

BIBLIOGRAPHIC INPUT SHEET

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Batch 50

1. SUBJECT CLASSIFICATION	A. PRIMARY	TEMPORARY
	B. SECONDARY	

2. TITLE AND SUBTITLE
Import requirements of less developed areas and the trade gap

3. AUTHOR(S)
Balassa, Bela

4. DOCUMENT DATE 1964	5. NUMBER OF PAGES 47p.	6. ARC NUMBER ARC
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7. REFERENCE ORGANIZATION NAME AND ADDRESS
Yale

8. SUPPLEMENTARY NOTES (*Sponsoring Organization, Publishers, Availability*)
(In Trade prospects for developing countries, Bela Balassa and R.D. Irwin, 1964)

9. ABSTRACT
(ECONOMICS R & D)

10. CONTROL NUMBER PN-AAD-098	11. PRICE OF DOCUMENT
12. DESCRIPTORS	13. PROJECT NUMBER
	14. CONTRACT NUMBER Repas-4 Res.
	15. TYPE OF DOCUMENT

Repas. 4 Res
PN-AAD-098

Revised

TRADE PROSPECTS FOR DEVELOPING COUNTRIES

Chapter 4⁹

Import Requirements of Less Developed Areas and the Trade Gap

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94. IMPORT REQUIREMENTS OF LESS DEVELOPED AREAS
AND THE TRADE GAP

94.1. ECONOMIC GROWTH IN DEVELOPING COUNTRIES

Whereas the foreign exchange earnings developing countries derive from their exports to developed economies can be estimated with some degree of confidence, the error-possibilities multiply as we get to the projection of import-requirements. Imports into developing countries, as well as the geographical and the commodity-composition of these imports, are greatly influenced by the rate of economic growth and structural changes in these economies, and past relationships between income and imports can be only of limited use in making projection. At the same time, a considerable degree of uncertainty surrounds the growth prospects of less developed areas.

Economic growth in developing countries is affected by a number of economic and noneconomic factors. Among the economic determinants of growth, we may single out the rate of saving, the expansion of exports, the process of import substitution, and the inflow of foreign capital. But available information concerning the effects of these variables on the growth rate and their interrelationship in the process of economic development is not sufficient to derive quantitative relationships in the form of an economic model that could be used for purposes of projection. At the same time, prospective changes in saving ratios can hardly be predicted and neither can the extent of import substitution and the magnitude of the future capital inflow be foreseen with confidence. Moreover, a host of noneconomic variables (political and social structure, attitudes to work and risk-taking etc.) bear influence on the process of economic growth but these are not quantifiable and are likely to undergo changes over time.

Thus, any projection of future growth rates in developing countries will necessarily involve a large margin^{of} error. In arriving at some tentative figures in the present study, consideration has been given to past trends, as well as to national plans, projections on export earnings, and information on prospective developments. However, account has been taken of the fact that national plans provide growth targets rather than projections and these targets often prove to be overly optimistic.

Similarly to the case of developed economies, two income variants, have been distinguished in regard to developing areas (Latin America, Africa, Middle East, Asia) a most likely and a "high" or target alternative. The two variants are related to the income alternatives postulated for developed countries since the expansion of the exports of less developed areas is dependent on the rate of growth realized in developed economies. Further, the attainment* of the target rate of economic growth in the developing countries presupposes the successful implementation of growth oriented economic policies and a substantial capital inflow.

The assumed growth rate as well as data for past periods are shown in Table 4.1.1 while a comparison with the estimates of other researchers are given in Table 4.1.2. As regards the years 1950-1960, differences in the results for the 1950-55 and 1955-60 subperiods should be noted. These differences are largely explained by favorable world market conditions for primary products during and immediately following the Korean war and[↓] slackening in the growth of exports afterwards.¹ For purposes of the subsequent discussion, the period 1950-1960^{is} considered as a unit, however.

¹ According to U.N. statistics, the f.o.b. value of exports of the developing countries rose by 24 per cent between 1950 and 1955 and 15 per cent between 1955 and 1960 [19].

Table 4.1.1

Economic Growth in Developing Areas^a

	1950	1955	1960	1970	1975	Annual rate of growth						
						1950-1955	1955-1960	1960-1970	1970-1975			
<u>Latin America</u>												
GDP	40650	51140	61750	I 94100 II 100600	I 1117800 II 130900	4.7	3.8	4.0	I 4.3 II 5.0	I 4.6 II 5.4		
Population	160.7	181.1	204.7	263	299	2.4	2.5	2.4	2.6	2.6		
GDP per capita	252.9	282.4	301.7	I 357 II 382	I 394 II 437	2.2	1.3	1.8	I 1.7 II 2.4	I 2.0 II 2.7		
<u>Africa</u>												
GDP	14750	18160	21720	I 32500 II 35100	I 40500 II 45600	4.3	3.6	3.9	I 4.1 II 4.9	I 4.4 II 5.4		
Population	197.8	217.8	240.9	300	338	1.9	2.0	2.0	2.2	2.4		
GDP per capita	74.5	83.4	90.2	I 108 II 117	I 119 II 135	2.3	1.6	1.9	I 1.9 II 2.7	I 2.0 II 2.9		
<u>Middle East</u>												
GDP	4340	5750	7300	I 11000 II 12100	I 13700 II 15800	5.8	4.9	5.3	I 4.2 II 5.2	I 4.4 II 5.5		
Population	39.4	45.1	51.7	67	76	2.7	2.8	2.8	2.7	2.6		
GDP per capita	110.1	127.5	141.2	I 163 II 181	I 178 II 208	3.0	2.1	2.5	I 1.6 II 2.5	I 1.8 II 2.8		
<u>Asia</u>												
GDP	45500	57100	68750	I 103700 II 109900	I 129300 II 141600	4.6	3.8	4.2	I 4.2 II 4.8	I 4.5 II 5.2		
Population	651.0	716.1	797.1	1010	1140	1.9	2.2	2.1	2.4	2.5		
GDP per capita	69.9	79.7	86.2	I 103 II 109	I 113 II 124	2.6	1.5	2.1	I 1.8 II 2.4	I 2.0 II 2.7		
<u>Developing countries, total</u>												
GDP	105240	132150	159520	I 241300 II 257700	I 301000 II 333900	4.7	3.8	4.3	I 4.2 II 4.9	I 4.5 II 5.3		
Population	1048.9	1160.1	1294.4	1640	1853	2.0	2.2	2.1	2.4	2.5		
GDP per capita	100.3	113.9	123.2	I 147 II 157	I 162 II 180	2.6	1.6	2.1	I 1.8 II 2.5	I 2.0 II 2.8		

Source: U.N. Yearbook of National Accounts Statistics, Growth of the World Population, and Statistical Yearbook, IMF, International Financial Statistics.

Note: (c) GDP in millions at 1950 prices, population in millions, GDP per capita in 1950 dollars

Various factors would point to an acceleration of economic growth in the case of Latin America. Given the large differences shown in the growth rates of individual countries during the fifties and the increasing relative importance of countries with a better growth performance, a continuation of past rates of growth in all countries of the area would lead to higher growth rates for the entire region. Further, our projections indicate an improvement in the export prospects of Latin America (exports have been projected to rise at an annual rate of 2.8 per cent in the period 1960-1975, as against 2.4 per cent in 1950-1960)¹ and the Alliance for Progress program is also likely to have beneficial effects on the region's growth.

On the other hand, the projected increase in exports, taken by itself, does not warrant a high rate of growth of GNP, while changes in the pattern of import substitution promise difficulties for future expansion. In the period 1950-1960, import substitution in consumer goods was an important factor contributing to economic growth but this has been by and large completed. In the words of Raul Prebisch: "The stage of easy substitution is past. It was relatively easy to substitute imports of industrial items of current consumption and of some durable consumer goods, and there is little left to substitute in this field in Latin America [9 , p. 105].

¹ The projections refer to estimated changes in the value of exports to developed countries and the Soviet bloc under the assumption that the most likely income variant be realized in developed economies (Tables 3.5.1 and 4.3.2). Data on extraregional trade for the period 1950-1960 have been derived from the CN Statistical Yearbook.

Table 4.1.2

Estimates of Growth Rates of GNP Developing Countries
(average annual rates)

	<u>A</u>		<u>B</u>		<u>C</u>			
	Rosenstein-Rodan		FAO		Our Estimates			
	1961-71	1971-76	1958	1970	1960-70		1970-75	
			<u>Low</u>	<u>High</u>	<u>I</u>	<u>II</u>	<u>I</u>	<u>II</u>
<u>Latin America</u>								
Gross Domestic Product	4.1	4.6	4.4	5.2	4.3	5.0	4.6	5.4
Population	2.6	2.7	2.5	2.5	2.6	2.6	2.6	2.6
GDP per capita	1.5	1.9	1.9	2.7	1.7	2.4	2.0	2.7
<u>Africa</u>								
Gross Domestic Product	3.0	3.5	3.8	5.2	4.1	4.9	4.4	5.4
Population	1.6	1.6	2.4	2.4	2.2	2.2	2.4	2.4
GDP per capita	1.4	1.9	1.4	2.7	1.9	2.7	2.0	2.9
<u>Middle East</u>								
Gross Domestic Product	4.3	4.5	3.6	4.9	4.2	5.2	4.4	5.5
Population	2.1	1.9	2.3	2.3	2.7	2.7	2.6	2.6
GDP per capita	2.2	2.6	1.3	2.5	1.6	2.5	1.8	2.8
<u>Asia</u>								
Gross Domestic Product	4.3	4.5	3.6	4.9	4.2	4.8	4.5	5.2
Population	2.1	1.9	2.3	2.3	2.4	2.4	2.5	2.5
GDP per capita	2.2	2.6	1.3	2.5	1.8	2.4	2.0	2.7

Sources: A - Rosenstein-Rodan; "International Aid for Underdeveloped Countries,"
Review of Economic and Statistics, May 1961, pp. 107-37.

B - FAO, Agricultural Commodities--Projections for 1970, pp. A 3-4.

C - Table 4.1.1

Substitution in the case of capital goods is more difficult and it requires substantial investments. At the same time, the prospects for the inflow of foreign capital during the sixties are rather poor and much of domestic savings are still not channeled to productive occupations in the domestic economy. If we also consider the disruptive effects of political uncertainty in some of the larger Latin American countries (Argentina, Brazil) during the early sixties, it appears questionable whether we can assume

an acceleration of economic growth in the period 1960- 1970 under the "most likely" income alternative.

Higher growth rates could be reached in the years following, however, and faster growth would correspond to our high (target) income variant. Still, the latter (5.1 per cent for 1960-1970 and 5.4 per cent for 1970-1975) is lower than the target rates shown in national plans which range from 5.5 per cent in Chile to 8.0 per cent in Bolivia.¹ But an examination of these plans suggest that they have been based on overly optimistic assumptions as regards the prospects for exports and the possibilities of import substitution.

Among less developed areas, Africa is expected to show the highest rate of growth of exports during the period of projection
of exports
(5.4 per cent). But the same rate of increase/was experienced during

¹ Representative target rates are: Bolivia, 8.0 percent for the period 1958-1971 [10]; Brazil, 7.0 per cent for 1962-1965 [11]; Chile, 5.5 per cent for 1961-1970 [12]; Colombia, 5.6 or 6.5 per cent for 1958-1970 [13]; Peru 5.9 per cent for 1960-1970 [14]; and Venezuela, 7 per cent for 1962-1975 [15].

the fifties when the gross national product grew at an annual rate of 3.9 per cent. With a more rapid expansion in the production of commodities for domestic consumption in the newly independent countries, some improvement in the growth performance of this region is expected, however, although the transfer of political power may involve some dislocation of economic activity in a few countries. Correspondingly, under the most likely income assumption, we have calculated with a growth rate of 4.1 per cent for the period 1960-1970 and 4.5 per cent for 1970-1975. Note finally that relatively few African countries published economic plans and several of these plans do not include a growth target. In cases when growth targets are available, considerable differences are shown reflecting perhaps more the optimism of the planners than a realistic appraisal of the possibilities.¹

Among developing areas, the Middle East experienced the highest rate of growth of GNP and exports during the fifties; 5.3 and 9.6 per cent respectively. Our projections indicate a slowing-down in the expansion of exports, however, with an annual rate of increase of 4.1 per cent for 1960-1975. Correspondingly, the growth of incomes is bound to slow down and it appears questionable whether the rate of increase of that of GNP would exceed exports by a substantial margin.²

With respect to prospective changes in export performance, the situation in Asia is similar to that of Latin America inasmuch as^a 2.8

are:
¹ The relevant figures for the United Arab Republic, 7.2 per cent for the period 1960-1970 [17], Morocco, 6.1 per cent for 1958-1964. [16]; and Nigeria, 4.0 per cent for 1960-1968 [2].

² A more optimistic view is expressed in the economic plan for Iran where an annual growth rate of over 8 per cent has been assumed [8].

has been projected for per cent annual increase in exports/ the period 1960-1975 as compared to 2.5 per cent in the fifties. But Asia, too, faces the problem that further possibilities for import substitution in consumer goods are limited [22, p. 59]. Taking account also of institutional rigidities observed in several of the Asian countries, an increase in the rate of growth for the sixties has not been projected under the most likely income assumption, although our high income alternative is only slightly below the planned targets in the larger countries of the area.¹

For the developing areas, taken together, our projections indicate a growth rate of 4.2 per cent for the period 1960-1970 and 4.5 per cent for 1970-1975 under the most likely income assumption and 4.9 and 5.3 per cent in the two periods, respectively, for the high income variant.. For the period of projection taken as a whole, the "most likely" growth rates approximately correspond to the rate of increase of GNP shown in the fifties, with improvements expected in the latter part of the period. At the same time, our high income variant is comparable to the 5 per cent target for the Development Decade announced by the United Nations, although here again differences are shown in regard to the two subperiods.

Note, however, that the prospects appear to be less favorable if calculation is made in per capita terms. Due to the expected upsurge of the population, a continuation of growth rates experienced

Planned targets are:

¹The Federaation of Malaya, 4.4 per cent for 1961-1965, India 5.0 per cent for 1961/62-1965/66; Pakistan, 4.8 per cent for 1960/61--and 1964/65, the Phillipines, 6.0 per cent for 1963-1967, Thailand, 5.0 per cent for 1961- 1966. A higher rate of growth is planned in some of the smaller countries: Ceylon, 8.8 per cent; Taiwan 8.0 per cent; South Korea, 7.1 per cent; as well as in Burma, 7.6 per cent [21, p.3].

during the fifties would entail a decline in the rate of increase of per capita incomes, although an improvement would be shown as compared to the second half of the fifties. But even if the target income alternative were realized, the corresponding annual increase of 2.5 per cent in per capita incomes would entail a widening in the absolute gap between living standards in developed countries and in the less developed areas, given that per capita incomes have been projected to rise at a rate of 2 per cent in North America, 2.9 per cent in Western Europe, and 4.4 per cent in Japan under the most likely income assumption and 2.5, 3.4, and 5.4 per cent under the high income variant.

4.2. IMPORT REQUIREMENTS IN DEVELOPING COUNTRIES

Given the assumed rate of growth of GNP in the developing regions, the next question concerns the relationship between income and imports. Estimation may proceed by utilizing information provided by cross-section data, time series, and national plans. The first method has been suggested by Hollis B. Chenery who claimed that the results of cross-section regressions calculated from data of 62 countries for the period 1952-1954 would indicate systematic changes in the output of individual sectors as well as in imports as development proceeds. [1]. In the calculations, per capita imports have been taken to depend on per capita income and population:

$$(1) \quad M/N = A_0 Y/N^{\alpha}$$

When M = imports, Y = National income, N = population, and A_0 is a constant.

The results show to be equal to 0.987 while α is -0.281. Thus, other things being equal, / per capita imports would rise at a rate slightly lower than the growth of incomes per head while a larger population would

be associated with smaller imports per head. According to Chenery, the negative coefficient of population indicates the decline of imports due to an increase in market size since population is taken as a proxy for ^{extent} / of the market, and "an increase in market size lowers cost and thus permits the substitution of domestic production for imports" [1, p. 645].

Should these results be applied in estimating future imports, the growth of population in the developing countries would be accompanied by declining imports per head. For example, if we assumed per capita incomes to grow at an annual rate of 1.8 per cent and the increase in population were 2.4 per cent a year,¹ imports per head would rise at an annual rate of 1.1 per cent. Correspondingly, the increase in total imports would be 2.9 per cent a year as against a 4.2 per cent rise in the gross national product.

Doubts arise about the applicability of this method in forecasting, however. We have noted above that Chenery regards population as a proxy for market size. Yet, the negative import coefficient of population gives expression not only to the "market effect" attributed to the exploitation of large scale economies in a wider market but also to a "trading effect" which associates a larger number of domestic trading units² with a smaller volume of international trade. In other words, the greater the number of trading units in a country, the greater will be, ceteris paribus, the relative importance of internal trade,

¹The weighted average of our estimates for developing countries in the period 1960-1970 as shown in Table 4.1.1.

²For present purposes, the number of trading units has been taken to be identical to ^{the} population of particular countries.

and the smaller the share of imports (exports) in the gross national product. For example, the low propensity to import in the United States as compared to Belgium, is in part, explained by the fact that a larger part of the world population lives in the United States than in Belgium. But this relationship appears only in a cross-section of countries and it does not operate over time, since the growth of population in every country will not alter the relative proportions between domestic and foreign trading units. Correspondingly, the application of the results derived from a cross-section study of individual countries would impart a downward bias to the projections, and hence, this method has not been employed in the present investigation.

The time-series method has deficiencies of its own. With structural changes taking place in the developing economies, the ratio of imports to GNP changes and shifts occur in the commodity composition of imports. Yet a comparison of the experience of regions at different stages of economic development can provide an indication of possible future developments.

Over the period 1950-1961, the total imports of African and Asian countries increased at about the same rate as their gross national product, while the total income elasticity of import demand was 1.4 in the case of the Middle East and 0.6 in Latin America. Extra-area imports increased at a higher rate, however, partly because import substitution could be affected with greater ease against the less sophisticated commodities imported from neighbouring countries, partly because the process of industrialisation required increasing imports of machinery which were available in industrial countries only. In the

period 1955-1961, for which more detailed information is available, we find that the total income elasticity of import demand in Latin America was 0.4 in regard to all imports and 0.5 for extra-area imports, while the corresponding coefficients were 0.9 and 1.0 in Africa, 1.7 and 1.8 in the Middle East, and 1.2 and 1.5 in Asia.

Table 4.2.1 provides information on the gross national product and the extra-area imports of various regions in the years 1955-1956 and 1960-1961 for eight commodity groups in terms of constant prices, while Table 4.2.2 shows the composition of imports for the year 1960 expressed in current prices.¹ It appears that the ratio of extra-area imports to the gross domestic product is the smallest in Latin America and Asia, it is larger in Africa, and it is the highest in the Middle East. At the same time, about one-half of Latin American imports consist of chemicals, machinery, and transport equipment (other than passenger cars) while this proportion hardly exceeds one-third in the other areas.

The observed disparities in the time-pattern and the composition of imports reflect inter-area differences in the process of import-substitution and the level of economic development. In Latin America, the industrially most developed region, the ratio of imports to GDP is the lowest and the proportion of capital goods in imports the highest. The large amount of inter^{ra}-regional trade reduces the extra-area import-coefficient in Asia but imports of machinery into this region

¹ Note, however, that comparability is reduced by reason of the fact that in the absence of information on individual countries we had to use the geographical classification of the United Nations instead of the one employed in the present study in Table 4.2.1.

Table 4.2.1

The Gross Domestic Product and Extra-Area Imports in Developing Areas^a
 (\$ million, constant prices)

	Latin America ^b		Africa ^c		Middle East ^d		Asia	
	1955-1956	1960-1961	1955-1956	1960-1961	1955-1956	1960-1961	1955-1956	1960-1961
Food (0,1)	577	731	761	1180	451	760	818	1372
Agricultural Raw materials (SITC 2,4 Less 28)	253	394	235	322	142	246	359	587
Fuels (3)	456	383	483	633	80	114	280	407
Minerals, and Metals (28, 67, 68)	541	642	268	381	170	300	437	686
Chemicals (5)	641	907	369	584	173	319	547	841
Machinery and transport equipment (7) of which passenger cars and their parts	2222 (247)	2662 (294)	1690 (116)	1923 (151)	693 (88)	1043 (128)	1356 (143)	1904 (217)
Nondurable manufactured products other than chemicals (6.8 less 67, 68)	1369	1182	1854	1866	695	796	1339	1025
Total (0,-8)	6161	6903	5662	6891	2406	3576	5137	6824
Gross National Product	46,100	61,700	21,200	27,600	4.800	7.500	56.200	69.800

Sources: Gross Domestic Product-UN Yearbook of National Accounts Statistics and Statistical Yearbook, IMF, International Financial Statistics, various issues.
U.N. Monthly Bulletin of Statistics, March, April 1961 and 1963

Notes: (a) Imports in 1953 prices, gross domestic product in 1950 prices. Data are yearly averages. In regard to various groups of manufactured goods for which U.N. price indices are not available a weighted average of the export prices of the main industrial countries has been used (Cf Bela Balassa, "Recent Developments in the Competitiveness of American Industries and Prospects for the Future," U.S. Congress Joint Economic Committee, Factors Affecting the United States

Notes Continued

Balance of Payments, Washington, 1962, P.44

- (b) Excluding the Caribbean
- (c) Including South Africa
- (d) Including Egypt, Lybia, Suda, Somaliland and Ethiopia.

are still relatively low. Finally, the process of import-substitution has barely begun in Africa while the Middle East countries provide much of their needs in food, raw materials and manufactured goods from imports.

Between 1955-1956 and 1960-1961, the gross national product of the countries of Latin America rose by 22 per cent while the increase of extra-area imports was 12 per cent, indicating a total income elasticity of import demand slightly above 0.5. Import substitution in non-durable goods and increased selfsufficiency in petroleum appears to be chiefly responsible for the observed lowering of the import/GNP ratio. Extra-area imports of nondurable goods (other than chemicals) and fuels declined by about 15 per cent in the above period, while increases have been experienced in all other commodity-groups.

With oil exploration proceeding in some of the large fuel-countries, importing (Argentina, Brazil) an increase in the imports of fuels from outside the area. may be avoided in the period of projection. On the other hand, much of the possibilities of import substitution in consumer goods have been exhausted, and hence the importation of these commodities may increase pari passu with the growth of population in the future. At the same time, in view of the expected acceleration in the process of industrialisation it appears likely that imports of machinery and chemicals would rise at about the same ^{rate} as the gross domestic product in Latin America. Thus, even though the ratio of imports of foods and raw materials to the gross national product may fall somewhat, the rapid decline of the import/GDP ratio observed during the fifties

Table 4.2.2.

Extra-area Imports in Developing Areas, 1960

(\$ million, current prices)

	Latin America		Africa		Middle East		Asia		Developing Areas	
	\$m	%	\$m	%	\$m	%	\$m	%	\$m	%
Food (0, 1)	895	10.9	938	15.4	507	18.8	1241	17.5	3582	14.9
Agricultural Raw materials (2,4 less 2,8,	384	4.7	207	3.4	158	5.8	538	7.6	1287	5.3
Fuels (3)	300	3.7	507	8.4	52	1.9	377	5.3	1236	5.2
Minerals & Metals (28, 67, 68)	686	8.3	340	5.6	230	8.5	673	9.5	1929	8.0
Chemicals (5)	898	10.9	427	7.0	194	7.1	655	9.3	2174	9.0
Machinery & transport equipment (7)	3348	40.8	1817	29.8	781	29.0	1985	28.0	7931	32.9
of which passenger cars and their parts	(340)	4.1	(290)	4.8	(115)	4.3	(236)	3.3	(981)	4.1
Material intensive manufactures (6, 8 less 67, 68)	1648	20.1	1749	28.7	694	25.8	1540	21.8	5631	23.4
Miscellaneous (9)	49	0.6	107	1.7	77	3.1	74	1.0	307	1.3
TOTAL	8209	100.0	6092	100.0	2693	100.0	7083	100.0	24077	100.0

Sources: U.N. Monthly Bulletin of Statistics, March and April, 1961
U.N. Commodity Trade Statistics, 1960 and information received from the
United Nations Statistical Office.

Notes: (a) Numbers in parenthesis refer to SITC categories.

is unlikely to be again repeated. In the present study we have assumed that a 1 per cent increase in GDP would be associated with a 0.7-0.8 per cent rise in extra-area imports in the years 1960-1975.

These figures can be compared to import-targets contained in national plans. With the exception of Brazil, the total income elasticity of import demand derived from information provided in the plans in between 0.6 and 0.9 in the countries of Latin America with Bolivia and Chile at the lower and Venezuela and Peru at the higher end of the scale.¹ At the same time, a perusal of the plans suggests that these countries intend to restrain the increase of imports mainly in the case of commodities (agricultural products, nondurable consumer goods) that are imported also from neighboring economies so that the rise of extra-area imports would be larger than the average. In fact, in cases when the necessary breakdown is available, the imports of capital goods is approximately envisaged to increase/in proportion to the gross domestic product.

On the other hand, a rise in imports over the actual level observed in 1961 has not been envisaged in the plan of Brazil for 1965 [11]. But the plan does not specify what instruments would be used to attain this objective. It has been noted, for example, that the planners gave no indication as to how the proposed reduction in machinery imports would be realized and the possible ways of providing for the machinery needs of domestic production of nondurable goods have not been explored.^a At the same time, reduction in the imports/GNP ratio from the low level attained in 1961 (9 per cent) to 5 per cent in 1965 does not appear

¹For reference, see p. 3 above.

plausible [7, p. 148]. Thus, the figures contained in the Brazilian plan can hardly be relied upon in making projections.

Extra-area imports have been rising approximately in proportion to the growth of GDP in Africa. Increases have been experienced in all commodity groups with the exception of nondurable consumer goods. But the area is expected to provide a larger proportion of its fuel-needs from domestic sources in the future. Moreover, with the development of the production of simple manufactures, extra-area imports of non-durable manufactured products (excluding chemicals), which accounted for nearly one-third of imports in 1960 as compared to 20 per cent in Latin America and 22 per cent in Asia, may decline in absolute terms. On the other hand, imports of machinery and chemicals will rise at a rapid rate and Africa also has to rely on imports for much of the increase of her consumption of temperate zone foods. Correspondingly, the total income elasticity of import demand is not likely to fall much below unity; in the present study, we have calculated with elasticities of 0.9-1.0.

By comparison, a unitary income elasticity of import demand has been assumed in the Nigerian plan [2] and 1.1 in the economic plan of Morocco [16]. Imports may increase at a slower rate in the United Arab Republic, however, although--for reasons mentioned in connection with the Brazilian plan-- the absolute decline in imports envisaged in the Five-Year Plan (1960-1965) will hardly be forthcoming. The inadequacies of the plan can be indicated by reference to the statement according to which domestic production would replace all mineral imports by 1965 [17, p. 85].

The Middle East, the main petroleum producing area, has increased its imports at a rate considerably faster than the growth of GDP in the last decade. Given the natural limitations to the production of foodstuffs and the lack of manufacturing industries in much of the region, imports are likely to provide for an increasing part of consumption also in the future. In the present study, we have calculated with an income elasticity of import demand of 1.2. This coefficient has also been used in the Third Plan of Iran [8].

U.S. shipment of food and agricultural raw materials under the P.L. 480 program accounted for much of the increase in Asian imports of foods and beverages in the second half of the fifties. By 1960, the annual value of shipments under P.L. 480 approached one million dollars, about two-thirds of which went to Asia [24]. Future changes in these imports will greatly depend on the expansion of domestic production and the availability of surplus food and other agricultural products from the United States. Given the uncertainties surrounding the prospects of agricultural production in Asia and the P.L. 480 program in the United States, it is difficult to foresee prospective developments although one may expect further increases to take place.

Note further that the possibilities for import substitution in nondurable consumer goods have been largely exhausted in Asia and, similar to the case of Latin America, the imports of these commodities are likely to increase rather than decline in the future. At the same time, industrialisation is expected to require imports of machinery and chemicals to rise at a rate exceeding the growth of GDP. Similar developments are foreseen in regard to fuels given that most countries of Asia rely on imports for their petroleum needs.

Assuming that the rapid expansion of food imports observed in the second half of the fifties will not continue, the above considerations would indicate income elasticity of import demand around unity for Asia. Yet, with the exception of Malaya and Pakistan, the national plans of Asian countries envisage imports to rise at a lower rate than the growth of GDP. Much of the import substitution envisaged would take place at the expense of neighboring countries, however, in foodstuffs, agricultural raw materials, and nondurable consumer goods. At the same time, rapid increases in imports of machinery are planned which latter come largely from outside the region. Correspondingly, the rate of increase of extra-area imports would exceed that for all imports to a considerable extent and a perusal of the individual plans led the UN Economic Commission for Asia and the Far East to conclude that for the region as a whole it would be necessary "to increase imports of capital goods and materials for capital goods by 10 per cent a year and total imports by 6 per cent, although the latter figure will be higher if there is insufficient restraint on inflation" [21, p. 96].

Given that planned increase in the gross national product average ^{an} about 5-6 per cent, /income elasticity of import demand slightly exceeding unity is implied in the above statement. In the present study, it has been assumed that ^{this} /: elasticity would be about 1.0-1.1.

The projections indicate an increase in the extra-regional imports of developing countries from \$24.1 billion in 1960 to \$34.8-36.2 billion in 1970 and \$42.4-45.1 billion in 1975 under the most likely income assumption and \$37.0-38.8 and \$46.8-50.3 billion if the target rate

of income growth were reached. The largest increases are shown for the Middle East and Asia and a relatively smaller rise in Latin America and Africa (Table 4.2.2).

4.3 TRADE AMONG DEVELOPING REGIONS

Trade among developing regions amounted to \$1.6 billion in 1960, accounting for 7 per cent of ^{their} extra-area exports. The biggest item was fuel (\$589 million), followed by food (\$373 million), manufactured goods (\$323 million) and agricultural raw materials (\$274 million). The Middle East and Asia are the largest exporters; the former accounts for much of fuels traded among developing regions while the latter exports chiefly textiles, rubber, and jute.

The countries of the Middle East import the largest amount of foodstuffs from other developing economies but, with the shift in purchases to developed countries, these imports have changed little during the fifties. In connection with the rising consumption of tropical foods, increases are expected to be forthcoming during the period of projection, however. Some rise in the exchange of foodstuffs between Africa and Asia is also anticipated and these areas may buy increasing quantities of temperate zone foods from Latin America. On the other hand, the food imports of Latin America from other developing countries are likely to remain small.

In regard to trade in agricultural raw materials among developing areas, shipments from Africa to Asia and from Asia to Latin America are of importance. African countries export mainly cotton and hard fibres, while Asia ships rubber and jute. African exports may continue to rise at the slow rate observed during the fifties, while

Table 4.2.2.

Extra-area Imports into Developing Areas^a

	1960	1970 I			1970 II			1975 I			1975 II		
		a	b	c	a	b	c	a	b	c	a	b	c
Latin America	8209	11030	11250	11470	11580	11860	12150	12910	13320	13750	13950	14460	15000
Africa	6092	8760	8930	9100	9370	9590	9830	10660	10990	11340	11900	12320	1278
Middle East	2693	4330	4400	4490	4820	4930	5060	5550	5700	5870	6540	6790	7060
Asia	7083	10690	10890	11100	11320	11590	11870	13320	13700	14100	14590	15100	15660
Developing Countries total	24077	34810	35470	36160	37090	37970	38910	42440	43710	45060	46980	48670	50500

Source: Table A 4.3.1

Note: The following income elasticities of import demand have been used in the calculations:
Latin America, 0.7, 0.75, 0.8, Africa, 0.9, 0.95, 1.0; Middle East, 1.15, 1.2, 1.25, and Asia
1.0, 1.05, 1.1.

the expansion of synthetic rubber production will restrict the growth of imports of natural rubber into Latin America. Substantial increases are not expected in regard to other agricultural raw materials either.

Fuel imports into Africa and Asia have been expanding rapidly during the last decade. In view of our previous discussion, Asian imports are likely to rise at a rate exceeding the growth of GDP during the period of projection, while increased self-sufficiency in petroleum will lead to a slowing-down in the expansion of fuel imports into Africa. At the same time, fuel imports into Latin America and the Middle East -- the main exporting areas -- will remain small.

There is little trade in minerals and metals among developing regions. Rhodesia exports some copper and Malaya ships tin, but otherwise the metal needs of developing countries are supplied by domestic production and ^{by} purchases from industrial countries. The pattern of trade is likely to change during the period of projection, but we have assumed that the main shift will occur in substituting domestic production for imports within the individual areas, while trade among developing regions may not rise substantially.

The bulk of trade in manufactures among less developed areas takes the form of textile exports from India and Hong Kong to destinations in Africa, Latin America, and the Middle East. Except for shipments to the Middle East, increases in these exports have been small in recent years, chiefly by reason of the protection of the domestic textile industry in the countries of Latin America and Africa, and this tendency is expected to continue in the future. On the other hand, the exchange of chemicals, leather, rubber goods, and some other nondurable goods may increase further.

All in all, trade among less developed areas has been projected to rise from \$1.6 billion in 1960 to \$2.2 billion in 1970 and \$2.6 billion in 1975 under the most likely income assumption to \$2.3 and \$2.9 billion, respectively, if the target rate of income growth were reached (Table 4.3.1.). In the period 1960-1975, taken as a whole, the exports of Latin America, Africa, and the Middle East to other less developed regions would increase by over two-thirds, while Asian exports have been projected to rise by less than one-half. The relatively slow growth of exports from Asia is explained by the continuing process of import substitution against textiles in both Latin America and Africa.

Table 4.3.1

Developing Countries: Exports to other less Developed Areas

(\$ million, current prices)

	1960	1970 I	1970 II	1975 I	1975 II
Latin America	174	250	260	310	320
Africa	327	420	440	520	580
Middle East	570	800	850	990	1130
Asia	539	680	720	790	850
	1610	2150	2270	2610	2880

Source: Table A 4.3.1

4.4. Exports of Developing Countries to the Sino-Soviet Area¹

Trade between developing countries and the Sino-Soviet area has expanded at a rapid rate in recent years. Exports from less developed areas to Eastern Europe increased from \$225 million in 1953-1954 to \$1094 million in 1960-1961, while the corresponding figures for exports to Communist Asia are \$174 and \$262 million. At the same time the share of the centrally planned/^{economies} in the extra-area exports of developing areas increased from 2 per cent in 1953-1954 to 5 per cent in 1960-1961.

A few commodities dominate the imports of the Sino-Soviet bloc from developing areas. In 1960, the combined imports of cotton, rubber, and sugar into Eastern Europe amounted to \$539 million, nearly 60 per cent of total imports of \$968 million, while the corresponding figures for Communist Asia were \$188 and \$275 million. Further commodities of importance are cocoa with imports into the Sino-Soviet bloc valued at \$59 million in 1960; coffee, \$42 million; textile yarns and fabrics, \$37 million and wool, \$34 million. (Table 4.3.1)

This trade has been influenced to a considerable extent by political considerations, as indicated by the expansion of cotton imports from the United Arab Republic after 1955 and the jump in imports of Cuban sugar from 300 thousand tons in 1957-1959 to 2.1 million tons in 1960 and 4.8 million tons in 1961. In

1. The Sino-Soviet area includes the centrally planned economies of Eastern Europe excluding Yugoslavia (for short, Eastern Europe) as well as Mainland China, Mongolia, North Korea, and North Vietnam (for short, Communist Asia).

fact, the rise in sugar imports between 1960 and 1961 equalled the total increase in the value of imports of the Sino-Soviet bloc from less developed areas.. Given the importance of political factors, any projection of imports into the Sino-Soviet area is subject to a large degree of uncertainty. Although available information concerning individual commodities can indicate possible trends in these imports, the magnitude of future changes is difficult to predict. Also, should another Latin American or African country establish close relationships with the Soviet Union (or Mainland China), drastic changes in import policies may be forthcoming but cannot be foreseen.

Moreover, it is hardly possible to appraise the effects of a further cooling-off of Soviet-Chinese relations on trade with the developing countries although the Soviet Union may be inclined to buy some goods presently purchased from China in less developed areas and the latter might also supply Mainland China with raw materials/^{that are now} imported from the Soviet Union. Political considerations, too, may induce China to enlarge her trade with developing countries while economic difficulties may have the opposite effect.

In projecting the future imports of the main agricultural commodities into Eastern Europe, we have used the estimates prepared by the FAO as a point of departure. The FAO estimates have been based on information provided in national plans and official pronouncements in these countries [4] and cover 70 per cent of the imports of Eastern Europe from developing countries. With respect to some further commodities, information derived from the UN Economic Survey for Europe in 1960 has been

utilized, while other imports have been assumed to rise in proportion to the growth of national income. In turn, the national income of Eastern Europe has been assumed to double within a decade. A lower rate of expansion is expected in Communist Asia, however.

Information on the prospects for exports into Communist Asia is scarce and long-term plans are not available for the countries of this area. Neither does a consideration of past trends provide a clue for future development since, in response to crop conditions, foreign exchange availabilities, and political factors, ^{imports} /from developing areas have fluctuated to a considerable extent. In the present study, some simple assumptions have been made in regard to the future course of this trade. In general it has been assumed that foreign exchange difficulties will restrain the expansion of imports into Communist Asia and that much of the actual increase will take the form of machinery and transport equipment rather than primary products and simple manufactures supplied by less developed countries.

As elsewhere in this study, 1960 has been taken as the base year for the projections. Trade matrices according to SITC commodity classes have been published by the United Nations [18], while /national statistical publications and the FAO Trade Yearbook have been utilized in estimating trade flows for individual commodities. In cases where national publications provide information only on quantities traded, value data have been calculated by the use of average unit values in world trade [5].¹

1. Sugar imports from Cuba provide an exception. In this case, unit values derived from the Trade Yearbook of the USSR have been used in regard to those countries of the Sino-Soviet area that publish only quantity data.

Finally, in estimating the future value of exports to the centrally planned economies, account has been taken of prospective changes in the prices of individual commodities as indicated in Table A 1.2.2.

Temperate zone foods

The centrally planned economies imported temperate zone foods from underdeveloped areas in the value of \$67 million in 1960, hardly exceeding 5 per cent of their total imports from developing countries. (Tables 4.4.1. and A 4.4.1.) Shipments of fruits -- citrus fruits as well as dates -- to Eastern Europe accounted for much of these imports although the main suppliers of citrus fruits have been Greece and Spain. Imports of meats are negligible and if need for purchases of cereals arise, purchases are made in developed countries.

In conformity with projections made by the FAO for citrus fruits [4, p. 29], we have assumed that exports of temperate zone foods from developing areas to the Eastern Europe would increase pari passim with the rise of incomes in the latter, corresponding to an approximate doubling within a decade. Smaller increases have been assumed for Communist Asia.

Competing tropical foods

Until recently, imports of competing tropical foods by centrally planned economies had been small and the area as a whole was a net exporter. This situation changed abruptly in 1960 when intensifying Soviet political ties with Cuba were accompanied by large purchases of Cuban sugar. Sugar imports into Eastern Europe reached 1.7 million tons in 1960 and 3.8 million tons in 1961 as compared to an average of 0.3 million

Table 4.4.1.

Exports of Developing countries to the Sino-Soviet Area by Commodity Group 5

	<u>1960</u>			<u>1970</u>			<u>1975</u>		
	Eastern Europe	Communist China	Sino-Soviet Area	Eastern Europe	Communist China	Sino-Soviet Area	Eastern Europe	Communist China	Sino-Soviet Area
Temperate Zone Foods	56	11	67	118	16	134	166	22	188
Competing Tropical Foods	146	36	182	334	95	429	355	96	451
Non-Competing Tropical Foods	126	1	127	329	1	330	492	1	493
Raw Materials									
Agriculture	553	191	744	613	189	802	679	209	888
Fuels	0	2	2	0	4	4	0	5	5
Ores and Base Metals	38	10	48	76	16	92	106	21	127
Manufactured Goods	48	23	71	96	37	133	136	48	184
Total	967	274	1241	1566	358	1924	1934	402	2336

Sources: UN, Monthly Bulletin of Statistics, March and April, 1963, FAO, Trade Yearbook, 1961, and national trade statistics.

tons in the years 1957-1959. Similar changes have taken place in Mainland China where imports of Cuban sugar rose from 17 thousand tons in 1957-1959 to 450 thousand tons in 1960 and 1 million tons in 1961.

Available information suggests that self sufficiency in sugar could be ensured in Eastern Europe during the period of projection. However, with the continuation of political ties between the Soviet Union and Cuba, imports are expected to continue. The Soviet Union has undertaken a commitment to purchase 3 million tons of raw sugar annually in the period 1962-1965, and we have assumed that imports into Eastern Europe will equal this quantity in 1970 and 1975.¹ We have further assumed that sugar imports into Mainland China would remain at the level observed in 1961.

The remaining imports of this category consist largely of tropical oils and oilseeds (\$27 million in 1960). We have calculated with a doubling of these imports in the period 1960-1970 and a 40 per cent increase between 1970 and 1975. Correspondingly, the exports of competing tropical foods from developing areas to the Sino-Soviet area would rise from \$182 million in 1960 to \$429 million in 1970 and \$451 million in 1975.

Non-competing tropical foods

Foreign exchange considerations have restricted the consumption, and imports, of bananas, coffee, and cocoa in Soviet-type economics while the Soviet Union and China are large producers

1. This estimate is approximately at the mid-point of the 1 to 4-5 million tons range suggested by the FAO [4, p. 40 7].

of tea. In 1960, imports of non-competing tropical foods from developing countries amounted to \$127 million of which Communist Asia took \$1 million. Chinese imports will hardly rise in the period under consideration, hence we can restrict our discussion to Eastern Europe.

Imports of coffee and cocoa were given low priority in the past but the policy-makers announced their intentions to permit an expansion of these imports in the future. Nevertheless, there are no firm indications as to the magnitude of this increase during the period under consideration and hence any estimate is necessarily of a tentative character.

In regard to coffee we have accepted the FAO projections which have been based on an analogy as to the pattern of consumption in tea-drinking Russia and Japan on the one hand and in Chechoslovakia and Eastern Germany as against Italy on the other. Taking the mid-point of the range given in the FAO estimates, we have calculated with per capita consumption of 2.7 kg for Chechoslovakia and Eastern Germany, and 0.5 kg for the Soviet Union and other countries of Eastern Europe/^{in 1970} 4, p. 25 7. Correspondingly, coffee consumption (imports) in the area would reach 245 thousand tons in 1970 as compared to about 53 thousand tons in 1960. A further 50 per cent rise in per capita consumption has been assumed for the period 1970-1975.

Czechoslovakia and Eastern Germany are also the largest consumers of cocoa in Eastern Europe. Available information indicates future increases in consumption and imports in these countries. In the present study, we have calculated with per capita consumption of 1.5 kg in 1970 and 1.6 kg in 1975 as compared

to 0.9 kg in 1960. These estimates correspond to our projections for France¹ and are in conformity with the FAO forecasts. The latter appear to be on the low side, however, as far as cocoa consumption in the Soviet ^{Union} is concerned. With consideration given to trade agreements signed between the U.S.S.R. and several African and Latin American countries and the announced intention of the Soviet government to raise levels of cocoa consumption, we have assumed that cocoa consumption per head in the Soviet Union, as well as in other countries of Eastern Europe excepting Czechoslovakia and Eastern Germany, would reach 0.4 kg in 1970 and 0.5 kg in 1975, i.e., the levels projected for Yugoslavia.² Correspondingly, cocoa imports into Eastern Europe would rise from 92 thousand tons in 1960 to 175 thousand tons in 1970 and 285 thousand tons in 1975.

Banana imports into Eastern Europe were negligible in 1960 but the policy of increasing trade-relations with the less developed countries may lead to a considerable expansion of this trade. Nevertheless, given the substitutability of domestic fruits for bananas, it appears unlikely that Western European consumption levels would be approached in this area. We have assumed here that per capita banana consumption in Czechoslovakia and Eastern Germany would reach the level projected for Italy (3.5 kg in 1970 and 4.5 kg in 1975), ^{and that} the Yugoslav consumption level would apply

1. Table A 8.2.1.

2. By comparison the FAO projects per capita cocoa consumption of 0.25 in the Soviet Union and 0.45-0.6 kg in the other countries of the group for 1970 [4, p. 26] .

to the other countries of Eastern Europe (0.8 kg in 1970 and 1.2 kg in 1975). Banana imports into Eastern Europe would thus reach 290 thousand tons in 1970 and 440 thousand tons in 1975 as compared to 17 thousand tons in 1960.

Finally, despite the expected increase in the degree of self sufficiency in the Soviet Union, some rise in tea imports into Eastern Europe is likely to be forthcoming and imports of spices may also grow. Taken together, the exports of non-competing tropical goods from developing areas to Eastern Europe would reach \$329 million in 1970 and \$492 million in 1975 as against \$126 million in 1960.¹

Agricultural Raw Materials

With a trade value of \$744 million, agricultural raw materials accounted for 60 per cent of the total imports of the Sino-Soviet area from less developed countries. Within this category, special attention should be given to cotton and rubber, the imports of which were valued at \$298 and \$275 million, respectively.

The imports of natural rubber into the countries of Eastern Europe have been increasing rapidly in recent years but, according to the FAO, the expansion of the production of synthetic rubber may lead to a decline of imports in the future. At the mid-point of the range of estimates given by the FAO, natural rubber would account for 10 per cent of total rubber consumption in the Soviet Union and 35 per cent in the other countries of Eastern Europe
 [4, p. 12] .

1. The maintenance of 1960 imports of \$1 million have been projected for Communist Asia.

The FAO estimates may be on the low side, however. Although the goal of 95-96 per cent self sufficiency in rubber has been announced in the USSR, various considerations suggest that this objective may not in fact be pursued in the foreseeable future. Rather, with the expected 40 per cent decline in the price of natural rubber as compared to 1960, and increased rationality in Soviet planning, it appears plausible that a lower degree of self sufficiency will be aimed at. For purposes of projection, we have assumed that natural rubber imports would provide 18 per cent of Soviet rubber requirements in 1970 and 16 per cent in 1975, while the corresponding estimates for the other countries of Eastern Europe are 40 per cent in 1970 and 35 per cent in 1975.

The imports of natural rubber into Eastern Europe would thus surpass 1960 imports of 332 thousand tons by a considerable margin in 1970, while the 1961 imports of 493 thousand tons would be reached but not exceeded. However, the latter figure represents the combined effects of delays in the completion of synthetic rubber-producing facilities and stockpiling of natural rubber and can hardly be used as a basis for comparisons. Imports would further rise to possibly 600 thousand tons in 1975. At the same time, we have assumed that all imports would come directly from the producing countries rather than by way of London, augmenting thereby the increase in imports from less developed areas. Finally, a further expansion in the imports of natural rubber into Mainland China has been projected, although this increase may not be sufficient to counterbalance the reduction in the value of imports due to the expected decline in rubber prices, given that China is expected to embark on the production of natural

rubber [3, II, 84]7.

Cotton is the leading import of the countries of Eastern Europe from the developing areas, with an import value of \$234 million in 1960. But, on the basis of indications given in national plans, the FAO reached the conclusion that prospective increases in the production of cotton and synthetic fibers in the Soviet Union would augment the Russian export surplus in cotton to such an extent as to cover the import needs of the other countries of Eastern Europe [4, pp. 16-17]7. In the present study, we have assumed that although total imports of cotton into Eastern Europe may decline, purchases from developing countries would remain at levels observed in 1960, partly to fulfil the need for long-staple cotton and partly to maintain trade-relations with certain cotton-producing countries (e.g., Egypt). Similar considerations apply to Mainland China.

The FAO expects some decline in the imports of wool while we have assumed that imports from developing countries would be maintained also in this case. The value of wool imports, as well as those of cotton would, however, fall somewhat by reason of the expected decline in the price of these fibers.¹

The USSR has been reported to plan attaining self sufficiency in jute by 1965 [23, V. 15]7. Yet, jute imports into the other countries of Eastern Europe are likely to rise and, on balance, imports into the entire area may increase somewhat from the level observed in 1960 (\$21 million). Finally, imports of agricultural raw materials not included in the above categories,

1. Table A 1.2.2.

such as hides and skins, tropical timber, other vegetables fibers, animal and vegetable matter, taken together appear to account for \$112 million in 1960. ^{However,} / this figure has been derived as a residual and may hence represent an underestimation in other categories. For purposes of projection, we have calculated with an increase of these imports by one-half between 1960 and 1970 and one-fifth between 1970 and 1975.

Minerals and Metals

The countries of the Sino-Soviet area export oil and several metals and import small quantities of a few minerals, valued at \$50 million in 1960. We have assumed here that imports would increase approximately in proportion to the expected growth of national income in these countries. Fuel imports into China would rise at a higher rate, however, if purchases from the Soviet Union were reduced.

Manufactured goods

Developing countries exported manufactured goods, chiefly textiles, to the Sino-Soviet bloc in the value of \$71 million in 1960. According to the UN Economic Survey for Europe in 1960, should Eastern European markets be opened to consumer goods manufactured in less developed areas, the imports of these commodities may reach \$1.5-2 billion by 1980 ^{would} [23], p. V. 18 7. But the fulfilment of this prediction / : presuppose a major change in trading policies, as well as planning methods, in Eastern Europe and no such changes are contemplated in the countries in question. Correspondingly, we have assumed that imports would rise pari

passu with the increase of national income.

Taken together, the exports of developing countries to Eastern Europe have been projected to rise from \$0.97 billion in 1960 to \$1.57 billion in 1970 and \$1.93 billion in 1975, while the corresponding figures for Communist Asia are \$0.27, \$0.36, and \$0.40 billion. The largest increases in exports are expected to take place in regard to some competing tropical products, while the prospects for agricultural raw materials are the least favorable. Correspondingly, Latin American exporters of coffee, cocoa, and bananas would enjoy the greatest gains (Table 4.4.2.).

4.5 The Trade Balance of Less Developed Regions

According to our projections, the exports of developing countries to the Sino-Soviet area would rise at a rate somewhat higher than their exports to developed economies.¹ Nevertheless, given the importance of the developed countries as export markets for less developed areas, the export prospects of the latter are little affected by the inclusion of exports to the Sino-Soviet area in the estimates. While exports to developed economies have been projected to increase by 69.5 per cent between 1960 and 1975 under the most likely income assumption and 85.8 per cent if the target rate of income growth is reached, the estimates are 70.7 and 85.9 per cent if trade with the centrally planned economies

1. For the period 1960-1975, the projected annual rate of increase of the value of exports to the Sino-Soviet area is 4.3 per cent and to developed countries 3.6 and 4.2 per cent, under the "most likely" and the highest income assumptions, respectively.

Table 4.4.2.

Exports of Developing Countries to the Sino-Soviet Area by the Region of Origin
(current prices)

	1960			1970			1975		
	Eastern Europe	Communist China	Sino-Soviet Bloc	Eastern Europe	Communist China	Sino-Soviet Bloc	Eastern Europe	Communist China	Sino-Soviet Bloc
Latin America	264	42	306	597	103	700	706	104	810
Africa	301	73	374	396	80	476	499	86	585
Middle East	67	7	74	100	6	106	125	6	131
Asia	335	152	487	473	169	642	604	206	810
Developing Countries total	967	274	1241	1566	358	1924	1934	402	2336

Sources: UN, Monthly Bulletin of Statistics, March and April 1963, FAO, Trade Yearbook, 1961, and national trade statistics.

is included.¹

In appraising the export prospects of individual areas, account has also been taken of trade among less developed regions. According to the estimates of Table 4.5.1., the exports of Latin America would rise by 51.7 or 63.2 per cent between 1960 and 1975, depending on the income assumption chosen. The corresponding figures are 114.3 or 130.1 per cent for Africa, 73.7 or 108.1 per cent for the Middle East, and 49.5 or 60.3 per cent for Asia.

The projections on the future exports and imports of less developed areas are summarized in Table 4.5.2. The estimates indicate an increase in the trade deficit of the less developed areas, taken together, throughout the period although much of this increase would occur during the sixties by reason of the assumed decline in the prices of several primary products between 1960 and 1970. Under the most likely income assumption, the trade deficit of the developing countries is estimated to rise from \$1.3 billion in 1960 to \$4.3 billion in 1970 and \$5.2 billion in 1975, if, for all regions, the medium estimate of the income elasticity of import demand is chosen.²

Substantial differences are indicated with respect to the

1. The final estimates are further affected by the assumed constancy of special category exports.

2. In order to indicate the sensitiveness of the estimates to the values assumed for the income elasticity of import demand in the developing countries, three variants reflecting different assumptions made with regard to this elasticity have been given for each income alternative. For 1975, for example, the trade deficit of the developing countries would be \$3.9 or \$6.6 billion under the most likely income assumption, if the extreme values of the import demand elasticity were chosen for all regions.

Table 4.5.1.

The Exports of Developing Countries
(\$ million, current prices)

	<u>1960</u>				<u>1970 I</u>				<u>1970 II</u>			
	DC ^a	LDC	SSA	Total ^b	DC ^a	LDC	SSA	Total ^b	DC ^a	LDC	SSA	Total ^b
Latin America	7963	174	306	8497	9920	250	700	10920	10530	260	700	11540
Africa	4069	327	374	4863	6790	420	480	7780	7210	440	480	8220
Middle East	3100	570	74	3811	4640	800	110	5620	4980	850	110	6010
Asia	4471	539	487	5566	5540	680	640	6930	5860	720	640	7290
Developing countries, total	19603	1610	1241	22737	26890	2150	1930	31250	28580	2270	1930	33060
		<u>1975 I</u>				<u>1975 II</u>						
	DC ^a	LDC	SSA	Total ^b	DC ^a	LDC	SSA	Total ^b				
Latin America	11720	310	810	12890	12690	320	810	13870				
Africa	9220	520	590	10420	9930	580	590	11190				
Middle East	5660	990	130	6850	6600	1130	130	7930				
Asia	6640	790	810	8320	7190	850	810	8920				
Developing Countries, total	33240	2610	2340	38480	36410	2880	2340	41910				

Sources: Tables 3.1.4, 4.3.1., 4.4.2.

- Note: (a) Exports to developed countries include, in addition to the estimates of Table 3.1.4 (SITC classes 1-8), miscellaneous items (SITC class 9) amounting to \$107 million in 1960 (Latin America, \$32 million; Africa, \$31 million; Middle East, \$3 million; Asia \$41 million). A 50 per cent increase has been assumed for 1960-1970, and 80 per cent between 1960 and 1975.
- (b) The total exports of developing countries also include so-called special-category items (chiefly items of a military interest), reported for 1960 as follows: Latin America, \$54 million; Africa, \$86 million; Middle East, \$67 million; Asia \$69 million. These exports have been assumed to remain at 1960 levels throughout the period under consideration.

trade prospects of individual areas, however. According to our estimates practically the entire increase in the estimated trade deficit of the developing countries would take place in Asia, whose deficit would grow from \$1.5 billion in 1960 to \$5.2 billion in 1975. The large deterioration in Asia's projected trade balance reflects the slow growth of her exports as well as the rapid increase in import requirements.

By comparison, an improvement is foreseen in the case of Africa, no change in the Middle East, and some deterioration in Latin America. It appears that the expected rapid expansion in African exports of minerals and metals would contribute to a reduction in the deficit of that region while, despite the relatively low income elasticity of import demand assumed for Latin America, the rate of increase of exports in the latter region would fall behind that of imports.

The trade deficit of the less developed regions would be larger if target rates of income growth were reached in developed as well as in developing countries as compared to estimates made under the "most likely" income assumption. This result is largely explained by the difference between most likely and target growth rates in developing as against developed economies. Should target rates be reached in all areas, our projections would entail a trade deficit of \$5.0 billion for the developing countries in 1970, and \$6.8 billion in 1975.¹

1. Unless otherwise noted, the median income elasticity of import demand is applied in the projections.

The prospects for the balance of payments of developing countries would be even less auspicious if they were to attain target rates of income growth while the "most likely" income assumption applied to developed areas. Under these circumstances a trade deficit of \$6.8 billion would be shown for 1970 and \$10.2 billion for 1975. Nevertheless, the results would still be more favorable than those arrived at by the United Nations, which indicate a deficit of \$12 billion for 1970 [19, p. 67]. But the United Nations estimate has been based on aggregate projections and hence it could not allow for trends favoring the developing countries, e.g., in the field of non fuel minerals and metals. Correspondingly the UN estimate of the export earnings of developing countries is lower than ours (\$29 billion as compared to \$31.2 billion), although the former has not taken account of prospective decreases in the prices of several primary products.¹ At the same time, the 1970 import requirements of the less developed areas are given as \$41 billion in the UN report as against our estimate of \$38.0 billion.²

Finally, comparison is more difficult with projections prepared by GATT. According to GATT, the trade deficit of the developing countries, other than the Middle East, would amount to \$11-15

1. In 1960 prices, our estimate of the export receipts of developing areas in 1970 would be \$33.8 billion (a difference of \$2.4 billion pertains to exports to developed countries and \$0.2 billion to exports to the Sino-Soviet area).

2. Note that the growth rates postulated in the UN paper correspond to our "most likely" estimate for the developed countries and the target rate of income growth for the less developed areas.

billion in 1975 if their exports of manufactured goods were not taken into account /6, pp. 15-197. Using our projections for the exports of manufactures (\$2.4 billion), a deficit of \$8.5-12.5 billion is shown. But this figure has been calculated at 1956-1960 prices, and a correction to the 1961 price level, approximately corresponding to our price-assumptions, would increase the projected deficit by \$2.5 billion.

Note finally that the projections refer to individual regions and do not take account of intra-regional differences. At the same time, in Latin America the largest increases in exports are expected to take place in countries producing non-fuel minerals and metals, while in Africa petroleum and mineral-producing countries will share much of the increase. Intra-area trade in fuels will further contribute to a skewed distribution of export earnings and the trade balance. Further research would therefore be necessary to evaluate the trade prospects of individual countries in less developed areas.

Table A 4.3.1

Trade Among Developing Regions

(\$ million, current prices)

	1960					1970 I					1970 II					1975 I					1975 II									
	LA	AF	ME	AS	LDC	LA	AF	ME	AS	LDC	LA	AF	ME	AS	LDC	LA	AF	ME	AS	LDC	LA	AF	ME	AS	LDC					
Foodstuffs (0.1)																														
LA	-	34	23	25	82	-	50	30	40	120	-	50	30	40	120	-	60	40	50	150	-	60	40	50	150	-	60	40	50	150
AF	12	-	36	44	92	20	-	50	60	130	20	-	50	60	130	20	-	60	80	160	20	-	60	80	160	20	-	60	90	170
ME	1	11	-	9	21	-	10	-	10	20	-	10	-	10	20	-	10	-	10	20	-	10	-	10	20	-	10	-	10	20
AS	12	62	104	-	178	20	80	140	-	240	20	90	150	-	260	20	100	160	-	280	20	110	180	-	310	20	110	180	-	310
LDC	25	107	163	78	373	40	140	220	110	510	40	150	230	120	540	40	170	206	140	610	40	180	280	150	650	40	180	280	150	650
Agr. Raw Mat'ls (2.4 less 28)																														
LA	-	4	1	3	8	-	10	-	10	-	20	10	-	10	20	-	10	-	10	20	-	10	-	10	20	-	10	-	10	20
AF	10	-	28	108	146	10	-	40	120	170	10	-	40	120	170	10	-	50	130	190	10	-	60	130	200	10	-	60	130	200
ME	-	7	-	6	13	-	10	-	10	20	-	10	-	10	20	-	10	-	10	20	-	10	-	10	20	-	10	-	10	20
AS	75	16	16	-	107	90	20	30	-	140	100	20	30	-	150	110	20	40	-	170	120	20	50	-	190	120	20	50	-	190
LDC	85	27	45	117	274	100	40	70	140	350	110	40	70	140	360	120	40	90	150	400	130	40	110	150	430	130	40	110	150	430
Fuels (3)																														
LA	-	64	4	6	74	-	70	-	10	80	-	80	-	10	90	-	90	-	10	100	-	100	-	10	110	-	100	-	10	110
AF	4	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ME	55	186	-	262	503	50	230	-	420	700	50	250	-	450	750	50	270	-	550	870	50	290	-	650	990	50	290	-	650	990
AS	4	-	4	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LDC	63	250	8	268	589	50	300	-	430	780	50	330	-	460	840	50	360	-	560	970	50	390	-	660	1100	50	390	-	660	1100
Min. & Metals (28, 67, 68)																														
LA	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF	11	-	-	29	40	10	-	-	40	50	10	-	-	40	50	10	-	-	50	60	10	-	-	60	70	10	-	-	60	70
ME	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AS	7	-	1	-	8	10	-	-	-	10	10	-	-	-	10	10	-	-	-	10	10	-	-	-	10	10	-	-	-	10
LDC	19	-	1	31	51	20	-	-	40	60	20	-	-	40	60	20	-	-	50	70	20	-	-	60	80	20	-	-	60	80

Table A 6.3.1 (Continued)

	1960					1970 I					1970 II					1975 I					1975 II						
	LA	AF	ME	AS	LDC	LA	AF	ME	AS	LDC	LA	AF	ME	AS	LDC	LA	AF	ME	AS	LDC	LA	AF	ME	AS	LDC		
Manuf. Goods (5-8 less 67,68)																											
LA	-	1	-	7	8	-	10	-	20	30	-	10	-	20	30	-	10	-	30	40	-	10	-	30	40		
AF	16	-	24	5	45	20	-	40	10	70	20	-	50	10	80	30	-	60	20	110	40	-	70	30	140		
ME	2	21	-	9	32	10	30	-	20	60	10	30	-	20	60	10	40	-	30	80	10	50	-	40	100		
AS	70	122	46	-	238	80	140	70	-	290	80	140	80	-	300	90	150	90	-	330	90	150	100	-	340		
LDC	88	144	70	21	323	110	180	110	50	450	110	180	130	50	470	130	200	150	80	560	140	210	170	100	620		
Total Trade																											
LA	-	103	28	43	174	-	140	30	80	250	-	150	30	80	260	-	170	40	100	310	-	180	40	100	320		
AF	53	-	88	186	327	60	-	130	230	420	60	-	140	240	440	70	-	170	280	520	80	-	190	310	580		
ME	59	225	-	286	570	60	280	-	460	800	60	300	-	490	850	60	330	-	600	990	60	360	-	710	1130		
AS	168	200	171	-	539	200	240	240	-	680	210	250	260	-	720	230	270	290	-	790	240	280	330	-	850		
LDC	280	528	287	515	1610	320	660	400	770	2150	330	700	430	810	2270	360	770	500	980	2610	380	820	560	1120	2880		

Source: U.N. Monthly Bulletin of Statistics, March and April 1963, and national trade statistics.

Table A 6.5.1

Exports of Developing Countries to the Sino-Soviet Area

(\$ million, current Prices)

	-----1960-----					-----1970-----					-----1975-----				
	<u>LA</u>	<u>AF</u>	<u>ME</u>	<u>AS</u>	<u>Total</u>	<u>LA</u>	<u>AF</u>	<u>ME</u>	<u>AS</u>	<u>Total</u>	<u>LA</u>	<u>AF</u>	<u>ME</u>	<u>AS</u>	<u>Total</u>
<u>Temperate Zone Foods</u>	<u>1</u>	<u>4</u>	<u>20</u>	<u>42</u>	<u>67</u>	<u>2</u>	<u>8</u>	<u>40</u>	<u>84</u>	<u>134</u>	<u>3</u>	<u>11</u>	<u>56</u>	<u>118</u>	<u>188</u>
<u>Competing Tropical Foods</u>	<u>163</u>	<u>7</u>	<u>1</u>	<u>11</u>	<u>182</u>	<u>393</u>	<u>14</u>	<u>2</u>	<u>20</u>	<u>429</u>	<u>400</u>	<u>20</u>	<u>3</u>	<u>28</u>	<u>451</u>
Veg. Oil & oilseeds	9	7	1	10	27	18	14	2	20	54	25	20	3	28	76
Sugar	154	-	-	-	154	375	-	-	-	375	375	-	-	-	375
Tobacco	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-
<u>Non-Competing Trop.</u>															
<u>Foods</u>	<u>49</u>	<u>48</u>	<u>1</u>	<u>29</u>	<u>127</u>	<u>175</u>	<u>102</u>	<u>1</u>	<u>52</u>	<u>330</u>	<u>252</u>	<u>169</u>	<u>1</u>	<u>71</u>	<u>493</u>
Bananas	1	-	-	-	1	25	4	-	-	29	38	6	-	-	44
Coffee	35	2	1	4	42	130	25	1	16	172	188	70	1	27	286
Cocoa	13	46	-	-	59	20	73	-	-	93	-	93	-	-	119
Tea	-	-	-	19	19	-	-	-	28	28	-	-	-	35	35
Pepper	-	-	-	6	6	-	-	-	8	8	-	-	-	9	9
<u>Raw Materials Agr.</u>	<u>80</u>	<u>282</u>	<u>49</u>	<u>332</u>	<u>744</u>	<u>106</u>	<u>286</u>	<u>57</u>	<u>353</u>	<u>802</u>	<u>121</u>	<u>292</u>	<u>62</u>	<u>413</u>	<u>888</u>
Rubber	-	-	-	275	275	-	-	-	291	291	-	-	-	344	344
Cotton	8	248	28	14	298	8	235	26	14	283	7	230	26	14	277
Wool	15	-	4	15	34	14	-	4	14	32	14	-	4	14	32
Jute	4	2	-	19	25	4	3	-	21	28	5	4	-	26	35
Other	53	32	18	9	112	80	48	27	13	168	95	58	32	15	200
<u>Fuels</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>4</u>	<u>4</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>5</u>	<u>5</u>
<u>Ores & base metals</u>	<u>9</u>	<u>16</u>	<u>-</u>	<u>23</u>	<u>48</u>	<u>18</u>	<u>32</u>	<u>-</u>	<u>42</u>	<u>92</u>	<u>25</u>	<u>45</u>	<u>-</u>	<u>57</u>	<u>127</u>
<u>Manuf. Goods</u>	<u>3</u>	<u>17</u>	<u>3</u>	<u>48</u>	<u>71</u>	<u>6</u>	<u>34</u>	<u>6</u>	<u>87</u>	<u>133</u>	<u>9</u>	<u>48</u>	<u>9</u>	<u>118</u>	<u>184</u>
Textile yarns, fabrics	-	11	-	26	37	-	22	-	47	69	-	31	-	63	94
Other	3	6	3	22	34	6	12	6	40	64	9	17	9	55	90
<u>Total</u>	<u>306</u>	<u>374</u>	<u>74</u>	<u>487</u>	<u>1241</u>	<u>700</u>	<u>476</u>	<u>106</u>	<u>642</u>	<u>1924</u>	<u>810</u>	<u>585</u>	<u>131</u>	<u>810</u>	<u>2236</u>

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