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ANALYSIS AND PROSPECTS OF LATIN AMERICAN INDUSTRIAL DEVELOPMENT

79-7-1620

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/INTRODUCTION

INTRODUCTION

The present document has been prepared for consideration by the Latin American Conference on Industrialization in pursuance of the instructions received by the CEPAL secretariat to convene such a conference. At its seventeenth session (Guatemala City, 25 April to 5 May 1977), CEPAL adopted resolution 373 (XVII) in which it requested the secretariat to convene a Latin American Conference on Industrialization "with a view to the adoption of common positions by the region" for the third General Conference of the United Nations Industrial Development Organization (UNIDO), to be held in New Delhi from 21 January to 18 February 1980. The secretariat was also requested to prepare a paper for the Conference containing an interpretative analysis of the industrialization process in Latin America.

It is now necessary to add to the objectives set out in that resolution others, no less important, which are related to the opportunities of evaluating that process, in view of the time at which this meeting will take place and the new instructions received by the secretariat at the eighteenth session held recently in La Paz (18 to 26 April 1979). The fact that this event is taking place almost at the end of the present decade means that circumstances are favourable for an evaluation and retrospective examination of the process of Latin American industrialization and for raising some questions and hypotheses concerning the opportunities and problems that are likely to face the region in the 1980s. This is even more obvious if it is borne in mind that efforts are currently being made to lay the foundations for the international development strategy for the forthcoming decade, in the formulation of which the Latin American countries should play an active role.

One of the tasks assigned to the CEPAL secretariat at the latest session was to prepare "a regional action programme aimed at instrumenting the implementation of the Strategy for the Third United Nations Development Decade to be adopted by the General Assembly, as regards the countries of Latin America".1/ It is unnecessary to point out that in this exercise

1/ Resolution 386 (XVIII).

/priority attention

priority attention should be given to the aspects relating to the industrial sectors as regards the formulation of the basic objectives and the orientation of the corresponding strategies and policies.

Accordingly it is felt that this document, and in particular the Latin American Conference on Industrialization, should fulfil this dual purpose: to provide the governments with background material which will enable them to draw up a regional position for the world-level meeting, and at the same time to establish at the internal level the guidelines and the role which Latin America assigns to its own industry in efforts to achieve its aspirations in the field of economic and social development.

Bearing in mind these objectives, this document identifies and examines the most salient aspects of the process of industrialization, which have led to the advances and problems, as well as the potential offered today by the Latin American manufacturing sector, at both the regional and the country level.

The strong relationship between the region's industrial development and events and trends in the international economy is a fact which has had significant influence in the different stages of Latin American industrialization, and consequently has an important role in this analysis. The trends and changes observable in world industry not only provide important elements for the interpretation of some basic characteristics of the industrial sector in Latin America, but also constitute a valuable background for the identification of certain influences which might affect not only the present industrialization process but also its future course and the nature of the region's place in the world economy.

In this regard, a feature of particular clarity at the international level is the increasingly close link between industrial development and trade in manufactures in terms both of the dynamics of the process and of the structures of production and the growing and dominant role - in view of the nature of such trade - played by the most technology-intensive branches.

The industrialization process in Latin America has been examined, as regards the domestic aspects and its external links, in the context of the development of world industry, over a period covering the last 25 or

/30 years,

30 years, with the aim of highlighting and to some extent reaffirming, on the one hand, the principal facts and trends which have been present and have predominated in the evolution of the manufacturing sector, and on the other seeking in the different stages of the process data which will permit a response to the questions posed at present by the region's industrial development. Notwithstanding the transitory situations, and in particular the discouraging and uncertain conditions prevailing in the world economy, and also the specific circumstances of the countries, certain basic principles are clearly valid, and the concepts which give industrialization a leading role as the motive force and one of the main pillars of development are still applicable. Hence, the observations and conclusions of the analysis do not attempt to respond to temporary or short-term problems, but rather seek the predominant orientations and guidelines, within schemes of greater durability and continuity.

/I. LATIN

I. LATIN AMERICA AND THE CARIBBEAN IN WORLD INDUSTRY AND TRADE IN MANUFACTURES

1. General aspects

It is difficult to understand some of the basic characteristics of industrialization if the analysis is restricted to the context of the countries of Latin America and the Caribbean. This is because the economic, socio-cultural and often political aspects of their external relations have helped to shape certain patterns to which the region's manufacturing development tends to conform. For the moment, it suffices to mention those involving technological aspects and consumer trends in industrial products, which, together, make up or seek to make up a sectoral structure similar to that of the centres or the advanced economies in general.

The question is much further-reaching, however, since industrial development has long been linked with world events, particularly those occurring in the developed market economies with which relations have been more intensive. To illustrate this, two events may be recalled - one old and one new. The first was the deterioration of the region's primary export position when the weakened demand of the centres restricted the possibility of maintaining the dynamics of outward-directed development and taking advantage of technical progress solely through external trade. The second was the boom in the world economy which favourably affected the economic and industrial growth of the region and aided the noteworthy increase in exports of manufactures. This boom came to an end in 1973-1974, and owing to the oil problem was immediately reflected in a reduction in regional dynamism, particularly of industry. At the same time, and despite subsequent tendencies towards recovery, the future of the central economies has been creating uncertainties for the region, such as those connected with exports of manufactures towards markets which are tending to increase protectionism.

The majority of recent studies 3/ of the region's economic and industrial future link it with the diversification and increase in exports, assigning prominent responsibility precisely to manufactures.

3/ See, for example, CEPAL, Long-term trends and prospects of the development of Latin America, E/CEPAL/1076, April 1979.

/This economic

This economic and industrial future is further linked with the international negotiations for the establishment of a new economic order whereby the developing countries would receive fairer treatment in such aspects as finance, trade, technology and enterprises. Within the framework of these ideas, such targets as those of the Lima Declaration and Plan of Action 4/ were established with the aspiration that the developing countries and Latin America in particular should rapidly increase their relative weight in world manufacturing output.

For these reasons, and despite the notable changes in the world economy and industry and the growing interdependence of the economies, a halt should be made, even if only briefly to review the most outstanding characteristics of world industrial development and international trade in manufactures, with emphasis in both cases on the position of Latin America and the Caribbean.

2. Long-term trends in world production and international trade in manufactures

As from the middle of this century, world patterns of growth of production and international trade in manufactures have undergone significant changes of various kinds.

Although during the first half of the century the indicators of the evolution of world production and international trade in manufactures showed long-term rising trends, they also showed great fluctuations and sometimes even reversed themselves, owing mainly to the results of the First World War, the Great Depression and the Second World War. Latterly, the performance of the indicators became noticeably more regular, as a result of the greater capacity for controlling or limiting political and armed conflicts, the use by the governments of a more refined set of economic instruments and broader and more complete negotiating systems in order to face up to internal and external economic disruptions, and also to some extent the implementation of deliberate development and industrialization policies in much of the world. This explains why the

4/ Second General Conference of the United Nations Industrial Development Organization, Lima, March 1975.

/crises of

crises of the early 1950s and the 1970s proved to be less acute and geographically more restricted than those which took place in earlier decades (see figure 1).

Other significant changes to be observed as from the middle of the century relate to the notable speeding-up of the growth of production and trade in manufactures and, even more important, the inversion of the correlation existing up to that time between the growth of production and the expansion of international trade in manufactures, with the latter becoming notably more dynamic than the former.

During the first half of the century, production and trade in manufactures increased at annual average rates of the order of 2.8% and 1.7% respectively. Later, in the period between 1950 and 1975, the respective rates were 6.1 and 8.8% (see table 1).

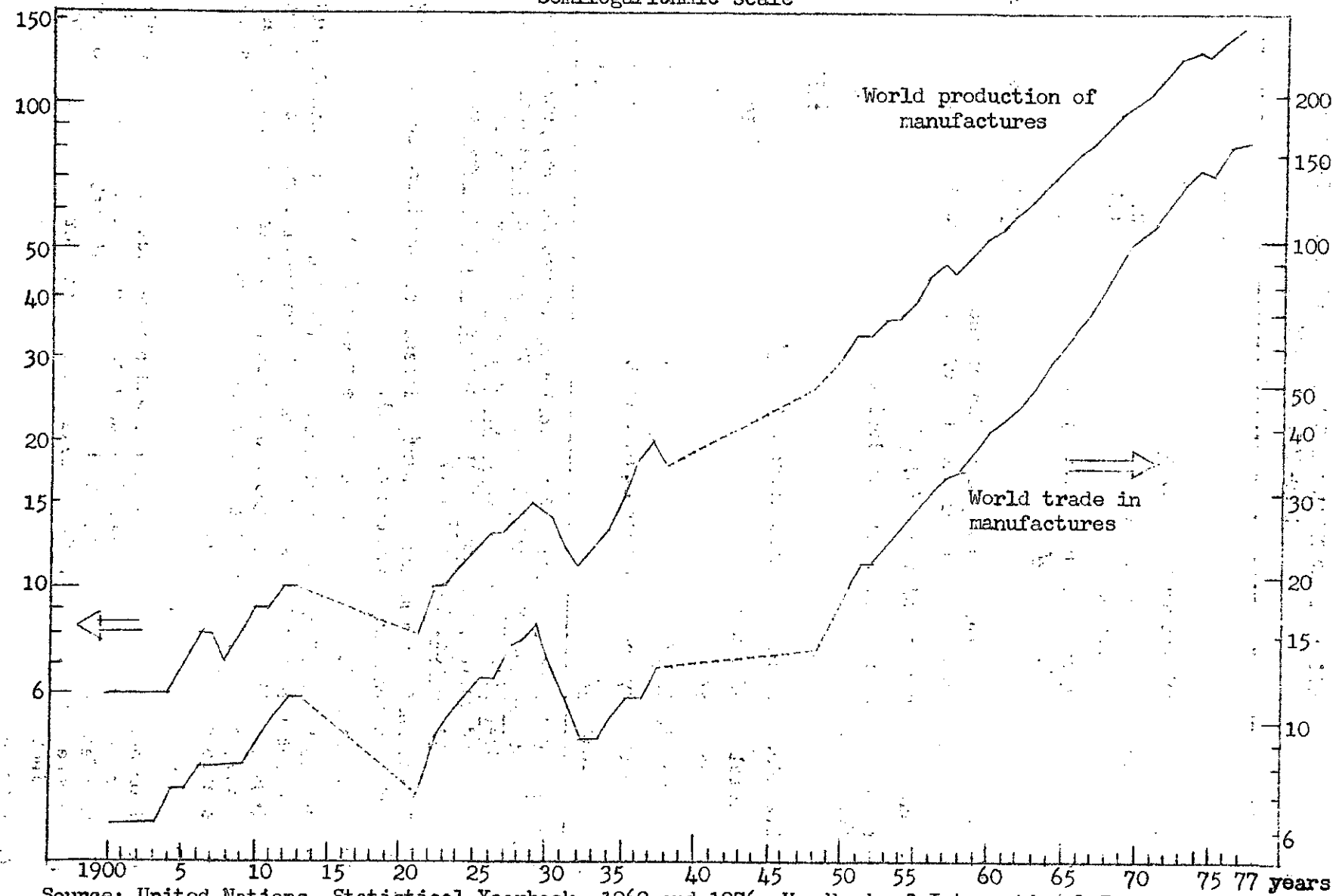
The speeding-up of the growth of manufacturing output can be explained by the influence of various factors. These include the strongly industry-oriented policies applied in different countries and regions, mainly those with centrally-planned economies, Japan and many developing countries. Increases in personal income in nearly all countries and the dynamics of the demand for industrial products associated with such increases have of course had considerable influence, while there is also growing capacity for mass production, which puts manufactures within the reach of increasingly large sectors of the population, and rapid technological innovations in the design and quality of the products in the production processes.

An outstanding role also attaches to scientific and technical efforts in the rapid growth of world trade in manufactures observed since the Second World War, since technical progress is disseminated, inter alia, by means of trade in the industrial products which incorporate it.

In a sense it can be said that as from the middle of the century, a process of internationalization of the world economy has been taking place, including an increasing "opening-up" of industry, evidenced by the rapid growth of trade in manufactures, which is greater than that of manufacturing itself.

/Figure 1

Figure 1
INDEX OF WORLD PRODUCTION AND TRADE IN MANUFACTURES
(1970=100)
Semilogarithmic scale



Source: United Nations, Statistical Yearbook, 1969 and 1976; Handbook of International Trade and Development Statistics, 1976 and 1977, and Monthly Bulletin of Statistics, March and May 1979.

/Table 1

Table 1

WORLD: INDUSTRIAL GROWTH AND TRADE IN MANUFACTURES, 1900-1950 AND 1950-1975

	1900-1950		1950-1975
1. Average annual growth rate (%) a/			
Production of manufactures	2.8		6.1
Trade in manufactures	1.7		8.8
2. Manufacturing production elasticity of trade in manufactures b/	0.64		1.41
	1900	1950	1975
3. Trade in manufactures as a proportion of the industrial gross domestic product (%) c/	22.4	13.7	25.7
4. Manufactures in total trade (%) d/		43.7	60.4
Manufactures in total trade, excluding fuels (%)		48.5	76.0
		1955	1975
5. Breakdown of trade in manufactures (%) d/			
Total manufactures		100.0	100.0
Metals e/		17.4	12.4
Chemicals f/		10.3	11.8
Machinery and transport equipment g/		36.9	47.1
Others h/		35.4	28.8

Sources: CEPAL, on the basis of the following United Nations publications: Statistical Yearbook, 1969 and 1976; Yearbook of National Accounts Statistics, 1975; Monthly Bulletin of Statistics, various issues, and UNCTAD, Handbook of International Trade and Development Statistics, 1976 and 1977.

a/ On the basis of the annual quantum indexes of manufacturing production (MP) and trade in manufactures (TM).

b/ Regression: log TM = a + e log MP (e = elasticity).

c/ On the basis of the values of trade and the industrial gross domestic product for 1970 (in US dollars) and the respective trade and production indexes. The industrial gross domestic product is at market prices (ISIC, Rev.2, major division 3) and trade in manufactures at FOB prices (SITC, sections 5, 6, 7 and 8).

d/ At current values.

e/ Iron and steel (SITC division 67) and non-ferrous metals (SITC division 68). In subsequent analyses non-ferrous metals are excluded from trade in manufactures, but they had to be included in this table so as to preserve homogeneity with available indexes on the long-term growth of world trade in industrial products.

f/ SITC, section 5.

g/ SITC, section 7.

h/ Other manufactures (SITC, sections 6 and 8, excluding divisions 67 and 68).

/In reviewing

In reviewing this process, certain important facts should be considered in connexion with trade, some of which are analysed below. Firstly, this opening-up is mainly to be seen among the developed market economies, where the degree of symmetry in trade is almost always high, since they generally trade in products of similar technological levels and social value. Secondly, it responds to some extent to explicit strategies implemented by applying policies of concertation and regulation, with the formation and operation of integration and free trade schemes and the establishment of rounds of negotiations within GATT. Lastly, it should be observed that the trade with the greatest growth is in the technologically most advanced manufactures, such as machinery and transport equipment; the rest, except for chemicals, have lost weight in the trade in these goods. It should also be recalled that the relative importance of raw materials and foodstuffs in international trade has declined considerably (see table 1).

3. Distribution and structure of world industry

(a) Changes in geographical distribution

The growth of world industry and international trade in manufactures has been accompanied by major changes in the economic and industrial weighting of the different regions of the world.

The main changes have taken place among the developed regions or countries. North America (Canada and the United States) and Western Europe, which have achieved high levels of development, have lost relative economic and industrial weight, and even the per capita position of North America has also declined.5/ The opposite has occurred with Eastern

5/ It should be borne in mind that industry tends to change its intrinsic nature as a result of increased scientific and technological inputs. This is so much so that the traditional statistical calculations are increasingly frequently being qualified in terms of these inputs and specific industrial services which conventional statistics do not cover, at least in their entirety, because they are fundamentally composed of indicators of material results and income generated in physical production activities. Problems of quality, type of product and efficiency are also involved, and the progress of these may be overlooked or underestimated in the traditional calculations.

/Europe and

Europe and Japan, whose economic and industrial weightings have increased notably, both in global and per capita terms, in conjunction with the markedly industrialist strategies followed in these countries (see table 2).

Because of the rapid growth of the population, the relative progress achieved by the developing countries seems less if per capita values are considered. In the case of Latin America and the Caribbean, the region's share in the industrial product increased from 3.9 to 4.8% between 1950 and 1977, but the relative per capita position declined, albeit minimally, from 46 to 45% of the world average (see table 2).6/

If the analysis is restricted to the western world, however, where the Latin American economies penetrate to a fairly large extent, it can be seen that the region's industry increased its relative importance from 4.7 to 8.4% and the per capita industrial product from 18 to 23% of the western average.

The changes in the geographical distribution of the various industries in the manufacturing sector have, of course, been different, both in terms of their size and their causes, and to some extent their orientations. A global analysis can be made, separating light from heavy industries (see table 3).

Around 1955, the light industries (mostly direct or indirect producers of consumer goods, in many cases not durables) were mainly concentrated in North America and Western Europe (37% and 32% respectively of the world total). The production of Eastern Europe accounted for 16% and that of the rest of the world for 15%. By 1977, however, there was a notable change since North America, Western Europe and Eastern Europe showed similar levels of participation in the production of these goods.

6/ In absolute terms, the per capita industrial product in Latin America increased 2.75 times, from 64 to 176 US dollars at 1970 prices, compared with the world figure, which increased 2.81 times, from 139 to 390 US dollars between 1950 and 1977. It should be borne in mind that the Latin American and Caribbean figures were obtained, for the purposes of this chapter and for reasons of homogeneity, from the statistical yearbooks and monthly bulletins of the United Nations, which means that they are not entirely comparable with the results of analyses based on statistics prepared by CEPAL, mainly because of the exchange rates used.

/Table 2

Table 2

WORLD AND REGIONS: CHANGES IN POPULATION DISTRIBUTION, GLOBAL PRODUCT AND INDUSTRIAL PRODUCT, 1950-1977

Region	Population (percentages)		Gross domestic product at market prices (values in US dollars at 1970 prices)							
			Global (percentages)				Per capita (indexes: World = 100)			
			Total		Industrial		Total		Industrial	
	1950	1977	1950	1977	1950	1977	1950	1977	1950	1977
World a/	100.0	100.0	100.0	100.0	100.0	100.0	100	100	100	100
North America (United States and Canada)	8.6	7.5	45.1	32.3	49.4	27.4	512	427	571	363
Western Europe b/	14.8	10.8	25.6	22.3	30.4	25.0	173	206	205	232
Eastern Europe c/ and Soviet Union	14.8	12.2	12.1	22.9	10.2	29.8	82	188	69	245
Japan	4.4	3.6	2.6	6.9	1.4	7.3	60	194	31	204
Other developed countries d/	1.5	1.5	2.2	1.9	1.9	1.6	142	130	124	104
Latin America and the Caribbean	8.5	10.6	5.1	5.9	3.9	4.8	59	55	46	45
Africa (excluding South Africa)	10.7	12.4	2.1	2.0	0.7	0.8	19	16	6	7
Asia (excluding Israel and Japan)	36.7	41.4	5.2	5.8	2.1	3.3	14	14	6	8

Source: CEPAL, according to data from official United Nations publications, especially the Monthly Bulletin of Statistics and the Statistical Yearbook.

a/ Excluding China, North Korea, Mongolia and the former Democratic Republic of Vietnam.

b/ All the EEC countries and the European Free Trade Association (EFTA), Spain, Greece and Malta.

c/ Albania, Bulgaria, Czechoslovakia, Hungary, Poland, German Democratic Republic, Romania and Yugoslavia.

d/ South Africa, Australia, Israel and New Zealand.

/Table 3

Table 3

WORLD: CHANGES IN THE DISTRIBUTION OF MANUFACTURING AND OF LIGHT AND HEAVY INDUSTRIES, BY REGIONS, 1955-1977a/

(Percentages of gross domestic product)

Region	Manufacturing		Light industries b/		Heavy industries c/	
	1955	1977	1955	1977	1955	1977
World d/	100	100	100	100	100	100
North America (United States and Canada)	45	27	37	26	52	27
Western Europe e/	30	25	32	28	30	24
Eastern Europe f/ and Soviet Union	14	30	16	26	12	32
Japan	2	7	2	6	1	9
Other developed countries g/	2	2	...	...	...	...
Latin America and the Caribbean	4	5	6	6	2	4
Africa (excluding South Africa)	1	1	...	...	...	...
Asia (excluding Israel and Japan)	2	3	4	5	1	2

Source: CEPAL, on the basis of statistics from official United Nations publications, especially the Monthly Bulletin of Statistics and the Statistical Yearbook.

a/ In this case, 1955 is taken as the base year, since sufficient data was not available for 1950.

b/ Light industries (according to the definition of the United Nations Statistical Yearbook) include: food, beverages and tobacco (ISIC, Rev. 2, division 31); textiles, wearing apparel and leather (division 32); wood and wood products, including furniture (division 33); printing, publishing and allied industries (major group 342); rubber products (major group 355) and plastic products (major group 356); and other manufacturing industries (division 39).

c/ Heavy industries(according to the definition of the United Nations Statistical Yearbook) include: paper major group 341); chemical products and products of petroleum and coal (major groups 351 to 354); non-metallic mineral products (division 36); basic metal industries (division 37); and fabricated metal products, machinery and equipment (division 38).

d/ Excluding China, North Korea, Mongolia and the former Democratic Republic of Vietnam.

e/ All the EEC countries and the European Free Trade Association (EFTA), Spain, Greece and Malta.

f/ Albania, Bulgaria, Czechoslovakia, Hungary, Poland, German Democratic Republic, Romania and Yogoslavia.

g/ South Africa, Australia, Israel and New Zealand.

/The heavy

The heavy industries, which were very concentrated in 1955 (North America 52%; Western Europe 30%), tended to be redistributed rapidly, and by 1977 their geographical distribution resembled that of the light industries except in the least developed areas, where they maintained a low level of participation despite the fact that they doubled in number during the period 1955-1977.

This pattern and its trends are determined to a large extent by the most dynamic industries: chemical products, petroleum products, and metal products, machinery and equipment, the joint weighting of which, in the heavy industries of the world, is around 80%.7/

The development of the heavy industries is linked to the improvement in the technological interrelations of the production processes and their effect on forward and backward vertical input-output relations (including capital goods) and therefore has relevance for the dynamic capacity of the manufacturing sector. These industries are thus normally considered to be strategic and generally warrant special efforts in development policies. These industries, especially chemical products and metal products, machinery and equipment, rapidly introduce important technological innovations and their products are part of the most dynamic flows of international trade.

These characteristics - apart from the influence of uneven economic growth among the regions of the world - explain the notable change in the distribution of heavy industries as a whole, naturally taking into account the highly industry-oriented strategies of Eastern Europe and Japan and the efforts of the developing regions in the same direction.

Another fact to which attention should be drawn is that, generally speaking, the increased economic growth of the different regions of the world has been linked with more rapid industrialization processes 8/

7/ On the basis of figures from the United Nations Monthly Bulletin of Statistics, August 1977.

8/ That is to say, industrial growth which is more rapid than global growth, measured approximately by the quotient of the growth rate of the product of manufacturing industry over the growth rate of the total gross domestic product of the economy, and reflected in the growth of industry elasticity with respect to the total product (see footnote 9).

/(table 4)

(table 4). The exceptions to this correlation are to be seen in developing Africa and Asia, where moderate rates of economic growth have existed side by side with pronounced industrialization processes, although accompanied by low income levels consonant with a very incipient stage of industrial development at the beginning of the period under analysis.

If the period 1950-1965 is taken separately from the period from 1965 onwards, the relative dynamism of industry is seen to be losing force. In the world as a whole, the industrialization coefficient fell from 1.23 during the first of these fifteen-year periods to 1.14 over the next period. The group of developed market economies tended to become "de-industrialized" after 1965, since the respective coefficient dropped from 1.20 to 0.93, and the developing economies followed the trend in reducing their coefficient from 1.42 to 1.25. Only the centrally planned economies of Eastern Europe maintained or increased their system of industrialization, registering industrialization coefficients of over 1.3 or around 1.4.9/ These figures suggest that a less industry-oriented model is perhaps tending to become generalized, except, according to the available information in the centrally planned economies. This model has become more pronounced since the middle of the last decade, so it cannot easily be attributed to conjunctural situations. For this reason, the various bodies which have been concerned with the future of the world economy tend to foresee a less important role for industrialization, particularly in the developed economies. However, even though the peripheral economies as a whole reveal a trend in the same direction, the industrialization process is still of transcendental importance, since the enormous developing world includes vast regions and numerous countries which are still too far below the industrial threshold which the mature economies would seem to have crossed.

9/ CEPAL, on the basis of the United Nations Statistical Yearbook and Monthly Bulletin of Statistics, various issues. The industrialization process (p) is calculated by regressive analysis (correlation between the industrial product (Pi) and the total gross domestic product (Pt) for each year), according to the equation $\log Pi = \log A + p \log Pt$.

/Table 4

Table 4

WORLD: INDUSTRIALIZATION PROCESS BY REGIONS, 1950-1977

(Percentages)

Region	Growth of the gross domestic product a/ (cumulative annual percentage)				Industrialization process b/	Degree of industrialization c/	
	Total		Per capita				
	Global	Industrial	Global	Industrial		1950	1977
World d/	4.9	5.9	2.9	3.9	1.2	23	30
North America (United States and Canada)	3.6	3.6	2.1	2.2	1.0	25	25
Western Europe e/	4.3	5.2	3.6	4.4	1.2	27	34
Eastern Europe and Soviet Union	7.3	10.2	6.1	8.9	1.4	19	39
Japan	8.6	12.7	7.5	11.4	1.5	12	32
Other developed countries f/	4.5	5.2	2.5	3.2	1.2	20	24
Latin America	5.5	6.7	2.6	3.8	1.2	18	24
Africa (excluding South Africa)	4.8	6.8	2.3	4.1	1.4	8	12
Asia (excluding Israel and Japan)	5.3	7.8	2.7	5.1	1.5	9	17

Source: CEPAL, on the basis of official United Nations publications, mainly the Monthly Bulletin of Statistics and the Statistical Yearbook.

a/ Albania, Bulgaria, Czechoslovakia, Hungary, Poland, German Democratic Republic, Romania and Yugoslavia.
b/ Growth rate of the industrial gross domestic product over the rate for the global product.
c/ Industrial gross domestic product over the global gross domestic product.
d/ Excluding China, North Korea, Mongolia and the former Democratic Republic of Vietnam.
e/ All EEC countries and the European Free Trade Association (EFTA), Spain, Greece and Malta.
f/ South Africa, Australia, Israel and New Zealand.
g/ Gross domestic product at market prices in US dollars at 1970 prices.

/(b) Changes

(b) Changes in the structure of the manufacturing sector

Naturally, these major changes in the geographical pattern of world industry are also linked to notable changes in the structure of the manufacturing sector, especially in regions whose economic growth and industrialization were more rapid.

The main changes tend to be along the same lines in nearly all the regions (see table 5). The three most significant facts are the substantial loss of relative weight of the industries manufacturing non-durable consumer goods (A), the notable increase in the weighting of the group manufacturing metal products, machinery and equipment (E), and the generalized vigour of the chemical industries (C). These facts, which involve 70 or even as much as 85% of the industrial value added, according to the different regions, would seem to constitute a transcendental feature of the world industrialization process. The remaining industries (B and D) show a slightly more erratic evolution (although, in the world as a whole, they are losing importance) perhaps more in line with local circumstances such as the endowment of natural resources, the use of particular strategies, or efforts by developing regions aimed at improving the structure of production.

These characteristics of the structural change in manufacturing production, which are typical of the industrialization process, at least in the long-term, have long been recognized and measured. They are basically linked to the behaviour of demand and to technological innovations - elements which also have a joint effect on international trade, the most dynamic flows of which involve products such as chemicals and machinery and transport equipment.

Latin America is, of course, no exception to the general patterns, since it displays an exceptional industrializing effort precisely in the case of chemicals, metal products, machinery and equipment. Although the general direction of the structural changes in the manufacturing sector in Latin America is similar to that of advanced regions and countries, however, the nature of these changes is different. Whereas in the latter the predominant causes lie in technical demand and progress, in the region an important and even outstanding factor is the improvement of the structure

/Table 5

Table 5

WORLD AND REGIONS: STRUCTURE OF INDUSTRIAL PRODUCTION, 1955 AND 1977

(Percentages of the industrial gross domestic product, at 1970 prices)

Region	Year	Industries				
		A	B	C	D	E
World	1955	30	16	10	10	34
	1977	22	13	14	7	43
North America (United States and Canada)	1955	22	17	9	10	42
	1977	19	15	16	6	44
EEC	1960	28	14	9	10	38
	1977	22	14	15	8	40
EFTA	1960	27	24	8	8	33
	1977	22	22	12	7	36
Eastern Europe and Soviet Union	1955	39	13	8	10	30
	1977	23	10	11	7	49
Japan	1955	35	26	13	8	18
	1977	19	10	15	10	46
Latin America and the Caribbean	1955	56	14	13	5	12
	1977	34	12	20	8	26
Asia (excluding Israel and Japan)	1955	71	8	11	3	7
	1977	54	11	10	5	20

Source: CEPAL, on the basis of official United Nations publications, especially the Statistical Yearbook and the Monthly Bulletin of Statistics.

Note: A : Food, beverages and tobacco (ISIC, Rev. 2, division 31); textile, wearing apparel and leather industries (division 32); other manufacturing industries (division 39).

B : Wood and wood products, including furniture (division 33); paper and printing (division 34); non-metallic mineral products (division 36).

C : Chemical, petroleum and rubber products (division 35).

D : Basic metal industries (division 37).

E : Fabricated metal products and machinery (division 38).

/of production,

of production, both in a horizontal sense (range of products) and a vertical one (technological interrelations of the production processes). Naturally, the situation arrived at is different, and mention may be made in this respect of what has been termed uneven industrial development, mainly as regards the lag in the production of intermediate and especially capital manufactured goods.

4. World trade in manufactures

(a) Industrialization and trade in manufactures

It was pointed out above that since 1950 the world trade in manufactures has grown steadily at a rate well above the rapid growth of industrial output. The rate and pattern of this growth varies, however, from region to region.

Thus, there has been some geographical redistribution of the trade in manufactures, although to a lesser extent than in output and sometimes in opposite directions, in the case of exports and imports. As a result, changes in each region's share of world industrial output are not uniformly accompanied by similar changes in its place in the world trade in manufactures (see table 6). Nor is there a widespread association between coefficients of manufacturing exports or imports and industrial ranking, except in the case of the developing regions whose coefficients of exports of manufactures are systematically lower than those of imports (see table 7). Given the close links between the United States and Canada, North America forms the largest unified market, combining the largest economic space with the highest per capita product. It is also recognized as the main generator of technology. Hence the scale for modern industrial development, the great diversification of industry and the high level of technological autonomy help to explain the smaller importance of its external trade in comparison with other regions.

It may also be seen that North America has lost considerable ground in its relative share of the world trade in manufactures from the standpoint of exports, although less so than in industrial output, since its development is marked by slow economic and industrial growth. This decline has been influenced to some extent by the significant industrialization

/Table 6

Table 6

WORLD DISTRIBUTION OF MANUFACTURING OUTPUT AND TRADE, AND INDUSTRIAL GROWTH BY REGIONS, 1955 TO 1975

Region	Distribution of manufacturing output and trade (percentages)						Industrial growth (compound annual percentage)
	Output a/		Exports b/		Imports b/		
	1955	1975	1955	1975	1955	1975	
World c/	100.0	100.0	100.0	100.0	100.0	100.0	5.6
North America (United States and Canada)	44.9	26.0	24.4	17.0	15.4	14.7	2.8
Western Europe d/	30.1	26.1	58.0	56.8	35.1	43.2	4.8
Eastern Europe e/ and Soviet Union	13.5	29.1	7.9	8.7	7.6	11.0	9.8
Japan	2.1	7.2	4.2	10.4	0.7	1.7	12.2
Other developed countries f/	1.8	1.7	0.9	0.8	7.0	3.3	5.2
Latin America and the Caribbean	4.8	6.1	0.8	1.3	13.0	7.2	6.9
Africa (excluding South Africa)	0.7	0.8	0.6	0.3	8.6	6.0	6.8
Asia (excluding Israel and Japan)	2.2	3.0	3.2	4.7	12.6	12.9	7.4

Sources: CEPAL, on the basis of official United Nations publications, primarily the Monthly Bulletin of Statistics and Statistical Yearbook; for exports and imports, CEPAL, on the basis of UNCTAD, Handbook of International Development Statistics, 1976-1977.

a/ Industrial gross domestic product, in dollars at 1970 market prices.
b/ Manufactures: SITC sections 5, 6, 7 and 8, excluding chapter 68 (non-ferrous metals), at current prices FOB.
c/ Excluding China and the other socialist countries of Asia.
d/ EEC and EFTA countries, Spain, Greece and Malta.
e/ Centrally-planned economies.
f/ South Africa, Australia and New Zealand.

/Table 7

Table 7

WORLD AND REGIONS: MANUFACTURING EXPORT AND IMPORT COEFFICIENTS, 1970 a/

Regions		Export	Import
World		0.21	0.21
North America		0.13	0.12
Western Europe		0.40	0.32
Eastern Europe and USSR		0.08	0.09
Japan		0.25	0.06
Other developed countries		0.11	0.45
Latin America and Caribbean b/	1955	0.02	0.59
	1970	0.05	0.33
	1975	0.07	0.36
Africa (excluding South Africa)		0.13	1.27
Asia (excluding Japan and Israel)		0.30	0.74

Sources: CEPAL, on the basis of official United Nations publications, particularly the Monthly Bulletin of Statistics and the Statistical Yearbook. For exports and imports, CEPAL, on the basis of UNCTAD, Handbook of International Trade and Development Statistics.

For Latin America, the value of exports and imports for 1955 and 1975 is deflated using CEPAL indices, on the basis of official data.

a/ FOB value of exports and imports of manufactures (SITC sections 5, 6, 7 and 8, excluding chapter 68) over the gross industrial product at market prices.

b/ Coefficients based on values of the gross industrial product and exports and imports at 1970 prices.

/processes of

processes of other economies, and by their technological progress which must have led to some redistribution of comparative advantages. Indeed, from the standpoint of the periphery, industrial progress including the incorporation of technological progress and the concomitant familiarization process, as well as lower labour costs or certain natural resources and, frequently, the formation of large capital units (private, public or foreign), have shifted some advantages to the semi-industrialized countries of Latin America and Asia in particular, thus contributing to the restructuring of the world trade of manufactures.

Although the countries of Western Europe have rather moderate industrial growth, they have maintained or even increased high indices of trade very open in manufactures, in which they enjoy surpluses. Mutual trade predominates among these countries within integration groupings such as the European Economic Community (EEC) and the European Free Trade Association (EFTA) for a variety of reasons, including the consolidation of industrial scales. In addition, they are also at the highest technological level and generate and supply technology, much of which is traded or transferred built into industrial products.

The centrally planned economies of Eastern Europe are developing according to a different pattern, because the overall result is made up of rapid rates of economic and industrial growth with low indices of trade in manufactures, with predominantly reciprocal trade within the formal structure of the Council for Mutual Economic Assistance (CMEA). It should be borne in mind that there are other circumstances such as large markets and a certain deliberate delinking from the rest of the world, as well as considerable natural resource endowment and major technological efforts.

Japan combines rapid economic and industrial growth with high indices of trade in exports of manufactures and very low indices in imports of manufactures. Japan is one of the economies with the relatively lowest level of imports of industrial products, at the level of major regions of the world, and the asymmetrical pattern of its trade is the opposite of that of the developing region.

/The "other

The "other developed countries" (South Africa, Australia and New Zealand) come in third place in the world per capita product ranking, although without placing much emphasis on industry, at least taken as a whole. This is largely due to their natural resource base and applied technology. Hence the structure of their trade of manufactures lacks the symmetry characteristic of the developed regions or the inverse asymmetry of Japan, and is instead similar to that of the developing regions. However, according to the data in the preceding section this group's position in the world economy and, of course, in industry is tending to decline in both overall and per capita terms.

Meanwhile, the developing regions (Latin America and the Caribbean, Africa and Asia), although sharing relatively rapid industrial growth - at rates above the world average - together with asymmetrical trade and a deficit in manufacturing trade, have reached very different levels of development and industrialization. The average total per capita product of Africa and Asia is one-quarter and the corresponding industrial product is one-eighth of Latin American levels respectively, since the average degree of industrialization in those two regions is only slightly over half the level of Latin America and the Caribbean. However, Latin America and Asia both have a significant rise in their share of world manufacturing exports, although they differ markedly in the trade pattern from the standpoint of imports. Whereas the Latin American industrialization process, in the twenty-year time horizon under consideration, brought a sharp fall in the region's share of world imports of manufactures, Asia's position remained virtually the same. Again, Africa and Asia are characterized by coefficients of imports of manufactures (imports as a proportion of output) which are extremely high, double or even quadruple the Latin American level. Nevertheless, the latter is at the level of Western Europe, one of the highest in the world excluding Africa and Asia.

In this connexion, it is worth bearing in mind the very low average level of industrial development in Africa and Asia, as well as the purchasing

/power of

power of the oil-producing countries and the peculiar industrial and trade structure of South Korea, Hong Kong, Singapore and Taiwan.10/

Nevertheless, the pattern of trade of the three developing regions, is largely determined by less advanced industrial development and technology, combined with technological dependence and, very often, less emphasis on industry, in line with their natural resource endowment and exports of primary products or fuels.

Taking another analytical viewpoint, again with a twenty-year time horizon, it may be seen that the change in world trade, in favour of a higher weight of manufactures in the value of exports and imports, affects practically all regions, with a consequent decline in the relative weight of trade of food and raw materials (see table 8).

This change is a striking constant in both the developed and the developing economies, and is associated with the world industrialization process and technological progress, since the trade in manufactures is to a considerable extent a form of exchange and transfer of technology applied to product design and quality and to production methods. In addition, it is often accompanied by a relative and sometimes absolute reduction of needs for primary products; in some cases it enables previously unusable natural resources to be exploited or the productivity of land to be increased, thus favouring self-sufficiency in food and agricultural raw materials.

10/ In the mid-1970s, 50% of the value of manufacturing imports of Asia were accounted for by the Middle East, whose exports represented barely 9% of the Asian total. Excluding the Middle East, the trade in manufactures is less unbalanced, with exports representing 65% of the value of imports (19% in Latin America), but more than 70% of the value of those exports originates in the abovementioned four countries, whose primary exports are very limited. These countries are further characterized by appreciable import coefficients and levels of industrialization comparable to the highest in Latin America. (See UNCTAD, Handbook of International Trade and Development Statistics, 1977; Directorate General of Budgets, Accounting and Statistics, Monthly Bulletin of Statistics, vol. IV, N° 5, Taiwan, May 1977; and Juergen B. Donges, "A comparative survey of industrialization policies in fifteen semi-industrial countries", in Weltwirtschaftliches Archiv, Review of World Economics, vol. 112, 1976, N° 4.)

/Table 8

Table 8

WORLD AND REGIONS: WEIGHT OF THE VALUE OF MANUFACTURES a/ IN MERCHANDISE TRADE, EXCLUDING FUELS, 1955 AND 1975

(Percentages)

Regions	Exports		Imports	
	1955	1975	1965	1975
World	49	70	49	70
North America (United States and Canada)	51	63	42	76
Western Europe	69	80	39	69
Eastern Europe and the USSR	59	68	47	68
Japan	83	94	13	33
Other developed countries b/	11	23	78	89
Latin America and the Caribbean	5	22	71	78
Africa (excluding South Africa)	6	12	72	79
Asia (excluding Japan and socialist countries)	19	55	59	67
China and other Asian socialist countries c/	17	39	78	73

Source: CEPAL, on the basis of UNCTAD, Handbook of International Trade and Development Statistics, 1976 and 1977.

a/ SITC sections 5, 6, 7 and 8, excluding chapter 68 (non-ferrous metals), based on FOB values.

b/ Australia, New Zealand and South Africa.

c/ North Korea, Mongolia and the former Democratic Republic of Vietnam.

/From this

From this standpoint, the three developing regions again show the same asymmetry in external trade (less so in Asia, in line with our earlier comments) and trends towards a relative improvement of the situation. Latin America, of course, stands out in this respect, since the relative weight of the value of manufactures in total exports of goods (excluding fuels) has risen more than four-fold.

Similarly, the transformation of world trade has entailed changes in the structure of the trade in manufactures. Mention should be made of the striking dynamism of machinery and transport equipment, which now appear to be another constant feature of all regions, both developed and developing. Some exceptions may be found, but only on one side - either export or import - of manufacturing trade (see table 9).

Broadly speaking, it may be argued that the changing structure of world manufacturing trade has been affected not only by demand patterns linked to income levels but also by technical progress, particularly with respect to products in which this plays a large part: this is precisely the case for many engineering items which, together with chemical products, form the most dynamic trade flows. Naturally, various trends towards specialization in technologically sophisticated products also have this effect, in line with changes in the world map of comparative advantages. It may also be said that this trend has been furthered by the lags in the developing regions, primarily in the technologically more complex engineering industries and, very frequently, the chemical industries. Thus the requirements of economic, industrial and technological progress towards more advanced stages have caused these regions to import increasing quantities of products for these industries, primarily of intermediate and capital goods.

This line of analysis again highlights the profound differences between the trade patterns of the developed and the developing regions, although the latter have, generally speaking, very rapidly followed the world and developed region trends. The developing regions are primarily exporters of less complex industrial products situated in the "other

/Table 9

Table 9

WORLD AND REGIONS: STRUCTURE OF EXPORTS AND IMPORTS OF MANUFACTURES, 1955 AND 1975[a]

(Percentages according to FOB values in dollars)

Region	Exports						Imports					
	1955			1975			1955			1975		
	Chemical products b/	Machinery and transport material c/	Other manufactures d/	Chemical products	Machinery and transport material	Other manufactures	Chemical products	Machinery and transport material	Other manufactures	Chemical products	Machinery and transport material	Other manufactures
World	12	39	49	12	49	39	12	39	49	12	49	39
North America (United States and Canada)	14	48	38	12	65	23	10	32	58	7	55	38
Western Europe	12	37	51	14	46	40	13	36	51	14	42	44
Eastern Europe and Soviet Union	7	52	41	9	56	35	8	56	36	10	53	37
Japan	6	15	79	7	52	41	38	41	21	20	37	43
Other developed countries e/	17	23	60	26	23	51	8	42	50	10	57	33
Latin America and the Caribbean	31	5	64	22	28	50	13	47	40	16	56	28
Africa (excluding South Africa)	14	10	76	21	8	71	10	38	52	10	58	32
Asia (excluding Japan and socialist countries)	8	7	85	7	21	72	12	34	54	12	53	35
China and other Asian socialist countries f/	10	5	85	13	5	83	10	38	52	15	48	37

Source: CEPAL, on the basis of UNCTAD, Handbook of International Trade and Development Statistics, 1976 and 1977.

a/ SITC sections 5, 6, 7 and 8, excluding chapter 68 (non-ferrous metals).
b/ Section SITC 5.
c/ Section SITC 7.
d/ SITC sections 6 and 8, excluding chapter 68 (non-ferrous metals).
e/ Australia, New Zealand and South Africa.
f/ North Korea, Mongolia and the former Democratic Republic of Vietnam.

manufactures" group;11/ they import less of these products, in which their production is more advanced; and a very high level of machinery and transport equipment. In the developed regions, the latter also have the greatest weight in both imports and exports. The exceptions are Japan, which has an inverse asymmetry in comparison with the developing regions, and the "other developed countries" whose asymmetry resembles that of the developing regions in keeping with a pattern of development (taken as a whole) which does not emphasize industrialization strategy. In the case of Japan, on the contrary, the importance of this strategy is once again very clear, in view of the striking change in the structure of its manufacturing exports, which in the mid-1950s resembled that of the developing regions but has since developed towards the patterns of the mature economies, attaching priority to exports of metal products, machinery and equipment of the highest technological level which have the most dynamic performance in world markets.

(b) Currents in manufacturing trade

Besides the transformation of world manufacturing trade as a result of its rapid growth, the changes in the weight of different regions in that trade and the changes in structure according to types of products, there have also been striking changes in the trade currence.

One salient feature is the growing weight in the world total of the reciprocal trade in manufactures of the developed market economy countries, a trend which was maintained until 1973 but which has subsequently declined due to the recession connected with the oil crisis (see table 10). Within the total trade of those countries, reciprocal exports also grew in importance until 1973. In turn, reciprocal imports remain above 90% of the total imported from any part of the world. However, there has been a slight relative advance in purchases of manufactures from other areas reflected in the increase in the latter's weight from 6 to 9% (see table 11).

11/ In the four Asian countries mentioned earlier as having high coefficients of manufacturing exports, more than 70% of exports of industrial products in the mid-1970s was accounted for by "other manufactures" and only 26% by metal products, machinery and equipment. (See UNCTAD, Handbook of International Trade and Development Statistics, op.cit.)

/Table 10

Table 10

WORLD: RECIPROCAL TRADE OF MANUFACTURES AMONG DEVELOPED, WESTERN EUROPEAN AND EASTERN EUROPEAN COUNTRIES AND AMONG COUNTRIES OF DIFFERENT DEVELOPING REGIONS

(Percentages of world total)

	Relative value of reciprocal trade in the world total			
	1955	1965	1973	1975
World	100.0	100.0	100.0	100.0
Developed market-economy countries	53.1	60.4	63.4	56.6
Western European countries	(27.2)	(34.0)	(37.9)	(34.4)
Eastern European countries and USSR	6.0	8.1	6.2	6.1
Latin America and Caribbean countries	0.2	0.3	0.5	0.5
Developing countries of Africa	0.2	0.2	0.1	0.1
Developing countries of Asia	1.4	0.9	1.1	1.3
All developing countries	(2.3)	(1.7)	(1.9)	(2.2)
Total reciprocal trade	60.9	69.9	71.3	64.6
Trade between groups of countries	39.1	30.1	28.7	35.4

Source: CEPAL, on the basis of UNCTAD, Handbook of International Trade and Development Statistics, 1976 and 1977.

a/ Excluding socialist countries of Asia due to lack of data.

/Table 11

This progress, however, is largely true only of trade with the developing countries of Asia, and particularly South Korea, Hong Kong, Singapore and Taiwan which, in special circumstances, developed industrialized, export-oriented models. However, it is also influenced by slight increases in trade with the socialist countries and to a still smaller extent, Latin America,12/ primarily involving the semi-industrialized countries.

These trends, which in 1973 accounted for 63% and in 1975 for 57% of the world trade in manufactures, explain most of the increasing predominance of intra-regional trade at least until 1973 (see table 10).

The explanation for these trends lies in a combination of different kinds of factors. On the one hand, there seems to be confirmation of the weight of technological development, as pointed out above, in relation to the growth and patterns of the international trade of manufactures. The industrialized countries, as major innovators, import these products basically from other developed countries and to a very small extent from the rest of the world, to which a large share of their exports is directed. The structure of these exports is increasingly based on the technological needs of the rest of the world, both in the socialist areas and in the periphery. In the latter, industrial progress, broadly speaking, entails changes in the structure of imports in favour of more complex manufactures, above all in the case of intermediate and capital goods, which contain technology applied to product design and quality and to the production process. Mention should also be made of an improved competitive atmosphere in the developed market economies (with the exception of Japan in the case of imports of manufactures) which may also be seen in the context of economic integration groupings. In addition, these economies to some extent form a system, not merely due to the high level of mutual trade, but also because of their joint action on politico-economic issues,

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12/ While developing Asia (excluding the Middle East) increased its share of manufacturing imports of the developed market-economy countries from 1.8% in 1955 to almost 5% in 1973-1975, the socialist countries rose from 2 to 2.5%, and Latin America from 1 to 1.2% (see UNCTAD, Handbook of International Trade and Development Statistics, op.cit.).

/including their

Table 11

MATRIX OF WORLD TRADE OF MANUFACTURES a/

Origin \ Destination	FOB values (millions of dollars)					Proportions according to destination (exports) and origin (imports) (percentages)									
						Exports					Imports				
	World b/ (1)	Developed countries (2)	Socialist countries (3)	Developing countries (4)	Latin America and the Caribbean (5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
World															
1955	40 567	22 846	4 222	13 499	5 121	100.0	56.3	10.4	33.3	12.6	100.0	100.0	100.0	100.0	100.0
1965	102 541	66 008	12 339	24 194	7 786	100.0	64.4	12.0	23.6	7.6	100.0	100.0	100.0	100.0	100.0
1973	341 459	237 564	36 199	67 696	20 255	100.0	69.6	10.6	19.8	5.9	100.0	100.0	100.0	100.0	100.0
1975	492 336	305 445	59 041	127 850	34 862	100.0	62.0	12.0	26.0	7.1	100.0	100.0	100.0	100.0	100.0
Developed market-economy countries															
1955	34 444	21 539	659	12 246	4 876	100.0	62.5	1.9	35.6	14.2	84.9	94.3	15.6	90.7	95.2
1965	85 414	61 898	3 082	20 434	6 953	100.0	72.5	3.6	23.9	8.1	83.3	93.8	25.0	84.5	89.3
1973	286 196	216 662	12 660	56 874	17 612	100.0	75.7	4.4	19.9	6.2	83.8	91.2	35.0	84.0	87.0
1975	415 546	278 794	26 512	110 240	30 733	100.0	67.1	6 4	26.5	7.4	84.4	91.3	44.9	86.2	88.2
Socialist countries of Europe and Asia															
1955	4 294	449	3 517	328	92	100.0	10.5	81.9	7.6	2.1	10.6	2.0	83.3	2.4	1.8
1965	12 650	1 609	9 055	1 986	419	100.0	12.7	71.6	15.7	3.3	12.3	2.4	73.4	8.2	5.4
1973	32 540	5 507	22 771	4 262	791	100.0	16.9	70.0	13.1	2.4	9.5	2.3	62.9	6.3	3.9
1975	45 838	7 712	31 331	6 795	1 370	100.0	16.8	68.4	14.8	3.0	9.3	2.5	53.1	5.3	3.9
Developing countries															
1955	1 829	858	46	925	153	100.0	46.9	2.5	50.6	8.4	4.5	3.7	1.1	6.9	3.0
1965	4 477	2 501	202	1 774	414	100.0	55.9	4.5	39.6	9.2	4.4	3.8	1.6	7.3	5.3
1973	22 723	15 395	768	6 560	1 852	100.0	67.7	3.4	28.9	8.1	6.7	6.5	2.1	9.7	9.1
1975	30 952	18 939	1 198	10 815	2 759	100.0	61.2	3.9	34.9	8.9	6.3	6.2	2.0	8.5	7.9
Latin America and the Caribbean															
1955	302	223	7	72	71	100.0	73.8	2.3	23.9	23.5	0.7	1.0	0.2	0.5	1.4
1965	694	373	8	313	306	100.0	53.7	1.2	45.1	44.1	0.7	0.6	0.1	1.3	3.9
1973	4 494	2 711	69	1 714	1 595	100.0	60.3	1.5	38.2	35.5	1.3	1.1	0.2	2.5	7.9
1975	6 475	3 673	176	2 626	2 375	100.0	56.7	2.7	40.6	36.7	1.3	1.2	0.3	2.1	6.8

Source: CEPAL, on the basis of UNCTAD, Handbook of International Trade and Development Statistics, 1976 and 1977.

a/ SITC sections 5, 6, 7 and 8, excluding chapter 68 (non-ferrous metals)

b/ The world totals do not necessarily coincide with source figures because the matrix was prepared by adding the partial figures for regions and countries according to the destination of the corresponding exports.

/This progress,

including their relations with the rest of the world,13/ and because the countries forming it have some degree of agreement and acceptance on standards tending to regulate economic, financial and commercial relations.

This system (North America-Western Europe-Japan), then, displays considerable reluctance towards manufacturing imports from the rest of the world. The major obstacles are the question of technology and increasing protectionism in the face of competition from other economies whose industrial progress has generated comparative advantages or which may harm their markets because of lower labour wages, or natural resource endowment and the availability of raw materials for industry. In any case, the question of technology combined with the industrial progress of the developing economies explain why 62% of the imports of the "system" from the rest of the world are made up of "other manufactures", where technology is less complex and generally more labour-intensive. A further 21% is accounted for by machinery and transport equipment 14/ which to some extent may be assumed to be linked with intra-industry trade and subcontracting of parts of processes, in which the main agents are transnational corporations (as are frequently "other manufactures" too), which shift advantages to the periphery, especially in the semi-industrialized countries. In any event, the (not very widespread) external openness of the system is usually connected with political issues, through which the potential competitiveness of the development economies is allowed to materialize.

The other system (comprising Eastern Europe) is obviously much more formal in all respects, and concentrates much of its manufacturing trade among its members. This mutual trade is not merely predominant but also

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13/ This system, comprising North America, Western Europe and Japan usually explicitly or implicitly adopts common attitudes in its relations with the rest of the world. Thus, for example, in connexion with trade, it is difficult to distinguish real differences in their practices in connexion with the generalized system of preferences, whose objective was to favour access to their markets for manufactures and other products of the developing countries. Other important matters are generalized protectionism and reticence with regard to the idea of redeployment in favour of the Third World.

14/ UNCTAD, Handbook of International Trade and Development Statistics, op.cit.

/increasing, from

increasing, from the standpoint of exports (60% of the total in 1955 and about 70% in 1973/1975). On the other hand, it is decreasing from the standpoint of imports (77% in 1955 and 64% and 56% in 1973 and 1975 respectively). This relative decline in mutual imports is due to the rise in purchases by the Eastern European countries and the Soviet Union from the developed market-economy countries, particularly Western Europe.15/ It may therefore be assumed that to a large extent these imports and trends towards greater openness are the result of technological needs. This would also seem to be suggested in the case of the socialist countries of Asia, whose limited trade in manufactures is accounted for essentially by the developed market economies (4% of their imports in 1975) and the European centrally planned economies (24% in 1975).

The reciprocal trade of manufactures of the developing countries has remained at a low level, about 2% of the world total (see table 10). The weight of their mutual exports with respect to total exports of manufactures, has tended to drop significantly, despite the rise in mutual trade within Latin America and the Caribbean, since much of the rise in Asian exports was accounted for by developed market-economy countries.16/ Mutual imports have tended to rise within the total, but solely as a result of trade within Latin America.

Another striking feature of the trade of manufactures in the developing regions is that it takes place in patterns which are heavily dependent on the developed market economies, a state of affairs which tends to be perpetuated on the import side and to increase on the export side (see table 11).

15/ In 1975, 95% of imports of manufactures by Eastern Europe and the Soviet Union from abroad came from developed market-economy countries, and 81% from Western Europe (see table 9).

16/ See UNCTAD, Handbook of International Trade and Development Statistics. op.cit., which gives the following figures for exports of manufactures by developing Asia to the developed market economy countries (percentages):

1955	37.1
1965	57.4
1973	70.7
1975	63.5

/Nevertheless, these

Nevertheless, these links are not in themselves the crux of the issue. What does matter is the imbalance in the trade of manufactures which those economies, roughly 1 to 35 for Africa, 1 to 4 for Asia 17/ and 1 to 8 for Latin America and the Caribbean or 1 to 6 for the developing regions as a whole (see table 11). In this connexion it is necessary once again to bear in mind the difficulty for raw materials and food to make up these enormous deficits in trade of manufactures, as well as the obstacles encountered by the manufactures of the periphery in the attempt to penetrate the central markets and thus make fuller use of the comparative advantages acquired through the industrial progress of the developing countries or resulting from labour or natural resource factors. Again, an important question which may be asked, given the high and growing technological content of manufacturing imports of those countries, is whether it will be possible to reduce the imbalance in trade with the centres on the basis of mutual trade within and between the developing regions. It might be assumed that a scheme of this kind would call for continued or increased industrialization efforts, as well as determined emphasis on technological development, and consequently on the generation of comparative advantages at more advanced levels of industry. Latin America certainly has had some great success in these areas, especially in the case of the larger and more industrial countries, as is examined and assessed in other chapters, which encourages a belief in the possibilities offered by this approach within the region and also in relation to other developing regions.

17/ UNCTAD, Handbook of International Trade and Development Statistics, op.cit.

II. TRENDS IN THE MANUFACTURING SECTOR IN RECENT DECADES

1. The overall setting

In the course of the second half of the present century, Latin American industry has been a dynamic sector with a growth rate higher than that of the other sectors of the economy taken together, and has satisfied much of the increased demand for consumer manufactures and, to a lesser extent, intermediate and capital goods. During this period a number of countries developed an industrial base which made it possible for them to export manufactures on a considerable scale. Some industrial centres reached dimensions which, from the standpoint of size and diversification of output, are comparable to those existing in developed countries. In order to achieve all this it was necessary to undertake considerable investment, introduce and adapt technology, develop administrative, technical, entrepreneurial and labour skills, and also to change the orientation of economic policies with a view to creating favourable conditions for the development of the sector.

Nevertheless, despite the important role played by this sector in Latin American development and the considerable progress made in industrialization in recent decades, there are a number of shortcomings and imbalances which to a greater or lesser extent affect manufacturing activities in the countries of the region and will no doubt influence their future development.

Progress has not been even in all the countries of the region, nor in all manufacturing branches. The industry of the group of large countries grew more than that of the medium-sized and small countries, whose share in the formation of the regional industrial product declined appreciably.

These differences may be seen not merely in the uneven growth in the countries of different economic size, but also and particularly in specific features of industrial development in each of the abovementioned categories of countries.

/There were

There were clear differences in the changes which occurred in the structure of production, as well as in the diversification of the domestic supply of manufactures, and ultimately in the degree of linkage achieved by the different manufacturing activities. Likewise, there were differences in the development of external trade of industrial goods and of the financial, entrepreneurial and technological skills involved in the industrialization process.

In addition, in all the countries of the region there was a clear imbalance in the development of the different manufacturing sectors. The industries producing intermediate and, in particular, capital goods lagged behind the other manufacturing activities, leading to what some studies have termed "uneven industrial development".

This structural imbalance of industry has partly been the result of the state of external dependence in the technological field, which is also a constraint upon further progress in industrialization, and on winning an increasing share of the dynamic currents of international manufacturing trade.

It should also be noted that the small domestic markets, often circumscribed by the existence of inequitable income distribution patterns, have often helped to establish productive structures at a subeconomic scale, together with inadequate levels of specialization, which helps to explain cost and pricing problems.

Again, industrialization has helped to improve the living conditions of broad sectors of the population, although its benefits have mainly been concentrated in the upper and middle sectors of Latin American society, while to a greater or lesser extent large groups of the population have been excluded from them, having but a limited or very small share in the consumption of industrial products.

With regard to employment, industry has made an important contribution, but is far from satisfying the perhaps exaggerated expectations of 25 years ago concerning the manufacturing sector's capacity to absorb labour. Nevertheless, it should be borne in mind that if the sector's growth rate accelerated, accompanied by structural improvements designed to complete input-output linkages - including capital goods requirements - the industry's contribution to employment could increase, not only directly but also through its multiplier effect on other economic activities.

/The growth

The growth rate of Latin American industry and its orientation have depended basically on stimuli and pressures determined by the way in which economic and industrialization policies combined with domestic development potential and external factors in each country. These varying combinations have given rise over recent decades to sharp differences in the levels of development attained by the countries not only in the industrial field but in other economic and social areas as well.

Differences in natural resource endowment, market size, geographical location, prior levels of development, the degree of openness of the economy, socio-political patterns and stability and the willingness to define and apply promotion strategies are some of the factors which have largely determined the varying abilities of the countries, and help to explain the progress they have made in their industrialization processes and, in particular, the differences among them from the standpoint of dynamism and transformation of their production structures. External factors, varying over time and with a direction and effects on the Latin American economies which differ enormously according to the countries and circumstances, have largely conditioned the industrial development of each country, thus helping to create or perpetuate the marked differences already mentioned in this field.

World political and economic events, and their consequences for the development of centre-periphery relations, the varying ways in which the countries are inserted in the international system and economy, the trends prevailing in world trade, and the activities of the transnational corporations are some of the main factors which have helped to shape the general setting of Latin American industrial development, with a varying degree of rigidity.

Public and private local enterprises and the transnational corporations have all taken part in this development, following a pattern in which, broadly speaking, the State is present in certain basic areas and foreign participation is emphasized in the manufacturing sector, particularly in the more advanced, dynamic industries. Thus there has been a tendency for changes to take place in the entrepreneurial structure, although local private enterprise has been present in all industrial areas, save in exceptional cases where the State has assumed a dominant role.

/2. Three

2. Three different stages

When analysing the Latin American industrialization process since the 1950s it is useful to divide the period into a number of stages, taking into consideration the effect of changing external circumstances on the economies of the countries of the region. Obviously that impact varied from country to country, in view of the marked differences among them from the standpoint of basic resources, economic size, level of development and industrialization and other specific factors which influence their capacity to take advantage of favourable external circumstances or face up to adverse factors.

Simplifying matters by generalizing for the region as a whole, it is possible to distinguish three stages. The first includes the 1950s and the early 1960s; the second, the remainder of the 1960s until 1973, which makes the beginning of the third stage.

The first stage was characterized by external circumstances which, after having been favourable to Latin America from the standpoint of exports and prices of raw materials as a result of the Korean war, developed unfavourably until the mid-1960s. The terms of trade deteriorated, with a general decline in the borrowing capacity of the countries and the availability of financing. However, these relatively unfavourable external conditions did not lead to a marked decline in the growth rates of the regional manufacturing product.

The drive towards industrialization, which in the early 1950s took the form of slow but sure growth of the Latin American manufacturing sector, picked up noticeably from 1954 onwards and in the following eight years the regional industrial product grew quite steadily and rapidly. It was only in 1962 that the process began to show signs of flagging, and in the following year one of the lowest growth rates of the manufacturing product since the war was recorded. Although subsequently sectoral growth increased sharply, it only became sustained after the middle of the decade.

It should be observed that the process did not vary in the same way in all the countries of the region. These overall trends were shaped by the industrial performance of the large countries, given their high incidence

/upon the

upon the formation of the regional industrial product. Broadly speaking, the performance of the medium-sized and small countries did not coincide with those of the region as a whole.

Figure 2 shows that the relative instability of the Latin American manufacturing sector in the mid-1960s did not hold in the medium-sized countries or the small countries taken as groups. Thus, strictly speaking, this was a phenomenon proper to Argentina and Brazil.

An analysis of the evolution of the manufacturing product in countries which make up these three categories also fails to bring to light a clear coincidence in this period from the standpoint of periods of growth, recession or stagnation of the sector.

The three large countries, which have played such an important part in shaping global trends, also differ sharply as indicated. In Argentina manufacturing growth was definitely unsteady, with short periods of growth and stagnation following one another. On the other hand, growth was steady in Brazil and Mexico, although their periods of greatest expansion did not coincide. In Brazil this took place between 1958 and 1962, followed by a period of instability which only came to an end in 1967. In Mexico, growth was practically constant, accelerating sharply from 1963 and without encountering the difficulties faced by Brazil and Argentina in that period. There were similar differences among the manufacturing growth trends of the medium-sized and small countries.

These time differences in the growth of manufacturing output in the different countries of the region would seem to indicate that during the first period (the 1950s and early 1960s) the trend of regional output was not determined only by the influence of favourable or unfavourable external factors which equally affected all the countries. An important part was also played by prevailing local conditions in each country, which helps to explain the striking differences in the fluctuations of production in the different countries.

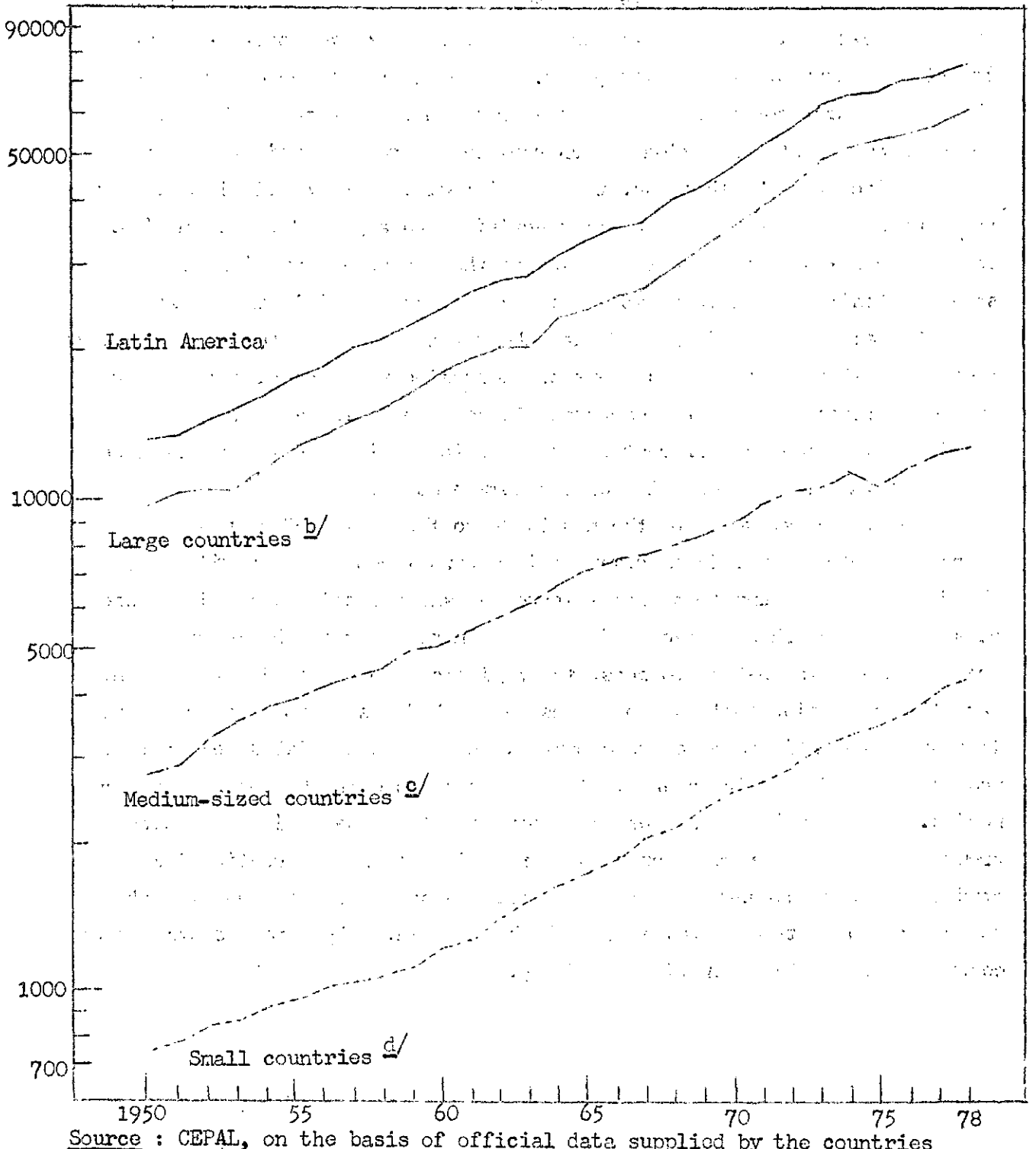
Besides these different factors which determine each country's ability to develop industrially, it should be observed that, broadly speaking, during this first period the industrialization process in the region was developing in a favourable setting. Already by 1950 many Latin American

/Figure 2

Figure 2

LATIN AMERICA : MANUFACTURING PRODUCT a/, 1950-1978
(Millions of dollars at 1970 prices)

Semilogarithmic scale



Source : CEPAL, on the basis of official data supplied by the countries

a/ Gross domestic product at market prices(in 1970 US dollars) at parity exchange rate.

b/ Argentina, Brazil, Mexico.

c/ Colombia, Chile, Peru, Uruguay, Venezuela.

d/ Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Bolivia, Ecuador, Haiti, Panama, Dominican Republic.

/countries were

countries were applying policies which, without in all cases actually constituting deliberate efforts by governments to industrialize - since they depended on the performance of the external sector - provided a great stimulus to manufacturing development. However, during the early years of this period most countries placed greater emphasis on more deliberate policies on industrialization, which rapidly became an explicit economic policy objective. To this end, the administrative and practical machinery to promote and support manufacturing activity was expanded in the region. In this connexion, it is worth mentioning that in some countries there were some outstanding antecedents going back as far as the 1930s and 1940s.

It was also in this period that the first regional integration projects came into being, largely as a means of overcoming the constraints imposed by the smallness of domestic markets. These integration efforts made it possible to achieve significant progress in industrial development in some zones, such as in the Central American Common Market.

The second stage, from the mid-1960s to the early 1970s, was characterized by a steady improvement in external conditions until 1973. The demand for primary commodities increased sharply and their prices rose considerably, which produced a significant improvement in the terms of trade. Everything helped to boost the region's economic activity, and this gave the impression that external constraints had ceased to be a fundamental limitation on Latin American development. At the industrial level, output rose steadily from 1968 onwards, at the highest rate in the entire postwar period. As a result of this progress many countries had relatively high growth rates of the manufacturing sector, while at the international level conditions were favourable to the industrial exports of the countries of the region, a state of affairs from which the relatively more industrialized countries were able to profit more fully.

/It is

It is also worth remembering that during this period there was a steady increase in the financial flows from the industrialized countries to the countries of the region, particularly in the early 1970s.17a/

Industry in particular received substantial inputs from abrod, and supplier's credits increased their share in the structure of financing. The growing and predominant part played by transnational corporations in some industrial sectors was another characteristic of this period and acted as a dynamic factor in the process in some countries.

The world economic crisis of 1973-1974 which coincided with the rise in oil prices may be considered to mark the end of this period.

The third stage began with this crisis which, together with other problems which had been developing in the international order at least since the early 1970s, such as the monetary problems and inflation in the central countries, produced disruptions and changes in the world economy which affected the Latin American countries and, ultimately, their industry.

These disruptions and changes led to a sharp drop in the economic growth rate of the central countries, accompanied by a standstill in the growth of Latin American exports and a deterioration of the terms of trade for the non-oil exporting countries, all of which was reflected in a deficit on the balance-of-payments current account and a slower growth rate in most countries of the region. Of course, the oil-exporting countries profited from the rise in oil prices and their real income rose considerably, which strengthened their capacity for economic growth.

17a/ The access of the different Latin American countries to international sources of financing has varied enormously, however. Some, like Brazil, have developed financial structures and international contacts which, together with the dynamism of their economies, have made it easier for them to obtain financial resources at a lower cost and for a great variety of periods. Others, however, have had to resort primarily to official government or multilateral sources. Brazil received 50.8%, 51.1% and 34.5% of total loans granted to Latin America in 1971, 1972 and 1973, respectively, and accounted for 41.4%, 47.3% and 38.1% of net flows of funds from abroad during that period. (See CEPAL, Latin American Development and the International Economic Situation, E/CEPAL/981/Add.2, February 1975.)

/In recent

In recent years the region's economic growth rate has tended to improve to some extent, although not enough to bring about a major industrial recovery, as is reflected in the fact that between 1973 and 1978 the growth of the sector was significantly lower than in the previous period in Latin America (see figure 2 and table 12).

To a large extent, the slower growth of Latin American industry in this period was due to the conditions in the central countries. Their slow economic recovery, continued inflationary problems and rising unemployment, and the existence of industrial sectors whose relative backwardness does not allow them to compete with similar industries in the developing countries, together with a concern for the prices and future supply of energy products, etc., has brought different kinds of reactions which are very damaging to the developing countries, and particularly to Latin America.

There is a striking resurgence of protectionist measures as a means of restricting the entry of manufactures from the developing countries, investment is being made to improve productivity in the industrial branches facing international competition, there are government subsidies to the less competitive industries, and so forth. These measures, and particularly protectionist ones, are harming the export possibilities for Latin American manufactures, and the negotiations which have been held at least to attenuate their effects do not appear to have given the desired results for the time being.

3. Global long-term analysis

(a) Global indicators

Latin American manufacturing industry as a whole has developed significantly since the 1950s. In 1950 the industrial product of the region amounted to approximately 13,000 million dollars at 1970 prices, and in 1978 to 78,000 million dollars (see table 13). The annual growth rate between 1950 and 1978 was 6.5% 18/ which was above the world average of 5.9% (1950-1977). In 1950 the per capita industrial product at 1970

18/ In chapter I a rate of 6.7% was given, the main reason for this difference being the exchange rates used, since in the present chapter all calculations are made at the par rate of exchange.

/Table 12

Table 12

LATIN AMERICA: GROWTH RATES OF THE POPULATION AND THE MANUFACTURING PRODUCT a/

(Annual rates)

	Population	Industrial product			
	1950-1978	1950-1965	1965-1973	1973-1978	1950-1978
Large countries	2.8	6.3	9.9	4.5	6.8
Argentina	1.6	4.8	5.9	-1.0	4.1
Brazil	3.0	7.3	12.0	6.3	8.5
Mexico	3.3	7.2	8.1	6.3	7.3
Medium-sized countries	2.9	6.4	5.1	3.7	5.6
Chile	2.1	5.5	3.4	-1.4	3.7
Colombia	3.2	6.2	7.7	5.4	6.5
Peru	2.8	7.8	6.6	1.8	6.4
Uruguay	1.4	2.7	0.9	5.9	2.7
Venezuela	3.5	9.5	5.0	7.6	7.9
Small countries	2.9	5.6	7.7	6.7	6.4
Costa Rica	3.2	7.9	9.4	8.1	8.3
El Salvador	3.1	7.2	5.8	5.2	6.4
Guatemala	2.8	5.4	7.7	6.2	6.2
Honduras	3.2	8.3	6.4	6.3	7.4
Nicaragua	3.0	9.5	6.9	3.6	7.6
(CACM)	(3.0)	(7.1)	(7.3)	(6.1)	(7.0)
Bolivia	2.4	2.0	5.6	8.3	4.2
Ecuador	3.2	5.3	7.1	11.9	7.0
Haiti	2.3	1.5	6.1	6.6	3.7
Panama	2.9	10.1	8.1	0.2	7.7
Paraguay	2.7	3.3	6.0	7.2	4.8
Dominican Republic	3.2	4.7	13.0	4.0	6.8
(Other small countries)	(2.8)	(4.6)	(8.1)	(7.1)	(6.0)
Total Latin America (19 countries)	2.8	6.3	8.2	4.5	6.5

Source: CEPAL, on the basis of official data supplied by the countries.

a/ The calculations are based on the gross domestic product at 1970 market prices, in US dollars at the parity exchange rate.

/Table 13

Table 13

LATIN AMERICA AND THE CARIBBEAN: MANUFACTURING GROSS DOMESTIC PRODUCT AT MARKET PRICES

(Millions of 1970 dollars)

	1950	1965	1970	1973	1978
Large countries	9 700	24 340	35 976	48 603	60 684
Argentina	4 103	8 291	10 630	13 139	12 512
Brazil	3 113	8 975	14 546	22 299	30 327
Mexico	2 484	7 074	10 800	13 165	17 845
Medium-sized countries	2 878	7 202	9 097	10 742	12 901
Colombia	585	1 440	1 964	2 604	3 384
Chile	898	2 010	2 401	2 624	2 451
Peru	454	1 403	1 863	2 331	2 554
Uruguay	469	699	778	749	999
Venezuela	422	1 650	2 091	2 432	3 513
Small countries	751	1 715	2 518	3 115	4 298
Costa Rica	49	153	238	313	461
El Salvador	76	216	285	339	436
Guatemala	114	252	373	456	617
Honduras	25	83	120	136	185
Nicaragua	30	117	173	199	238
(CACM)	(294)	(821)	(1 189)	(1 443)	(1 937)
Bolivia	104	141	192	218	325
Ecuador	137	298	405	515	905
Haiti	32	40	50	64	88
Panama	33	139	219	259	261
Paraguay	68	111	146	177	250
Dominican Republic	83	165	317	439	532
Total Latin American (19 countries)	13 279	33 257	47 591	62 460	77 883
Caribbean	...	358	451	483	...
Barbados	...	14	18	21	...
Guyana	...	30	33	30	...
Jamaica	...	157	192	224	...
Trinidad and Tobago	...	157	208	208	...
Grand total	...	33 615	48 042	62 943	...

Source: CEPAL, on the basis of official data supplied by the countries.

/prices was

prices was 87 dollars; in 1978 it was in the order of 233 dollars (see table 14), with an average per capita growth rate of 3.6% annually.19/ There was also a striking increase in the share of the manufacturing product in the total product, defined as the "degree of industrialization". In 1950 this amounted to roughly 20%, and in 1978 to almost 26%.

(b) Increasing differences among countries

This overall view, however, hides the very varied trends and circumstances in the individual countries, since the growth of industrial output was far from uniform. Between 1950 and 1978 the average annual growth rate ranged from 2.7% to 8.5%, corresponding to the growth rates of the manufacturing sector in Uruguay and Brazil, respectively (see table 12).

The countries with the highest gross rates of the sector include, besides Brazil, Venezuela (7.9%), Panama (7.7%), Nicaragua (7.6%) and Honduras (7.4%). Those with the lowest growth are, in addition to Uruguay, Chile (3.7%), Haiti (3.7%) and Argentina (4.1%).

This wide range of growth rates of the manufacturing product was accompanied by major changes in the relative shares of countries in the industrial product, as may be seen from tables 15 and 16.

Argentina, which in 1950 accounted for almost 31% of the regional industrial product, in 1978 accounted for only 16%. On the other hand Brazil increased its share considerably, from 23 to 39%. Although to a lesser extent, Mexico also increased its share in the regional manufacturing product from 19 to 23%.

At all events, these three large countries as a group significantly increased their industrial position in the region, from 73% of the regional manufacturing product in 1950 to nearly 78% in 1978.

Among the medium-sized countries, Venezuela alone increased its share; Peru remained in the same position, and Colombia's share dropped slightly. On the other hand, Uruguay and Chile clearly lost ground within the region.

19/ Calculations based on par rates of exchange, which explains a slight discrepancy with the figure given in chapter II (3.8% between 1950 and 1977). The same reasons account for discrepancies in output levels.

/Table 14

Table 14

LATIN AMERICA AND THE CARIBBEAN: PER CAPITA MANUFACTURING GROSS DOMESTIC PRODUCT

(Dollars at 1970 prices)

	1950	1965	1970	1973	1978
Large countries	100	165	213	265	287
Argentina	239	373	448	531	474
Brazil	59	109	153	215	254
Mexico	93	165	215	237	273
Medium-sized countries	88	142	156	194	177
Colombia	50	77	89	107	119
Chile	149	236	256	265	226
Peru	58	120	138	158	149
Uruguay	214	250	263	246	312
Venezuela	82	181	198	211	264
Small countries	33	51	85	73	87
Costa Rica	58	102	137	165	218
El Salvador	39	72	80	87	96
Guatemala	37	55	71	79	93
Honduras	17	38	47	48	55
Nicaragua	27	69	88	92	93
(CACM)	(35)	(63)	(79)	(87)	(101)
Bolivia	34	33	40	42	56
Ecuador	42	58	67	78	116
Haiti	10	9	10	11	14
Panama	41	110	150	163	143
Paraguay	50	55	63	71	87
Dominican Republic	36	45	73	92	94
Total Latin America (19 countries)	87	143	178	215	233
Caribbean	...	101	119	122	...
Barbados	...	60	75	87	...
Guyana	...	46	47	40	...
Jamaica	...	89	102	114	...
Trinidad and Tobago	...	173	218	211	...
Grand total	...	143	177	214	...

Source: CEPAL, on the basis of data contained in table 2, and CELADE, Boletín Demográfico, No. 20.

/Table 15

Table 15

LATIN AMERICA: POPULATION, GROSS DOMESTIC PRODUCT, DEGREE OF INDUSTRIALIZATION AND INDUSTRIAL WEIGHT WITHIN THE REGION, 1950

	Population (thousands of inhabitants)	GDP (millions of dollars)	Degree of industrialization (%)	Industrial weight within the region (%)
Large countries	96 657	43 382	22	73.0
Argentina	17 150	15 699	26	30.9
Brazil	52 901	14 440	22	23.4
Mexico	26 606	13 243	19	18.7
Medium-sized countries	32 879	16 991	17	21.3
Chile	6 019	3 914	23	6.8
Colombia	11 689	4 658	13	4.4
Peru	7 832	2 774	16	3.4
Uruguay	2 194	2 141	22	3.5
Venezuela	5 145	3 504	12	3.2
Small countries	22 475	5 944	13	5.6
Costa Rica	866	335	15	0.4
El Salvador	1 940	554	14	0.6
Guatemala	3 054	947	12	0.9
Honduras	1 390	359	7	0.2
Nicaragua	1 109	261	11	0.2
(CACM)	(8 359)	(2 456)	(12)	(2.3)
Bolivia	3 019	754	14	0.8
Ecuador	3 224	867	16	1.0
Haiti	3 380	441	7	0.2
Panama	809	399	8	0.2
Paraguay	1 371	430	16	0.5
Dominican Republic	2 313	597	14	0.6
(Other small countries)	(14 116)	(3 488)	(13)	(3.3)
Total Latin America (19 countries)	152 011	66 317	20	100.0

Source: CEPAL, on the basis of official data supplied by the countries.

/Table 16

Table 16

LATIN AMERICA: POPULATION, GROSS DOMESTIC PRODUCT, DEGREE OF INDUSTRIALIZATION AND INDUSTRIAL WEIGHT WITHIN THE REGION, 1978

	Population (thousands of inhabitants)	GDP (millions of dollars)	Degree of industrialization (%)	Industrial weight within the region (%)
Large countries	211 293	208 151	29	77.9
Argentina	26 395	38 011	33	16.1
Brazil	119 477	101 056	30	38.9
Mexico	65 421	69 084	26	22.9
Medium-sized countries	72 955	63 634	20	16.6
Chile	10 843	10 335	24	3.1
Colombia	28 424	19 162	18	4.3
Peru	17 148	10 323	25	3.4
Uruguay	3 207	3 478	29	1.3
Venezuela	13 333	20 336	17	4.5
Small countries	49 537	24 067	18	5.5
Costa Rica	2 111	2 031	23	0.6
El Salvador	4 524	2 238	19	0.6
Guatemala	6 623	3 783	16	0.8
Honduras	3 362	1 166	16	0.2
Nicaragua	2 559	1 195	20	0.3
(CACM)	(19 179)	(10 413)	(19)	(2.5)
Bolivia	5 848	2 072	16	0.4
Ecuador	7 798	4 434	20	1.2
Haiti	6 343	768	11	0.1
Panama	1 823	1 866	14	0.3
Paraguay	2 888	1 553	16	0.3
Dominican Republic	5 658	2 961	18	0.7
(Other small countries)	(30 350)	(13 654)	(17)	(3.0)
Total Latin America (19 countries)	333 785	295 852	26	100.0

Source: CEPAL, on the basis of official data supplied by the countries.

/Uruguay, which

Uruguay, which in 1950 accounted for 3.5% of the Latin American manufacturing product, in 1978 accounted for only 1.3% of the regional total. Chilean industry, which some 30 years ago accounted for 6.8% of the regional product, in 1978 accounted for only 3.1%. The share of the medium-sized countries as a group dropped considerably, from 21.3% to 16.6% between 1950 and 1978.

The group of small countries failed to improve its relative position in regional industrial output. Their joint share dropped from 5.6% to 5.5% over the period under consideration,20/ but the situation varied from country to country. Among the members of the Central American Common Market, which together showed slight progress (2.3% to 2.5%), only Costa Rica, El Salvador and Nicaragua increased their share. Other small countries whose relative share increased were Ecuador, Panama and the Dominican Republic (see tables 15 and 16).

It is clear from the above that since the war the process of Latin American industrialization has been accompanied by major changes in the industrial weight of the different countries.

The figures show that over this period only the large countries - due to the weight of Brazil and Mexico - increased their relative industrial weight within the region. The share of the regional manufacturing product accounted for by the medium-sized countries dropped sharply, as did that of the small countries to a lesser extent. There was also a relative decline on the part of the so-called Southern Cone countries (Argentina, Chile and Uruguay). These three countries, which together accounted for 41.2% of the total manufacturing output of the region in 1950, in 1978 accounted for 20.5%, as a result of the sluggish rate of manufacturing growth which has characterized them over the last 30 years. However, in these countries, and particularly in Argentina and Uruguay, the population has grown much more rapidly than in the rest of Latin America, so that if industrial growth is expressed in terms of the per capita product, the figures are much less unfavourable. In any case, Argentina continues to have the highest level of industrialization and

20/ If Uruguay is included in this group, the figures show a much greater drop in its relative share of the regional manufacturing product.

/the largest

the largest per capita industrial product, and has acquired a very diversified industrial structure. Chile and Uruguay are relatively highly industrialized, at a level comparable with that of the large countries in the case of Uruguay and slightly lower in the case of Chile.

4. Changes in the structure of industrial production

(a) Direction of change

The growth of Latin American manufacturing output since the 1950s has been accompanied by major structural changes. These have been more or less similar in direction in all the countries of the region, and resemble those which have taken place in the same period in other regions of the world. The industries producing non-durable consumer goods have declined in relative importance as the industries producing intermediate goods, consumer durables and capital goods have developed.

In 1950 non-durable consumer goods represented almost two-thirds of total manufacturing production, as opposed to roughly 40% today. In contrast, the relative importance of intermediate products in manufacturing output has risen from less than 25% of the total to more than one-third at present. However, it is the consumer durables and investment goods sector where the relative change has been most striking. This sector represented 11% of total manufactures in 1950 and now accounts for more than one-quarter of manufactures produced.

While manufactures of non-durable consumer goods declined in relative importance, their growth rate was well above that of the population, and thus the per capita supply of such goods increased throughout the period. In any event, the change in the productive structure of manufacturing industry was primarily due to still higher growth rates of output of intermediate manufactures and, in particular, consumer durables and capital goods.

This indicates the growing complexity of Latin American manufacturing industry, in which there has been increasing degree of linkage of the productive processes within the industrial sector and between the latter and the other sectors of economic activity, and ultimately the greater capacity on the part both of industry and of the economy as a whole to sustain its own development.

/These changes

These changes in the productive structure were visible from the first stages of the industrialization process, as a result of the growth of demand and the incorporation of technical progress, and also as a result of political decisions taken to integrate the structure of manufacturing production in keeping with objectives linked with economic and social development.

(b) Size of changes and differences among countries

Obviously these changes were not the same in all countries, although they worked in the same direction in all of them.

The great differences among Latin American countries from the standpoint of geographic size and economic dimensions has helped to differentiate the changes in the industrial structure according to economic size (see table 17). In this connexion, mention should be made of the significant drop in the share of non-durable goods in the manufacturing structure of the large countries, from 64% of the total in 1950 to only about 35% in 1975. In the medium-sized and small countries, this decline has been proportionately much smaller. There are also major differences in the changes which took place in the relative share of intermediate, non-durable consumer and investment goods.

These differences are perhaps most easily seen in table 18, which shows that between 1950 and 1975 almost 80% of the growth of the region's total manufacturing product was accounted for by the economically and demographically larger countries (Argentina, Brazil and Mexico); 13% by the medium-sized countries; and 7% by the smaller countries.

/Table 17

Table 17

LATIN AMERICA: STRUCTURE OF INDUSTRIAL PRODUCTION BY ECONOMIC SIZE OF COUNTRIES, 1950 AND 1975 a/

(Percentages of value added in the manufacturing sector)

		Non-durable consumer manufactures	Intermediate manufactures				Consumer and capital manufactures	Total manufactures
		A	B	C	D	B+C+D	E	
Large countries	1950	64	10	10	4	24	12	100
	1975	35	9	21	7	37	28	100
Medium-sized countries	1950	66	10	15	3	28	6	100
	1975	48	9	20	6	35	17	100
Small countries	1950	85	8	6	0	14	1	100
	1975	65	11	14	1	26	9	100

Source: CEPAL, on the basis of official data from 13 countries (censuses and indexes of industrial production).

a/ The figures in this table are not fully comparable with those in table 5 of chapter I because of differences in the classification of goods and the exchange rates used.

A: Food, beverages and tobacco (Division 31); textile, wearing apparel and leather industries (Division 32); furniture and fixtures, except primarily of metal (major group 332); printing, publishing and allied industries (major group 342); pottery, china and earthenware (major group 361), and other manufacturing industries (Division 39), according to ISIC, Rev.2.

B: Wood and cork products, except furniture (major group 331); paper and paper products (major group 341); glass and glass products (major group 362), and other non-metallic mineral products (major group 369), according to ISIC, Rev.2.

C: Chemicals and chemical, petroleum, coal, rubber and plastic products (Division 35 of ISIC, Rev.2).

D: Basic metal industries (Division 37 of ISIC, Rev.2),

E: Metal products, machinery and equipment (Division 38 of ISIC, Rev.2).

/Table 18

Table 18

LATIN AMERICA: ESTIMATION OF THE DISTRIBUTION OF THE GROWTH OF INDUSTRIAL OUTPUT BY BRANCHES OF ACTIVITY, 1950-1975

	Total manufacturing industry	Manufactures a/				
		Non-durable consumer goods	Intermediate goods			Consumer durables and capital goods
		A	B	C	D	E
	%	%	%	%	%	%
Large countries	80	71	80	83	86	87
Medium-sized countries	13	17	13	13	13	10
Small countries	7	12	7	4	1	3
Total Latin America	100	100	100	100	100	100

Source: CEPAL, on the basis of official figures for manufacturing output for 1950 and 1975 and the data on industrial structure given in table 17.

a/ Columns A, B, C, D and E represent the ISIC manufacturing branches and groups (Rev.2) as indicated at the foot of table 17.

/Looking at

Looking at the country shares in the growth of manufacturing product by branches of activity, it may be seen that in the case of non-durable consumer goods the large countries accounted for about 70%, and the medium-sized and small countries for nearly 30%, which is considerably higher than their share of the total growth of industrial production in the region.

As concerns manufactures of consumer durables and capital goods, the medium-sized and small countries only accounted for 13% of the growth of the product, whereas the large countries contributed roughly 87%, which is higher than their share of the total of the industry. There are also striking differences in the intermediate goods sector and particularly in the basic metals industries, where the small countries accounted for only 1% of the growth of the regional product, the medium-sized countries 13% and the large countries about 86%.

The distribution of the growth of the industrial product between 1950 and 1975 again displays these marked qualitative differences in the industrialization process, on the basis of which a number of structural constants can be defined in the different types of countries grouped according to the size of their economies.

The composition of the major industrial groups is not always the same in the different countries; therefore the aggregate figures may hide important qualitative factors concerning the real degree of development of certain activities.

The industries producing non-durable consumer goods (processed foods, beverages, tobacco, textiles, clothing, footwear, leather products, printing, ceramics and others) are highly developed and more homogeneous in most of the countries of the region. In the other group of less dynamic industries, including wood, pulp and paper and non-metallic minerals, the situation is rather different. The wood and paper industries are quite widespread in the region; the glass industry somewhat less so; and the basic industries, with the exception of cement, much less still. Of course, the development of a number of these industries is linked with natural resources which in the large countries are obviously more diversified, but they also depend on

/the availability

the availability of critical masses of capital, infrastructure and technology, usually associated to previous stages of development, which in turn go hand in hand with a certain economic dimension.

In turn, the group of chemical, rubber and oil products industries have been very dynamic in Latin America, coming after the metal products, machinery and equipment group. Of the basic industries included in this group, only petroleum refining is widespread in the region; the others exist in the large and, to a lesser extent, the medium-sized countries, and only exceptionally in the small countries.

The group of basic metals industries, whose development has been quite dynamic, is concentrated in the large and medium-sized countries, due to the existence of minerals and to market size.

Table 19 confirms and highlights this fact: of the basic industries, only the production of cement and of oil products is widespread in the majority of the countries of the region.

Finally, the metal products, machinery and equipment group, which has been very dynamic at both the regional and world levels is also concentrated in the large countries, more so than manufacturing industry as a whole. It may be seen in table 20 that there are clearly differentiated levels in the proportion occupied by these industries in the manufacturing sector of the large, medium and small countries (between 24 and 31% of the manufacturing product in the large countries; between 15 and 20% in the medium-sized countries; and between 7 and 15% in the small countries).

In this connexion, it should be pointed out that in the economically larger countries, the degree of national integration of this group (in terms of input-output linkages) is greater than in the other countries of the region, where activities are predominantly at a technological lower level and, sometimes, amount almost to the mere assembly of more complex products.

The automotive industry clearly bears out this observation. In the countries of larger economic size, the value added by this branch of activity represents in general about 30% of the total of the metal products, machinery and equipment group and between 6 and 9% of the total manufacturing product. The degree of integration in these countries is high, reaching

/Table 19

Table 19

LATIN AMERICA: PRODUCTION OF SOME INDUSTRIAL GOODS, 1976

(Thousands of tons)

Country	Cement	Steel	Aluminum	Caustic soda	Sulphuric acid	Ethylene	Benzene	Wood pulp (chemical)	Petroleum derivates
Argentina	5 717	2 224	43	110	234	43	131	250	26 355
Brazil	19 147	9 092	139	259	...	349	121	1 208	52 822
Mexico	12 691	5 243	42	226	2 171	228	99	569	42 914
Chile	964	456		29	206a/	28a/	1a/	394	5 178
Colombia	3 612	252		56	51a/	11a/	30a/	140	9 231
Cuba	2 501	250		2	383			44	6 474a/
Peru	1 966	349		37b/	60a/	3a/		91	6 603
Venezuela	3 838	754	47	9a/	36a/			35	57 968
Uruguay	676	15			...			10	2 049
Costa Rica	362								293
El Salvador	322				12				817
Guatemala	310a/								825
Honduras	234	42							476
Nicaragua	209			...					808
Bolivia	232							1	1 244
Ecuador	616				...			6	2 457
Haiti	232								
Panama	311								3 201
Paraguay	155				...				256
Dominican Republic	582	...							1 936
Barbados									138
Guyana									
Jamaica	395	15			19				1 422
Suriname	51		46						
Trinidad and Tobago	238				...				18 697
Grenada									

Source: United Nations, Statistical Yearbook; Economic Activity in Caribbean Countries. ILAFA, Anuarios estadísticos de la siderurgia y la minería del fierro en América Latina. CEPAL, on the basis of official data supplied by the countries.

a/ 1974.
b/ 1972.

/Table 20

Table 20

COUNTRIES OF LATIN AMERICA: STRUCTURE OF INDUSTRIAL PRODUCTION IN THE MID-1970s

(Percentages of value added in the industrial sector)

	Non-durable consumer goods industries a/	Metal products and machinery industries b/	Other industries
Large countries			
Argentina	39	28	33
Brazil	30	31	39
Mexico	36	24	40
Medium-sized countries			
Chile	50	17	33
Colombia	50	17	33
Peru	47	20	33
Venezuela	45	15	40
Small countries			
Costa Rica	69	9	22
Ecuador	57	15	28
El Salvador	69	8	23
Guatemala	71	11	17
Honduras	77	7	16
Nicaragua	72	8	20
Dominican Republic	74	7	18

Source: CEPAL, on the basis of official data supplied by the countries (censuses and indexes of production).

a/ Food, beverages and tobacco (Division 31); textile, wearing apparel and leather industries (Division 32); furniture and fixtures, except primarily of metal (major group 332); printing, publishing and allied industries (major group 342); pottery, china and earthenware (major group 361), and other manufacturing industries (Division 39), according to ISIC, Rev. 2.

b/ Metal products, machinery and equipment (Division 38 of ISIC, Rev. 2).

/almost 100%

almost 100% in Argentina and Brazil. This is not true in the case of economically smaller countries. In the medium-sized countries the share accounted for by the automotive industry in this group is usually less than 15%, and amounts to figures in the order of 1.5% to 2.5% of total manufacturing industry. The degree of national integration in those countries is obviously lower than in the case of the larger countries, varying from country to country and from year to year and ranging from 15% to 60%. These percentages agree with the fact that toward the end of the 1960s there were in Latin America some 4,000 establishments supplying parts and components for the final industries, of which nearly 80% were in Argentina, Brazil and Mexico.21/

This is borne out even more clearly by the capital goods industries, which have grown considerably in the region in recent decades. Here again, in the three economically larger countries growth was much more marked. Argentina, Brazil and Mexico together produce about 90% of the capital goods (machinery and other equipment) manufactured in the region. In turn, these three countries produce more than 60% of the goods needed to carry on their economic activities. Four medium-sized countries (Colombia, Chile, Peru and Venezuela) together generate slightly more than 25% of the capital goods they need. In the remaining countries of Latin America local production of such goods is of little importance.22/ 23/

21/ CEPAL, Perspectivas y modalidades de integración regional de la industria automotriz en América Latina, E/CN.12/971, 24 July 1974.

22/ CEPAL, on the basis of official data from the countries.

23/ Even in the countries where this manufacturing activity has developed most, there are sharp differences between the progress made in the production of capital goods for general use - used indiscriminately in different activities - and in the manufacture of goods for specific uses, which generally form the central nucleus of the plant. In the first case, great progress and a high degree of self-reliance have been achieved, but far less progress has been made in the second case.

/Thus in

Thus in the manufacturing development of the various countries of Latin America there are certain structural constants, which are linked with their economic size. These would appear to be determined, though only partially, by substantial differences in the form of industrialization in each of the categories of country.

It is well known that the share of the metal manufactures and machinery industries stands at definite levels, depending on whether the countries are large (24 to 31% of the industrial product), medium-sized (15 to 20%) or small (7 to 15%). The situation is similar but reversed with the non-durable consumer goods industries, which make up between 30% and 39% of the manufacturing product in the large countries, between 45% and 50% in the medium-sized countries and between 57% and 77% in the small countries (see table 20).

Other constants have also been established. Greatest progress in the development of basic industries is a feature of the large countries. This is so to a lesser extent, and when natural resources permit, in the medium-sized countries, while apart from exceptional cases (most frequently linked to exports), there are no basic industries in the small countries. On the other hand, oil refining and cement manufacture are spread throughout the region. Meanwhile, the metal manufactures and machinery group is better integrated in the large countries, where production of capital goods has assumed particular importance. In the medium-sized countries, the degree of national integration in this group is lower, with few capital goods produced; in the small countries this activity is in its infacy, and almost no capital goods are produced.

However, the differences between countries with different sizes of economy also take other forms, which have to do with the particular form of industrial development in each of them. One is the situation as regards technology. Only the larger countries in Latin America are carrying out systematic technological efforts on a substantial - though still insufficient - scale, principally designed to adapt imported technology to national circumstances. According to our data, some medium-sized countries would appear to be carrying out similar efforts, but their technological lag behind the former still seems to be considerable. In the small countries, such efforts are generally of little importance in manufacturing industry.

/In the

In the field of exports of manufactures, the differentiation between the three categories of country is also clear, as can be seen in chapter III. About three-quarters of total Latin American manufacturing exports come from the three economically most important countries, but the share of these countries in exports of metal manufactures and machinery is nearly 90% of the total, since it is they which export products with the greatest degree of processing.

It may be said that the clear and marked dissimilarities between the Latin American countries as regards geographical size and economic importance appear not only in different levels of industrial development, but also in the special forms which the industrialization process has adopted in each of them. For each of the categories of country, these forms would appear to be moulding a particular "model" of industrial development, and to a certain degree suggesting the patterns of future development, as well as some corrections in the various trends (see chapter IV).

In accordance with this approach it would not appear at all appropriate to interpret the industrial dissimilarities of Latin American countries simply as different stages in the same process. In other words, the assertion so frequently heard that the large countries in Latin America are at a more advanced stage of industrial development, the medium-sized countries in an intermediate position and the small countries on the threshold, would seem to require some qualifications.

In the various countries the process of manufacturing development has manifested highly diverse characteristics as a result of various factors. Among these factors economic size has been of particular importance, and makes it possible to explain clear differences in the levels and nature of industrial development in the countries. It would be difficult to imagine that such differences were no more than the result of the application of different economic policies, although exceptional cases can be identified. Rather, it might be asserted that the industrial policies were sometimes applied in different ways, but with common perspectives subject to local and international influences. In this context the various integration agreements represent the testing ground for such common perspectives or intentions, since to a large extent the conceptual basis of the agreements rests on the idea of overcoming national "obstacles" to more advanced stages of industrial development.

/5. The

5. The productive agents of industrialization

In recent decades substantial changes have occurred in the roles of public, private, national and transnational enterprises as productive agents in the process of industrialization in Latin America.

In general, national private enterprises have been losing ground, sometimes to public enterprises and more specifically, in many countries, to transnational enterprises, as regards their contribution to the formation of the industrial product.

There is a tendency towards greater differentiation of the roles played by the various agents operating in industry. The public enterprise, especially in the large and medium-sized countries, covers first and foremost basic industrial areas with the aim of supporting overall and manufacturing development. The transnational enterprise, which emerges later, reaches a peak in the most dynamic and advanced areas of the sector, and especially in the countries with larger markets. The national private enterprise generally maintains its predominance in the traditional industries producing non-durable consumer goods, though in some branches the transnational corporations are also making significant progress.

Thus the structure of enterprises is changing, with important repercussions on both the operation and the orientation of the sector and on the overall development of the countries.

Although there is evidence of these structural changes, it is not easy to assess their real magnitude, since there are serious methodological problems 24/ and a scarcity of reliable information.

24/ One methodological problem is the definition of the enterprises to be covered in the analysis. For example, consideration only of the proportions of capital of each type of origin making up the assets of a company does not seem to be sufficient to define it as a transnational, public or private national company. The number of shares is only one of the channels through which a shareholder can exert influence and control the company. This is fundamentally true in the cases of the transnational corporations which, even though they have only a minority holding in many companies, exercise real control over them by means of their mastery of technology, the supply of inputs and equipment, access to finance, the dispersion of local shareholders and their bargaining power at the national and international level. The criteria applied in studies carried out in various countries vary enormously; this makes it difficult to compare the numerical data and may sometimes lead to erroneous conclusions.

/At all

At all events, it is possible, with care, to establish some elements which define patterns of evolution, the present position and trends in the conduct of the various participants in the process of industrialization in Latin America, and particularly in the transnational corporations, whose role in this process has become particularly important in recent years.

(a) The State in an entrepreneurial role

The role of the State, not only in regulating and guiding general and industrial economic activity, but also as a direct participant in the industrialization process, has been one of the important characteristics of this process in recent decades.

Although in a number of countries of the region there are previous cases of State companies producing industrial goods which were set up at the beginning of the industrialization process, only in the 1940s did the governments of the region begin with any frequency to set up State or mixed enterprises to achieve specific economic and, sometimes, national security objectives. However, it should be pointed out that there are rather few State or public enterprises which produce industrial goods in Latin America, just as their share in total output in each country, save in exceptional cases, is generally small.

Nevertheless, in some Latin American countries the State has played a very important role as an agent of production. An indication of this phenomenon is provided by the figures concerning the share of public enterprises in manufacturing investment and output, since figures of the order of 15 or 20%, and in some cases rather higher, are often found. Aside from this, it should be borne in mind that State participation is generally concentrated first and foremost in basic industries, such as iron and steel, oil refining and petrochemicals.

In 1978, the steel produced by State iron and steel enterprises made up 69% of total production in Argentina, 60% in Mexico and Brazil, almost 100% in Chile, 100% in Peru and 80% in Venezuela. The share of State enterprises in oil refining also stands out. In countries such as Bolivia, Chile, Colombia, Cuba, Mexico, Uruguay and in practice also in Brazil, 100% of oil refining is carried out by the State enterprises. The contribution of

/such enterprises

such enterprises to the processing of chemical and petrochemical products is also very substantial in a number of countries in the region. In Argentina, and above all in Brazil and Mexico, there are large State enterprises which process basic products in these branches, while in Andean Pact countries such as Colombia, Peru and Venezuela all the enterprises which process basic petrochemical products are State-owned. The State's share in the manufacture of other non-basic products in this same industrial branch is also important.25/

In Peru, in 1975, the State had a share of more than 80% in the "paid-up share capital" in the paper, oil, basic metals, iron and steel, cement and fertilizer industries, and a substantial share in the chemical industry. In Bolivia the State also has an important role in the basic metal industries.26/

In the initial stages of the development process the State assumed the role of an entrepreneur in the field of basic industries as a way of initiating locally the production of goods regarded as essential to accelerate economic development, aside from other possible motives. The amount of resources required to carry out projects of this type meant that, in general, only State or foreign enterprises could undertake them, and for some time the latter showed little interest in investing in activities which did not appear to offer immediate or sufficiently attractive profits. It is true that in some cases national or foreign private initiative had been applied to some basic industries for many years, but it is also true that in other cases attempts to operate in these areas have been frustrated.

More recently, State participation in basic industries has often been due to the conviction of the government that such participation was a means of increasing national decision-making power in the industrial sector and permitting more independent development. In a number of countries norms have been established in recent years to define areas for action by the

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25/ C.A. Garay Salamanca (CEPAL consultant), El programa petroquímico andino, antecedentes, perspectivas y su relación con las empresas transnacionales, working paper, December 1977.

26/ C. Saberbein Ch. (CEPAL consultant), Estudio interpretativo del desarrollo industrial peruano; mimeo, 1979, and Estudio interpretativo del desarrollo industrial boliviano, mimeo, 1979.

/public sector

public sector and the private sector in some industrial branches such as petrochemicals and iron and steel, with the State reserving to itself the manufacture of basic products. It is also probable that for reasons of national security the areas referred to have been delimited with the aim of increasing State control in activities regarded as "strategic".

However, it is not only in basic industries that the State has participated as a producer. There are a relatively high number of industrial firms engaged in a wide variety of manufacturing activities whose establishment or acquisition by the State was prompted by generally temporary factors of an economic, social (for example, maintenance of employment) or political nature. In addition, public credit institutions have frequently been obliged, because of circumstances arising from financial difficulties encountered by the creditor firms, to take a share in their capital by means of debt capitalization. Moreover, temporary factors were involved with regard to certain industrial activities, such as economic crises or particular problems experienced at a given moment by the economy of a country or area. Of course, almost all the countries of the region also possess State industrial enterprises established for strategic reasons, which in many cases produce not only components for military use but also other industrial products for use in agriculture or industry or for general consumption.

Thus it may be observed that in many countries public enterprises have played an important role in the development and formation of industrial capital, as well as carrying out notable activities in the field of technology and in the supply of specific industrial products.

(b) The national private firm

The national private firm participates in the whole range of manufacturing industry in the region, and in general this is important in terms of the contribution to the manufacturing product, especially in the traditional industries sector, though in some countries this predominance is weakening following appreciable progress by the transnational corporations.

On the other hand, its share is weaker in the more dynamic sectors. This is indicated by the cases of Brazil and Mexico, for which some statistical information is available. Around 1977, in a sample covering

/more than

more than 2,700 Brazilian manufacturing firms 27/ the "liquid assets" of national private firms represented 48.3% of the total for the sector. Taking into account only industries producing non-durable consumer goods, this share rose to 75.5%; on the other hand, in the intermediate and metal manufactures and machinery industries, the share of national private enterprises was 34.4% and 45.2% respectively. The results of the sample highlight the predominant role of the national private sector only in production of non-durable consumer goods, but it should be pointed out that these percentages would be even higher if one considered the whole of industry, since the sample is restricted to larger units, excluding medium-sized and small enterprises, where national private initiative predominates. National private enterprises also have an important share in Brazil in some activities producing intermediate goods, such as the plastics or cellulose and paper industry. On the other hand, the share is not large in the chemical and petroleum products industries, a highly dynamic activity where the State has the greatest share (largely because of its activities in oil refining), followed at some distance by transnational corporations. In metal manufactures and machinery, which are extremely dynamic, the share of the national private sector, though not predominant, is striking.

In the case of Mexico, the situation would appear to be very similar to that of Brazil. According to figures for total output from Mexican manufacturing industry from the 1970 industrial census, national private enterprises also enjoy a marked preponderance in the production of non-durable consumer goods (more than 70%); on the other hand, the share in production of intermediate goods and metal products, machinery and equipment was rather lower (of the order of 40% and 45.0%, respectively).28/

However, it should be mentioned that although these figures are representative, they may not properly indicate the real role of national

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27/ Visão, Quem é Quem na Economia Brasileira, a work cited by R. Bonelli and W. Suzigan in Tendencias recentes da industrializaçao brasileira, mimeo, 1978.

28/ Joint CEPAL/CTC Unit, Tendencias y cambios en la inversión de las empresas transnacionales en los países en desarrollo y particularmente en América Latina, Anexo Estadístico, September 1978.

/private firms

private firms in the development and orientation of industry. In general, in all the countries of the region, most national private firms are smaller than State and transnational companies, with the result that in the various countries very few of them belong to the group of so-called leading companies in each of the branches of activity - fewer still in those dynamic sectors where the preponderance of the transnational firms, and in some cases State companies, is clear.

These leading firms are generally the largest in each sector, and because of their financial, technological, organizational and commercial potential (which takes the form of a capacity to introduce new products, fix prices and engage in intensive publicity), succeed in exercising influence in the operation and orientation of the industrialization process which is much greater than would be indicated by their relative share in output or in capital.

In some countries of the region, nevertheless, principally the largest, there are powerful groups of private national firms which are at the head of some manufacturing industries such as cement, cellulose and paper, and other industries which produce consumer goods or metal products, machinery and equipment. For example, in Argentina, national private firms predominate in the sugar, wine, textile, cement, cellulose and paper, dairy products and other industries, especially in the food branch.

At all events, one of the common characteristics of the national private firms in the countries of the region is the diversity of their composition in terms of size, technological level and forms of organization. The proportion of craftmen's establishments is still very high in many countries of Latin America. The firms in the manufacturing sector show great differences in productivity as a result of factors related to the size of the plants, the technology used and access to innovations in this field, organization and managerial structure, the professional abilities of the management, access to sources of finance and so on. In general, the transnational corporations have advantages in many of these fields, and this goes some way to explaining their lead, mentioned above, and the consequent relative lag of national private firms in regional manufacturing output.

/(c) The

(c) The transnational corporations.

One of the outstanding characteristics of Latin American industrialization is the growing participation of foreign capital organized in the form of the transnational corporation. Although the presence of foreign capital in the economy of the Latin American countries is of longstanding, it has substantially increased its share in manufacturing industry in the past two or three decades. Until the 1950s foreign capital was to be found in the sectors which exported primary products, and frequently in urban and transport services. Since then, but principally since the second half of the 1970s, there has been a considerable rise in direct foreign investment in the manufacturing sector, especially in the Latin American countries with the largest markets. This has resulted in the establishment or extension of numerous subsidiaries of transnational corporations which, because of their organizational structure, the extent of their operations and their access to financial and technological resources and management skills, have had an important influence in manufacturing development in the host countries.

(i) Investment by transnational corporations in the field of manufacturing in Latin America and the Caribbean. Table 21 shows that in 1977 81% of direct foreign investment 29/ in regional industry and 48% of total investment went to Argentina, Brazil and Mexico. In contrast, in the medium-sized countries as a whole (Chile, Colombia, Peru and Venezuela), where total direct foreign investment in 1967 was substantial (almost 40% of the total for 19 countries of Latin America), in the manufacturing sector it was barely equivalent to 14% of the cumulative total in this part of the region. In the small countries, manufacturing activity also received a relatively small percentage of flows of foreign investment, which up to that year reached a total equivalent to 5% of total foreign capital invested in manufacturing industry in Latin America. Meanwhile, in the medium-sized and

29/ It is assumed that direct foreign investment is almost entirely made up of investment by the transnational corporations. See Multinational Corporations in World Development (United Nations publication, Sales No. E.73.II.A.11), pp. 5 and 7.

/Table 21

Table 21

LATIN AMERICA AND THE CARIBBEAN: TOTAL DIRECT FOREIGN INVESTMENT AND PROPORTION OF SUCH INVESTMENT IN THE MANUFACTURING SECTOR OF SELECTED COUNTRIES, 1967-1976

	1967					1976				
	Millions of dollars		Proportion invested in manufacturing sector (%)	Percentage distribution in region		Millions of dollars		Proportion invested in manufacturing sector (%)	Percentage distribution in region	
	Total	Manufacturing sector		Total	Manufacturing sector	Total	Manufacturing sector		Total	Manufacturing sector
Large countries	7 336	5 014	68.3	48.1	81.1	16 000	12 000	75.0	59.0	79.0
Argentina	1 821	1 201	66.0	11.9	19.4	2 250	1 500	66.7	8.3	9.9
Brazil	3 728	2 526	67.8	24.4	40.9	9 100	6 900	75.8	33.6	45.4
Mexico	1 787	1 287	72.0	11.7	20.8	4 650	3 600	77.4	17.1	23.7
Medium-sized countries	5 968	864	14.5	39.1	14.0	6 360	2 330	36.6	23.5	15.4
Colombia	728	238	32.7	4.8	3.9	1 250	850	68.0	4.6	5.6
Chile	963	93	9.7	6.3	1.5	410	150	36.6	1.5	1.0
Peru	782	142	18.2	5.1	2.3	1 800	330	18.3	6.6	2.2
Venezuela	3 495	391	11.2	22.9	6.3	2 900	1 000	34.5	10.7	6.6
Small countries	1 946	303	15.6	12.8	4.9	4 750	853	18.0	17.5	5.6
CACM a/	601	114	19.0	3.9	1.8	970	350	36.1	3.6	2.3
Others b/	1 345	189	14.1	8.8	3.1	3 780	503	13.3	13.9	3.3
Total Latin America (19 countries)	15 250	6 181	40.5	100.0	100.0	27 110	15 183	56.0	100.0	100.0
Caribbean c/	4 157	660	15.9	27.3	10.7	10 630	1 130	10.6	39.2	7.4
Grand Total	19 407	7 341	37.8	127.3	110.7	37 740	16 313	43.2	139.2	107.4

Source: Figures prepared by the CEPAL/CTC Joint Unit, on the basis of data from OECD, Development Cooperation, 1978 Review, Table E.1; and U.S. Department of Commerce/BEA, Survey of Current Business, August 1978.

a/ Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua.

b/ Bolivia, Ecuador, Panama, Paraguay, Uruguay, Haiti and Dominican Republic.

c/ Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago, plus Bahamas, Bermuda, and West Indies Associated States.

/small countries,

small countries, including those in the Caribbean, only a small share of foreign investment was destined for manufacturing industry, in contrast to the large countries, where even then the bulk of foreign investment was destined for industry.

During the final years of the 1960s and the first half of the 1970s there was a substantial rise in net flows of direct foreign investment to Latin America and the Caribbean, with an accentuated tendency for it to be directed increasingly towards the manufacturing sector (see table 21).

Around 1976 the proportion of foreign investment destined for industry improved, especially in the medium-sized countries and the members of CACM. The reasons included not only the preferences of foreign capital, but also the industrialization policies of the countries and, frequently, the withdrawal of foreign capital from other sectors, as well as action by some governments in nationalizing certain activities, such as in mining.

In 1976 total direct foreign investment in 19 Latin American countries amounted to somewhat more than US$ 27,000 million at current prices, which, compared with cumulative investment up to 1967, represented an increase of almost 78%. In the manufacturing sector the rise in foreign investment was even greater, from about US$ 6,200 million in 1967 to more than US$ 15,000 million in 1976 - a rise of almost 146%.

The shares of the recipients of direct foreign investment in the manufacturing sector in Latin America continued to be closely related to the scope of markets and the size of industry, but also to the vigour of their economic expansion. The large countries continued to predominate (79% of the regional total), despite the substantial drop in relative terms in the flow of capital to Argentina. This drop provides an explanation of the fact that the rise in foreign investment in the large countries was lower (139%) than the regional average between 1967 and 1976. Over the same period the medium-sized and small countries increased their share in the distribution of foreign investment in manufacturing industry, while the Caribbean countries 30/ recorded a relative fall.

30/ In Jamaica and Suriname the transnational corporations play an important role in the production of alumina.

/The notable

The notable increase in foreign investment in Latin American industry was reflected in an equally considerable increase in the share of subsidiary firms of transnational corporations in the product of the manufacturing sector in the countries of the region (see table 22).

In 1966, these subsidiary firms contributed a little over 16% of the total manufacturing product of 19 Latin American countries, while in 1975 their contribution amounted to 19%. The annual rate of growth of the product generated by these subsidiaries, measured in dollars at 1970 prices, during the period 1967-1975 was around 9%; the rate of increase in the total manufacturing product was 7%.

As regards the origin of direct foreign investment in manufacturing in the region, attention is drawn to the preponderance of the United States as an investing country. As early as 1967 over 54% of direct investment in manufacturing came from transnational corporations. United States investment represented nearly 50% of total foreign capital in the major countries, about 77% in the medium-sized countries and 69% in the smaller countries. In the countries of the Caribbean, United States investment amounted to 40%, but in the period 1967-1976 that country increased its participation as an investor in manufacturing.

The expansion of transnational corporations in the Latin American manufacturing sector did not always mean the establishment of new industrial plants, however, nor the use of large volumes of resources from abroad. In an increasing proportion,31/ the expansion of transnational corporations was effected through the purchase of local enterprises and the tendency has been to use more and more financial resources obtained in the recipient countries themselves. Also notable, moreover, is the decrease in the share of direct investment with respect to the commitments of subsidiaries of transnational corporations with the international financial system, which has had a considerable effect on the countries' external indebtedness,32/ and is one of the most negative aspects of the operation of these corporations.

31/ Up to 1946, 73% of the subsidiary firms of United Nations transnational corporations established in Mexico were new plants. Between 1946 and 1957 the proportion dropped to 52%, and between 1958 and 1967 to only 34%. See F. Fajnzylber and T. Martínez Tarragó, Las empresas transnacionales en México, Mexico, 1975.

32/ C. von Doellinger and L.C. Cavalcanti, Empresas multinacionais na indústria brasileira, IPEA-INPES, Rio de Janeiro, 1975.

/Table 22

Table 22

LATIN AMERICA: VALUE ADDED BY BRANCHES OF TRANSNATIONAL MANUFACTURING ENTERPRISES, COMPARED WITH THE TOTAL MANUFACTURING GDP OF SELECTED COUNTRIES, 1966-1975

(Percentage shares and growth rates)

Country	Value added by transnational enterprises (as percentage of total manufacturing GDP)		Value added by United States transnational enterprises (as percentage of total manufacturing GDP)		Average annual growth rates, 1966-1975		
	1966	1975	1966	1975	Value added by transnational enterprises	Value added by United States transnational enterprises	Total manufacturing GDP
Argentina	14.2	9.5	7.8	5.3	0.8	1.0	5.5
Brazil	23.9	27.3	8.5	14.1	11.8	16.5	10.2
Mexico	16.5	19.5	12.7	13.9	9.2	8.4	7.2
Colombia	13.6	17.1	10.7	10.4	10.0	6.9	7.2
Chile	3.2	4.9	2.8	2.2	2.8	-4.4	-1.8
Peru	10.7	4.3	9.0	2.9	-4.0	-6.5	6.1
Venezuela	22.4	35.9	16.3	25.3	11.1	10.7	5.4
Panama	5.5	23.5	4.5	17.6	23.4	22.0	5.0
CACM a/	6.4	8.2	5.7	6.6	9.3	8.0	6.4
Others b/	5.8	7.0	4.4	5.4	8.0	8.0	5.7
Latin America (19 countries)	16.2	19.0	9.0	11.2	8.9	9.6	7.0

Source: Estimated prepared by the CEPAL/CTC Joint Unit.

a/ Central American Common Market: Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua.
b/ Bolivia, Ecuador, Paraguay, Uruguay, Haiti and Dominican Republic.

/(ii) Expansion

(ii) Expansion of transnational corporations and effects on the dynamism and other aspects of industrial development. The scale of participation of subsidiaries of transnational corporations in the Latin American manufacturing sector is considerable, but perhaps does not adequately express its real influence on the sector's development. In view of the fact that these corporations are mainly concentrated in the more dynamic branches of industry, they have particular influence on the growth rate of manufacturing and its structural orientation.

It should be noted that transnational corporations also play an outstanding role in some branches of the traditional industries (food, beverages, tobacco), particularly in the relatively less developed countries; but their presence mainly in manufacturing activities which lead the production process gives them the high degree of influence they exercise over the industrialization process of not a few countries in the region.

Table 22 shows that in nearly all the countries of the region the rate of increase in the value added of transnational corporations contributed by subsidiaries in the period 1966-1975 has been higher than the growth rate of the manufacturing product. This expansion of subsidiaries of transnational corporations is closely related with the growth of the branches of activity in which they participate. In Brazil, in the period 1966-1973, the most dynamic branches of the manufacturing sector were those in which the subsidiaries of transnational corporations played an outstanding role. As shown by an analysis of a sample of enterprises in that country,33/ in the non-electrical machinery branch whose annual growth rate during that period was over 16%, transnational corporations accounted for 75% of total sales; in transport equipment, whose growth rate was nearly 15%, sales by transnational corporations represented 94% of the total.

The considerable participation of transnational corporations in certain branches of manufacturing activity has influenced not only the sector's growth rate but also its structural orientation, one of the manifestations of which has been the notable increase of metal manufactures and machinery in Brazil's manufacturing production.

33/ C. von Doellinger and L.C. Cavalcanti, op.cit., p. 56.

/The presence

The presence of transnational corporations in the manufacturing sector has had similar effects in nearly all the countries of the region, particularly those in which these corporations play a more important role, such as Argentina and Mexico, where cumulative direct foreign investment has the greatest relative significance in the region. The figures in table 22 do not, however, adequately reflect the influence exercised by subsidiaries of transnational corporations in the development of manufacturing in Argentina, because they relate to a particular period of that country's industrial development which was characterized by a certain contraction in the inflow of capital assigned to the sector.

Nevertheless, the industrial development of Argentina between the mid-1950s and the early years of the present decade has been strongly influenced by the large-scale entry of subsidiaries of transnational corporations since 1955, especially from 1959 to 1962. Between 1955 and 1973 the growth rate of the manufacturing product generated by these corporations was 8.8%, which is much higher than that recorded by national enterprises (only 4.3%), and therefore also higher than the rate for the total manufacturing product (about 5.2%).34/ The subsidiaries of transnational corporations engaged in those branches and sub-branches of manufacturing activity which experienced the highest rates of growth during the 1960s and the first few years of the present decade, and in general their participation reached high proportions (between 85 and 95%) of the production of each branch or sub-branch.

The cases described above shed light on an important aspect of the Latin American industrialization process deriving from the presence of transnational corporations in the manufacturing activities leading the development process of many countries of the region. This circumstance is responsible for the fact that the process has depended - and will possibly depend in quite a considerable degree in the future - on the transnational corporations' dynamism and readiness to transfer resources, technology and

34/ Juan V. Sourrouille, La presencia y el comportamiento de las empresas extranjeras en el sector industrial argentino, undated mimeographed version.

/managerial capacity

managerial capacity to the subsidiaries established in these countries, a situation which has enabled them to exercise control - in greater or lesser measure according to the country - over some basic variables of economic policy such as the growth rate of manufacturing, the transfer of technology and the expansion of exports of manufactured products.

The expansion of subsidiaries of transnational corporations has also had important implications for the concentration of production, employment, and productivity of the manufacturing sector in recipient countries.

In the last few decades there has been a notable increase in the concentration of production in the manufacturing sector of those countries of the region where the participation of transnational corporations is most significant. This is obvious since the size of the subsidiaries of transnational corporations in Latin America in virtually all sectors is usually larger than that of the average national enterprises. According to some studies carried out in Argentina, Brazil and Mexico, the high degree of concentration of production in the industrial sectors of these countries nearly always coincides with the large-scale participation of transnational corporations in those sectors.35/

As regards employment, Mexico's experience would seem to indicate that the subsidiaries of transnational corporations and the branches of activity in which they predominate generate less employment per unit of production and investment than national enterprises and sectors, but contribute more towards increasing employment as a result of their higher rate of expansion.36/

In Brazil, an eloquent example of this is provided by the results of a survey of the biggest manufacturing enterprises which absorbed 25% of the country's industrial employment in 1972. Transnational corporations provided employment for nearly 51.1% of the total number of workers in the enterprises covered by the survey; private national enterprises for 35.5%; and State

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35/ J.V. Sourrouille, op.cit., (Argentina); C. von Doellinger, L.C. Cavalcanti, op.cit., (Brazil); and F. Fajnzylber and T. Martínez Tarragó, op.cit., (Mexico).

36/ F. Fajnzylber and T. Martínez Tarragó, op.cit.

/enterprises for

enterprises for 13.4%.37/ Investment per worker employed in transnational corporations, in view of their concentration on activities with higher capital-output ratios, was higher than in private national enterprises. This partly explains the fact that in the data analysed the global average productivity (in terms of value added per person employed) was higher in transnational corporations than in national enterprises, although another contributing factor would seem to have been the composition of labour whose average wages are higher in transnational corporations.

In Argentina the share of transnational corporations in total employment has remained constant over the period 1955-1978 (around 10%). Concurrently, their share in the value of manufacturing production, as noted earlier, rose from 18% to 30%, which indicates that the productivity expressed in terms of value added per unit of employment has increased more than twice as much in international corporations as in national enterprises.38/ Obviously, this has meant the use of more capital-intensive technologies.

As regards employment, the number of new jobs is perhaps not the most important contribution of transnational corporations, but rather the higher manpower skills demanded by them, in view of the branches of activity in which they are concentrated and the technology used, thereby helping to create or expand a labour market which makes it profitable to invest in "human capital".

With respect to technology, it should be recognized that transnational corporations constitute an important vehicle for the transfer of technical know-how from the centres to the countries of the region, and to other developing countries. One indication of this is the fact that a high percentage of the income received by the parent companies of transnational corporations under the head of the transfer of technology to Latin America comes from their subsidiaries. In the case of Mexico, 80% of external payments for the purchase of technology are effected by subsidiaries of transnational corporations.39/

37/ C. von Doellinger and L.C. Cavalcanti, op.cit.

38/ A. Monti, op.cit.

39/ F. Fajnzylber, op.cit.

/Without disregarding

Without disregarding the contribution this means to the technical progress of manufacturing industry in the region, it is clear that this situation enables transnational corporations to exercise genuine control over the use of technology in the field of industry, since in practice it is these enterprises which determine the time, intensity and mode of application of technical know-how, while making sure they absorb most of the benefits deriving from its use.

This means of transfering technology through subsidiaries of transnational corporations, which has been called "captive" trade in technology, has implications not only for the valuation, origin and control of the technical know-how acquired by the countries, but also for the actual content of the technology they import. This aspect of the question is very important, since the technological profile of the manufacturing sector in the various countries will tend to respond to a great extent to the objectives in terms of production growth and diversification of the transnational corporations, which do not always coincide with those that might be defined for the manufacturing sector and the economy as a whole, if a macroeconomic criterion were used.

Another important aspect of the presence of transnational corporations in Latin America's industrial process is their performance in relation to the countries' external sector, in particular, their exports of manufactures.

The objective of transnational corporations upon establishing themselves in the region was basically to take advantage of the domestic markets, especially in those countries of largest economic size where the industrial development policies in force assured them of favourable conditions for their establishment and expansion. Export activities were generally of a marginal character, as they were also for the rest of the industrial enterprises. This meant that the products, their technical features and plant size were usually defined in terms of domestic market requirements.

Since the end of the past decade, however, the subsidiaries of transnational corporations have paid more attention to external markets. It is probable that the destination of the output of these enterprises was influenced by the favourable conditions which arose at the international level for the expansion of exports of manufactures, the efforts made by some

/countries of

countries of the region to increase such exports as a top priority objective, and the strong incentives or stimuli to export of which they were the object.

Thus, in the last few years, Latin America's exports of manufactures have grown significantly and part of this increase is accounted for by the exports of transnational corporations.

In any case, exports by transnational corporations, although considerable, are on the whole of a somewhat marginal character compared with their total sales.40/ In this respect, it should be noted that in 1976 around 94% of the sales of manufactured products by subsidiaries of United States transnational corporations in Latin America were destined for the domestic market, and under the heads of electrical and non-electrical machinery and food alone they represented approximately 9% of total sales.41/

It is interesting to observe the results of some relatively recent research on the share of transnational corporations in exports of manufactures by Mexico, Brazil and Argentina, although for methodological reasons they may not be completely comparable. In Mexico, according to data for 1973, 23.3% of total exports of manufactures were effected by subsidiaries of transnational corporations. In durable consumer goods their share was 14.4%; in intermediate goods, 24.6%; and in metal products, machinery and equipment, 35.9%. In some items, the share of transnational corporations reached figures that were close to 100%, as for example tobacco, transport material and rubber, all activities in which these corporations are virtually the leaders.

In Brazil, the data for 1976 show similar results.42/ The share of transnational corporations that year amounted to US$ 976 million, which is equal to 18.8% of total exports of manufactures. They accounted for a very

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40/ Exceptions to this are the transnational corporations engaged in subcontracting activities (maquiladoras), whose production is destined almost exclusively for the export market.

41/ United States Department of Commerce/BEA, Survey of Current Business, August 1978.

42/ Banco do Brasil/CACEX; Visão, Quem é Quem na Economia Brasileira, 1977, and Guía Interinvest, O Brasil e o Capital Internacional, cited by R. Bonelli and W. Suzingam, op.cit.

/high proportion

high proportion in some branches of industry such as transport material (94.7%), electrical material (71%), rubber (67%) and pharmaceutical products (100%).

In Argentina, transnational corporations seem to have played a much more important role in exports of manufactures. In 1973, foreign capital enterprises and companies with foreign participation were responsible for 42% of total exports of manufactures (excluding exports by the meat packing industry).43/

On the other hand, apart from the share of transnational corporations in exports of manufactures, it is interesting to note the effect of the role of these corporations in imports of industrial goods. It should be taken into account that the largest direct and indirect content of imports is destined for the so-called dynamic manufacturing activities, which are precisely those in which the pre-eminence of transnational corporations is most marked. This would account, although only in part, for the fact that the import coefficient (imports of inputs as a percentage of the value of production) of transnational corporations is generally much higher than that of national enterprises. The greater propensity to import which seems to be shown by the former compared with national enterprises 44/ operating in the same branches of activity also largely accounts for such differences.

43/ INPE, Las exportaciones argentinas en 1973, mimeographed version, 1976, referred to by Angel Monti, op.cit.

44/ The import coefficient of subsidiaries of transnational corporations in Mexico was 7.8% in 1970, and that of national enterprises was 3.4%. Although no data are available for a similar comparison of branches of industry, it can be said that at least in the case of food, beverages, tobacco, textiles, printing and publishing, metal products, electrical and non-electrical machinery, transport equipment and miscellaneous manufactures, the import coefficient of transnational corporations is significantly higher than that of national enterprises. See F. Fajnzylber and T. Martínez Tarragó, op.cit.

/Furthermore, in

Furthermore, in the light of the research carried out in some countries it might be affirmed that foreign trade operations by subsidiaries of transnational corporations in the field of manufactures show a decided deficit.45/ Although it may seem a dubious procedure to use the balance of imports and exports effected by these corporations as another indicator of the advantages or disadvantages of their presence in the manufacturing sector of the countries of the region, it is none the less true that this is an especially important factor because of the high proportion of the manufacturing external deficit generally represented by that balance. If the balance of remittances of profits, financial services, payment of royalties, etc., is added to that adverse balance, the negative effect of the operations of transnational corporations on the external sector is generally in not a few cases fairly substantial.

45/ Studies carried out by the Ministry of Planning of Brazil (1976), and by F. Fajnzylber and T. Martínez Tarragó, in Mexico (1975), cp.cit.

III. INDUSTRIAL DEVELOPMENT AND TRADE IN MANUFACTURES

The external trade in manufactures is of interest because the various regional and individual country patterns are closely linked with the forms of industrialization and their differences, which are in turn related to the different models or stages of industrialization which exist in the region. It should also be borne in mind that the basic objectives of industrial policy in many countries include the export of manufactures as a means of solving the problems of foreign trade deficits; that in some cases there is a deliberate policy to open domestic markets to foreign competition in order to improve production efficiency and resource allocation with a view to possible comparative advantages; that integration arrangements have been implemented in the region for this same purpose, as well as to attain scales for more advanced industrial development, and finally, that according to recent projections the long-term outlook for the Latin American economies is closely linked with their import capacity, in which exports of manufactures will have to play a more important role that in the past.

1. General characteristics of the manufacturing trade of Latin America and the Carribean 46/

(a) The overall picture

The importance of the external sector, from the industrial standpoint, may be seen from the fact that the Latin American economies are among those with the highest coefficients of imports of manufactures, excluding Africa and Asia. The proportion of the industrial product represented by the value of imports of manufactures is several times higher in Latin America than in North America, Eastern Europe or Japan, and at the same level as in the Western European economies. Furthermore, considering trade with the rest of the world alone and excluding reciprocal intra-regional trade, this proportion is several times higher in Latin America than in Western Europe (see chapter II).

46/ Here, as in chapter II, manufactures include SITC sections 5, 6, 7 and 8, excluding chapter 68 (non-ferrous metals). Other manufactures, such as food with a high degree of processing, are incorporated at a later stage.

/Nevertheless, this

Nevertheless, this Latin American import coefficient is entirely different in nature from that of the developed market economy countries. To a large extent the trade of the latter is reciprocal, particularly on the import side, takes place in a more competitive atmosphere, even within the integration groupings, and has a relatively symmetrical structure with intra-sectoral specialization, in accordance with the high and more even technological level characteristic of those countries. In contrast, the manufacturing imports of Latin America and the Caribbean are largely due to needs arising from industrial and technological gaps.

Thus the trade in manufactures of the region is notoriously asymmetrical: industrial products account for a high and growing proportion of imports while representing a small proportion of exports. The relative seriousness of this asymmetry has tended to decline, however, because the weight of manufactures in sales abroad has grown significantly, as has the proportion of manufacturing exports in relation to the value of manufacturing imports (see table 23).

Despite this tendency for the relative imbalance in manufacturing trade to decline, the absolute deficit has risen sharply: from nearly 5 billion dollars in 1955 to around 30 billion in 1975, more than 60% of which is accounted for by machinery and transport equipment, including capital goods and many technologically more advanced intermediate products, as well as more sophisticated consumer durables (see table 25).

Despite this progress, the basic asymmetry of the region's external trade persists, giving rise to a chronic deficit on the trade and payment balances, and a chronic external bottleneck. The crux of the problem lies in the fact that world demand for and trade in primary products are growing slowly, as are traditional manufactures, to a lesser extent, whereas the demand for capital goods and industrial intermediate goods, including many "conspicuous consumption" durables, is growing rapidly.

All the same, the pattern of manufacturing trade changed significantly in the mid-1960s. The coefficient of manufacturing exports in relation to the gross sectoral product, which stood at slightly over 2%, began to rise steadily from 1962 onwards, reading roughly 8% in 1973/1975. Meanwhile, the corresponding import coefficient declined appreciably until 1967, from

/Table 23

Table 23

LATIN AMERICA AND THE CARIBBEAN: MANUFACTURES[a] AS A PROPORTION OF IMPORTS AND EXPORTS OF MERCHANDISE

(Percentage of FOB value)

	1955	1960	1965	1970	1973	1974	1975
Manufactures as a proportion of:							
Imports of merchandise	58.8	64.6	64.5	68.8	64.1	58.3	61.3
Imports of merchandise excluding fuels	70.8	75.5	74.1	77.9	76.1	76.5	78.2
Exports of merchandise	3.2	3.3	5.4	11.1	15.2	12.6	13.3
Exports of merchandise excluding fuels	4.6	4.9	8.4	14.6	20.6	21.0	21.9
Exports of manufactures as a proportion of imports of manufactures	5.9	5.2	8.9	15.1	22.2	19.1	18.6

Source: UNCTAD, Handbook of International Trade and Development Statistics, op.cit. various issues.

a/ Manufactures comprise chemical products (SITC section 5), machinery and transport equipment (section 7) and other manufactures (sections 6 and 8, excluding chapter 68).

/76% in

76% in 1955 to 44% in 1967, and thereafter much more slowly until 1973, returning to about 44% in 1974/1975.47/

Nevertheless, the export coefficient remained relatively low, and the import coefficient high.

These trends may be viewed, at least in part, as the natural result of industrial development patterns in which the manufacturing sector is reaching quite an advanced and competitive level while at the same time demand and production progress towards more sophisticated imports, for technological reasons or because of backwardness in specific manufacturing areas, such as capital goods and many intermediate products. Other factors, of course, include the application of less restrictive import policies as of the second half of the 1960s, in line with improvements in the terms of trade until 1973; subsequently the financial flows helped to increase imports. Again, there are reasons for arguing that, particularly in the case of exports, the growth of intra-regional trade and the operation of integration arrangements had some effect.

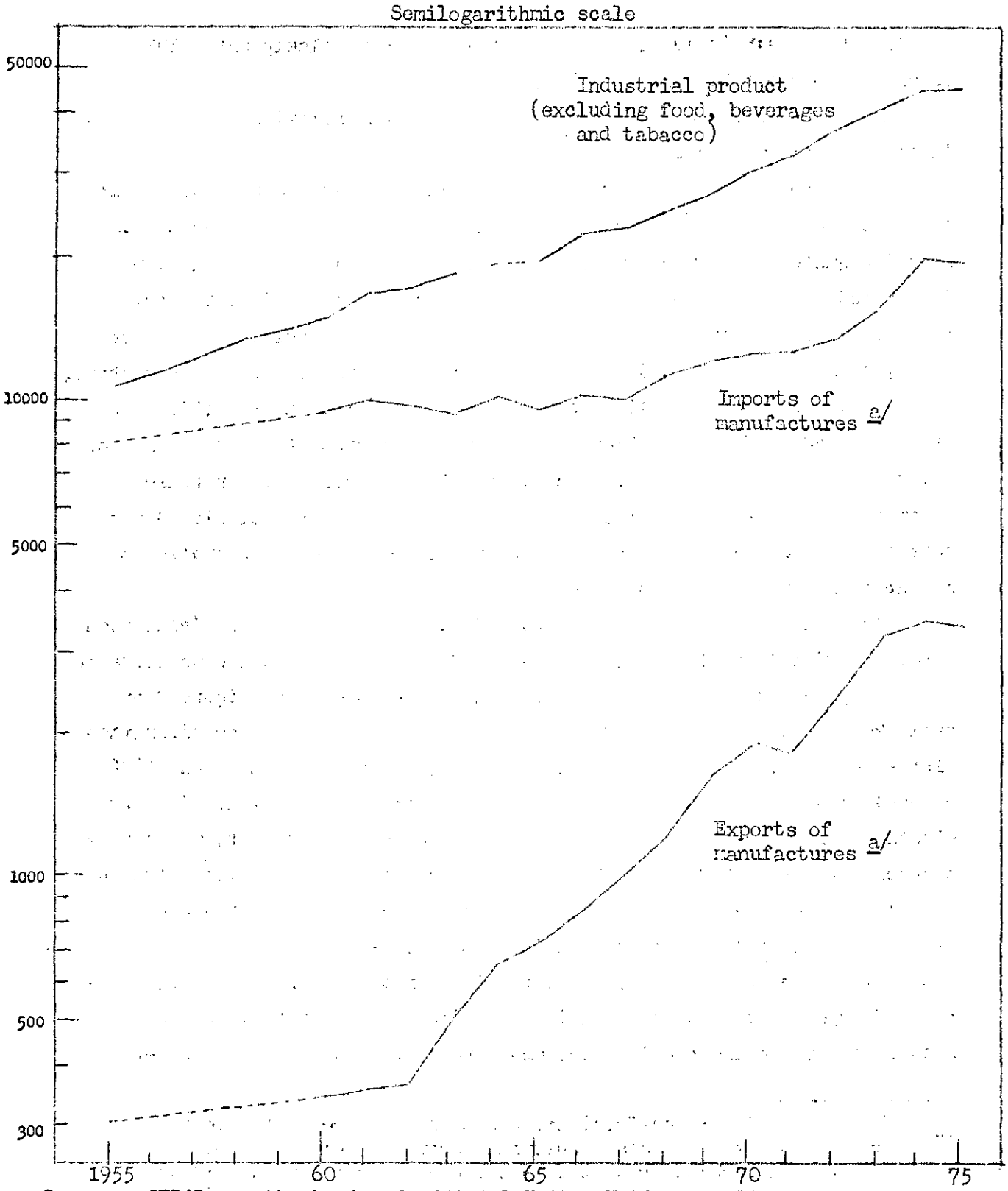
These trends may also be interpreted as a shift in industrialization strategy, visible in these developments and more clearly in the performance of imports and exports of manufactures, as may be seen from figure 3 and table 24. During the first twelve years of the period under consideration (1955-1967), external purchases of industrial products (at constant 1970 prices) grew at a much lower rate than in the following period, with low elasticity in relation to the growth of the industrial product, which rose appreciably after 1967. What happened on the export side is more striking: for 11 years (1962-1973) manufacturing exports maintained a high growth rate (20.2% annually) with an elasticity of 2.3% with respect to the industrial product. Subsequently the growth rate of imports continued to rise, while that of exports dropped sharply, in line with the substantial decline in industrial growth and the international events beginning in 1973/1974.

47/ Export and import coefficients are measured here as the corresponding proportion of the gross industrial product (excluding food, beverages and tobacco, whose product is not included in the trade analysed in this section), on the basis of values at constant 1970 prices (see figure 3).

/Figure 3

Figure 3

LATIN AMERICA AND THE CARIBBEAN : INDUSTRIAL PRODUCT AND EXPORTS AND IMPORTS OF MANUFACTURES
(Millions of dollars at 1970 prices)



Sources: CEPAL, on the basis of official United Nations publications, especially the Monthly Bulletin of Statistics and UNCTAD, Handbook of International Trade and Development Statistics, op. cit. The price indices for exports and imports were calculated by CEPAL on the basis of official data

a/ SITC sections 5,6,7 and 8 excluding chapter 68

/Table 24

Table 24

LATIN AMERICA AND THE CARIBBEAN: GROWTH OF IMPORTS AND EXPORTS OF MANUFACTURES a/

Period	Growth rates (compund annual percentage) b/			Elasticities with respect to the growth of the product d/	
	Imports	Exports	Industrial product c/	Imports	Exports
1955-1962	2.9	2.7	7.2	0.4	0.3
1962-1973	4.4	20.2	8.3	0.6	2.3
(1955-1967)	(1.6)			(0.3)	
(1967-1973)	(6.9)		(10.2)	(0.7)	
1973-1975	10.4	3.0	3.5	3.2	1.0
1955-1975	4.3	16.4	7.5	0.6	2.0

Sources: CEPAL, on the basis of United Nations publications, especially the Statistical Yearbook and UNCTAD, Handbook of International Trade and Development Statistics, op.cit.

a/ Manufactures: SITC sections 5, 6, 7 and 8 excluding 68 (non-ferrous metals).

b/ All calculations are based on values at constant 1970 prices. The rates are calculated by regression considering all years in each period.

c/ Gross industrial product at market prices, excluding food, beverages and tobacco, trade in which is not considered.

d/ Elasticities (e) are calculated by regression using the function: log exp. or imp. = A + e log. industrial product.

/It is

It is also worth recalling that these changes in the patterns of trade and industrialization coincide with the greater emphasis placed by many countries on manufacturing exports since the mid-1960s, both in order to solve the above-mentioned problem of asymmetry in their foreign trade and also to produce for the domestic market and improve industrial efficiency. This is clearly reflected in development plans, particularly those fixing ambitious export targets for industrial products (see chapter V). Even before then it was argued that, besides helping to underpin the growth of intra-regional trade, integration could become a platform for penetrating other markets competitively, as may be seen from the background to the different agreements signed in the region. In other words, at an early stage it was felt that exports of manufactures should be an important element in development policy and industrialization strategy.

At the same time as most governments were implementing institutional provisions and machinery (to be expanded and perfected in the light of subsequent experience) designed to promote exports of non-traditional products, particularly manufactures, and the various integration schemes were entering into operation, the region, very often with the rest of the Third World, was taking part in international fora in order to try to get the major markets of the developed economies to open up to the industrial imports from the periphery. Likewise, the region was attempting to develop horizontal trade with other developing regions.

These efforts, together with the major industrial progress which preceded them, may help to explain some of the striking success achieved by manufacturing exports, particularly on the part of the large, more industrialized countries, although to some extent these achievements may be attributed to the rapid growth of the world economy until the early 1970s. Again, the widespread and considerable rises in manufacturing prices must have helped to make many industrial products of the region more competitive (see figure 4).

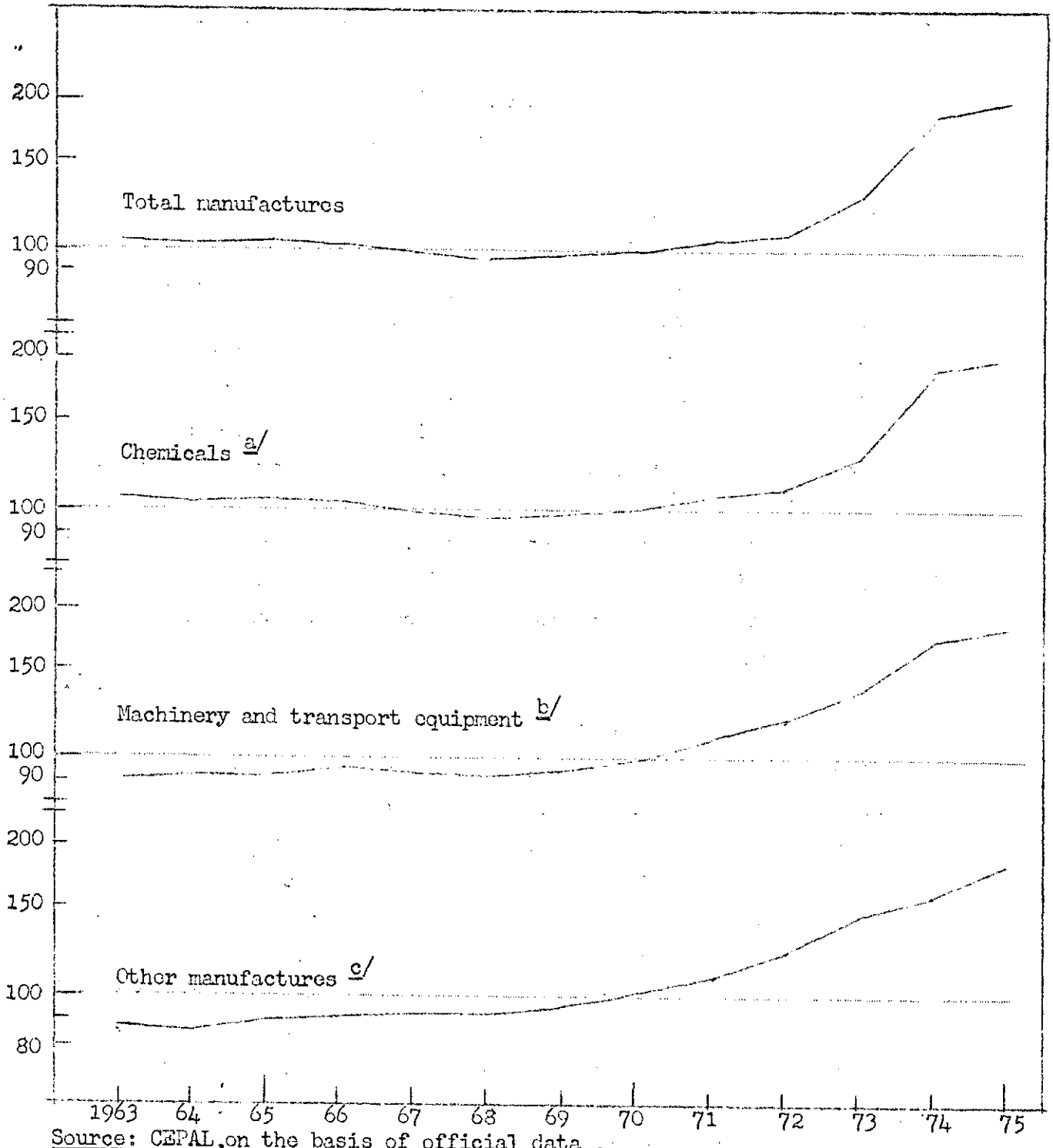
Thus from a long-term standpoint it may be seen that Latin America kept in step with the change in world trade, in the form of a substantial growth of manufactures as a proportion of exports and imports, and the resulting decline in the relative weight of food and raw materials. Thus

/Figure 4

Figure 4

LATIN AMERICA AND THE CARIBBEAN : UNIT VALUE INDEX OF EXPORTS OF MANUFACTURES (1970 = 100)

Semilogarithmic scale



Source: CEPAL, on the basis of official data.

a/ SITC section 5

b/ SITC section 7

c/ SITC sections 6 and 8, excluding chapter 68

/the region's

the region's trade has advanced appreciably towards great asymmetry: but it remains very far from the intra-sectoral specialization which prevails in the developed economies, since although manufacturing exports grew rapidly, their initial volume was very small.

(b) Structure and flows of manufacturing trade

As was indicated in chapter II, machinery and transport equipment account for the lion's share of imports of manufactures in the region and have tended to increase it, which is consistent with the existing gap in those industries, with the region's technological needs and with the more dynamic growth performance of such products. On the other hand, the relative importance of these products in exports is considerably lower, although growing strongly, having risen six fold between 1955 and 1975 (see table 25). These were the exports which grew fastest (see table 26), in line with the higher growth rates achieved by those industries, a salient factor within the industrialization strategy of the region as a whole and the advanced industrial levels reached by some countries.

Hence from the standpoint of both imports and exports the manufacturing trade of Latin America and the Caribbean is following world trends and advancing towards the patterns of the mature economies. However, once again the region is very far from having achieved the relative balance in manufacturing trade of those economies, or a surplus of exports over imports, particularly in the case of machinery and transport equipment.

In turn, the trade in other manufactures (which includes the products of many of what are often referred to as traditional industries, including light industry),48/ also followed world trends, with a falling share in imports and exports in keeping with the generally sluggish growth rate of demand for such products. This trend is particularly clear on the import side, due to the earlier, more advanced and more widespread development of the industries in question. These factors also help to explain why although the share of such manufactures in exports has declined, these industries have greatly improved their export position (more than the chemicals and

48/ See table 25, footnote c/.

/Table 25

Table 25

LATIN AMERICA AND THE CARIBBEAN: IMPORTS AND EXPORTS OF MANUFACTURES

Products	Imports					Exports				
	1955	1960	1965	1973	1975	1955	1960	1965	1973	1975
	FOB values (millions of dollars)									
Manufactures	5 121	6 490	7 786	20 255	34 862	302	338	694	4 494	6 475
Chemicals a/	682	890	1 257	3 356	5 550	95	130	198	859	1 425
Machinery and transport equipment b/	2 385	3 360	3 873	10 793	19 406	14	28	68	1 125	1 789
Others c/	2 054	2 240	5 656	6 106	9 906	193	180	428	2 510	3 261
	Structure (percentages)									
Manufactures	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Chemicals	13.3	13.7	16.1	16.6	15.9	31.5	38.5	28.5	19.1	22.0
Machinery and transport equipment	46.6	51.8	49.7	53.3	55.7	4.6	8.3	9.8	25.0	27.6
Others	40.1	34.5	34.2	30.1	28.4	63.9	53.2	61.7	55.9	50.4

Source: UNCTAD, Handbook of International Trade and Development Statistics, op.cit. various issues.

a/ SITC Section 5.

b/ SITC Section 7.

c/ SITC Section 6 and 8, excluding chapter 68 (non-ferrous metals). SITC Section 6 includes manufactures of leather; rubber; wood and cork; paper and cardboard; textiles; non-metallic minerals; iron and steel; and other metal products (excluding machinery). Section 8 includes sanitary, plumbing, heating and lighting fixtures and fittings; furniture; travel goods; clothing; footwear; professional instruments, photographic and optical goods and watches; and miscellaneous manufactures.

/Table 26

Table 26

LATIN AMERICA AND THE CARIBBEAN: GROWTH OF MANUFACTURING IMPORTS AND EXPORTS BY TYPES OF PRODUCTS, 1955-1975

Products	Growth rates (compound annual percentage)a/		Elasticities with respect to the product of each group of industries b/	
	Imports	Exports	Imports	Exports
Chemicals c/	6.5	13.8	0.7	1.5
Machinery and transport equipment d/	4.3	25.1	0.4	2.1
Others e/	3.3	15.3	0.6	2.6
Manufactures	4.3	16.4	0.6	2.0

Sources: CEPAL, on the basis of United Nations, publications, especially the Statistical Yearbook and UNCTAD, Handbook of International Development Statistics, op.cit.

a/ FOB values at constant 1970 prices. The rates are calculated by regression considering all years in each period.

b/ Elasticities (e) are calculated by regression using the function: log. imp. or exp. = A + e log. product. The total sectoral product excludes food, beverages and tobacco, trade of which is not considered.

c/ SITC section 5.

d/ SITC section 7.

e/ SITC section 6 and 8, excluding chapter 68 (non-ferrous metals)(see table 27, footnote c/).

/even the

even the machinery and transport equipment industries) with a high elasticity of growth of exports with respect to increments in output (see table 26). Thus while the export coefficient of the manufacturing sector as a whole rose to about 8% in the mid-1970s, the figure for these industries reached almost 10%, as against a mere 7% for the chemicals and machinery and transport equipment industries.49/

It should be stressed that intra-regional trade has been closely associated with the overall patterns of the trade in manufactures.

Reciprocal trade within Latin America and the Caribbean has a more balanced structure, in which machinery and transport equipment have much greater weight in comparison with exports to the industrialized countries. In addition, although the largest volume of trade of manufactures in the region (mid-1970s) was with the developed market economy countries (88% of imports and 57% of exports), exports of machinery and transport equipment were primarily directed towards the region itself: 52%, as compared with 39% to the developed market economy countries, this being the only sector in which intra-regional exports headed the list. Consequently, these exports helped to underpin the development of more advanced industries, although in view of the low level of trade this should perhaps be interpreted more as a definite potential of which use can be made in the future. All the same, exports of these products to the developed market economies grew appreciably and more rapidly (see table 27).

Technology again comes to be fore in an analysis of the structure of manufacturing imports and exports from the standpoint of origin and destination. Most imported manufactures (88%) originate in the developed market economy countries, especially in the case of machinery and transport equipment (91%), and it is in these countries that most of the technology applied to product design and quality and production processes incorporated in the region originates. In addition, machinery and transport equipment

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49/ Based on FOB values of exports at 1970 prices, as in the case of the gross industrial product. This product excludes the product of the food, beverages and tobacco industries, whose products are not included in exports.

/Table 27

Table 27

LATIN AMERICA AND THE CARIBBEAN: STRUCTURE (1965 AND 1975) AND RELATIVE WEIGHT (1975) OF IMPORTS AND EXPORTS OF MANUFACTURES BY TYPES OF COUNTRIES OF ORIGIN AND DESTINATION

(Percentages of FOB values)

Countries of origin and destination/products	Structure				Origin and destination 1975	
	Imports (origin)		Exports (destination)			
	1965	1975	1965	1975	Imports	Exports
World	100	100	100	100	100	100
Chemicals a/	16	16	28	22	100	100
Machinery and transport equipment b/	50	56	10	28	100	100
Others c/	34	28	62	50	100	100
Developed market-economy countries	100	100	100	100	88	57
Chemicals	16	17	32	23	87	59
Machinery and transport equipment b/	52	57	4	19	91	39
Others	32	27	64	58	84	65
Socialist countries	100	100	100	100	4	3
Chemicals	13	11	88	15	3	2
Machinery and transport equipment b/	49	59	-	10	4	1
Others	38	30	12	75	4	4
Developing countries (excl. Latin America and the Caribbean	100	100	100	100	1	4
Chemicals	7	20	29	14	1	3
Machinery and transport equipment b/	4	24	-	56	0.5	8
Others	89	56	7	30	2	2
Latin America and the Caribbean	100	100	100	100	7	37
Chemicals	23	22	23	22	9	36
Machinery and transport equipment b/	17	39	17	39	5	52
Others	60	39	68	39	9	28

Source: CEPAL, on the basis of UNCTAD, Handbook of International Trade and Development Statistics, op.cit.

a/ SITC Section 5.
b/ SITC Section 7.
c/ SITC Section 6 and 8, excluding chapter 68 (non-ferrous metals)(see table 27, footnote c/).

/predominate in

predominate in the structure of imports of Latin America and the Caribbean from those countries and also from the socialist countries, unlike imports from the developing countries, whose technological contributions are presumably limited, as would be the development of the industries in question and their competitiveness. The opposite is true of regional exports, which mainly consist of other manufactures, mostly products of light or traditional industry. However, in the case of sales to the other developing countries, machinery and transport material predominate (56%), as a result of the greater industrial maturity of the region and what might be termed its position as a technological intermediary - even within the region -, often based on the activities of affiliates of transnational corporations and their global strategy. This strategy may also be responsible for some of the striking growth of exports of machinery and transport equipment to the developed countries, including intra-industry trade and to some extent subcontracting operations.

Quite frequently these and other external sales are influenced by a combination of export policies by the countries of the region, cheap labour and, in some cases, natural resource endowments, together with technological, organizational and market inputs by the transnationals. Nevertheless, it cannot be said that the contributions of the corporations to manufacturing exports has been particularly great, since their export coefficients (exports as a proportion of total sales) are usually relatively low, and indicate a slight or marginal interest in penetrating foreign markets, sometimes no greater than that of national enterprises. However, a process has started and it may gather momentum. This is borne out to some extent by the growth of these coefficients as a whole and the fact that transnational affiliates, after being interested only in domestic markets, have entered the regional and, more recently, foreign markets.

Imports of chemical products have little weight in the manufacturing total, but a relatively larger share of exports, which suggests that this trade is also linked to some extent with the technology factor, besides the characteristics of demand and the existence of certain comparative advantages linked, for example, to natural resources. This is so because the technology

/of the

of the chemical industries is usually easier to install than in the case of the fabrication of capital goods and machinery and transport equipment, although problems do exist, due to the need for industrial linkage and scales of production, particularly in basic products, except those aimed at exports.

Imports of other manufactures are declining in importance and have less weight than machinery and transport equipment, except in the case of imports from developing countries, whose industrialization is more advanced in this area.

This shows clearly the disequilibrium in manufacturing trade with the developed countries, which goes beyond a mere trade deficit since it involves qualitative factors. Most of the purchases from those countries consist of products containing more or more advanced technology, whereas the contrary is true of sales to those countries. In this respect, intra-regional trade in the mid-1970s is more balanced, and simpler ('other') manufactures are clearly tending to decline in importance. To some extent this is the result of the more widespread development in this industrial field and also the generally more sluggish growth of demand for those products, as reflected in the world patterns of industrialization and trade (see chapter II).

It is precisely in the "other manufactures" that many of the comparative advantages acquired by the region's industrial development are situated. This explains the greater importance of such products in exports of industrial products, particularly those to the developed countries. Nevertheless, these advantages have been unable to materialize fully due to the protectionism in those markets against competition from industries located in the periphery. In addition, actual trade does not fully reflect the industrial potential of Latin America and the Caribbean for intra-regional trade, inter alia, because of the relatively limited and slow progress of integration schemes. It should be stressed here that one limitation has stemmed from the industrial structure itself, in that non-durable consumer goods, light industries in general and other traditional industries were set up and spread early on in the region, thus developing more evenly in the different countries. Hence the difficulties encountered

/by the

by the integration schemes in their attempts to liberalize markets have restricted competition and the growth of intra-regional trade. This has also been the effect of the problems involved in complementarity measures, very often applied to technologically more complex industries with larger scale requirements. However, it should be borne in mind that the shortcomings inherent in the relatively lower level of development of these industries, and particularly machinery and transport equipment, together with the technological needs incorporated in such products, have meant that the majority of imports from the countries have consisted of manufactures of this kind. Thus the technological backwardness of the region also appears to be linked to the difficulties of the integration schemes, in the case of the more complex industries, as well as to the backwardness of those industries, including in particular those producing capital goods and many intermediate goods.

Nevertheless, intra-regional trade in manufactures grew appreciably, with a steady increase in the relative weight of reciprocal imports, although still at low levels, to reach a figure of nearly 8% of the total value of manufacturing imports by the countries in 1973. In turn, reciprocal exports also increased, in relative terms, until the mid-1960s (44% in 1965), thereafter declining until 1973 (36%), given the dynamic performance of exports to the developed countries and other areas. Subsequently, with the crisis which began in 1973-1974, intra-regional trade has tended to offset the effects on regional exports,50/ while there has been a greater opening towards the socialist countries and other developed areas (see tables 28 and 29).

50/ Between 1973 and 1974 reciprocal trade maintained its relative weight of roughly 8% of imports and rose from 36 to 40% of exports. In 1975, these proportions dropped to 7 and 37%, in round figures.

/Table 28

Table 28

LATIN AMERICA AND THE CARIBBEAN: IMPORTS AND EXPORTS OF MANUFACTURES[a/]
BY ORIGIN AND DESTINATION

(Percentages)

	Imports				Exports			
	1955	1965	1973	1975	1955	1965	1973	1975
World	5 121	7 786	20 255	34 862	302	694	4 494	6 475
Developed market-economy countries	4 876	6 953	17 612	30 733	223	373	2 711	3 673
United States	2 550	3 205	6 990	12 580	130	229	1 625	2 039
Canada	106	197	479	920	7	6	71	141
Japan	174	466	2 585	4 515	3	7	171	150
Wester Europe	2 030	3 015	7 500	12 520	71	126	802	1 287
Others b/	16	70	88	198	12	5	42	56
Centrally-planned economies	90	332	720	1 270	6	8	63	160
Soviet Union	13	185	441	701	-	4	31	51
Eastern Europe	77	147	279	569	6	4	32	109
Socialist countries of Asia	2	87	71	100	1	-	6	16
Developing countries (excluding Latin America)	82	108	257	384	1	7	119	251
Africa	-	7	18	21	-	2	44	138
East and South-East Asia	80	95	229	305	1	3	59	65
Middle East	2	6	10	58	-	2	16	48
Latin America and the Caribbean	71	306	1 595	2 375	71	306	1 595	2 375
Latin America	62	277	1 498	2 233	63	281	1 476	2 192
Caribbean	9	29	97	142	8	25	119	183

Source: Table 30.

a/ SITC Sections 5, 6, 7 and 8, excluding chapter 68 (non-ferrous metals).

b/ South Africa, Australia and New Zealand.

/Table 29

Table 29

LATIN AMERICA AND THE CARIBBEAN: IMPORTS AND EXPORTS OF MANUFACTURES a/
BY ORIGIN AND DESTINATION

(FOB values in millions of dollars)

	Imports				Exports			
	1955	1965	1973	1975	1955	1965	1973	1975
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Developed market-economy countries	95.2	89.3	87.0	88.2	73.8	53.7	60.3	56.7
United States	49.8	41.2	34.5	36.1	43.0	33.0	36.2	31.5
Canada	2.1	2.5	2.2	2.6	2.3	0.9	1.6	2.2
Japan	3.4	6.0	12.8	13.0	1.0	1.0	3.8	2.3
Western Europe	39.6	38.7	37.0	35.9	23.5	18.2	17.8	19.9
Others b/	0.3	0.9	0.4	0.6	4.0	0.7	0.9	0.9
Centrally-planned economies	1.8	4.3	3.6	3.6	2.0	1.2	1.4	2.5
Soviet Union	0.3	2.4	2.2	2.0	-	0.6	0.7	0.8
Eastern Europe	1.5	1.9	1.4	1.6	2.0	0.6	0.7	1.7
Socialist countries of Asia	0.0	1.1	0.4	0.3	0.3	-	0.1	0.2
Developing countries (excluding Latin America)	1.6	1.4	1.3	1.1	0.3	1.0	2.6	3.9
Africa	-	0.1	0.1	0.1	-	0.3	1.0	2.1
East and South-East Asia	1.6	1.2	1.1	0.9	0.3	0.4	1.3	1.0
Middle East	0.0	0.1	0.0	0.2	-	0.3	0.4	0.7
Latin America and the Caribbean	1.4	3.9	7.9	6.8	23.5	44.1	35.5	36.7
Latin America	1.2	3.6	7.4	6.4	20.9	40.5	32.8	33.9
Caribbean	0.2	0.3	0.5	0.4	2.6	3.6	2.6	2.8

Source: UNCTAD, Handbook of International Trade and Development Statistics, op.cit., various issues.

a/ SITC Sections 5, 6, 7 and 8, excluding chapter 68 (non-ferrous metals).

b/ South Africa, Australia and New Zealand.

/In any

In any event, the pattern of Latin American and Caribbean trade in manufactures is still heavily linked with the developed market economies. Although the links with the United States and Western Europe have declined in relative importance, they still represent more than 70% of imports and over 50% of exports. In addition, the growth of trade with Japan has to some extent offset this decline with the result that the predominance of trade with these economies has remained at very high levels; and there are no clear signs that the situation will change.

Furthermore, despite the significant changes in the external manufacturing trade of Latin America and the Caribbean, there is still a heavy predominance of primary exports and a low proportion of manufactures, which largely consist of the products of light industries and other less complex industries. At the same time, the region primarily imports manufactures and particularly capital goods and other products of a high technological level. Thus broadly speaking the pattern of intersectoral specialization has been maintained, in contrast with the intra-sectoral specialization generally characteristic of the industrially mature economies, the structure of whose external trade consists of exports and imports of a similar kind within schemes combining specialization and diversification of trade.

Thus the region's asymmetrical foreign trade structure, closely linked to the developed economies, places it in a dependent position. It is true that the industrial and technological backwardness of Latin America and the Caribbean also play a considerable part; but another factor is that the industrialized countries are not doing much to change this international division of labour, particularly when they establish restrictions on manufacturing imports from the region. However, the above trends suggest that there are real possibilities for correcting the region's situation, so long as the necessary changes take place in trade relations. Furthermore, the policies of the Latin American and Caribbean countries (for example, in terms of supply for export, technological development, etc.), and the arrangements relating to intra-regional trade, appear to be of increasing importance in this respect.

/2. Position

2. Position of the countries in the regional trade of manufactures 51/

(a) Imports

The preceding analysis of the manufacturing trade of Latin America and the Caribbean as a whole is of limited interest if it is not supplemented by a review of the various tendencies and situations which exist within the region. It is true that, broadly speaking, the features of external trade are the same for practically all the countries: asymmetry of trade; large deficits in the trade of industrial products, particularly machinery and transport equipment as a result of high import coefficients and low export coefficients of manufactures; the predominance of links with the developed market economies, especially on the side of manufacturing imports; and so forth. However, a more detailed analysis shows significant differences among countries, which help to shape different kinds of industrial models, particularly when viewed from the standpoint of groups of large, medium-sized and small countries.

Naturally, these differences exist in both imports and exports of manufactures since, as is obvious, performance in both these areas is closely linked with the countries' industrial characteristics. Thus an analysis of these performances complements the study in the preceding chapter on the industrial positions and trends in the region and the different groups of countries, singling out the features which define the different models characteristic of each, over and above a mere consideration of the stage of manufacturing development which they have reached.

As already stated, the region as a whole has one of the highest import coefficients for industrial products. However, in this respect there are striking differences among the various groups of countries. It is clear from columns 1 and 2 of table 30 that there are major disparities in their share of the product and of imports of manufactures: the large countries account for 78% of the product and barely 51% of the region's industrial imports, whereas all the other groups systematically account for a larger proportion

51/ In this section the UNCTAD trade classification criterion is used, which includes food, beverages and tobacco with a higher level of processing, wood and synthetic rubber, as well as the industrial products in SITC sections 5, 6, 7 and 8, excluding chapter 68.

/Table 30

Table 30

LATIN AMERICA AND THE CARIBBEAN: POSITION OF COUNTRIES IN IMPORTS OF MANUFACTURES, 1975

Groups of countries	Share (percentage)					Share of imports of manufactures over share of manufacturing product	Imports of manufactures over total import of goods (%)	Structure of imports of goods (total = 100)		
	Manufacturing product	Imports of manufactures								
		Total	Non-durable consumer goods a/	Intermediate b/	Metal products, machinery and equipment c/			Non-durable consumer goods	Intermediate goods	Metal products, machinery and equipment
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Latin America and the Caribbean	100.0	100.0	100.0	100.0	100.0	1.00	71.1	8.5	37.8	53.4
Large countries d/	78.2	50.9	28.5	55.6	51.1	0.65	68.5	4.8	41.4	53.8
Medium-sized countries e/	15.9	28.1	27.5	25.4	30.1	1.77	79.5	8.4	34.2	57.4
(Medium-sized countries excl. Venezuela)	(12.0)	(12.5)	(10.3)	(25.4)	(12.3)	(1.04)	(71.3)	(7.1)	(40.3)	(52.6)
CACM f/	2.3	7.0	15.5	7.1	5.5	3.04	78.6	19.1	38.7	42.2
Other small countries g/	2.8	8.4	14.8	7.1	8.4	3.00	74.7	15.1	31.8	53.1
Caribbean h/	0.7i/	5.6	13.7	4.8	4.9	8.00	51.8	20.9	32.3	46.8

Source: CEPAL, on the basis of official country and LAFTA data.

a/ Includes textiles, clothing, footwear, furniture, printing, publishing and allied industries, food, beverages and tobacco and other manufacturing industries.
b/ Includes wood and cork, paper and paper products, chemical industries and plastic products, rubber products, clay, china and porcelain products, glass and glass articles, other non-metal products and iron and steel.
c/ Includes metal products, electrical and non-electrical machinery, transport equipment and professional and scientific instruments.
d/ Argentina, Brazil and Mexico.
e/ Chile, Colombia, Peru, Uruguay and Venezuela.
f/ Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua.
g/ Bolivia, Ecuador, Haiti, Panama, Paraguay, and the Dominican Republic.
h/ Barbados, Belize, Guyana, Jamaica, Suriname and Trinidad and Tobago.
i/ Barbados, Guyana, Jamaica and Trinidad and Tobago.

/of imports

of imports than of the product. Column 6 of table 30 highlights this fact in terms of the quotient of the share in imports and in the product, which may be considered an indicator of the relative manufacturing import coefficient. Thus the large countries, with more advanced manufacturing development and more diversified industry, have a lower coefficient than the region as a whole; the medium-sized countries are above the average, and almost exactly coincide with it if Venezuela, a country whose propensity to import is very high due to petroleum, is excluded; the countries of the Central American Common Market and the other small countries of Latin America triple the regional average; and finally, the Caribbean countries are the biggest relative importers of manufactures.

As a general rule there is, then a direct link between the relative import coefficient of manufactures and the corresponding industrial situation. This analysis could be extended to the different types of industries with similar results, above all as concerns the fabrication of metal products, machinery and equipment and imports of such products, where larger discrepancies are found between the groups of countries, since these industries are even more concentrated in the large countries (87%), so that their share of these imports is almost the same as that of total manufactures (51%).

The same conclusion may be drawn from the fact that imports of non-durable consumer goods are distributed more evenly (column 3 of table 32), largely because these industries too are less developed in the small countries. The case of the CACM should be borne in mind, however, where reciprocal trade plays a notable part, largely in the form of this type of product.

In any event, the pattern seems to be that the relative coefficient of manufacturing imports is in inverse proportion to the size of the country and the level of manufacturing development, as measured by industrial diversification.

From another standpoint, the structure of manufacturing imports of the different groups of countries also shows a close link with industrial patterns. In all cases imports of intermediate and metal products, machinery and equipment predominate, reflecting the regional pattern in which traditional

/industries are

industries are more developed and widespread while the demand for imports of intermediate goods and metal products, machinery and equipment is due either to the incipient stage of development of those industries or to the need for capital goods and inputs involving increasingly complex technology, at the highest levels of industrial development of the region. All this is related to the dynamics of demand and the need for incorporating technical progress generated abroad, for both consumption and production. Nevertheless, the proportion of imports of non-durable consumer manufactures is very low in the large and more industrialized countries (4.8%), higher in the medium-sized countries (8.4%) and considerably higher in the small countries (between 15 and 21%), which is once again connected to some extent with the level of industrial development or with reciprocal trade within the CACM.

As a qualification of this analysis, it is worth recalling the widespread problems examined in other sections, such as the asymmetry of external trade and the imbalance between imports and exports of manufactures within patterns of intersectoral specialization. In this case it may be seen that in all the groups of countries imports of manufactures represent at least 70% of the value of imports of merchandise, with the exception of the Caribbean countries whose oil imports have a large impact. The corresponding proportion for the large countries (68.5%) is affected by Brazil's oil purchases, since before fuel prices rose the share of manufactures in total imports of merchandise of those countries amounted to 77% (1970). Thus the share of manufactures in total imports of merchandise contrasts with the corresponding share of exports, which are much lower in all the groups of countries (see table 31).

In summary, these different patterns of manufacturing imports, together with the other elements analysed in previous chapters and sections, characterize the various industrialization models which exist in the region or the various stages reached in manufacturing development.

/Table 31

Table 31

LATIN AMERICA AND THE CARIBBEAN: EXPORTS OF MANUFACTURES[a/] AND THEIR SHARE OF TOTAL EXPORTS OF MERCHANDISE, 1965, 1970, 1975 AND 1977

(Percentages of FOB values)

Groups of countries	Origin of exports of manufactures				Share of manufactures in exports of goods			
	1965	1970	1975	1977	1965	1970	1975	1977
Latin America and the Caribbean	100.0	100.0	100.0	100.0	8.7	15.3	19.0	23.6
Large b/	57.9	62.6	68.1	69.9	13.8	25.4	31.9	33.0
Medium c/	14.0	10.5	12.4	12.7	2.7	3.8	6.3	8.0
(Medium excl. Venezuela)	(9.6)	(9.1)	(10.8)	(11.1)	(4.5)	(6.5)	(16.4)	(17.0)
Central American Common Market d/	15.2	13.6	8.6	8.4	19.4	28.7	26.0	21.8e/
Other small Latin American countries f/	4.1	2.3	2.3	3.1	9.1	7.6	6.6	11.2
Caribbean g/	8.7	10.9	8.6	5.9	10.7	22.4	17.5	16.6

Source: CEPAL, on the basis of official country and LAFTA data.

a/ See table 32, footnotes a, b and c.
b/ Argentina, Brazil and Mexico.
c/ Chile, Colombia, Peru, Uruguay and Venezuela.
d/ Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua.
e/ Bolivia, Ecuador, Paraguay and the Dominican Republic.
f/ Bahamas, Barbados, Belize, Grenada, Guyana, Jamaica, Suriname and Trinidad and Tobago.
g/ Partial estimates.

/(b) Exports

(b) Exports

The first point that leaps to the eye is the high and growing share of manufacturing exports of the three large countries which in around 1977 accounted for almost 70% of the total value of the region (see table 31). Even for these countries, however, their share of exports is not as high as their share in industrial output. From this standpoint, the small countries appear as relatively larger exporters of manufactures, just as they are proportionally larger importers, as was pointed out above. This is in line with the coefficients of manufacturing exports of Argentina, Brazil and Mexico of about 4% of the gross manufacturing product in 1970; for the medium-sized countries this coefficient was about 3%; in the CACM 25%; and in the remaining small countries of Latin America, 5%.52/

Unfortunately, the analysis of the evolution of these coefficients at the level of groups of countries presents serious statistical difficulties connected with changes in the prices of manufacturing exports. However, it was pointed out in the previous section that there has been a notable increase in industrial exports from the region as a whole. Everything suggests that this process was generalized, although obviously not uniform. In any event, industry in the region continued to record relatively low export coefficients, with the exception of the CACM in its reciprocal trade, although here the initial dynamism is tending to slacken.53/

The salient differences among countries in their manufacturing trade patterns lie more in the weight of industrial products in exports of merchandise. Although the problem of trade asymmetry is widespread, it is less serious for the large countries, which have managed to raise the weight of manufactures to almost one-third of the total value of external

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52/ Value of exports of manufactures over the value of the gross manufacturing product, according to the sources given in table 31 and chapter III, table 13.

53/ During the 1960s the industrial product of the CACM grew at an annual average rate of 8.4%, while manufacturing exports (at constant 1970 prices) grew at an annual compound average rate of 25.2%. During the first half of the 1970s, these growth rates declined to 5.7 and 9%, respectively. Exports of manufactures slackened as a result of the crisis which shook the CACM in 1969.

/sales, while

sales, while no other group of countries achieved even 20%, with the exception of the CACM and the Caribbean towards the beginning of the decade (see table 31). In the case of the CACM reciprocal trade is decisive, and in the case of the Caribbean exports of aluminium oxide whose value is in the order of 70% of total manufactures.

Thus the more advanced industrial development of the large countries led inter alia to the diversification of exports and a notable reduction in the asymmetry of their trade. The medium-sized countries, especially if Venezuela is excluded on the grounds of the importance of oil, also systematically raised the share of manufactures within exports, although at rather lower levels than in the case of the large countries. As regards the small countries, the trend is not clear, particularly bearing in mind the special cases of the CACM and of the Caribbean, as has just been pointed out.

Nevertheless, it is worthwhile stressing that towards the end of the period under consideration, from this standpoint, the trade patterns of the medium-sized countries (excluding Venezuela) are more similar to those of the small countries than to those of the large countries. It should be noted that the patterns of the medium and small countries also differ in nature when compared with the large countries, since very often the proportion of manufactures in exports of merchandise is determined by special circumstances. In Chile, the weight of manufactures amounted to 19% in 1977, largely due to exports of forestry industries (wood, pulp and paper), whose value represented about 50% of the manufacturing total. In Colombia, this figure in 1976 amounted to almost 20%, with a more diversified pattern. Peru exports very few manufactures: in 1976 manufactures represented a mere 5% of exports. Uruguay, on the other hand, stands out for its high proportion of manufactures, 39% in 1977, 70% of which is accounted for by the textile, clothing, footwear and leather industries. Venezuela, with a low level of industrialization and as an oil exporting country, is not noticeable for its exports of manufactures, which account for barely a little over 1% (1975), mainly in the form of chemical products derived from petroleum. The high share of manufactures in CACM exports, as pointed out above, is basically due to reciprocal trade, and

/70% of

70% of this is accounted for by products of light industries producing non-durable consumer goods (above all clothing) and some chemical products (primarily pharmaceutical products and toiletries). Ecuador stands out among the small countries with a proportion of manufacturing exports of 19% (1977) more than 70 or 80% of which is attributable to food industries, largely cocoa products. The figure for Paraguay is 23% (1977), primarily consisting of food (meat products), wood and some chemical products (essential oils and tanning extracts). Bolivia and the Dominican Republic have very low figures, in the order of 3% in the mid-1970s. Silver alloys and concentrates are important in Bolivia and furfural in the Dominican Republic. The Caribbean countries likewise have low exports of manufactures, except for aluminium oxide, based on their bauxite deposits.

The case of the large countries is quite different, apart from the fact that in all three of them the share of manufactures in the value of exports of merchandise is over 30% (1977). The diversification of external sales of industrial products is greater, as a result of the diversification of production, and there is a large proportion of metal products, machinery and equipment, exports of which are largely concentrated in these countries (90%). Exports of these products by other countries, and particularly the small countries, are limited (see table 32).

In sum, the industrialization of the large countries generates a broad range of manufacturing exports including more sophisticated lines in the metal products, machinery and equipment group. In the other countries, exports of such products are limited and frequently consist of specialization in light industries producing non-durable consumer goods and some intermediate products or basic products, very often due to advantages linked with specific natural resource endowments.

This is by no means important, since although it may seem obvious that more diversified industrialization schemes lead to a broader range of possibilities of manufacturing exports, it should be recalled that it is primarily the demand for metal products, machinery and equipment which is most dynamic, a fact which helps to explain (together with industrial and technological development, and sometimes flexible export policies) the growing share of the large countries in regional exports of manufactures.

/Table 32

Table 32

LATIN AMERICA AND THE CARIBBEAN: STRUCTURE AND ORIGIN OF EXPORTS OF MANUFACTURES BY TYPE OF PRODUCT AND GROUPS OF COUNTRIES, 1975

(Percentages of FOB values)

	Structure				Origin			
	Manufactures	Non-durable consumer goods a/	Intermediate b/	Metal products, machinery and equipment c/	Manufactures	Non-durable consumer goods	Intermediate	Metal products, machinery and equipment
Latin America and the Caribbean	100.0	39.5	32.3	27.3	100.0	100.0	100.0	100.0
Large d/	100.0	41.0	23.6	35.4	68.1	71.0	48.7	89.4
Medium e/	100.0	40.5	45.7	13.5	12.4	12.5	16.9	6.1
CACM f/	100.0	40.9	48.4	10.7	8.6	8.9	12.6	3.4
Other small countries of Latin America g/	100.0	66.9	32.4	0.7	2.3	3.2	1.9	0.1
Caribbean h/	100.0	20.4	76.4	3.1	8.6	4.4	19.1	1.0

Source: CEPAL, on the basis of official country and LAFTA data.

a/ Includes textiles, clothing, footwear, furniture, printing, publishing and allied trades, food products, beverages and tobacco manufactures and other manufacturing industries.

b/ Includes wood and cork, paper and paper products, chemical industries and plastic products, rubber products, clay, china and porcelain articles, glass and glass products, other non-metal products and iron and steel.

c/ Includes metal products, machinery and transport equipment, and professional and scientific instruments.

d/ Argentina, Brazil and Mexico.

e/ Chile, Colombia, Peru, Uruguay and Venezuela.

f/ Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua.

g/ Bolivia, Ecuador Paraguay and the Dominican Republic.

h/ Bahamas, Barbados, Belize, Grenada, Guyana, Jamaica, Suriname and Trinidad and Tobago.

/These countries

These countries have increased their relative share in all products, with the exception of intermediate products (due almost exclusively to heavy exports of aluminium oxide from the Caribbean) and above all in metal products, machinery and equipment, which rose by 1965 from 62% to 90% of the value of the corresponding regional exports. Of the remaining groups only the medium-sized countries were able to increase slightly their share in the regional total in the case of exports of non-durable consumer goods and intermediate products: from 12% to around 13% and from 14% to 17%, respectively. All the others, including this group, experienced a sharp decline in their exports of metal products, machinery and equipment or maintained these at an insignificant level. This was even true of Colombia a country which stands out among those pursuing active export promotion policies, which helped the country to increase its share of regional exports of non-durable consumer goods and intermediate goods of industrial origin.

(c) Direction of manufacturing exports by countries of origin

The extraordinary growth of manufacturing exports which began slightly before 1965 coincided with a great diversification of exported products and also of markets of destination. It is true that this diversification of products and markets was more striking in the large countries which have more diversified industrial sectors, in which technologically advanced industries, whose products are characterized by higher demand elasticities, have come to have some importance.

By the mid-1970s large differences may be seen in the patterns of dispersion of export markets of manufactures of the countries of the region (see table 33). The large countries generally have a larger presence in the various world markets, although Argentina is more concentrated in the LAFTA market, a situation resembling that of the medium-sized countries. In any event, the range of dispersion of external markets clearly diminishes from the large countries to the small countries.

Although for the medium-sized countries the regional market, and more specifically LAFTA, is generally more important, an appreciable proportion of their manufacturing exports reach the developed market economies, particularly the United States or the European Economic Community, or both.

/Table 33

Table 33

LATIN AMERICA (15 COUNTRIES): DESTINATION OF EXPORTS OF MANUFACTURES, MID-1970s[a]

(Percentages)

	Developing America				Developed market-economy countries				Eastern Europe and China	Other developing countries			
	Total	LAFTA	CACM	Others	Total	United States	EEC	Others		Total	Asia	Middle East	Africa
Large countries													
Argentina	60.4	48.7	0.2	11.5	31.7	7.1	18.8	5.8	4.6	3.2	0.4	1.5	1.3
Brazil	32.1	29.9	0.5	1.7	57.7	23.1	21.5	13.1	4.0	6.3	1.1	1.0	4.2
Mexico	25.2	16.3	5.6	3.3	72.7	51.2	12.8	8.7	0.5	1.7	1.4	0.2	0.1
Medium-sized countries													
Chile	85.2	85.2			14.2	3.4	7.4	3.4	0.6				
Colombia	57.6	41.0	4.7	11.9	41.3	21.1	14.6	5.6	0.5	0.6	0.3		0.3
Peru	62.3	55.8	2.6	3.9	36.6	6.4	21.5	8.7	1.1				
Venezuela	48.1	23.3	2.6	22.2	50.1	35.4	10.6	4.1		1.6			1.6
CACM	90.0	4.2	78.8	7.0	9.5	7.2	1.6b/	0.7		0.5	0.5		
Costa Rica	90.9	7.8	71.0	12.1	7.3	6.0	1.3			1.6	1.6		
El Salvador	91.5	4.8	82.4	4.3	8.5	3.3	3.8	1.4					
Guatemala	91.6	1.2	85.2	5.2	8.2	6.6	0.6	1.0					
Honduras	74.4	8.6	56.7	9.1	25.0	18.6	5.9	0.5		0.6	0.6		
Nicaragua	91.5	1.7	87.9	1.9	8.4	7.5	0.3	0.6		0.1	0.1		
Other small countries of Latin America													
Bolivia	28.5	27.3		1.2	70.8	49.5	7.6	13.7		0.7	0.5		0.2
Ecuador	54.0	54.0			46.0	36.0	9.9	0.1					
Paraguay	85.1	83.1			14.0	2.2	7.6	4.2		3.0	3.0		

Source: CEPAL, on the basis of official country and LAFTA data.

a/ The analysis is based on samples of major products representing between 80 and 100 per cent of the value of total exports of manufactures.

b/ Western Europe.

/However, the

However, the proportion of manufacturing exports to the socialist countries is much smaller than in the case of Argentina and Brazil, and this is also true of the proportion of such exports to the other developing regions. Mexico's trade with these two categories is likewise low, since its main commercial links are with the developed market economy countries, especially the United States, which is obviously influenced by its geographical position and the high level of border trade.

In the case of CACM countries, reciprocal trade predominates, as has already been stressed above. Honduras alone stands out for its exports to the United States, primarily consisting of processed fruit, tobacco and wood. Broadly speaking, exports to other world markets are insignificant.

Bolivia and Ecuador likewise presented a different picture in 1975, with exports to the developed market economies, especially the United States. As in the case of Honduras, however, these exports were very little diversified: in Bolivia they consisted mostly of wood and silver concentrates and alloys, and in Ecuador of cocoa products and wood. On the other hand, Paraguayan manufacturing exports were concentrated within LAFTA, consisting predominantly of light industrial products, wood and some chemical products.

To some extent it may be said that within the regional market the exports of the Latin American countries are more diversified and exports to the rest of the world are more specialized, especially in the case of the medium-sized countries and still more the small countries. This was pointed out in the overall analysis of manufacturing trade and the study of the structure of manufacturing exports by countries.

This feature is all the more striking in sales in less traditional markets. Thus for example the relatively significant figure for Chilean trade with the socialist area (China) in table 33 consist basically of iodine; the figure for Venezuelan trade with Africa corresponds basically to liquid ammonia; the figure for Costa Rican trade with Asia represents paper and cardboard containers; and the figure for Paraguayan trade with Asia corresponds to essential oils. The manufacturing exports to those markets by Argentina, Brazil and Mexico in the same period were considerably more diversified, even including important items of the metal products, machinery and equipment group.

/In the

In the context of this study of the destination of manufacturing exports it is also important to take note of trade within the framework of integration agreements (see table 34).

Reciprocal exports of industrial products within LAFTA have remained virtually constant in relative terms since the mid-1960s, at a figure slightly above 30% of the total exports by member countries, although the quantities and values have risen appreciably. Nevertheless, in 1975 this proportion rose by almost 36%, which may be attributed to some extent to the standstill in exports to the central economies because of the world recession since 1973/1974. In this connexion, elsewhere in this chapter attention was drawn to the fact that intra-regional trade had to some extent softened the blow of this recession; and now this is also seen in the case of LAFTA.

Another aspect which again deserves attention is the way in which regional trade underpins exports of metal products, machinery and equipment, in that the proportion of reciprocal exports of these goods within total exports of such products by LAFTA countries - and in this sphere also those of the Andean Group - is substantially higher than that of other manufactures in their respective totals: 47 and 25%, respectively, in LAFTA, and 53 and 25% in the Andean Group (1976).

This underpinning which consists in the consolidation of scales, quality, marketing experience, etc., may be seen as a springboard for reaching other markets, and this may be reflected to some degree in the declining importance of mutual trade of these products within LAFTA. Naturally, this process is decisively affected by the large countries. Between the mid-1960s and the present day, Argentina reduced the proportion of its exports of metal products, machinery and equipment to other LAFTA countries from 73 to 63%, Brazil from 87 to 49%, and Mexico from 34 to 28%. Thus these three countries diversified their markets, although Argentina concentrates its exports of such products in the region (86%) and Mexico in the United States (51% in the mid-1970s). Brazil is therefore the country which has most diversified its external markets for such goods.

/Table 34

Table 34

LATIN AMERICA: EXPORTS OF MANUFACTURES WITHIN INTEGRATION AGREEMENTS

Integration agreements	Total manufacturing exports of member countries (FOB values, millions of dollars)				Proportion of manufacturing exports within integration agreements			
	1965	1970	1975	1976	1965	1970	1975	1976
LAFTA								
Manufactures	734	1 730	5 826	6 880	31.2	31.4	35.5	31.2
Metal products, machinery and equipment	79	362	1 827	1 889	52.9	48.6	49.4	47.1
Others	655	1 368	3 999	4 991	28.6	26.8	29.1	25.2
Andean Group a/								
Manufactures		221	807	1 051		18.4	29.1	29.3
Metal products, machinery and equipment		28	111	153		24.2	48.7	53.1
Others		193	696	898		17.5	26.0	25.3
CACM								
Manufactures	148	315	607	753	81.1	81.9	80.0	81.0
Metal products, machinery and equipment	13	29	65	79	76.9	87.5	85.0	84.0
Others	135	286	542	673	81.5	81.1	79.3	80.8

Source: CEPAL, on the basis of official country and LAFTA data.

a/ Includes Chile.

/This does

This does not occur among Andean Group countries, where reciprocal trade has tended to increase sharply during the 1970s, especially in the case of metal products, machinery and equipment, at least until the last year for which is available and before the withdrawal of Chile (see table 34). Nevertheless, this fact suggests that the trade has provided a basis for the development of industries and exports of a higher technological level. In any case, these exports by the Andean Group countries are very largely concentrated in the regional market and have little access to other markets.

In the case of the CACM, the high level of reciprocal trade also covers metal products and machinery, although such exports are limited, as is true of those of most other small countries of the region.

Among CARICOM countries reciprocal trade of manufactures has little weight, (about 20%, in 1977) mainly because of the large-scale export of certain products outside the region, such as aluminium oxide, whose proportion in the total value of manufacturing exports is very large, as was pointed out earlier. However, nearly 90% (1977) of the limited exports of metal products and machinery go to CARICOM countries.

IV. INDUSTRIALIZATION IN THE MEDIUM AND LONG TERM

1. Summary of the analysis and general frame of reference

The preceding chapters have analysed a number of facts and trends at the world and regional levels which offer a basis for an assessment of prospects in manufacturing in Latin America and the Caribbean, bearing in mind the substantial differences between countries. At the same time, they have indicated some imperatives for industrialization as related to economic and social development.

In short, it may once again be observed that economic growth is generally accompanied by a process of industrialization or more rapid growth in manufacturing industry, at least until reaching the threshold of development and industrialization which the more mature developed economies would appear to have crossed. This fact, which is linked to trends in demand and technological innovation, as well as to the conditions of international trade, has applied particularly to the regions and countries where economic growth has been fastest. Of course, it has also been observed in the developing countries. Nevertheless, one may observe the persistence of slow elimination of the peripheral features of industry in most of the countries in the developing regions, although the semi-industrialized countries have made notable progress, and have even exploited opportunities for many of their manufactures to compete in world markets.

Also worthy of mention are the characteristics of international trade in manufactures, as a result of which the international division of labour has been influenced by the operation of systems and blocks of developed countries, in concert or under regulation; in some cases trade between such countries has been liberalized, but trade with the rest of the world has been protected, especially in the area of manufactures where the periphery has acquired advantages and interest in exporting. Although according to overall trade figures such countries are showing a slight tendency to import a greater proportion of manufactures from the periphery, these imports are of little significance or are subject to very particular circumstances. At the same time, the export trade of the developing countries poses a smaller threat to the most advanced and technologically more developed industries, the

/products of

products of which, in turn, form the most dynamic flows in world trade. In this latter regard it is necessary to bear in mind, of course, that there are in the periphery supply constraints inherent in the less diversified industrial structure and lower degree of technological development.

Consideration of manufacturing development in the region highlights the widespread strategy of industrialization and indicates, above and beyond the figures, that many countries have achieved a degree of industrial maturity and have ceased to be primitive economies, with an industry which already possesses critical mass and enjoys conditions which guarantee possibilities of passing beyond more complex stages towards more advanced positions. However, it also brings out the diversity of circumstances and trends in the countries, from the largest, industrialized countries to the smallest ones where manufacturing development is just beginning. This is important, because the industrial future of the countries will be strongly influenced by individual circumstances, such as the economic and industrial structure, the size of the market, natural resources and internal socio-economic boundaries.

Under the above analyses, the framework within which the industrial prospects of the region and the countries fall may be defined on the basis of various significant elements. Some are linked to external relations, others to questions of a largely domestic nature.

Notable as far as external relations are concerned are the persistent asymmetry of trade, including imbalance in trade in manufactures; the growing internationalization of the economy and industry as regards trade, financial flows, technological flows and the activities of the transnational corporations; slow progress in the formal integration processes, which in some cases are stagnating or deteriorating, although relations within the region have expanded significantly. As the region takes its place in the world economy, it is running up against protectionist trends in the industrialized market economies and the relatively closed strategy of the regions with centrally planned economies. In such a context, it is necessary to bear in mind the prospects linked to the New International Economic Order and to programmes of co-operation for industrial development, such as those laid down in the Lima Declaration and Plan of Action.54/

54/ Report of the Second General Conference of the United Nations Industrial Development Organization (ID/CONF.3/31).

/Noteworthy among

Noteworthy among the internal elements, apart from the strategy of industrialization and the frequent official intention to give it further emphasis, are the persistence in many countries of fairly serious domestic socio-economic boundaries which, among other things, restrict the size of the national markets; the penetration of such markets from outside, especially the markets for luxuries, through imports of goods or forms of production which become established with various degrees of local integration; to this is linked the fact that, in many cases, the transfer of technology from outside almost completely predominates over indigenous technological development, although Argentina, Brazil and Mexico have developed greater capacity to generate know-how to adapt or complement foreign technology; the substantial degree of industrial diversification achieved, particularly by the large countries, although the manufacturing sector is backward in some regards (above all in the areas of intermediate and especially capital goods); a degree of inefficiency in manufacturing output, although very often not widespread (as is shown by the protectionism of the developed countries vis-à-vis advantages of the periphery) and in addition not usually attributable to companies, but rather to the economy as a whole, including the lack of external economies; finally, changes in the breakdown of industry by type of firm operating in the sector, the active role of the public sector and the growing presence of transnational corporations in manufacturing activities.

Of course, these facts are applicable to most of the countries of the region, although there are great differences in trends, situations and potentialities between them, to which must be added political diversity and the various approaches they tend to adopt to the problems of development and industrialization.

Nevertheless, and aside from common elements which may be identified within the region, industrial prospects fall within the world context, which generates influences and uncertainties. Some arise from the probable evolution of the world economy, international trade and technology; others from managerial and financial circumstances; and others, of course, more generally, from the cultural and political aspects.

/The international

The international context has imposed patterns on industrialization in the region, and will probably do so in the future in so far as very rigorous policies of delinking are not adopted in the search for new horizons or styles of development. These patterns, which constitute a vitally important element in interpretation, comprise a number of elements which link together to shape the very form of Latin American industrialization, notably those related to the question of technology and to the structure of demand for manufactures. As has been pointed out, industry is developing largely by assimilating the technology (product and production technology) generated in the centres. Meanwhile, demand is structured in line with this technology and the patterns of consumption in the centres, especially demand by the medium and high social strata. In this way, the structure of manufacturing output in the region tends to resemble that of the advanced countries, but encounters difficulties in more complex branches; and examples of backwardness occur even in the largest, industrialized countries.

Of course, industrial progress does not take place in the same way in all countries. An initial distinction arises between the large countries, where progress in manufacturing has achieved higher levels and a greater degree of diversification and technological development; the medium-sized countries, in an intermediate position, encountering difficulties at earlier stages than the large countries in sustaining industrial progress in the face of the challenge of penetrating the field of more complex products; and the small countries, generally on the threshold of industrialization. Thus there is a certain correlation, at the regional level, between levels of income, market size and industrialization, though with conspicuous exceptions, largely related to the natural resource endowment and the capacity to import founded on exports of primary products.

Nevertheless, the industrial patterns of the three types of country are only partly linked with the different phases which the industrialization process would appear to have reached. This is so because some local influences, such as the size of the market and the degree of richness or diversity of the natural resource endowment, lead to different forms of industrialization, just as they lead to the establishment of substantially different international trade arrangements, particularly with regard to exports of manufactures.

/Many of

Many of the differences which may be observed between the models of industrialization and trade in the region are related to the countries' capacity to assimilate the technological developments required by specific scales of production and to secure critical masses of capital, public or private, necessary to sustain the development of basic or advanced industries, frequently with stronger dynamic effects. In the centres, foreign trade organized on the basis of the multilateral negotiations in GATT and integration schemes lessens these restrictions and contributes to the achievement or maintenance of generally more similar levels. In Latin America and the Caribbean, exports of manufactures still represent a relatively small proportion of output, and formal or informal integration is still not achieving very significant results in evening out differences between the countries. Sometimes certain differences even tend to become accentuated.

At the same time, general economic and socio-political characteristics are of great influence in the industrial patterns of the countries of Latin America and the Caribbean. It should be remembered, firstly, that the evolution of the manufacturing sector is determined to a substantial degree by domestic demand, and that in the region industry barely represents a quarter of the income generated by the economy as a whole, fluctuating, depending on the country, between 10% and 30%. Secondly, industrial development is a means rather than an end subject to fundamental economic and socio-political choices. Thus, for example, when one speaks of guiding industry towards meeting the basic needs of the population, it is difficult to imagine that the idea can fully materialize from within the sector on the basis of independent actions. At best, industry would go along with the general policies affecting direct and indirect demand from the social strata it is wished to benefit, adapting its structure of production and, where necessary, it costs and prices.

Nevertheless, neither the impact of external elements nor that of internal elements can lead one to think that the industrial sector lacks areas with regard to which the specific policy of manufacturing development is important. On the contrary, the history of Latin American industry, as well as current plans or programmes, show many striking examples of specific policies designed to fulfil certain objectives, although it is not a question of

/modifying the

modifying the patterns originating from outside or the domestic economic and socio-political influences. This is the case, for example, of the development of many basic industries, and the efforts currently being made by various countries to develop industries producing capital goods. One may add, of course, all the many ways and means mobilized to support or promote industrialization in a general or selective manner, or to achieve certain specific objectives, such as exporting, decentralization, improving the structure of production, increasing efficiency, and so on.

In this way the factors determining the industrial future may be grouped on three main levels: that of external relations in all their aspects, including the forms - whether selective or not - of assimilation to the patterns of the advanced countries; the level of general economic and socio-political influences; and the level of the spheres of action of specific industrial policy. Of course, it is obvious that these three levels are not completely independent, so that the different combinations of possibilities would not be infinite, at least in their essential features.

2. Basic orientations of official industrial policy

(a) The strategy of industrialization: global forms

The medium-term industrial perspective falls within the framework of the policy for manufacturing development proposed by the governments of the region. This policy is clarified by the official statements made in the present decade, according to which, and generally, the strategy of industrialization in the broadest sense of the term would continue. Within this process, in 1974 55/ the governments agreed on special efforts, including international co-operation, to increase the relative share of the region in world industry, with the target of 13.5% by the end of the century (4.8% in 1977), the most obvious implication of which was an acceleration of the pace of industrial growth.

55/ See the report of the Latin American Conference on Industrialization (ST/CEPAL/Conf.51/L.5/Rev.1).

/Other attitudes

Other attitudes of the governments in international meetings point in the same direction. Thus, for example, initiatives aimed at securing better terms of access for the region's manufactures to other markets, especially those of the developed market economies, are being agreed and supported with increasing emphasis. The link with the strategy of industrialization is very clear, since such concerns originate in the problems inherent in the asymmetry of trade, bearing in mind the ability acquired by industry to compete in various areas, and expectations of exporting manufactures founded on domestic industrialization efforts.

In this way, at the eighteenth session of CEPAL (La Paz, Bolivia, April 1979) the governments laid down that "a vigorous impulse must be given to industrial development, using methods in keeping with the conditions existing in different countries and regional integration programmes, and the production of consumer goods, essential intermediate products and capital goods must be encouraged in order to ensure sustained economic growth and increase exports of manufactures within a new structure of international trade".56/

In this way, and within the provisions of the New Economic Order, these international positions can be interpreted as a reflection of governments' declarations on the subject of development and industrialization.

Examination of these governmental proposals 57/ brings out not only the intention of speeding up economic growth, but that of strengthening the process of industrialization as one of the imperatives of economic and social development. In fact, the simple arithmetical mean rate (which is a better measure of the intentions of the countries, regardless of their size) of annual increase in the gross domestic product which may be deduced from these proposals is 7.2%, in contrast to the 4.9% of the past 30 years;58/ the industrial targets raise manufacturing growth to 9.3% a year, or 50% faster than the long-term historical trends. Meanwhile, the relative industrialization efforts (the industrialization process) also tend to be increased by the plans and programmes reviewed (see table 35).

56/ Resolution 386 (XVIII), section B, paragraph (d).

57/ Principally 25 development plans and programmes formulated during the 1970s.

58/ The weighted average was 5.5%.

/Table 35

Table 35

LATIN AMERICA: PROJECTIONS IN DEVELOPMENT PROGRAMMES DRAWN UP DURING THE 1970s

(Simple arithmetical means)

	Countries				Latin America
	Large a/	Medium-sized b/	CACM c/	Other small d/	
Projections in the programmes (generally medium terms of 4 or 5 years)					
Growth in total GDP (% a year)	8.5	6.7	7.0	7.3	7.2
Growth in industrial GDP (% a year)	10.2	9.7	9.8	8.7	9.3
Industrialization process e/	1.2	1.4	1.4	1.2	1.3
Long-term historical trends (1950-1978)					
Growth in GDP	5.5	4.3	5.4	4.7	4.9
Growth in industrial GDP	6.6	5.4	7.4	5.6	6.1
Industrialization process	1.2	1.3	1.4	1.2	1.2

Source: CEPAL, on the basis of information from 25 official plans and programmes drawn up by governments in the region during the 1970s.

a/ Five programmes from Argentina, Brazil and Mexico.

b/ Six programmes from Chile, Peru, Uruguay and Venezuela.

c/ Five programmes from Costa Rica, El Salvador, Honduras and Nicaragua.

d/ Nine programmes from Bolivia, the Dominican Republic, Ecuador, Haiti, Panama and Paraguay.

e/ Industrialization process: industrial GDP growth rate divided by overall GDP growth rate.

/These figures

These figures, though for the most part referring to medium-term targets or projections, illustrate the widespread maintenance of the strategy of industrialization. In addition, an examination by country re-emphasizes significant differences between the patterns proposed in the large, medium-sized and small countries. In the large countries, which have progressed further along the path of industrialization, schemes of development tend to take shape in which the industrial dynamic is relatively lower (compared with overall economic growth) on average than in the rest of the regions. In contrast, in the group of medium-sized countries the programmes accentuate the industrialization process as a part of the development strategy, endeavouring to cope with the difficulties which in previous years prevented greater and more rapid progress in the development of manufacturing.

The programmes of the Central American Common Market countries, in turn, reaffirm the previous industrial efforts, though, as in all cases, with faster general rates of growth. The same is found in the plans of the remaining small countries, although these are engaged in rather more moderate industrialization processes.

The figures referred to generally correspond to targets and projections which contrast with the direction and pace of previous economic development. They also represent the development policy of the decade which is coming to an end and, as far as industrialization is concerned, the technical and political requirements laid down by the governments in the light of local circumstances, characteristics, potentialities and constraints. In this way, they provide valuable background for consideration of prospects in the longer-term future.

(b) Objectives of industrial policy

Governments proposals for industrialization have gone substantially beyond expressing figures. There are even some cases in which figures are left aside, or merely expressed in rather vague orders of magnitude, with emphasis instead on substantive issues related to essential aspects of the industrial patterns on the basis of objectives designed to correct or adapt the patterns to the imperatives of the new phases of economic and social development.

/The official

The official proposals point in these directions when they set out the purposes and define the policies aimed at improving the technological interrelationships of the processes of production, to the benefit of the internal dynamic, employment and the balance of payments; strengthening the linkages between industry and other sectors, such as agriculture and mining, for purposes related to the exploitation of the country's natural resources and raw materials; improving production efficiency to benefit consumers and increase competitiveness; increasing exports of manufactures, in an endeavour to resolve the problems inherent in the asymmetric nature of trade and deal with the constraints imposed by limited national markets; stimulating the technological development required for more advanced industrial stages; decentralizing industry and promoting development in backward areas; and so on.

Consideration of such proposals brings out, in most cases, some marked differences with the industrial policy proposals made in previous periods, and also some similarities. The most striking difference lies in the fact that the policy is now principally aimed at more specific problems and objectives, such as those referred to, passing beyond the previous stages when promotion was directed to the whole of industry, very often with little or no discrimination.

Nevertheless, industrialization, as an objective derived from the imperatives of development, has for a long time been the subject of deliberate decisions in the vast majority of countries - in some cases since the 1930s, more generally since the Second World War, and even more starting in the 1950s. Although in general terms the industrial development policy was less selective, cases were fairly frequently encountered, especially among the large and medium-sized countries, where priorities were adopted on specific industries, especially in the field of basic industries. This position spread within the region, and even encompassed various integration agreements involving small countries. The range of industries covered is now expanding to include, apart

/from basic

from basic industries, some "traditional" industries (for example, in agro-industry and food) and many more advanced industries in the field of intermediate and capital manufactures.59/

(c) Structural improvements

Of course, the emphasis that the various official proposals place on the different branches of industries varies with national characteristics and objectives and with the stages of manufacturing development. In general, the large and most industrialized countries emphasize the technologically more developed intermediate and capital goods with regard to which they lag behind, including basic inputs. In the medium-sized countries the approaches are usually more diverse, though they frequently feature aims designed to diversify the structure of industry, following the path trodden by the large countries, seeking positions similar to those of the advanced countries. However, more recent proposals reveal a growing interest in making use in industry of comparative advantages based on natural resources. Meanwhile, the small countries are following the same trend, but are more influenced by the constraints imposed on them by the size of the domestic market. In this way, a general conclusion might be that the latter group of countries place more emphasis on light industry and particularly, in a number of cases, on agro-industry, and the consolidation of the initial stages of industrial development, where necessary on the base of subcontracting activities. However, like the medium-sized countries, they often seek to follow the more advanced patterns, though over a longer period of time, generally linked with the progress of the integration schemes.

59/ Analysis of a sample of 2,448 industrial projects in 11 countries of Latin America shows a high concentration of public and mixed projects in the food industry (23% and 13% respectively), chemicals and petroleum products (30% and 42%), basic metals and engineering (31% and 32%). According to this study, official priority for direct participation in industrialization would seem to focus on these three industrial branches (84% of public projects and 87% of mixed projects). The same branches - if engineering is excluded - are precisely those where public and mixed investment represents a larger share of the totals in the sample: food, 35%; chemicals and petroleum products, 41%; and basic metals, 38% (Javier Villanueva, Perspectivas del desarrollo industrial latinoamericano: una completa transformación, BID/INTAL, serie Estudios Básicos N° 3).

/It is

It is noteworthy that in the proposals reviewed the rates of expected or planned industrial growth in the medium term are similar in the large, medium-sized and small countries, at about 9% or 10% a year (see table 1), in circumstances where there are significant differences in the average rates of growth in the various groups of industries. Declarations by the large countries reflect high priority on basic industries (chemicals and petroleum products), metal products, machinery and equipment, and this is reflected in growth rates of about 15% a year, while the planned rate for the growth of traditional industries (producing non-durable consumer goods) is barely 5% a year. In the medium-sized countries, this latter rate rises to 7%, since light industry is emphasized somewhat more. Nevertheless, in these countries priority is given to basic industries (including, in this case, those based on forestry and non-metallic minerals), in line with the growth rates of 12% to 19% a year, and less to metal products, machinery and equipment, for which the projected rate of growth is close to the industrial average of 10%. At the same time, it is necessary to bear in mind that the programmes for these industries within the Andean Group might perhaps have modified the national proposals, increasing the dynamic of the medium-sized countries which signed the agreement. In the small countries the industrial structure sketched out in the plans and programmes is similar to that of the medium-sized countries, with the difference that much greater demands are placed on the metal products, machinery and equipment industries, with a growth rate of 15% a year, more than 50% more than the industrial average and similar to that in the large countries.

The discrepancy between the latter two groups of countries might be related to the difficulties encountered by the medium-sized countries in their progress in developing such industries, in view of the constraints imposed on them by the domestic market after a certain level, having passed which they would have to embark on areas which are more complex and more demanding in terms of scale, and related, among other things, to the improvement of input-output linkages and the manufacture of capital goods. As far as the small countries are concerned, the fact that the metal products, machinery and equipment industry is currently in its infancy would seem to offer opportunities for faster expansion, still within less complex areas.

/In this

In this way, then, such projections or targets are linked to the strategies differentiated in preceding paragraphs, determined in large part by the current phases of the industrialization processes, the restrictions which appear during industrial advance and the manufacturing policy orientations which reflect local characteristics, such as those related to natural resources.

The improvement of the structure of industry, especially in the sense of the vertical linkages of the production processes, is a general objective, although by no means one which corresponds to a position of self-sufficiency. Rather, one may note a certain intention to specialize, even on the basis of the background and purposes of the various integration agreements and processes. Obviously, this tendency is clearer in the policies drawn up in the medium-sized and small countries, whose market constraints are more serious.

Nevertheless, there is also, especially in the more recent proposals, a marked tendency to exploit comparative advantages, although in a sense much broader than that of purely static formulations of these advantages; they encompass both comparative advantages related to natural resources and labour 60/ and the dynamic advantages generated by the process of industrialization itself and the concomitant technological development (acquired comparative advantages, which are very important, particularly in the case of nascent industries). The relative emphasis between these advantages varies with the countries; thus in the official proposals of the large countries, more explicit emphasis on acquired advantages may perhaps be noted.

In this way, the proposals examined give the impression that the industrial policy of the countries of the region set out during the present decade would tend, in its implications for the future, to differentiate increasingly between the models of the various types of country, as outlined in the long-term analyses in preceding chapters. In this regard, attention should be drawn to the fact that the official plans and programmes have made progress in rationalizing and improving the models which, in the past, arose first and

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60/ The study by J. Villanueva referred to above, concerning an analysis of 2,448 industrial projects in 11 countries of the region, concludes that most investment for export falls on already existing traditional activities which make use of natural resources and are more labour-intensive. Notable among these projects are those in the areas of processed foods, textiles and hides and skins.

/foremost as

foremost as a result of local constraints and not so much because of preconceived ideas. Perhaps this may be interpreted as the aim of improving efficiency in these differentiated forms of industrialization until they produce maximum economic and social benefits.

From this viewpoint, particularly marked changes in the various differentiated models of industrialization in the different types of countries would not appear in the very near future. However, it might be supposed that the efforts aimed at sharp rationalization would assist in making the trends in economic growth more similar and perhaps in reducing some of the growing differences between the levels of development in the countries.

(d) Export of manufactures

The substantial improvement of industrial policy also includes other aspects highlighted in recent proposals, which help to outline the near future of industry in the region.

Among the most significant objectives of these proposals was the export of manufactures, an area featuring one of the most marked similarities among the countries of the region, including the oil producers and those with the greatest capacity to import. This is principally due to the expected demands on the capacity to import necessary to sustain more rapid economic growth rates. It also reflects, especially with regard to various medium-sized and small countries, the need to achieve appropriate scales for more advanced stages of industrial development. Here the integration processes assume importance, although there is a noteworthy intention to make use of world markets, and especially the largest ones, such as those of the developed market economies. Hence the widespread concern at protectionism in those economies expressed in the proposals referred to and in all the international economic forums gathering together the countries of Latin America and the Caribbean.

The background to the targets set out in this regard may be found in the rapid growth in exports of manufactures which began a little before the middle of the last decade, and was maintained almost continuously up to 1973, when a boom cycle in the world economy ended, at the time of the rise in the prices of petroleum. It is also based on recognition that the previous process of industrialization generated many comparative advantages, which might be better reflected in international markets if the conditions of trade were liberalized.

/Another foundation

Another foundation lies in the expansion of the range of measures and administrative apparatus to support and promote exports of manufactures achieved in many countries, not to mention the commercial experience gained in the past 15 years.

Reference should also be made to the importance attached in many plans, programmes and other proposals to the policy concerning transnational corporations designed, among other things, to encourage them to increase their willingness to export. It is true that this willingness has increased (sometimes as a result of specific government demands), and is spreading in the regional market and extending to other markets in various forms, including intra-industry trade, trade within the transnationals or subcontracting. Nevertheless, many governments consider it very important to induce these corporations to grant exports more than the usual marginal status (which contrasts with the considerable propensity to import capital goods, inputs and technology,61/ in addition to the repatriation of high profit margins, which generally characterizes the transnationals). These positions also appear in international forums when, within the context of the ideas on the New Economic Order, the need arises to establish codes of conduct applicable to the transnational corporations and to transfers of technology. In addition, since in some cases, and increasingly widely, the transnationals are tending to adapt to the policies firmly applied by the countries hosting their subsidiaries, the same purpose is served by official positions designed to prompt more positive attitudes by the governments of the central countries when such corporations show interest in exploiting advantages in the region to export to their markets.

(e) Efficiency in production

Another widespread concern is related to improvement of efficiency in production, especially when there are objectives relating to exporting or to the spread of industrial development to intermediate and capital goods, where inefficiency may harm development and the investment which sustains it. In

61/ As regards the tendency of the transnational corporations to import, it is perhaps worthwhile pointing out that, to some extent, it is related to the presence of such enterprises in more advanced industries. In this way, it might be supposed that national enterprises in similar industries would perhaps show a similar tendency.

/the same

the same way, this objective is sometimes set out with considerable emphasis in the official plans and programmes, on the basis of social aims related to the domestic market for consumer manufactures, the incorporation in it of the little-involved strata and the meeting of basic needs.

This concern for efficiency is manifesting itself in various ways and with increasing emphasis in the industrial policy proposals. Apart from specific programmes of support and technical assistance specifically aimed at medium-sized and small industry, targets may frequently be found relating to quality control and standardization, as well as to facilities for re-equipment and modernization, and the acquisition of proper infrastructure and the necessary basic services. In a broader sense, the goals of technological development are set out in relation to aspects linked to efficiency, including the choice and appropriateness of technology, aside from more ambitious purposes which appear principally but not exclusively in the proposals of the larger, industrialized countries. These objectives relating to efficiency are often associated with policies aimed at strengthening national firms and promoting their expansion, if necessary by means of mergers and the formation of conglomerates so that they acquire sufficient scale to compete with the subsidiaries of transnationals. At the same time, governments in various countries are tending to establish machinery to improve domestic competition and also competition with outside. These proposals should, of course, be added to long-established patterns linked to the integration agreements which, by means of complementarity and market liberalization, would make it possible to achieve, among other things, more efficient production scales and operations. In the same way, and also linked to this background, there are policies laid down to exploit the advantages of certain activities, whether absolute, relative or comparative, natural or acquired, for purposes linked to external trade and the benefits of specialization.

At this point a differentiation arises once again between the statements of the larger countries and those of the majority. Although the former usually define medium-term industrial priorities, these priorities involve greater interest in correcting deficiencies in the structure of production or solving specific problems. This applies, for example, to certain intermediate and capital goods, and also sometimes to traditional industries, such as the food

/industries. In

industries. In these countries a tendency appears towards substantial industrial diversification, although sometimes aims of a degree of specialization are suggested, for example when one observes import policy and tariff revisions. In the medium-sized and small countries one finds schemes for greater specialization, although they do not always appear in a very explicit form in the proposals published officially.

(f) Decentralization

Another aim which increasingly appears in the statements is that of industrial decentralization, frequently related to stimulation of the development of relatively backward areas and the aim of making more comprehensive use of the natural resources base. One may observe, especially in larger countries and some medium-sized countries, a clear emphasis on the need to relieve the pressure on the congested industrial centres, which may possibly be suffering from external diseconomies and negative effects on the urban environment.

The policy lines which are usually proposed with regard to these objectives aim at the promotion of regional development through programmes which include the establishment of infrastructure and transport services, the formation of "poles" of development, the granting of incentives for firms which establish themselves in specific areas and, in addition, restrictions on investment in the congested industrial centres. Sometimes measures are adopted to encourage small and medium-sized industry, when it meets conditions for development in areas remote from the major centres of consumption. In some cases this type of objective is included among the criteria for the location of major industries, bearing in mind the capacity to generate external economies and complementarity.

(g) Employment

The objectives mentioned are, perhaps, the most notable and widespread in the official declarations of industrial policies. At least it is they which point to the shaping of the industrial picture which the governments have been planning. However, it is necessary to add other aspects which complement this view and contribute to clarifying the differentiations which distinguish the statements of the countries in line with local circumstances and influences.

/Outstanding among

Outstanding among these aspects is industrial employment, although it is not always a subject of explicit declarations, perhaps because of the experience that the manufacturing sector, in relation to total employment, has not absorbed a large amount of labour in the region. However, a number of countries have drawn up industrial policies for the training of industrial manpower at various levels. Moreover, policies have been drawn up to increase the sector's capacity to absorb manpower, especially in the countries where open or concealed unemployment is greatest. To that end the programmes provide for a variety of mechanisms, including support for small firms, the generation of vertical links between large and small firms (for example, in forms of subcontracting which may even involve craftsmen), the development of handicrafts, the choice and appropriateness of technology, employment subsidies, shifting the financial of social security to general revenue, the development of backward areas through industries linked to local natural resources and raw materials, and so on. In a number of cases, following noteworthy precedents, maquila and other forms of subcontracting are proposed at the international level, in activities which are highly labour-intensive.

(h) Policy on firms

Another aspect which deserves mention relates to policy on firms, since it contains differentiations which are usually linked to political positions and general economic strategies. With notable exceptions, industrial policy places great stress on incentives and support for private firms, with various degrees of selectivity and specificity in the instruments used. However, marked discrepancies emerge with regard to public and foreign enterprises. Some statements emphasize the role of the State enterprise, and reserve specific areas for it - especially in basic industry - or open to it any area where problems arise (or adopt both measures); others limit it to the traditional areas of public services, and in exceptional cases accept its participation in industry or other sectors. As regards foreign enterprises, some recent proposals impose restrictions on them in favour of local firms, provide for their replacement or nationalization, or subject them to rules of greater or lesser strictness, including rules guiding them towards specific areas. Others attempt to attract them more liberally or to exempt them from restrictive rules, though sometimes guiding them towards specific objectives by indirect means.

/Most of

Most of the industrial policies attempt to promote and assist medium-sized and small firms in areas where they are appropriate, while some favour large private firms which would be capable of competing with foreign firms, as was indicated in connexion with the objectives of efficiency. Finally, various types of enterprise (public, State, private, foreign, small and craftsmen's) are usually oriented towards different areas, on the basis of selective and specific policies.

At the same time, these proposals find their inspiration in some tendencies which have been observed for a long time, as is analysed in another part of this study (chapter II). These tendencies relate to the structure of enterprises - notable in regard to which are the relative process of concentration and loss of ground of small industry; the presence of the public enterprise, especially in basic industry and above all in the large and medium-sized countries; and the growing presence of the transnational corporations, which tends to make itself felt principally in important more advanced manufacturing branches. In this way the proposals referred to deal, on the one hand, with strengthening the national enterprise, and on the other with guiding or regulating, in various forms and to various extents, the activities of the transnational corporations. All this might be interpreted as a widespread intention to guide the phenomenon of change in the structure and nature of the agents of industrialization and adapt it to the imperatives of development. As was mentioned above, this issue also has certain international connotations, when the governments take an interest in the codes of conduct to be applied to the transnational enterprises, or when they agree on uniform treatment, as in the case of the Andean Group.

(i) Implementation of industrial policy

Finally, it should be added that the proposals referred to have been accompanied by significant refinements and extensions of the instruments and administrative apparatus designed to support and promote the achievements of the objectives of industrial policy. Furthermore, it is easy to see how the planning or programming systems have become more secure, on the basis of the extension of the relevant disciplines, the experience of previous decades and the widespread conviction that manufacturing development should be rooted in the context of economic and social development. Such efforts may be observed in the large number of plans and programmes announced during the present decade,

/the results

the results of which go beyond material evaluations, since they are notable for increasingly complete knowledge of the problems, constraints, means, objectives and mechanisms of industrialization. This fact, which is apparent in the political, academic, technical, administrative and managerial spheres, is in line with the progress in clarification of the suitable strategies and with the growing thoroughness of the natural discussions which arise concerning these strategies.

In this way, one may suppose that in the future there will be increasing possibilities of giving substance to the industrial schemes and patterns which have been taking shape as the result of official declarations on manufacturing development. However, it is necessary to bear in mind that, in the same way that internal and external circumstances had an influence in the past, various sources of uncertainty may be discerned in the future.

3. Industrial patterns over a longer perspective

(a) Industrialization and development

Industrialization is a prerequisite for economic and social development, especially when there is an aspiration to rapid rates of economic growth compatible with the aims of solving, within a reasonable period, the most serious and persistent social problems facing most of the countries of the region. Moreover, regional experience in recent decades - and that of other areas and countries of the world - shows that objectives of this type call for deliberate national action not only to speed up growth, but also to correct the distortions which may be observed in the social field and in the economic and industrial structure. Similarly, in view of the roles of the region in the world economy and its marked economic and technological backwardness compared with the developed economies, the search for suitable forms of international co-operation not only with those economies but with other areas of the world, and especially with the countries of this region, is indispensable.

Such action and co-operation take on their true meaning when one defines the implicit patterns in the assessments of quantitative long-term requirements, and considers the variety of the countries in the region, also over a longer perspective, within which it is necessary to assume special efforts aimed at reducing the disparities which tend to separate them.

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It is therefore necessary to define more precisely the role which should be played by industry with regard to the imperatives of development, together with the means which would be used to fulfil this role over the long term.

In short, the role expected of industry, as may be inferred from the analyses in the preceding chapters and the official statements referred to above, may be described on the basis of two complementary and mutually interrelated approaches. One corresponds to the internal dynamic of economic growth, which it is expected that the sector will increase its power to stimulate, while the other regards industry as a vehicle for the harnessing of technical progress.

The manufacturing sector appears as a dynamic agent in various ways. One involves the functional interrelationships between income and demand, so that a greater rate of growth will imply clear stimulating effects extended throughout the economic sphere. At the same time, industrialization contributes to the spread of technical progress, either by means of demands on suppliers, by the demonstration effect or as a result of the fact that it requires and generates human skills in the labour, technical, entrepreneurial and administrative fields. In this way the effects involved tend to spread and go beyond the limits of the sector itself, under a process of increasingly important self-stimulation and retro-stimulation as industry develops towards more complex areas.

This mechanism involves certain structural requirements of industrial production, which are linked precisely to progress towards more complex and technically more advanced activities. However, the dynamic power of the sector is felt most in the interrelationships of the processes of production, either within the sector itself or in its links with the other sectors. In this regard, there stand out once again the structural implications of the input-output linkages involving final, intermediate and capital manufactures, i.e., the vertical diversification of production.

The other approach, as has already been said, regards industry as a vehicle for the harnessing of technical progress, including such advances as promote or generate its development, and the introduction of new activities and more advanced production techniques. In a still broader, though indirect way, it acts in the same direction when exports contribute to expanding the

/capacity to

capacity to import consumer, intermediate and capital goods which incorporate technology and which introduce it to the countries. For that reason it is necessary to bear in mind the characteristics of the external sector and external trade in particular, whose asymmetry, together with other factors, such as the low level of dynamism of primary exports - except in exceptional cases and periods - is reflected in a constraint on the harnessing of technical progress and, as a result, on economic growth and development, sometimes palliated by means of borrowing, on which limits may also be assumed. In this way the export of manufactures and the consequent trend towards positions of intra-sectoral specialization acquires strategic significance.

Thus this approach once again has structural repercussions, especially because the vigour of demand for the various manufactures is different in the domestic and external markets, as is shown by the low income elasticity of traditional manufactures and high income elasticity of chemical and engineering products. The result is a resurgence of ideas on industrial diversification designed to produce consumer, intermediate and capital manufactures of different degrees of technological complexity and vigour of domestic and external demand.

Of course, these proposals by no means represent positions of self-sufficiency. On the contrary, they are associated with views on specialization, whereby specific chains of production can ensure dynamism within schemes of more symmetrical trade and technological development applied to specific priority fields. They also imply conceptions which contrast with other forms of industrialization, in specific situations and phases of the process or responding to particular short-term or medium-term objectives.

(b) Differences in circumstances

In fact, these approaches should not be regarded as linked to an industrial strategy suitable for all cases and occasions. However, in the long term it is necessary to bear in mind that possibilities of drawing benefit from technical progress are associated with these approaches and the rates in international trade.

/Nevertheless, it

Nevertheless, it should be remembered in this regard that industrial imperatives change in importance in specific circumstances. One of them corresponds to the capacity to import based on a particularly well exploited natural resource, which would enable the population to enjoy high levels of income and secure the most advanced consumer products - a situation which, in the region, would particularly favour the countries which export oil or energy, although in most of them one may infer from the official proposals the need to provide for more thoroughgoing forms of development. Another factor relates to cases where the social objective of involving all social strata in development is not regarded as of vital importance, so that exports of primary products would retain their capacity to sustain or increase the enjoyment of technical progress by restricted social strata, in inequitable schemes of distribution. However, a basis of primary exports would not be incompatible with fairer structures of distribution (if the appropriate policies are adopted), though distribution would probably be achieved with restrained consumption and subject to moderate - or fluctuating and vulnerable - economic growth patterns.

To the above may be added possible considerations concerning "styles" of development, which may guide the economy and social values along paths different from those transmitted by the patterns of the developed countries, i.e., away from the environment in which the economy and society of the countries of the region fall.

Bearing in mind the statements of official policy in recent years, it is very unlikely that delinking schemes will arise in most cases, even though positions of some selectivity vis-à-vis foreign patterns may be maintained. There may possibly be a tendency towards an enhanced role in the international economy by means of trade, financing, transnational corporations and other elements which in some cases make up the concept of internationalization of the economy and industry.

However, this assumption cannot be considered to provide grounds for relative passivity towards the challenges of development and industrialization. This is so because the structural repercussions for industry of the maintenance of more rapid rates of economic growth and the solution of external imbalance and the external bottleneck will require particularly intense efforts. Furthermore, it is necessary to bear in mind that the requirements as regards

/exports of

exports of manufactures go beyond the structural requirements and, in turn, involve very serious efforts in the field of technology, which go beyond the harnessing and internalization of progress generated outside, and are aimed at forming local skills for the generation of growth and innovation.

The region, and some countries in particular, would seem to be prepared to carry out such efforts on the basis of the industrial development already achieved, which includes technologically highly complex activities and also significant progress in exports of manufactures with a growing degree of complexity and even in some cases external sales of technology. However, it is necessary to bear in mind the experience that efforts of this type have usually encountered difficulties whose result has been the adaptation of industrial policy to domestic and external restrictions, rather than a desire to correct the structural tendencies.

The problem occurs in almost all the countries of the region and is more serious in the medium-sized and small countries, where one of the most serious constraints is market size. For this reason the integration agreements have attached particular importance to ways of achieving the development of basic industries and the most advanced industries, in a way designed to correct the structural deficiencies. It is sufficient to mention the LAFTA instrument on complementarity agreements, the CACM "integration industries" and the "programming areas" of the Andean Group, where priority has been assigned at the highest political level to the programmes in the petrochemicals, motor vehicles and metal products, machinery and equipment sector.62/

(c) Export of manufactures

However, the main difficulties arise on the technological side, since in addition to raising the degree of processing of exports of basic products and engaging in the export of manufactures already produced, the imperatives relating to exports call for the production of technologically more complex goods, in areas where technical progress is most rapid and intensive and where international markets behaviour is for that very reason most dynamic. These areas principally cover the metal products, machinery and equipment industries

62/ Meeting of Presidents of the member countries of the Andean Group, Cartagena, Colombia, May 1979.

/and certain

and certain sectors of the chemical industries - precisely areas where some of the major cases of backwardness in the region's manufacturing may be observed.

However, it is not absolutely vital that this should be the only way of participating more actively in trade in manufactures on the export side. Thus the prospects indicated usually include traditional manufactures, which might materialize in so far as local comparative advantages are combined with the opening up of other markets, including the large markets of the developed economies. These prospects are usually linked with the industrial restructuring of these economies, by means of which more attention would be placed on the advanced industries so that the traditional manufactures of the periphery would improve access to these markets under a system of mutual economic and commercial stimulation.

In addition, and under a similar scheme, ideas are being raised concerning industrial redeployment, whereby some industries in the centres which are internationally less competitive and have advantages in the periphery would cope with increases in world demand for their products from locations in the developing countries.

Undoubtedly the region offers advantages in both fields which, to a certain extent, have tended and are tending to materialize. On the one hand, it possesses a huge light industry sector well established in many countries, and on the other a substantial and diversified natural resource endowment which, moreover, already supports a wide range of basic industries, especially in the large and medium-sized countries. Furthermore, it possesses abundant manpower and the initial advantage provided by the lower, but not necessarily excessively low, wage levels, which must be regarded from a dynamic viewpoint.

It is clear that these advantages are worthy of note and that, as regards exports, they have a place in the context of ideas on the New Economic Order, in so far as these ideas influence policy, international trade and especially the protectionist attitude of the centres.

However, the vigour of these exports, based on the rate of growth in demand would have limitations since, firstly, traditional manufactures are generally characterized by low income elasticities of demand, and secondly, the expectations of economic growth in the centres are not very optimistic.

/At all

At all events, it is once again clear that it is necessary in the long term to emphasize intra-sectoral specialization and settle industry into the right structure, since otherwise the present asymmetry and tendency towards external imbalance might merely be transferred to another level, but with consequences similar to those which are now hampering the economic and social development of the region.

It is also necessary to mention that although traditional manufactures still predominate in exports to the centres, exports of machinery and transport material have been rather more dynamic, a fact which coincides with the activities of the transnationals and with the recognition that protectionism in the centres applies more severely to the former.63/ In this regard and with a view to the future, it is useful to remember that protectionism, extended to a broader range of manufactures including machinery and transport equipment, might perhaps harm trade between the centres themselves, since a substantial proportion of their trade in industrial products covers precisely these products (about 50% in the middle of the present decade),64/ trade in which, both among them and world-wide, is very dynamic. In the same way it should be pointed out that the restrictions imposed by the industrialized countries on imports from the developing countries tend to reduce the growth in the purchasing power of the latter, so that the former harm themselves because they weaken their exports of intermediate and capital goods, which the developing countries need to increase their economic growth.

It should be remembered (see chapter I) that the region's exports of manufactures to the centres continue to be marginal: at the middle of the present decade they represented barely 1.2% of the total value of external purchases of industrial products made by those countries from all parts of the world (2.2% of chemical products; 1.6% of "other manufactures", which include traditional manufactures; and 0.5% of machinery and transport equipment). They do not even possess much weight in imports of manufactures by those economies as a whole from the rest of the world: 13.8%. In view of this marginal status one might think that moderate increases in the degree of openness of these

63/ See "Economic and social development and the external economic relations of Latin America", Vol. II (E/CEPAL/1061/Add.1).

64/ UNCTAD, Handbook of International Trade and Development Statistics, 1977.

/markets might

markets might have significant effects on the balance on trade in manufactures with them. However, specifically as regards traditional and some other manufactures, probably including electronic manufactures, it is necessary to bear in mind in the long term the competitive strategy of other developing areas, apart from the low income elasticity of the simplest products, in systems of moderate economic growth and slow population growth.

In the face of the demands which development places on industry, emphasis is being laid on intra-regional co-operation and trade, as well as on links with the rest of the third world. In this regard it should be borne in mind that in recent years the region's most dynamic exports in both directions have also been exports of machinery and transport equipment. In addition, it is necessary to maintain this trend to the benefit of structural improvement, also remembering that the traditional industries are more developed and widespread in the region and in the rest of the third world. It is also useful to reflect that the industrial maturity of some countries of the region offers prospects for continued enhancement of their role as technological intermediaries with the markets of the remaining developing regions, while their own capacity or independence in this field increases as the result of notable successes and progress achieved recently.

In these ways, everything appears to indicate that in the long term industry in the region would have to strive to achieve more advanced patterns of development combining structural improvement, technological development, widening of the range of comparative advantages, in the dynamic sense of the concept, and the exporting strategy. These proposals, moreover, highlight the paths of progress suggested by the considerations concerning access for traditional manufactures to the developed markets, and the ideas on redeployment, as well as the various forms of industrialization adapted to special situations or objectives, within the framework of strategies to reach more advanced stages.

(d) Differences between countries and importance of the market

The situation would appear fairly clear as far as the region is concerned. However, some difficulties arise when an attempt is made to distinguish among the various countries, although the concept of a path to be followed, or of transitory situations, assists in clarifying them. Otherwise, this concept is

/implicit in

implicit in the official statements for the medium term and is reflected in the industrial evolution of the countries of the region, in the same way as it finds outstanding examples in other areas of the world.

At the same time, it is necessary to examine some fundamental differentiations which would seem to be transmitted to the long term, including those related to the size of the countries' domestic markets, which is associated with the financial capacity to obtain critical masses of capital, the richness and diversity of natural resources, and the ability to absorb technical progress and develop local skills.

For some time now the Latin American diagnosis has emphasized the restrictions imposed on industrial development by the limited size of national markets, especially for those manufacturing activities which impose requirements of scale. As has already been said, this gave rise to some of the conceptual foundations which supported the ideas on the integration processes in regional and subregional contexts. From this viewpoint, therefore, integration continues to be a strategic aspect of industrialization, and is more urgent the smaller the national market.

In more general terms, it should be mentioned that many industries become profitable as the market expands. Thus it may be said that the inclusion of large middle strata in consumption of manufactures is one of the factors which stimulated regional industrialization, beyond the mere effect of the increase in demand for the products of already existing industries. Within the same context fall the prospects related to the involvement of the social strata with a low level of participation, which, because they represent a substantial proportion of the population in most of the countries, offer significant potential for industrial development. This is, of course, additional to the ethical considerations which stand at the root of, for example, distributive policies and those designed to solve the serious problems of poverty.

This involvement can not only enable certain more advanced industries to expand, but can also invigorate industries regarded as not having very dynamic growth prospects, as is asserted with regard to those traditional industries manufacturing non-durable consumer goods whose expansion is not expected to create serious technical difficulties in most of the countries. From these viewpoints, then, failure to involve these social strata might be interpreted as a constraint on manufacturing development.

/Of course,

Of course, in this regard this is a general development problem, which might come to differentiate industrial patterns and progress between countries with socio-economic boundaries of differing extent and severity, provided of course that policies aimed at dealing with the problem are adopted.

In addition to this, and to the effects of growth in income, the maintenance of industrial growth and the continuing expansion of scales of production also have implications for the extension of markets towards the exterior. And it is precisely here that some of the most notable differentiation may be described, towards the long term, between countries with domestic markets of different sizes. The large countries would certainly be able to continue the process of industrial diversification and structural improvement without encountering an excessively urgent need to extend the market by means of foreign trade. Nevertheless, apart from the fact that it is easy to imagine limits in the fairly near future, depending on the country and industry, the need to stimulate exports of manufactures under schemes for intra-sectoral specialization falls among the reasons referred to in preceding paragraphs when mention was made of the harnessing of technical progress. In view of the experience of recent years it might therefore be thought that the penetration of world markets, with items of growing technological complexity, might have occurred up to a point against the background of the exploitation of the possibilities offered by the domestic markets and their extension to the regional sphere.

For the medium-sized countries, going beyond national limits is even more necessary in order to move upwards towards advanced industrialization. A greater degree of specialization would be a more important element, like the bases of wider markets, in schemes for integration and co-operation between two countries or groups of countries.

The small countries would be faced with a similar prospect in their expectations of passing beyond the initial stages of industrialization, for which purpose integration and co-operation would become still more urgent. Thus, for example, in order not to replicate the centre-periphery patterns at the regional level, the relatively less developed countries enjoy possibilities of improving or establishing guidelines for integration and selective co-operation with large and medium-sized countries, as exemplified by LAFTA and the Andean Group.

/In this

In this way, long-term structural dissimilarities would take shape, according to patterns related to differing degrees of industrialization and specialization, with equally different orientations; different paths would be defined, on the basis of the initial points of the present situation; and the integration and co-operation schemes would operate in various fields and forms.

Of course, intra-regional co-operation goes further than offering a market to serve as a support for industrial progress. Multinational ventures in building up critical masses of capital, as well as in organizing co-operation for technological development, appear among the most salient aspects. Mention might also be made of collective positions in international negotiations, especially with the developed countries, relating for example to protectionism or to expectations of drawing greater benefit from natural resources through the export of primary and basic products in general with a higher degree of processing. This applies to the whole region, but it is probably more important for most of the medium-sized and small countries, where industrial specialization is rooted in, or can develop through greater links with, traditional manufactures and the advantages supported by the natural resource endowment, while they progress towards more advanced positions and acquire a different structure of comparative advantages.

4. Long-term quantitative evaluations

(a) Latin America in world scenarios

The Latin American diagnosis assigns industry a crucial role vis-à-vis the fundamental problems of economic and social development, above all in the longer-range prospective analyses. This diagnosis extends, moreover, to the third world sphere when, for example, in the International Development Strategy 65/ for the 1970s minimum targets for economic growth of 6% per year and 8% for industry were established; or when in Lima 66/ it was agreed that

65/ Resolution 2626 (XXV), October 1970.

66/ Report of the Second General Conference of the United Nations Industrial Development Organization (op. cit.).

/industry in

industry in the developing regions should, by the year 2000, contribute 25% of world manufacturing output (13.5% for Latin America),67/ compared with the present figure of about 9% (about 5% for Latin America and the Caribbean).

The background to proposals and agreements such as these is well known and need not be reviewed here. It is, however, necessary to emphasize that they are very far from discovering the paradigm of development in the manufacturing sector, since under-development implies many other aspects of backwardness, not least in agriculture, to deal only with production activities.

Moreover, declarations of this kind are usually discussed within the framework of the concepts concerning styles of development, which are used at various levels and with various meanings. Notable in the region are social motivations oriented towards considerations relating to unemployment, poverty, marginality and the inequitable distribution of income and wealth, as problems which are very widespread and persistent or which are being solved excessively slowly. Of course, these are also issues such as consumerism, the external bottleneck, the deterioration of the environment and the exhaustion of non-renewable natural resources.

As far as social issues are concerned, the predominant style in the region is usually linked to inadequate rates of economic growth or the fact that the style would necessitate a high rate of sustained economic growth, difficult to achieve, in order, for example, to resolve the employment problem in a reasonable period.

In this connexion, it is common practice to conjure with rates of increase in the gross domestic product which are not only much higher than the trend rates over the past 30 years (5.5% per year, in contrast with an estimated required rate of about 8%), but also go beyond the targets of the International Development Strategy in the decade now ending (6%) and frequently also beyond

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67/ Report of the Latin American Conference on Industrialization, op. cit. At this Conference the governments agreed on a declaration set out in the document Industrialization in Latin America: principles and plan of action, in paragraph 3 of which they declared that they were "resolved ... to raise /the/ share /in world industrial production/ to at least 13.5% by the year 2000".

/those specified

those specified in some of the government proposals described above (it should be remembered that the average of the target rates is only 7.2%).

However, any of these scenarios, whether or not within the prevailing style, assume an industrializing model, in other words a significant process of industrialization with rates of growth in manufacturing significantly higher than in the total product. In this way, the rate of industrial growth would be above the long-term historical rate (6.7%), and higher than 7% or 10% a year (9.3% in the official statements).

If the evaluation is carried out with reference to the targets laid down at the Second Conference of UNIDO - that regional industry should constitute 13.5% of world industry by the year 2000 - it is necessary to postulate hypotheses or scenarios concerning world economic expansion and industrialization. Generally, in view of the trends of recent decades (see chapter I), there would seem to be a certain inclination to assume that world industry would not grow so much faster than the economy as a whole as in the past. Of course, this hypothesis is based on the assumption that the more mature developed economies have already crossed the threshold of industrialization and that their evolution will follow the tendency for the manufacturing sector to maintain or reduce its relative share which has been observed since the middle of the past decade in the developed market economies generally. In order to round off the scenario it is, however, necessary to estimate growth in the world economy, and in this regard the positions are not usually particularly optimistic. The reasons lie, principally, in the future of the developed economies, bearing in mind the events of 1973-1974 and the persistence, for structural reasons, of slower economic rates than before.

In this way, some prospective analyses project world economic growth at about 3.5% or 5% a year, with industrial growth at similar levels, slightly higher or slightly lower. In these scenarios, the targets laid down at the Second Conference of UNIDO would imply growth in regional industry of over 8% a year, perhaps up to 10% (as against 6.7% over the last 30 years).

/(b) Three

(b) Three Latin American scenarios

Table 36 shows the overall results of the analysis of three scenarios for the development of Latin America (19 countries) over the period 1980-2000. These results show that the process of industrialization, in the context of rising economic growth rates, would remain at moderate relative levels, as a result of other sectoral requirements, such as those from agriculture. However, the process remains at trend levels and at relatively high rates of industrial growth, if they are compared with those of the long-term past.

Scenario A is based on the trends, adjusted to take account of a series of changes under way in the region. These changes would seem to guarantee a slight increase in the rates of expansion in the economy and in industry, within perfectly feasible margins of financing and investment capacity.

Scenario B, based on moderate acceleration, assumes additional efforts, which are regarded as possible because the region has given evidence, especially in boom periods, of a relatively extraordinary capacity to promote a process of substantial investment.

Scenario C assumes rather high levels of average economic and industrial growth between 1980 and 2000 in pursuit of the Lima target as it affects the region (13.5% of world industry). It is also assumed that by 1990 the region might encounter conditions for accelerated growth.

There are some problems common to all three scenarios. Notable among them are those relating to employment and the external sector.

In none of them does it appear that industry would play a very important direct role as a sector absorbing labour, although it would seem to have an indirect effect because of its role in stimulating the economy. In the three scenarios industrial employment amounts to about 20% of total employment. However, the degree of industrialization would rise above 32% or 35%, leading to a rise in manufacturing productivity, which would separate it from the average for the economy, probably even doubling it in some cases. This fact assumes significant technological changes generally in line with other objectives of industrial development. However, it raises serious problems as regards the implementation of policies for the improvement of income distribution.

/Table 36

Table 36

LATIN AMERICA (19 COUNTRIES): INDUSTRIALIZATION TO THE YEAR 2000

(Illustrative projections)

	Trends	Scenarios to the year 2000 a/		
	1970-1980	A	B	C
Annual growth rates (cumulative annual percentage rates)				
Population	2.7	2.6	2.6	2.6
Gross domestic product b/	6.0	6.4	7.5	8.3
GDP manufacturing industry	7.0	7.4	8.8	9.8
Industrialization process c/	1.17	1.16	1.17	1.18
Degree of industrialization d/				
1980		26.7	26.7	26.7
2000		32.3	34.0	35.5

Source: CEPAL.

Scenario A: Trends.

Scenario B: Moderate acceleration in economic growth.

Scenario C: Increasing acceleration towards the Lima target.

a/ The growth rates correspond to the averages which emerge for the period 1980/2000.

b/ On the basis of dollar values at 1970 prices, at the exchange rate for imports.

c/ Industrial GDP growth rate divided by overall GDP growth rate.

d/ Share of the manufacturing product in the total.

/Concerning the

Concerning the external sector, the importance of a very vigorous increase in exports of manufactures once again stands out, since the slowness with which exports of primary products grow may mean that the external bottleneck will prevent the achievement of the growth rates analysed for the purposes of illustration. Moreover, in view of the uncertainties concerning other markets, the preliminary analyses lead to increasing emphasis on intra-regional trade.

By the year 2000, under the scenarios used, the per capita product would reach levels fluctuating around US$ 2,500 to US$ 3,500 (about US$ 1,000 at present, at 1970 prices), so that the projected degrees of industrialization would more or less correspond to those of the regions which are currently raising their per capita product to figures of these magnitudes. It might therefore be concluded that this fact would also have to be reflected in the structural patterns, especially bearing in mind the reasoning in the previous section. In this way, the more advanced industries, such as chemicals, metal products, machinery and equipment, would continue to be outstandingly dynamic. The latter, for example, would raise their share from 26% to above 30%, perhaps even reaching 40%. However, policies designed to achieve involvement by the socio-economic strata which play a minor role in the market for manufactures might ultimately help to modify the tendency of traditional industries to continue to lose their relative share so rapidly.

However, even if this was the case, the industries mentioned above would have to develop so as to ensure the structural improvements mentioned in preceding paragraphs, as well as the regional capacity to compete in the most dynamic flows of international trade. A scheme such as this, of course, could materialize only in the context of rapid rates of economic growth.