis for knowing how much can justifiably be spent in overcoming his ignorance; the result may be total inaction.

Apart from this kind of risk, there is also the fact that the conditions of competition in world markets are not so easily defined or predicted—and certainly not so easily controlled—as in the markets at home. When selling to export markets, one has no guarantee against the risk that a competitor may enter the market from any direction. Moreover, there are no reasonable guarantees that the importing country will not alter its tariffs or licensing system at any time. The outcome, therefore, is much less predictable than in domestic marketing.

Here again, the similarities and differences between raw material exports and manufactured goods are worth mentioning. Numerous studies have established the fact that the prices of raw materials are more variable than those of manufactured products. If the manufactured products are undifferentiated and come from many different sources—the frozen shrimp and grey cloth cases come to mind again—the variability in price may not be much less than that of raw materials; but if the product is well-differentiated and its sources are few, then a higher degree of price stability is likely.

It would be a gross mistake, however, to leap from this observation to the conclusion that the exporter of the differentiated product feels less inhibited by the

[8] See, for instance, J. E. Stepanek, *Managers for Small Industry, An International Study* (Palo Alto: Stanford Research Institute, 1960), p. 40; Y. A. Sayigh, *Entrepreneurs of Lebanon* (Cambridge, Mass.: Harvard University Press, 1962), p. 79; G. F. Papanek, "The Development of Entrepreneurship", *American Economic Review*, May 1962, p. 52; A. P. Alexander, "Industrial Entrepreneurship in Turkey: Origins and Growth", *Economic Development and Cultural Change*, Vol. VIII, No. 4, July 1960, p. 360.

market risk to which he is exposed. This risk may be different in character; but as perceived by him it may be no less inhibiting than the risk confronting the raw material exporter.

Exporters of most raw materials offer their goods on a world market. True, a few markets may be especially dominant, as in the case of tea or jute. But, in general, the demand that exporters of raw material confront is made up of the sum of a series of different national demands; it means, therefore, that variations in purchases of imports in any given national market, whether generated by cyclical phenomena, by protectionist policy, or by other factors, may be muffled by different movements in other national markets.

By contrast, the exporter of manufactured goods, to the extent that he offers a differentiated product, tends to be committed to given markets and given distribution channels. By achieving some product differentiation or market differentiation, he may have managed to insulate himself from competition—at least competition which takes the form of a small price advantage to the buyer. At the same time, however, he will probably have lost some of the averaging effects of selling to diversified markets. Though the price elasticity of demand for the output of the individual producer may be slight in the market in which he sells, the risks of sharp changes in sales by reason of other factors affecting the market may be greater. The insulation achieved through product or market differentiation may be attained only by accepting the danger of larger—if less frequent—shocks that go with a more constricted and specialized market.

If specialized risks exist in the sale of differentiated products, can one assume that the promise of a higher return may be enough to offset the risk? It would be a mistake to assume too readily that there is some given prospective rate of return which the entrepreneur of the less-developed country would regard as sufficient to justify the risk involved in exporting manufactured goods. Contrary to the easy assumption sometimes made in economic theory, entrepreneurs in fact are not necessarily willing to accept larger risk for the chance of greater gain. There is a point in the calculations of entrepreneurs in which increments of risk simply cannot be offset by higher prospective gains over the long run. The project is abandoned because it falls outside the range of relevant risk-yield choices of the entrepreneur.

This reaction, of course, may be quite rational. An entrepreneur who draws a losing card in the export game is not necessarily allowed to draw again. If his capital is wiped out by the unlucky draw, he is out of the game. The long-run yield that might come from a large number of successive draws, therefore, has no great relevance in the individual entrepreneur's calculations. As a result, the entrepreneur who decides that he is unwilling to risk the game of Russian roulette that may be involved in investing in the penetration of a large and potentially profitable export market may be making a rational decision after all.[9]

The issue of scale. Still another kind of problem confronting the exporter of manufactured products in the less-developed countries is the familiar question of scale. Just as the problem of risk was seen to be related to that of ignorance, so too the problem of scale tends to be intertwined with that of risk. If the cost of investigating and penetrating the markets for manufactured products in the advanced countries were not high, the risk of a commitment to such markets would not be very great. Where the cost is substantial, however, the choice faced by the exporter is either to investigate the market with the hope of penetrating on a fairly large scale, or not to investigate the market at all; any lesser position might mean that the initial cost of investigation and penetration could not be recouped. So the easy intermediate choices that exist in the marketing of many raw materials are not as readily available in manufactured products; in many cases, either these products must be marketed on a large scale or not at all.

The need to gamble on a large-scale marketing operation or on none at all is reinforced by other marketing considerations. Product-differentiation and market-differentiation usually involve large, lumpy, costs at the outset. If the volume is large enough and reliable enough, distributors of many products in the advanced countries are sometimes willing to bear or share these costs; if the volume is small, the exporter is obliged to bear them or to give up the hope of exporting.

Problems of scale also tend to become inseparable from questions of production cost. The markets existing in less-developed countries for many products are too small at present to support all the scale economies that are technically available in the manufacture of the products. Where manufacturing facilities exist for such products in less-developed areas, their survival is made possible largely because of the protection extended by their Governments or because of the protective impact of transportation costs or time. None the less, one could envisage some of these plants achieving a competitive cost structure if only they could increase their volume by extending the reach of their markets. Exports represent one of the obvious possibilities to serve this end.

Of course, if an oversized plant is already in being, operating at less than optimal scale, no special incentive is needed to encourage the expansion of output through exports. The investment having been made, the plants have a high incentive to try to make it pay; as long as exports can make any contribution to overhead cost, they are welcome. If the plant does not exist, however, any rational prospective investor presumably has to be persuaded that he can survive through the period in which his production is still low and his unit costs still high. Accordingly, to the extent that infant-industry considerations justify a period of interim protection in home markets for some industries, they would also seem to justify an analogous

[9] A more general and more rigorous formulation of the relation of risk to gain is expressed in the "individual's utility function" concept, presented in John Von Neumann and Oskar Morgenstern, *Theory of Games and Economic Behaviour* (Princeton: Princeton University Press, 3rd ed., 1953) pp. 15-29; see also C. Jackson Grayston, Jr., *Decisions under Uncertainty* (Boston: Harvard Business School, 1960), pp. 279-291. An exceedingly stimulating effort to relate the risk factor to conventional economic theory is found in G. B. Richardson, *Information and Investment* (London: Oxford University Press, 1960).

protective edge, by one preferential device or another, for exports to the markets of third countries.

There is, of course, nothing new in the concept that the infant industries of the less-developed countries may be able to achieve low-cost high-volume maturity by means of preferences. It is one of the bases on which preferential arrangements such as the Central American Common Market and the Latin American Free Trade Association are justified.[10] In these instances, the essence of the arrangement is that the less-developed areas pool their markets in favour of one another, in order to increase the likelihood that their producers will be able to operate at satisfactory scale. But the situation may also justify preferential access on the part of producers to the markets of the developed countries.

A solution to the problems of low scale and high costs which plague the producers in the less-developed countries, however, may involve real difficulties. Simply to provide a larger market may not be enough. While not much of a systematic character is known about the structure of cost curves for producers in the less-developed areas, as compared with their competitors in the more-advanced countries, the presumption is strong that economies of scale are exhausted at lower volumes in the environment of less-developed countries. There are various reasons for this assumption. One is worth particular emphasis.

It is a familiar fact that the span of control of the managers of plants in less-developed countries tends to be less than the span of their counterparts in the advanced countries. There are a number of reasons for this discrepancy: a lesser willingness to delegate authority, based on cultural impediments or lack of experience; an absence of trained foremen and other supervisory help at the middle grade; and so on.[11] This impediment need not be particularly serious when a manufacturing operation is highly automated and integral in character, such as a petroleum refinery. However, in the production of light manufactures, such as consumer goods and food preparations, an effective system of supervision is indispensable in order to maintain a proper flow of materials and an adequate level of quality control. Without such control, an adequate degree of standardization is a near-impossibility; and without standardization, the whole marketing scheme is usually imperilled.

If systematic data were available, they would almost certainly show that manufacturers in the less-developed areas bow to the limitations on their span of supervision by limiting the size of their plants and by operating fewer shifts than their competitors in the advanced areas. One can say, therefore, that acceptable shift supervisors are still scarcer than capital in those areas, relative to advanced countries.

The alternative to multiple shifts as a means of increasing output is, of course, the use of multiple plants, each operating under its own entrepreneur. For some kinds of products, this is a realistic possibility. But where standardization of the product is essential, the multiple-plant possibility may not be very realistic. Problems of standardization are difficult enough when conducted inside the four walls of a single plant in less-developed countries; to try to achieve standardization in several plants in the conditions of those countries is to increase the problems geometrically.

Import restraints. Apart from problems of ignorance, uncertainty, and scale, there are also a variety of public and private trade restraints that inhibit the exports of manufactured products from the less-developed countries. Exports to the markets of the advanced countries must overcome the tariffs generally applied on the import of manufactured products. And exports to the markets of other less advanced countries face even more formidable barriers—not only high tariffs but also import prohibitions or quotas.

It is hard to generalize about the inhibiting effects of these restrictions on exports unless one is considering some specific product. The existing restrictions of the advanced nations include formidable restraints on agricultural products, many of which are exported by the less-developed world; major restraints on some critical non-agricultural materials, including steel, lead and zinc; and, finally, severe restrictions on a few manufactured products which the less developed world has managed to export in increasing quantities, notably cotton textiles.

When all these restrictions are added up, however, they seem fairly modest in the total stream of world trade. As one scans the long lists of import duties imposed by the advanced countries, the typical tariff rate applicable to manufactured products appears to be of the order of 10 to 15 per cent.[12] And when the list of products subject to quantitative restrictions in these countries is laid alongside the list of possible manufactured goods exports from the less-developed countries, the seeming opportunities loom greater than the restricted area.[13]

What is more, the trend for some years has been sharply in the direction of lower restrictions, not higher ones.[14] There is no single measure of tariff

[10] See Raymond F. Mikesell, *Liberalization of Inter-Latin American Trade* (Washington, D.C.: Pan American Union, 1957), pp. 55-56; an article by the same author, "The Movement Toward Regional Trading Groups in Latin America", in A. O. Hirschman (editor), *Latin American Issues* (New York: Twentieth Century Fund, 1961), pp. 125-151; in the same book, Victor L. Urquidi's "The Common Market as a Tool of Latin America's Economic Development", pp. 151-160; Rolf Sannwald and Jacques Stohler, *Economic Integration* (Princeton: Princeton University Press, 1959), pp. 27-31; Bela Balassa, *The Theory of Economic Integration* (Homewood, Illinois: Richard D. Irwin, Inc., 1961), pp. 138, 143 and finally United Nations Department of Economic and Social Affairs, *The Latin American Common Market* (New York, 1959) pp. 18-20.

[11] See, for example, J. E. Stepanek, *op. cit.*, p. 70; Yusif A. Sayigh, *op. cit.*, p. 63.

[12] For tariff rates, see Political and Economic Planning, *Atlantic Tariffs and Trade* (London: George Allen and Unwin Ltd., 1962); for a summary of rates for selected countries, see Raymond Vernon, "The Trade Expansion Act in Perspective", *Proceedings of the Winter Conference of the American Marketing Association* (Pittsburgh, December 1962), pp. 373-392. But note *Measures for Expansion of Markets in Developed Countries for the Exports of Manufactures of Developing Countries*, E/CONF.46/PC/20, Table 11, p. 28, which indicates that tariff rates applicable to manufactured products which less-developed areas now export may be somewhat higher.

[13] See *Measures for Expansion of Markets in Developed Countries for the Exports of Manufactures of Developing Countries*, E/CONF. 46/PC/20, Table 13, p. 32.

[14] Average *ad valorem* duties for 1937 and 1955 in eight advanced countries for a sample of manufactured goods (both unweighted and weighted by import value) are presented by Maizels, *op. cit.*, pp. 141, 179, based on data from various editions of the *Bulletin International des Douanes* (Brussels). Declines of one-third or so are typical, with the notable exception of Japan.

levels capable of expressing this drop. The well-known problem of weighting rates defies solution in "scientific" terms. None the less, one can say that the general level of tariffs prevailing in 1963 in the field of manufactured products probably is of the order of one-half the level that existed in 1948, at the outset of the series of great tariff negotiating sessions sponsored by GATT.

To be sure, there has been almost no relaxation of the virtual import embargo maintained by France, Belgium, and others on such important products as cotton textiles and footwear. Moreover, the United States and the United Kingdom have applied new restrictions to imports of cotton textiles in the past few years and have impelled the exporters themselves to put restraints on other products. But these restrictions, disconcerting though they may be, did not prevent Japan and Hong Kong from sharply increasing their exports to the advanced countries.[15] Exports of products such as cotton textiles and clothing, though subject to formal agreed restrictions, have grown throughout most of the 1950's, have reached new high levels in the early 1960's, and have been scheduled for somewhat higher totals in the years just ahead. Exports of other products, such as footwear, electronics, and sporting goods have expanded spectacularly in the countries which do not maintain embargoes, without provoking new restrictive action.

In short, the reactions of the importing countries have not automatically thwarted the increasing activities of the "low wage" exporters. On the contrary; although some countries with virtual embargoes have persisted in maintaining them, the others have accepted quite extraordinary import increases with very limited reactions.

The less-advanced countries have tended to belittle the reductions in import restrictions on the part of the more-advanced nations, not only because of such disconcerting reactions as the cotton textile restrictions, but also because the reductions have tended to cover products hitherto traded mainly among the advanced countries. The tendency to concentrate tariff reductions in products traded among the advanced countries has been due in part to the past negotiating procedures under the General Agreement on Tariffs and Trade. Under these procedures, the products chosen for negotiation and reduction have been selected on the initiative of the principal suppliers; and the principal suppliers in most cases have been advanced countries. To be sure, the less-developed countries have received the benefits of such reductions through the operation of the most-favoured-nation clause; but, partly through their indifference and partly through the nature of the negotiating procedure, they have had little to say in the selection of the rates that have been reduced.

However, the fact that the products heretofore subject to tariff reduction have been exported principally by the advanced countries tells us nothing about their potential importance to the less-advanced nations, once these nations venture into the field of manufacturing exports. The expansion of such exports can be expected to take place principally in products in which the less-developed producers have had only limited historical interest. More important still, the shift in the character of tariff-negotiating techniques now under consideration as part of the Kennedy round will tend to place much greater stress on broad linear cuts across large categories of products, almost irrespective of their suppliers. Reductions of this sort can be expected to contribute to the interests of the exporters of manufactured goods from the less-developed countries.

Less-advanced countries also have looked with a certain understandable apprehension at the development of customs unions among the advanced countries, notably the European Economic Community (EEC). One of the major worries has been that such preferential trading arrangements may shut exporters of the less-developed world out of major markets.

The problem of measuring the effects of the EEC on outside exporters is disconcertingly complex. A classical justification for customs unions of the size and kind represented by the EEC is that they stimulate internal growth, hence stimulate the demand for all sorts of products. And while much of the increase in demand will be supplied from internal sources as free trade inside the area is achieved, some of the increased supplies is expected to come from abroad. The history of growth in the EEC to date is surely not inconsistent with this justification.

None the less there is a fear that the demand for increased imports may be thwarted by a highly protectionist external tariff on the part of the EEC. It is true that the EEC in fixing a common external tariff, has tended to raise the protective incidence of tariffs on some products even as it lowered the protective incidence of others. Whether the average protective incidence as a whole has been raised or lowered is unclear; the subject has become a favourite topic for measurement and debate among economists.[16] Whatever the change may have been, however, there is no doubt that the average protective incidence of import restrictions in the EEC on manufactured products is far less than it was in the constituent countries ten or fifteen years earlier. On the whole, post-war developments in the field of commercial policy seem to have improved the chances of the less-developed countries for exporting manufactured goods to Europe, rather than to have reduced them.

One area in which no visible progress has been made is in the import policies of countries whose foreign trade is organized on a state-trading basis, principally the centrally-planned economies. In régimes of this sort, the formal tariff level is largely irrelevant to the question of whether imports will occur. No import can be made unless the State-trading organization decides to make it; and the

[15] General Agreement on Tariffs and Trade, *International Trade*, 1961 (Geneva, 1962), pp. 62-63 and earlier publications in same annual series; and Maizels, *op. cit.*, p. 364.

[16] See, for instance, Bela Balassa, "European Integration: Problems and Issues", *American Economic Review*, May 1963, pp. 175-184; Lawrence B. Krause, "European Economic Integration and the United States", pp. 185-196 of the same *American Economic Review* issue; and Walter Salant and others, *The United States Balance of Payments in 1968* (Washington, D.C.: Brookings Institute, 1963), pp. 95-118.

criteria for such a decision are not visible on the surface. Presumably, the State-trading organization will consider whether the product offered by the less-advanced countries is "good" for the people of a socialist economy; or whether the prospective trading partner is willing to accept goods from the State-trading country in return, such as crude oil from the Soviet Union or machinery from Czechoslovakia; or whether the proposed import forms part of a plan of foreign aid to the less-developed country. In any case, neither overt tariff levels, nor import-licensing policies, nor any other criteria exist for gauging either the level of restriction or the trend. As matters now stand, the exporter of manufactured goods from the less-developed nation confronts a wall of infinite height whose hidden doors can be opened or shut at will only by the economy which lies behind them.

Any less-developed country which aspires to export manufactured products has to concern itself not only with the barriers imposed by Governments or government-directed enterprises, but also with hurdles applied by private enterprises. Sometimes these hurdles are visible, through the use of patents or trade marks; sometimes they are less in evidence, being reflected in the internal distribution policies of the companies involved. Problems of this sort are especially likely to exist when the local manufacturer and potential exporter in a less-developed country is the subsidiary or licensee of a foreign enterprise.

A patent is a monopoly right granted by a sovereign which permits its holder, in that sovereign's jurisdiction, to exclude others from making, using or selling the products falling under the patent. The manufacturer of a product in some country of the less-developed world, therefore, may have a patent right to make a product; but he may not have the right to penetrate the market of some advanced nation if he has not come to terms with the patent-holder in that jurisdiction. If the producer in the less-developed country holds a licence on a patent covering only his own country and if the outstanding patents in other countries are in the hands of other producing licensees, the producer in the less-developed country may in practice be confined to selling within his own country.[17]

Something like the same situation exists with respect to trademarked products. A licensee entitled to use a given trademark in one country may not have that right in another. In practice, therefore, he may be excluded from trying to penetrate other markets under his mark.

In practice, patents and trademarks are probably less important as a restraint than is internal corporate policy. Companies producing in the advanced countries are loath to authorize their subsidiaries in the less-advanced countries to compete with the parent in home markets. They are hesitant to do so on many grounds: partly because the products produced in the less-advanced countries may differ in subtle respects from the products manufactured in the advanced countries (a very real and growing problem in the manufacture of automobiles, for instance); partly because the parent's day-to-day control of subsidiaries may not be as complete or as disciplined as the parent could wish, especially if the subsidiaries are joint enterprises with local interests; and partly because the technical problems of integrating the operations of a number of subsidiaries located in different countries present challenges which the parent is unwilling to try to overcome.

These private restraints constitute at once the most difficult and the most promising areas for the less-developed countries to consider. They are promising because the producers in less-developed areas that are hemmed in by restraints of this kind are likely to be in possession of many of the other attributes necessary for increased exports. Such producers are likely, for instance, to know how to fabricate a standardized product familiar in world markets. And they are likely to be able to acquire a knowledge of such markets with far more ease than would be characteristic of the producer who heretofore had no significant ties with the outside world.

Yet to deal with these restraints in a constructive way is extremely difficult. First of all, the existence of the restraints may not be known. Second, though some of the restraints involved may be unnecessary, others may be based on reasonable grounds. Finally, because the enterprises involved may be the most effective available instruments for expanding the exports of the less-developed countries, some accommodation to their problems may well serve the interests of the less-developed countries themselves. This is an area of action, therefore, in which progress can only be slow and cautious.

Measures to promote manufactured exports

What can be done about the obstacles that confront the manufactured exports of the less-developed nations? Probably the most significant measures lie wholly within the jurisdiction of the less-developed countries themselves, in the fields of monetary, fiscal and trade policy. But if we assume that these general policies are just about as conducive to exports as the complex goals of the exporting country permit, is there then something more to be done? For most countries, the answer is clearly in the affirmative. Much more can usually be done; some of it by the developing country itself; and some by the countries which constitute its prospective markets.

Measures by the exporting countries. The problems of overcoming obstacles to the export of manufactured goods are a peculiarly mixed bag. Some of these problems reflect the inadequacies of the private sector in less-developed countries a lack of information and perspective, a limited capacity for accepting risk, an inability to operate on a large scale. On all these scores, the public sector can help.

The most constructive role for the public sector, however, probably is in a partnership with the private sector rather than in a substitute capacity. If the public sector were charged with the problem of

[17] Data on patent and trademark licensing practices are scant. One of the more informative studies on the subject is reported in part in J. N. Behrman and W. E. Schmidt, "New Data on Foreign Licensing", *The Patent, Trademark, and Copyright Journal of Research and Education*, George Washington University, Vol. 3, No. 4, Winter 1959, pp. 357-388. Data on pp. 379 and 383 indicate that United States parents like to maintain close control of their overseas subsidiaries' use of patents and trademarks and tend sharply to circumscribe the scope of licences granted.

exploring and exploiting foreign markets for manufactured products, there is nothing in the history of foreign trade to suggest that the operation would have a chance of success. Small swift initiatives, multiple investigations, minor product and price adjustments, and diffuse negotiations in international trade are peculiarly the province of the private sector, not of government enterprise.

What form, then, might such a partnership take? As long as local entrepreneurs are not aware of their market opportunities abroad, and as long as the prospective marketers abroad know nothing of the producing potentialities of the less-developed countries, an indispensable link in the export-import chain is missing. There is nothing mysterious about the range of governmental measures that can be taken to build the link. One of these is the government underwriting of production and export feasibility studies. It matters little whether the underwriting consists of financing the investigations of domestic entrepreneurs in search of export markets or of foreigners in search of new sources of supply. The critical point is that the inducement must be on such terms as to overcome the stalemate induced by the block of ignorance. The more-advanced countries have already done a great deal for their exporters in exactly this direction. There is scarcely a major exporting country that does not provide a flow of information to its business community, collected by its diplomatic apparatus overseas. A few countries, such as Japan, have gone much further by providing travel costs and other inducements to prospective importers in order to examine the productive facilities of the country. What the less-developed countries need at this stage are more extensive efforts of a similar sort, undertaken in close collaboration with their existing and prospective producers.

Once the problem of initial ignorance is overcome, of course, there are still some threshold uncertainties to be dealt with: domestic investors, despite some knowledge of the conditions of overseas markets, may still see the risks of initial penetration as very high; and prospective importers, while aware of the capabilities of domestic producers, may still feel that reliance upon such sources is an especially chancy business.

A standard approach to problems of this sort has been to provide an exemption to "new and necessary" industries, excusing them from all manner of taxes, especially income taxes. But the results of programmes of this sort have not been especially fruitful.[18] To be sure, prospective importers in search of an overseas production source are likely to favour a country with tax exemptions over a country without such exemptions, other things being equal. But it is doubtful that tax exemptions can do much to offset the inhibiting effects of uncertainty. If a prospective investor in a developing country is uncertain of his ability to manufacture some product for export, an exemption from excise taxes or import duties on his machinery and materials may seem quite irrelevant. If his uncertainty goes to the question of costs and if he is unsure whether he will be able to produce at a profit, an exemption from income taxes will seem a dubious gift. Even if the prospective investor anticipates that he may be able to produce at a profit over the long run, his concern over the possibility of being wiped out in the early years of his venture may mean that a tax exemption is unresponsive to his needs.

There are various risk-reducing techniques that lie within the province of Government. One type of technique is exemplified by the various forms of insurance offered by the advanced countries to their own exporters and investors, particularly the various types of export insurance (often including subsidy as well) that are now extant. The less-developed countries should certainly undertake to provide schemes of this sort to their prospective exporters.

But some of the risks confronting export operations from less-developed areas may require even more heroic risk-reducing measures. Domestic investors confronting the hazards of export markets might be indemnified, for instance, for some major fraction of any losses during an initial period of market penetration; while importers from the advanced countries, trying to decide whether to accept the risks of using new domestic sources, might be held harmless during an initial introductory period against delivery failures or the delivery of substandard products.

Apart from dealing with problems of ignorance and uncertainty, the less-developed countries may also be in a position to deal with some of the private restraints inhibiting their exports. While restraints of this sort are especially hard to grapple with, nevertheless, any less-developed nation concerned with the promotion of its manufactured exports cannot afford to neglect the problem. One way of dealing with the problem is to include it in the bargain that generally is a prelude to the entry of any significant foreign producer in a less-developed country. In recent years, negotiations of this sort have generally taken off from the assumption that the foreign investor would establish an import substituting industry and would do little exporting. Perhaps the time has come for negotiating Governments to ensure that investors also are in a position to export, wherever cost levels and operating conditions permit.

Another possibility for the less-developed countries is to reconsider whether their national patent and trademark laws are appropriate to their circumstances, and to revise them as necessary. Since these laws convey certain monopoly rights to patent and trademark holders inside a national area, they are sometimes used as a way of allocating national markets and restricting competition among various producers. A number of countries such as India include provisions in their patent law which require patentees to license their Indian patents to others if some export demand is not being satisfied. Perhaps this is as far as one can reasonably go. On the other hand, it might be possible to require the recipient of a national patent or its parent to license patents in third countries over which they exercise control, if such a measure would facilitate exports. If a provision of this sort were adopted, it

[18] For an appraisal of such programmes in Mexico and the Philippines, see Jack Heller and K. M. Kauffman, *Tax Incentives for Industry in Less-Developed Countries* (Cambridge, Mass.: Harvard Law School, 1963).

might be thought of as an extension of the so-called "working provisions" of patent laws, already sanctioned under certain circumstances by the basic international patent convention.[19] The obligation to produce within the jurisdiction in order to retain a monopoly would then be supplemented by an obligation not to block the export of what was being produced.

Measures by the importing countries. There are some measures in support of the exports of the less-developed countries, however, which lie beyond their own reach, notably in the markets of the advanced nations. The first and most obvious of such measures is the reduction of import barriers, including tariffs, quantitative restrictions and more subtle inhibitory devices of an administrative character.

The progress made on tariffs, as we saw earlier, has been notable. And even more significant progress is to be expected if the forthcoming Kennedy round of tariff negotiations manages to produce results. Progress on these lines, however, cannot be expected to go forward smoothly. Internal pressures are bound to build up within the advanced countries from time to time, as the less-advanced countries suddenly achieve new capabilities for export. This will lead to the inevitable protectionist response; and in a few cases even to restrictive action on the part of the advanced countries. Responses of this sort are not only likely; they are also justified in some cases—justified in the sense that the internal shift of resources required for the advanced countries to deal with sudden large increases in imports in some products may be greater than they can manage successfully. The problem for the advanced countries in dealing with such increases can be particularly difficult when the region inside the country affected by the import competition is, relatively speaking, an area of unemployment and low wages. Inevitably, some of the imports from the less-developed countries hit with particular force in such regions. This is the case because labour-intensive industries in such countries tend, in the course of time, to be pushed into the poorest parts of such countries in an effort to survive the pressure of increasing labour costs.[20] Unhappily, therefore, the less-developed countries sometimes find themselves in competition with the poorest, least mobile, least adaptable regions of the rich nations.

We observed earlier, however, that the effect of these reactions should be kept in proper perspective. The fact is worth repeating that Hong Kong and Japan—the two illustrations *par excellence* of countries ready, willing, and able to export "low wage" products—have managed to an extraordinary degree both to expand and to diversify their exports of manufactured products. And there is no reason to assume that the future performance of the advanced countries in this regard will be much different from their past performance.

[19] International Convention for the Protection of Industrial Property, Article 5A (2). For a systematic presentation of the interests of less-developed areas in the patent system, see U.S. Senate, Committee on the Judiciary, Sub-Committee on Patents, Trademarks, and Copyrights, Document No. 63, "The International Patent System and Foreign Policy". Study No. 5 pursuant to S. Res. 55, 85th Congress, first session.

[20] A description of the process for the United States is found in Martin Segal, *Wages in the Metropolis* (Cambridge, Mass.: Harvard University Press, 1960), p. 104 *passim.*

What many of the less-developed countries would like to see, however, goes beyond the reduction of trade barriers. What is wanted is a system of preferential tariff rates applied by the advanced countries in favour of all products from the less-developed areas. The basis for a non-selective preference of this sort is somewhat difficult to define. Presumably, it is justified in the eyes of those who request it on very much the same grounds as foreign aid would be justified: as a partial compensation for past "exploitation"; as an obligation of rich countries toward poor countries; or as a measure of self-interest on the part of the advanced countries, with a long-run payout to all nations in the form of increased world stability.

The trouble with justifications of this sort as a basis for trade policy is that they eliminate the last shred of economic justification for a given line of policy, substituting only political norms in their place. The existing economic criteria provide reasonable stable indications of the direction to be sought. The political criteria, wholly detached from an economic anchor, can generate policies which shift with the winds. In the end, political criteria can justify adverse discrimination by any advanced country displeased with its less-developed trading partner, just as readily as they justify preferences.

However, there is an economic case for a system of preferences to the less-developed countries, provided the preferences are limited in time and selective in character. If the infant-industry argument provides the intellectual justification for special measures of protection such as those permitted in the General Agreement on Tariffs and Trade for infant industries,[21] it also provides the justification for preferential access on the part of those industries to the markets of advanced nations. The industries involved would not necessarily cover the traditional manufactured exports of the less-developed countries such as cotton textiles. These are not the industries to which the infant-industry argument applies most clearly; that is to say, they are not the industries which need help to overcome an initial high-cost period in order to demonstrate their long-run ability to survive without special assistance. Instead, such preferences would cover such comparatively new possibilities as processed foods, consumer electronics, clothing and intermediate supplies such as timber, newsprint, selected chemicals and fertilizers. In theory, once the industries have achieved a size and maturity sufficient to exploit their potential economies of scale, the special measures of protection and preference should no longer be available.

There is a basis, therefore, for justifying a selective preference for the exports of the less-developed nations applicable to those products for which the infant-industry argument is relevant and for so long as the relevancy exists. But many problems will have to be solved before the principle is converted into an operating reality. Suppose, for instance, that the grant of a preference would dilute the already existing preference of some less-developed countries by admitting others on the same basis; what then? This is

[21] General Agreement on Tariffs and Trade, Article XVIII.

the case of some French Community African countries now selling in France, of the overseas Commonwealth countries selling in Britain, of Libya in Italy, and of the Philippines selling in the United States. Still another set of difficulties revolves about the treatment of industries which are no longer "infants" in some less-developed countries while remaining infants in others; in such circumstances, is discrimination in favour of some but not all under-developed areas to be permitted? Other difficulties relate to the situation of countries whose basic law prohibits the proposed deviation from most-favoured-nation treatment, or whose executive authority to reduce tariffs has been exhausted—both very real problems for the United States. And then there is the problem of countries committed under bilateral treaties to grant most-favoured-nation treatment to other countries unwilling to waive their rights—Austria, for instance, in its relations to the Soviet Union. Finally, there are the knotty procedural problems involved in identifying the industries entitled to protection, determining the relevant period, and settling on the appropriate size of the preference. Solutions to all these problems can probably be found. But the probabilities of eventual solid achievement in this field depend in part on an early recognition of the formidable obstacles.

So far, we have considered the concessions which advanced countries with an open economy might appropriately make to the products of less-developed countries. But there is also the question of securing appropriate concessions from the centrally-planned economies and from other countries whose trade is centrally-controlled. This is a formidable problem. It has been proposed from time to time that the problem could be met by prescribing some rules of the game to centrally-controlled economies parallel to those that apply to countries with an open economy. The Havana Charter, for example, embodies an ambitious effort of this sort, in which the trading margins of State-trading importers are analogized to tariffs and made subject to negotiation.[22]

Analogies of this sort are now recognized as fairly treacherous and unrealistic. We have already pointed out that when the ultimate determination whether an import will occur depends upon the decision of a foreign trade agency, the decision of the agency may not be a function of demand or of price. It may depend on extraneous questions which, under the rules of the game, the countries with open economies are presumed not to ask. Only some readily definable, unambiguous, and objective commitments, therefore, would be of much use to the less-developed nations, such as a commitment to buy minimum amounts of given commodities, or a commitment to pay for purchases in convertible currencies. Any commitments more general in character would be likely to prove of doubtful value to the less-developed nations.

If all the measures suggested above that lie within the range of the possible were in fact achieved, no one can say what they would add to the total exports of the less-developed countries. Partly, this is due to the unavoidable generality with which the measures are described. Partly, it is due to the fact that projections of future export and import volumes are notoriously subject to major error; even the most carefully developed projections, if accepted as conditional forecasts, come dangerously close to being downright specious.

All that can defensibly be said is that the volumes of potential trade involved in the discussion are not trivial. The size of the market for imported manufactured products in advanced countries is, of course, very large. Such imports now run in the neighbourhood of 25 to 40 billion dollars annually, depending on country and product classifications. The annual increase in the production of manufactures in the advanced countries runs at 7 or 8 billion dollars in constant terms. Meanwhile the less-developed countries are increasing their production of manufactured products in the amount of 2 to 3 billion dollars annually in constant terms. The magnitudes themselves suggest significant possibilities.

While one has to be content with the unavoidable imprecision of estimates in this field, a few things can be said with some reasonable assurance. We are dealing here with problems that have multiple causes. Some of the causes, such as import embargoes, must be eliminated if progress is to be made; others, such as inefficiency in the less-developed countries, can be partially offset by temporary preferences or by subsidies. On the whole, as one surveys the whole casual complex, there is cause to believe that a great deal can be done by the less-developed countries themselves, without the help of the Governments of the advanced countries. And there is cause for concern over the widespread impression that, once the import barriers of the advanced countries are reduced, a real expansion in the exports of the less-advanced countries will be possible without much added effort.

Added measures will be needed. Some of these measures are of a very general nature, such as measures leading to the expansion of internal supply, and to the lowering of prices for potential exports. Others are of a more particular character, such as those that help the prospective exporter to overcome his ignorance of opportunities, to limit his perceived risk, or to cope with problems of scale. If the measures within the power of the less-developed countries are taken without trade liberalization by the advanced countries, there is no reason to assume that they will be barren in effect; if taken in combination with trade liberalization measures, they are sure to help the less-developed nations considerably.

[22] *Havana Charter for an International Trade Organization* (28 March 1948), Arts. 29-31.

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