

## ECONOMIC AND SOCIAL COUNCIL



GENERAL
E/CN.12/830
13 March 1969
ENGLISH
ORIGINAL: SPANISH

ECONOMIC COMMISSION FOR LATIN AMERICA

Thirteenth session Lima, Peru, 14-23 April 1969

THE UNITED NATIONS SECOND DEVELOPMENT DECADE.

3

Industrial development in Latin America

All the second of the second o

## TABLE OF CONTENTS

we the second		Page
INTRODUCCION	•4 g • 4 • 6 4 • 6 • 6 • 6 • 6 • 6 • 6 • 6 •	1
	HE PRESENT STAGE OF INDUSTRIAL DEVELOPMENT N LATIN AMERICA	4
· · 2 3 4	Scale of the manufacturing sector and features of its development	4 12 35 43 51
	UTLINE DESCRIPTION OF LATIN AMERICA'S AJOR INDUSTRIAL DEVELOPMENT PROBLEMS	63
1 2	an industrialized society	65
3	industrial promotion and allocation of resources	68
4	acceleration of development	74
·	techniques	79
6	efficiency and productivity of industrial activities	89
	technical modernization requirements Problems relating to regional	93
	integration and progressive opening of markets to external competition	101
	HE INSTRUMENTS OF INDUSTRIAL DEVELOPMENT OLICY	112
1 2 3 4 5	• Technology, efficiency and productivity. • Institutional framework and financing • • • • • • • • • • • • • • • • • • •	112 119 126 134
	market	139

	,			Page
· · · Cı		F AN INDUSTRIAL DEVELO		153
•	the mod	es for the promotion of dernization of techniq thening of Latin Ameri	ues and the	:
	entrep 2. Region	reneurial capacity al integration policy governing exports of	* * * * * * * * * * * * * * * * * * * *	153 163
• -	to the	world market		171
•	And the state of t		•	
· · ·	· · · · · · · · · · · · · · · · · · ·			
•				
	2 <sup>4</sup> - 24, 24		e, e	•
		the same of the same		
	4 1 2 4 4 1 4 4 4 1 L			
	. 3s		,	
		•		
	100	oren olean kun allen 1965 (h. 1965). 1 - Bureto Hornord, erre eta eta eta eta eta eta eta eta eta et		`
. * 				
· •	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	<ul> <li>Yes also in the second of the s</li></ul>		
ţ, -		3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3		
• •				
; ·			•	,
,	en e			

#### INTRODUCTION

The aim in preparing this document has been to examine the difficulties encountered in Latin American industrial development with a view to defining policies, or rather economic policy guidelines, to help to strengthen and speed up its progress in the future. All this, moreover, as part of a more general aim of supplying the necessary background information which, together with other factors, could lead to an economic and social development strategy for Latin America within the United Nations programme for the second Development Decade.

Since all aspects of industrial development are very closely linked, and it is difficult to consider the performance of the manufacturing sector separately from that of other sectors of economic activity, it was thought necessary to give a brief summary of the fundamental problems and obstacles in order to make it easier to analyse the industrial development policies that have led to the current situation and problems of industry, and to evaluate these policies as instruments for the attainment of basic economic and social development objectives during the coming decade.

An analysis that is confined to the industrial sector is of necessity incomplete and provisional. Because all aspects of industry are so closely linked, this analysis can only be the first in a series of steps through which the assumptions and conclusions relating to the industrial sector will have to be gradually and reciprocally brought into line with the assumptions and conclusions emerging from analyses of other aspects of economic activity which are of particular relevance to the functioning of the industrial sector, for example, the performance of the agricultural sector, income distribution, or the anticipated trends of the external sector. This analysis of industry is therefore provisional, in the sense that adjustments may be necessary to make it compatible with the conclusions to be reached on the other components of a strategy for economic and social development.

Some word may be appropriate here on the approach to industry in Latin America adopted in this document. It is designed to encourage the development of new and more effective lines of action in future industrial policy or in the over-all economic policies which most influence the /direction of

direction of industrial development. It necessarily had to be based on a critical appraisal of past experience showing the limitations and disadvantages of some of the policies that have been followed. However, the object of the exercise has not been to present a detailed account of the historical experience of industrial development as such in Latin America, or of industrialization policies either individually or within the historical context in which they were conceived and applied. If the approach had been to evaluate how far the policies adopted were justifiable in the historical circumstances at the time, then the conclusions of this study might well have been very different in many cases, and the picture given would probably have been less critical and pessimistic. But this is not what the secretariat had in mind. An attempt has been made to draw a picture - of necessity brief and confined to the factors that seem to constituted common denominator among many countries in the region of the current situation and the recent past, and to evaluate this situation and the industrial policies underlying it in terms of  ${ t \underline{future}}$ requirements for the development of Latin America. This critical summary was not designed as an analysis of a particular historical experience - nor would it be valid if that were its aim; its only justification is the desire to fulfil the purposes outlined above.

It is not possible to design an industrial development policy in isolation, without regard for the major currents of economic and social development. Since the present document is preliminary and tentative in nature, owing to the complexity of the subject and the extremely limited amount of time available for its preparation, it has not even been possible to attempt to place it within a broader view of the prospects and policies for the economic and social development of Latin America. It therefore simply gives a rough outline of some approaches to industrial policy which it would seem appropriate to bear in mind within the context of an economic and social strategy, without claiming to provide a comprehensive and coherent picture of industrial policy or to bring the individual policies suggested into line with the more general framework of the policies that will have to be worked out subsequently. In addition, since the aims of this document are linked with the second Development Decade, the policy

measures or guideliness suggested have been chosen in the basis of their feasibility during the Decade. It goes without saying that the suggestions made are still cuite general in nature, owing to the great diversity present in the Latin American countries in terms of capacity for, and conceptions and levels of industrial development.

This outline of the salient characteristics of industrial development in Latin America is therefore intended simply as a basis for discussion of the future action that will be required.

#### Chapter I

#### THE PRESENT STAGE OF INDUSTRIAL DEVELOPMENT IN LATIN AMERICA

# 1. Scale of the manufacturing sector and features of its development

If the trends of the last few years are maintained, it is estimated that, by 1970, the Latin American manufacturing product will have reached a value of close to 25,500 million dollars at 1960 prices. The fact that it will constitute just under 24 per cent of the region's total gross product is a measure of its importance as a sector of production. —

As the industrial product represented 22 per cent of the total product in 1960 and ten years earlier had amounted to only 19 per cent, it is clear that manufacturing industry has been developing more vigorously than the rest of the regional economy during the last twenty years.

Although its development has taken place in the context of slow growth for the product as a whole, its trend contrasts favourably with that of agriculture, whose contribution to the product dwindled from over 24 per cent in 1950 to about 22 per cent in 1960 and is unlikely to be more than 20 per cent by 1970.

The industrialization coefficient for the region as a whole has varied widely from one country to another; it is now 11 to 12 per cent in Bolivia and Haiti and 34 per cent in Argentina (see table 1).

The internal structure of Latin American industry has changed radically in the course of its development over the last two decades. To give one example, the contribution of the different branches of industry to the value of aggregate industrial production has varied enormously.

The figures given in this section are only rough estimates and in some cases differ from those presented in such documents as "América Latina y el Simposio Internacional sobre Desarrollo Industrial" (E/CN.12/L.34), presented at the International Symposium on Industrial Development, Athens, 29 November - 10 December 1967. The differences are due to variations in the exchange rates at which national currencies have been converted into dollars.

Table 1 LATIN AMERICA: SHARE OF THE INDUSTRIAL PRODUCT IN THE TOTAL CROSS DOMESTIC PRODUCT, 1950, 1960, 1967

(Percentages)

Country		1950	1960	1967
Argentina		29•4	32,2	34.1
Bolivia		11.9	10.2	10.8
Braz <b>i</b> l	<i>•</i>	15.1	21.4	21.6
Dhile		21,2	23.7	25.8
Colombia		14,2	17.0	18,2
losta Rica		9•5	11.1	14.0
Cominican Republic		11.9	14.0	14.6
Soundor	ere e	15.7	15.6	16.8
a Salvador		12.9	13.6	17.2
iuatemala		10.1	10.5	1209
iaiti		11.1	12.2	11.8
londuras	•	8•4	12.1	14.8
lexi co		19•9	23.3	25,6
licaragua .		964	11,1	12.3
anama		8.2	12.8	16.0
eraguay	*	19.4	17•3	18,2
eru		14.1	16.7	19.3
ruguay		17•3	21,2	21.0
enezuela		8.0	10.6	13.4
Total a/	٨.	18-7	21.7	23.1

Source: ECLA, on the basis of country data.

a/ Excluding Cuba, Guyana, and Trinidad and Tobago for want of information.

As table 2 indicates, the food, beverages and tobacco industries, which represented 36 per cent of the total in 1950, saw their share shrink to 29 per cent in 1960, and it will probably drop to 26 per cent by 1970. The experience of the textile, footwear and clothing industries has been similar, if on a lesser scale: from 23 per cent in 1950 their share decreased to 17 per cent in 1960 and is expected to be roughly 13 per cent in 1970. The chemical and petroleum products industries, on the other hand, expanded their share from 10 per cent to 14 per cent between 1950 and 1960, and it is estimated that, by 1970, it will be over 17 per cent, while the contribution of the metal-transforming industries rose from 9 to 18 per cent during the same ten-year period and is expected to climb to 21 per cent over the next ten years. Basic metals and pulp and paper have also achieved increases, but on a rather more restrained scale.

Thus the industries known as the traditional industries have been rapidly declining in importance, while the dynamic industries have been coming to the fore, although their rate of growth has been slowing down gradually over the last few years.

As far as magnitude is concerned at least, this line of development is basically determined by the trend of events in the more industrially advanced countries of the region because of the weight they carry in the total figures. 2/

The food, beverages, textiles and clothing industries, which are long-established industries in those countries, have lately been developing slowly in keeping with the rate of population growth, encouraged, in some cases, by external demand for traditional products or the introduction of new products. The basic metal industries, which were founded more recently, although even so they date back to 1950 or even earlier, have followed a trend that has been closer to that of the total product after their initial upsurge, while the metal-cransforming industries made tremendous strides during the nineteen-fifties with the inauguration of the motor-vehicle industry and began to slow down in the sixties as the first flood of requirements was satisfied:

<sup>2/</sup> Particularly Argentina, Brazil and Mexico, which account for about 80 per cent of the industrial product.

Table 2

LATIN AMERICA: STRUCTURE OF THE GROSS VALUE OF INDUSTRIAL PRODUCTION
BY GROUPS OF INDUSTRIES, 1950, 1960 AND 1967

Industrial group		1950	1960	1968 2/	
20	Food	27.8	22.8	20.5	
21~22	Beverages and tobacco	8.1	<sub>.</sub> 6 <sub>0</sub> 1	5.8	
3	Textiles	16.6	12.2	10.0	
i <b>t</b>	Footwear and clothing	6.6	5.0	3.7	
5~26	Wood and furniture	3.4	3.0	2.7	
7 .	Paper and paper products	2° <sup>1</sup> 4	205	3.4	
l-32	Chemicals and petroleum products	10.2	13.9	1607	
3	Non-metallic minerals	4.5	9∙8	4.0	
<b>,</b> '	Basic metals	4.3	5•9	6.6	
- <u>3</u> 8	Metal transforming	9.4	18.6	20.7	
3-30 39	Printing, rubber and miscellaneous	6.7	6.2	5•9	
	<u>Total</u>	100±0	100.0	100.0	

Source: ECLA, on the basis of country data.

a/ Estimates.

/Trends in

Trends in the other Latin American countries have been similar up to a point, but with different proportions and timing. For instance, in the intermediate-level countries, the basic metal trades surged forward in the nineteen-fifties, and so did the metal-transforming industries in the next decade, both from very low starting-points. In the relatively less developed countries, on the other hand, new additions are still being made to the production capacity of the traditional industries while the dynamic industries have become bogged down in the early stages of development. In 1960, the food, beverages and tobacco industries were still accounting for about 45 per cent of the industrial product and textiles and clothing manufacture for 23 per cent, but these preportions are expected to decrease to 40 and 20 per cent respectively by 1970. On the other hand, the basic metal trades are vartually non-existent and the metal-transforming industries, which represented 2 per cent of the industrial product in 1960, may have crept up to about 4 per cent by 1970.

Side by side with these trends, traditional artisan-type activities have been outsed by factory industry of a more modern kind, and their displacement is speeded up as the country reaches more advanced stages of development. For instance, in the last group of countries, artisan-type activities represent about 40 per cent of value added in industry and large-scale industry 29 per cent, whereas the equivalent figures are 24 and 53 per cent in the more developed countries of the region.

Even if the size of the domestic market in those countries is regarded as having been a decisive factor in that respect, the same situation has obviously occurred in each of the Latin American countries, however small, under the pressure of technological progress.

The replacement of crafts by factory-type industry has been a very gradual process, however, even in the more developed countries of the region, which indicates that there are serious barriers to the introduction and widespread adoption of modern forms of production in each country.

<sup>3/</sup> Bolivia, Ecuador, Paraguay and the Central American countries, in particular.

Establishments emplying from 1 to 4 persons are of the artisan type, while those with 100 or more are classified as large-scale factory industry.

Despite the difficulties, Latin American industry has developed sufficiently to supply a growing proportion of regional demand for manufactures. Nevertheless, there is still a wide range of products, whose importance varies in accordance with the branches of industry concerned, which are not produced in Latin American insufficient quantity or with the right level of quality.

Imports of manufactures to supplement domestic production have risen to a value of nearly 10,000 million dollars in the last few years, with about 52 per cent corresponding to capital goods, 30 per cent to intermediate goods and the balance of 18 per cent to consumer goods.

Exports of manufactures from the region have been growing rapidly, but have not yet become really significant, since, if manufactures with a very low degree of processing (roasted coffee, washed wool and so forth) are excluded, the remainder will be worth less than 1,000 million dollars a year. Of these exports, 85 per cent represent transactions in intra-regional trade, and only 15 per cent go to foreign markets.

The foregoing figures indicate that the per capita supply of manufactures in Latin America 6/ must have increased from some 200 dollars in 1950 to 270 dollars in 1960, and may roughly be expected to be just over 300 dollars by 1970.

Although the last figure is a good deal higher than for Africa and Asia, it is far below the present level of the developed countries in Europe or of North America. Any attempt to close the gap between Latin America and those countries would necessitate enormous efforts on a far greater scale than any made in the last twenty years or so.

Excluding petroleum products as well. The figures are again approximate and, in this case, have the additional drawback of a lack of clarity in the difinitions of manufactures and semi-manufactures, especially when the industrial process and the primary activity are inextricably mixed in the same unit of production (metal smelting, coffee roasting, etc.).

<sup>6/</sup> Calculated by adding the gross value of industrial production to the value of imports and then subracting the value of exports.

The development of the industrial sector and its trend of internal structural change have, in fact, been flagging gradually but unmistakably in the last few years. The growth rate of the gross industrial product for the region, which, in 1950-60, was as much as 6.3 per cent, dropped to 5.4 per cent between 1960 and 1968 (see table 3).

Table 3

LATIN AMERICA: GROWTH RATES OF THE TOTAL GROSS DOMESTIC PRODUCT AND OF THE INDUSTRIAL PRODUCT, 1940-68

(Annual cumulative rates between end years)

Period	Growth rate of total product	Growth rate of industrial product	Ratio of (1) to (2)		
.,	(1)	(2)			
1940-50	5.0	. 6.8	1.4		
1950-60	4.7	6.3	1.3		
1960-68 ª/	4.5	5.4	1.2		

Source: ECLA.

a/ Based on preliminary estimates for 1968.

Although the total product is also expanding less rapidly the fact that the growth elasticity of industry has dropped from 1.4 in the early nineteen-fifties to less than 1.2 towards the end of the sixties shows that industry has ceased to be a driving force in the Latin American economy; instead, it has simply become one of a number of sectors with no special power to galvanize the others. Moreover, the branches of industry whose development has slowed down most appreciably in the last ten years have been precisely those which had the highest growth rates at the beginning of the period - basic metals, metal transforming and even chemicals. This explains the increasingly sluggish tempo of change in the internal structure of the different branches of industry.

These developments are given added significance by the fact that the regional industrial product has lost ground in the world total (dropping from 3.1 per cent in 1950 to about 2.5 per cent in 1968). This is all the more serious in that Latin America's share of the world population increased from 6.5 to 7.5 per cent during the same period.

Within the gradual devitalization of irdustrial growth as a whole, there are, however, quite important differences between the individual countries. In Colombia, Peru, and, above all, Mexico, the industrialization coefficient has been rising fairly steadily, and the same may be said of the Central American countries and Venezuela, although the levels attained are still very low. In Argentina, Brazil, Chile and Uruguay, on the other hand, the coefficient in 1968 was only a little higher than at some points in the nineteen-fifties, and in Bolivia, Haiti and Paraguay it has fallen below its level during that decade. It is the sum total of these trends that determines the general evolution of Latin America.

This loss of momentum is of course partly due to some factors that have been consistently blocking the general development of the region, such as unfavourable terms of trade, little demand in the agricultural sector, shortcomings in the transport and electric energy systems, and specific factors in individual countries, such as natural resources and past history.

It has also been influenced by some of the characteristics of the industrial sector itself which, to one degree or another, exist in all the Latin American countries and must be modified if the region is to make greater progress in the next decade.

It would be useful therefore to spend some time on examining the factors which seem to have had the greatest impact on the development of the sector over the last few decades, namely the production methods

State of the state

 $(x_k)\mapsto (F_k, -1)$ 

/used, their

No attempt is made here to describe groups of countries. The intention is simply to indicate the different growth trends of national industry, which are dictated by a variety of situations as regards both relative degrees of development and other aspects, some of which will be analysed in subsequent chapters.

used, their efficiency and productivity, the institutional framework of industry, sources and modes of financing, utilization of manpower and, lastly, the integration process and competition in world markets.

### 2. Technology, efficiency and productivity

The impetus built up by industry in the early stages of import substitution derived from the wide field covered by this process and the fact that the industries that were being created were able to supply requirements that already existed. As import substitution went deeper in that respect, its possibilities were increasingly limited by the fact that the manufacturing processes involved became more and more complex while, as soon as the pent-up demand had been satisfied, the market for the new products moulded itself to the needs arising out of the countries! own growth. In other words, import substitution became more directly dependent on the general process of economic growth. While these observations trace the past course of industry in Latin America and explain its decline, especially in the last few years, they also indicate an area for which a number of economic policy measures should be framed, particularly in relation to the technical and operational level of manufacturing. In fact, the obstacles currently faced by industry in its attempt to introduce new products, such as the small size of the consumer market, which make it difficult to speed up the rate of industrial growth, are closely linked with certain technical characteristics of the production process. Technology or the level of technological progress achieved are a decisive factor in determining whether industry is to forge ahead with import substitution and improve its competitive status by enhacing its efficiency and productivity. As import substitution was carried on under heavy tariff protection with the aim of settling balance-of-payments problems rather than of laying the foundation for a healthy and vigorous industrial sector, it is readily understood why technical problems should not have occupied the key position they have today. This change of attitude is not due to the disappearance of external sector problems. On the contrary, these problems have increased in that the structure of imports is now less elastic for the economy in general and for industry in particular, as a result of the very process of substitution, which brings new pressures

/to bear

to bear on imports of raw materials and intermediate goods essential for industry, and which, by altering the structure of imports, adds, in both absolute and relative terms, to the proportion of capital goods, formerly the least affected by import substitution. This trend of events is precisely one which can be dealt with only through a more technical approach to economic policy-making, since the products that must now be replaced have more need of economies of scale and require production methods for which fuller and more sophisticated technical know-how is necessary. Moreover, external savings play a major part in the manufacture of such products, and the achievement of acceptable levels of efficiency and productivity by industry largely depends on its technological resources.

This does not mean, however, that the industrial park created in those circumstances was neutral in its effects, or that the industrial growth which took place under the spur of import substitution merely helped to solve balance-of-payments problems. There was much that was positive in that stage, which may be described as the germination of industrial activity. What must be stressed, however, is the need for industry to concentrate on consolidating the process of substitution during its next phase of growth, and to do so, it must have access to modern technology and achieve higher levels of efficiency and productivity.

These considerations, which are inspired by a general review of the situation in Latin America, are applicable to every country, although their implications and significance vary from one to another and even among the different branches of industry. Very broadly, they are more germane to the countries where industry has advanced the furthest and has a more diversified structure. Their relevance to the individual branches of industry is greatest for those in which the introduction or efficient development of such factors in terms of investment and production costs is more dependent on economies of scale, or in which technological innovations are continually being made. Cases in point are many capital and durable consumer goods industries, those producing certain basic goods and intermediate chemical products, the steel and pulp and paper industries, and the manufacture of semi-processed non-ferrous metal products, particularly copper and aluminium.

/This chapter

This chapter does not pretend to deal exhaustively with the subject. It is simply concerned with identifying the broad areas in which remedial action should be taken or incentives offered, in order to establish certain criteria and guidelines for determining the policy instruments to be used.

#### (a) Technology

Technological problems crop up in existing industry and are bound to arise in the future in the manufacture of products that are technically more complex. Although the nature of these problems is the same in both cases in that they relate to common aspects such as the sound selection of production processes, the assimilation and transfer of know-how, the engineering and design of processes and equipment, and technological research, and the ultimate objective of technology, which is to deploy the resources available in the most efficient way in order to produce at the lowest possible cost, is also the same, there is an important distinction between existing and future industry which must be pointed out. It is that the technological decisions to be taken for the future cannot be dissociated from present conditions in that the increase in the technical content of future manufactures must be accompanied by a corresponding rise in the technological level of industry. It is impossible to obtain really good results from technology if it is superimposed on existing characteristics and conditions. Manufacturing can of course be started in a vacuum, but such enclaves are the exception to the rule and can contribute little to the spread of know-how and the general improvement of the level of technology. Consequently, it is essential to analyse and understand the present situation if sound policies are to be formulated for the future.

One of the characteristics of industry in Latin America has been its close dependence on the industrialized countries in questions of technology. In view of reasons for the transfer of know-how and the inability of the existing institutional set-up to offer industry any real incentive, it is fairly clear why there were remarkable differences in the kind of technology adopted, not only between countries and branches of industry, but also within one and the same branch. In Latin America,

/a whole

a whole host of branches of industry that are more relatively developed and have shown greater initiative in incorporating new techniques co-exist with others that are backward and seemingly indifferent to the need to improve their production technology while enterprises that are technically more efficient and up-to-date are found side by side in the same branch of activity, with others that are antiquated in both senses. Generally speaking, and with all due reservations, it may be argued that the technological differences are closely associated with the amount of market competition, the age of the industry, its sources of financing and their connexions with foreign firms, the nature of the enterprises and their business flair. Differences of the same kind also exist between countries, for the same reasons. Furthermore, the technological level of even the best-endowed firms is generally lower than in the industrialized countries.

It is difficult to assess the true scope and significance of these events owing to the fragmentary nature of the data available, and the situation has to be reconstructed from a few statistics and indirect sources of information. Table 4 brings together data on the supply of energy per person employed in selected Latin American and other countries, as a guide in interpreting the differences in production methods. This table shows, in the first place, that there is little energy available for each employed person in the different branches of Latin American industry. An exception is Venezuela, probably because its industrial sector was established more recently and the level of wages is higher than elsewhere in the region. Major differences between the Latin American and the more industrialized countries are to be found in the industries producing rubber, wood and cork, chemical products, pulp and paper, petroleum products, non-metallic minerals, basic metals, machinery, including electrical equipment, and transport equipment. In these, the degree of mechanization is nearly five times lower than in the United States and somewhat lower than in Italy, the other non-Latin-American country included in the table. The disparities are less marked in the other cases, but are nevertheless significant, and high indexes are found in some instances, e.g., the textile and clothing industry in Mexico, which has a higher index than its counterpart in the United States, and the beverages and leather industries in Colombia, which are on much the same level as the United States in that respect. However, the quality and comparability of the data preclude a more exhaustive analysis, and the only conclusions

Table 4

INSTALLED CAPACITY PER EMPLOYED PERSON, IN INDUSTRY

(Horsepower)

	* · • · · · ·	Vene-	Bra	zil	Color	nb1a	Chile	Mexico	Paragu	ау	United States	Ita-
	Industry	zuela 1961	1950	1960	1953	1960	1957	1960	1953	1963	1963	' <b>ly</b> 1961
20	Food	6,35	2.78	3.93	2.59	3-17	1.07	4.29	2.03	2.47	6.87	7.69
21	Beverages	5.51	1.89	2.58	3.14	5.02	2.31	2.43	1.87	1.24	5.68	3.9
22	Tobacco	2,50	0.57	0.96	0.33	0.86	0.46	1.40	0.25	0.52	3.83	1.2
23	Textiles	3.14	1.54	2,28	2.57	2.81	0.94	6.18	1.79	4.27	5.92	2.95
24	Clothing	0.88	0.37	0.53	0.32	0.35	0.39	1.14	0.33	0.11	0.32	0.66
25	Wood and cork	1.66	2.83	3-59	3.56	3-45	2.43	2.13	3.13	4.09	13.21	5.50
26	Furniture, etc.	4.35	1.06	1.59	1.10	1.15	0.57	1.09	2.00	1.09	3.36	3.80
27	Pulp and paper	9.83	6.40	7.11	4.63	4.07	3.16	6.86	3.00	4.81	21.21	10.6
28	Printing, etc.	2.07	₽•68	0.90	0.96	0.89	1.07	3.62	0.50	0.38	1.91	1.68
29	Leather	5•93	1.89	2.63	3.08	4.07	0.67	2.56	1.20	1.28	3.83	4.02
30	Rubber	8.18	4.10	5-48	3.71	4.38	2.05	5.12	1.00	2.09	10.03	6°21
31	Chemical products	8.57	2-47		1.80	1.64	1.70	2.95	1.86	1.82	22.33	10.5
32	Petroleum products	0.01	2.47	4.71	2.63	27.47	 -	19.90	<b>~</b> '	2.67	64.38	18.9i
33	Non-metallic minerals	11.24	1.31	2.52	3.90	5.52	3-54	3-79	2.63	0.96	15.18	6.3
34	Basic metals	80.80	3-42		3-77	12.00	· • · · · ·	3.31	* <u>-</u> 1.35	i.85	29.55	14.76
35	Metal products	5-14	3.42	3.45	2.47	2.23	1.40	1.55	1.50	2.27	7.00	3.30
36	Machinery	9.19	1.52	2.29	2.00	2.58	0.84	3.61	` s)"(,;;; <b>~</b>	1.40	4.56	3.7
7	Electrical equipment	2.48	1.77	1.99	0.65	1.21	2.00	0.98	·	0.42	4.56	2.00
38	Transport equipment	2.34	2.16	1.62	1.86	1.26	<u>s</u> /	0.98	0.70	0.81	6.63	5.50
39	Miscellaneous	1.81	0.81	1.19	1.03	1.29	0.70	0.57	1.00	0.61	3.39	2.36
	<u>Total</u>		2-01	2.89	2.21	2.94	· ·		1.86	1.80	9.31	•

Sources: United States and Italy: The growth of world industry 1953-1965 - National tables (United Nations publication, Sales No: 67.XVII.10).

a/ Included in machinery.

Latin America: ECLA, on the basis of national censuses.

Table 5

AVERAGE ANNUAL INCREASE IN INSTALLED CAOACITY PER EMPLOYED PERSON

(Percentages)

I	ndus triy	Argentina 1950-1957	Brazil 1950—1960	Colombia 1953-1960	Paragua <b>y</b> 1955—1963	United States 1954—1963	Italy 1951-196
20	Food	-1.1	3•5	2.9	2•5	402	1.1
21	Beverages	1.5	5.2	6.9	-5.0	9.4	2•2
22	Tobacco	6 <sub>8</sub> 8	5°4	7.0	9.6	4.0	15.6
23	Textiles	2.8	4.0	1.3	11.5	3 <b>-</b> 3	3•9
24	Clothing	3°7	3.7	1.3	-12,8	•	3∙5
25	Weed and cork	0.5	2•4	<b>-0.5</b>	3.4	5•8	2 • 2
26	Furniture, etc.	-0.7	4.2	0.7	<b>~7∘3</b>	2.1	2.8
27	Pulp and Paper	8.8	1.1	-1.9	6.1	3.4	4.3
28	Printing, etc.	<b>-0.1</b>	2.8	-1.1	<b>-9.</b> 4	. 5∙2	. 3.4
29	Leather	6.1	3.4	4.1	0.8	-2.6	0.6
30	Rubber	4.8	2.9	204	9•7	3∙3	2•3
31	Ohemicals products	0.7)	6.7	-1-3	0+3	2+2	5.1
32	Petroleum products	0,5	<b>36</b> /	. 40.0	**	6.8	11.6
33	Non-metallic minerls	8.0	6.8	5.1	-11.8	5.0	<b>4.</b> #
<del>3</del> 4	Basis metalc	4.4 )	0.1	18.0	,÷ ,√ <del>•</del> ,	<b>3.4</b> (2)	4.0
35	Metal priducts	2•2		-1.4	5•3	<b>3•9</b>	1.8
36	Machinery	3.2	4.2	3•7	- <b>→</b> →	1.6	2.8
37	Electrical equipment	0.5	1.2	9*3	,•• )	SELEN.	0.6
8	Transport equipment	-0.4	-2.8	<b>-5•5</b>	1.8	2•5	5•3
39	Miscellaneous	6.2	3.9	3.•3	-6.0	6.8	5.6
	Total	3-2	<u>3.7</u>	4.2	6.4	2.3	<u>3•3</u>

Source: As for table 4.

1.1

٠.

One factor worth stressing is the rate of technological assimilation in the region, which can be deduced from the increases that have taken place in the supply of energy per employed person. Where such information is available, it will be seen that a greater amount of horsepower became available per person rose and that in some branches of industry the available supply has grown at an even higher rate than in the industrialized countries. This applies, in particular, to beverages, tobacco, clothing, leather, and non-metallic minerals. Although there is no statistical evidence to confirm this assumption, it seems likely that the increases in the average growth rate of the energy supply per employed person have been mainly in the bigger plants.

It should be noted, however, that these growth rates, and particularly the highest, are attributable to the low initial level of mechanization in the region, or to the introduction of new industries when import substitution was at its height. In order to simplify the presentation and analysis of the data, the branches of industry have been divided into two broad groups: the traditional and the dynamic. The results are given in table 6 and figure I. To some extent they confirm the view that the increases in the region have an elastic relationship with the degree of mechanization or the technological level of industry. Thus the situation in Latin America is simply the corollary to this trend, in other words, the progress achieved has been on a par with their state of development. The other fact that must be stressed is that the traditional industries are more prone than the dynamic industries to reach saturation point so to speak in the utilization of energy per employed person, and are thus less ready to accept technological innovations signifying sizable increases in unit investment.

Land Commence

Table 6

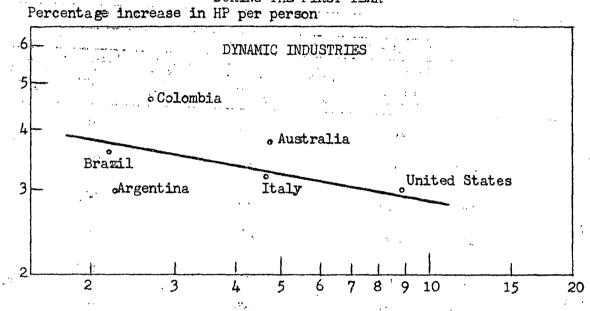
INSTALLED CAPACITY PER EMPLOYED PERSON IN TRADITIONAL AND DYNAMIC

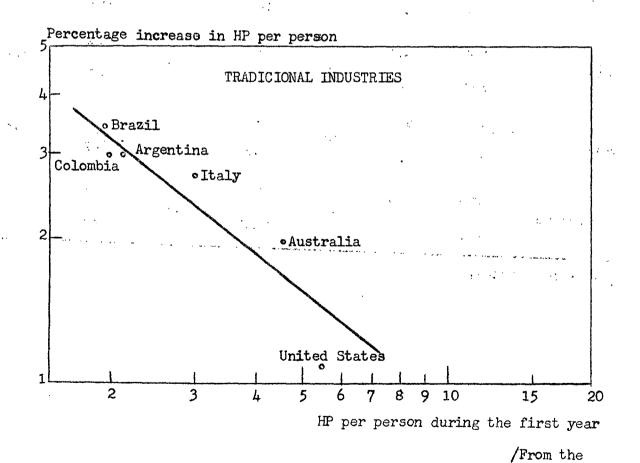
				Indust	ries			
		Traditional industries		Dynamic in	dustries	Total		
Country	Year	Horsepower per em- ployed person	Annual percen- tage increase	Horsepower per em- ployed person	Annual percen- tage increase	Horsepower per em- ployed person	Annual percen- tage increase	
	1950	2-15		2.26		2.19		
Argentina	1957	2.66	3.0	2•78	3€0	2•72	302	
Brazil	1950	1.94		2.17		2.01		
	1960	2.73	3 <b>.</b> 4	3-12	3.6	2.89	3.7	
Colombia	1953	2.04	3,0	2.71	4 <u>.</u> 6	2,21	4.2	
	1960	2•50		3•72		2.94		
	1955	1.88	1.6	1.82	* <del>]</del> † ~ †	1.86	4,00	
Paraguay	1963	2.14		1,26		1,80		
	1951	2.57	2.7	4,66	3 <b>-2</b>	3.81		
Italy	1961	3 <b>.</b> 88		6.36		5.27	3.3	
Australia	1953-1954	4 <sub>e</sub> 58	2,00	4.73	3.8	4,66		
	1963-1964	5.59		6.89		6,37	3.2	
, , , , , , , , , , , , , , , , , , ,	1954	5°42		8.83		7.60		
United States	1963	6,00	1.1	11.56	3.0	9.31	203	

Source: As for table 4.

Figure I

RELATIONSHIP BETWEEN THE PERCENTAGE INCREASE AND HP PER PERSON DURING THE FIRST YEAR





C 15 (4)

mi regere

92.7

From the figures in table 1 it may also be concluded that the production processes used in Latin American industry in general, and in each activity as a whole, are more labour-intensive than those employed in the industrialized countries. It should be noted, however, that, while this is statistically valid, it may be a somewhat biased presentation of the facts in that when the total number of persons employed is taken into account rather than those directly involved in production, a large number, possibly even a big proportion of the total, are simply concerned with upkeep, training, social welfare and other activities needed in the under-developed countries to compensate for the shortcomings of such facilities in the industry's immediate environment. The techniques employed will thus naturally appear more labour-intensive than if the production process were considered separately. However, as this is the prevailing situation in the developing countries, it should be borne in mind when examining the question of employment in relation to the choice of various highly capital-intensive techniques, at least until external services and supporting facilities for industry have developed sufficiently to eliminate the need for staff of the kind described in the plant. Another factor that raises the proportion of employed persons in the developing countries is the in-service training of skilled operatives, which is often undertaken in the plant itself, not merely to fill possible educational gaps but also to maintain a reserve supply of skilled labour so as to assure the continuity of the work if some operatives leave their jobs.

It is impossible to determine with any accuracy, on the basis of this information alone, how far the techniques used in Latin America are in keeping with accepted criteria on the uses of capital and labour. Although there seems to be a growing tendency to adopt more capital—intensive processes, such trends cannot be observed in industry as a whole. Moreover, any economic and technological evaluation must allow for other aspects of the objectives and strategy of development policy. For instance, quality and cost become of prime importance if the question is how to increase the share of manufactures in foreign trade. There are of course some key activities for which the technological options should be carefully examined if an industrial policy that responds to

/Latin American

Latin American needs is to be framed. This is particularly true of the clothing, footwear, furniture and allied industries but is not applicable to such branches as machinery, electrical equipment, transport equipment, chemicals, pulp and paper and basic metals.

It is important to determine how far the techniques actually used have been chosen with an eye to obtaining the maximum efficiency possible within existing market sizes and what has been the capital cost of the industrial park - in other words, to discover how far Latin America has taken advantage of economies of scale from a technological standpoint. Plainly, it has not done so, as numerous examples go to show. This is in fact one of the crucial problems of the industrial sector, and its causes must be discussed, however briefly.

Owing to industry's dependence on foreign technology and its development on what is essentially the basis of heavily protected domestic markets, the question of choosing production techniques that are more compatible with the characteristics and resources of the region has been left in abeyance. As so little attention has been paid to it, and there are no national programmes or policies for the application of technology to industrial development, virtually the whole responsibility for selecting manufacturing processes and plant size has been left to the manufacturers themselves. This want of policy has made itself felt not only in the private entrepreneurial sector but also in government circles in relation to industrial activities that the governments are anxious to encourage. Few decisions are taken on the basis of what would be technically most advisable but are swayed by other considerations, and the resulting projects reveal serious technical, operational and economic shortcomings with the passage of time.

The subordination of the region to the industrialized areas in technical matters has had a number of side-effects which are now affecting its cost levels and possibilities of accelerating its industrial growth.

There are of course other non-technical reasons, proper to the enterprises themselves or external to them, which affect the levels of efficiency and productivity. They will be discussed later in this document.

Procedures have been adopted which are unsuitable for the properties of the raw materials available, require a large amount of skilled labour, demand standards and specifications that are hard to achieve in a developing country and which have production dimensions and indivisible equipment that are designed for bigger markets and outstrip the domestic requirements of the Latin American countries - even, in some cases, those of the region as a whole. It is perhaps in this last aspect that the maladjustments in industry have been most glaring and have led to excessive capital expenditure and under-utilization of installed capacity. There are, moreover, other factors, such as defects in the institutional framework, the nature of the enterprises themselves and of managerial capacity, and market shortcomings, which have aggravated the situation and whose impact has often been even more adverse than that of technological dependence. A more exhaustive investigation should be made to see just how far each of these technical and environmental elements has been instrumental in limiting the growth of Latin American industry and the achievement of greater efficiency. The scale of production is likely to be a vital issue in the basic chemical, intermediate goods and steel industries in production of pulp and certain kinds of paper, and in the manufacture of transport equipment and some durable consumer goods. It is interesting to note that, despite the importance of economies of scale in these branches of industry only a mere handful of the disproportionate number of enterprises operating in these fields in the region are of reasonable size according to international standards. The situation shows signs of improving, however, particularly in the petrochemical industry, where some large-scale projects are being launched to supply regional or world markets.

In other branches, however, the question of technology is bound up with the obsoleteness of the equipment used rather than with plant size. A typical case in this respect is the textile industry.

As regards local production of certain goods, particularly capital goods, dependence on foreign technology is evident not only in the manufacturing processes but in access to the blue-prints and engineering know-how that go with them, regardless of whether the plants consist of

22 2 %

/single units

single units or complete installations. In the case of many of these goods, it is important for manufacturers to be fully conversant with the manufacturing processes so as to ensure that the final product meets certain fixed specifications and quality standards, and even more important for the technical resources or know-how needed to use the equipment efficiently to be incorporated in them. Machine-tools are a case in point, and many of the shortcomings of production in the region can be ascribed to neglect of this aspect of the question.

The common factor that underlies all these considerations and explains the technological disparities and under-utilization of resources in Latin America compared with the industrialized countries is undoubtedly the lack of applied research in industry. Because of this, the region's natural resources have not been made full use of and technologies are developed that lead to the industrial utilization of what are to some extent non-conventional resources. It is generally acknowledged that the annual appropriation for scientific and technological research in Latin America is negligible in comparison with the sums spent in other areas. For instance, the funds earmarked in Latin America are less than 0.5 per cent of the gross national product as against 2 to 3 per cent in Western Europe and over 3 per cent in the United States. There are numerous reasons for the region's backwardness in this respect, all of which will have to be tackled before the gap in its industrial development can be filled. This is all the more necessary if industry is to concentrate on expanding the production or improving conditions for the manufacture of capital and intermediate goods, in which the greatest technological progress is being made, to judge by the rate at which the supply of energy available for production is increasing.

#### (b) Efficiency and productivity

The attainment of greater efficiency and productivity is one of the objectives that Latin American industry must pursue in the next few years, not only as a means of more adequately satisfying demand, but also as an essential requisite of its own development.

Low manpower productivity and inefficient use of capital are two of the weaknesses generally found in Latin American industry, although they differ in magnitude and scope from one branch of industry to another.

/Since there Since there is more information available on employment, the value added per person employed is often used to express industry's productivity and to compare its position with that of other regions. Thus, it may be established that the average level of Latin American industry is about one-fifth as high as in the United States and approximately half as high as in the Western European countries. No such comparison is possible for input of capital per unit of production, but certain piecemeal data indicate, although not categorically, that the situation is equally unfavourable.

The region's disadvantageous position as regards value added per person employed in industry certainly calls for an examination of its underlying causes. These comparisons are known to be subject to a number of statistical distortions (exchange rates, classification of activities, etc.) which may significantly increase or diminish the scale of this phenomenon; therefore, they are of value only as an indication of its existance. Nevertheless, it is possible to discern various adverse factors in existing industry which are contributing to Latin America's low manpower productivity. One is unquestionably the size of the industrial establishment. Several studies on this subject, 10/ highlight the direct relationship between productivity and plant size. Taking the industrial sector as a whole, the value added per person employed in large-scale industry (establishments employing more than 100 workers) is twice or three times that of small-scale industry (employing 5 to 20 persons), with medium-sized establishments somewhere between the two. In the various branches of industry, however, there are certain deviations from this trend, which may well be due to circumstances other than the actual size of the establishment, e.g., the degree of specialization, the horizontal or vertical integration of establishments, different characteristics and qualities of the products, etc. To explain these deviations, an analysis

<sup>9/</sup> Patterns of Industrial Growth, 1938-1958 (United Nations publication, Sales No: 59.XVII.6), table 14.

See, for example, The process of industrial development in Latin America (United Nations publication, Sales No: 66.II.G.4), pp. 57-68.

would have to be made at a lower level of aggregation than that provided by the statistics available. Likewise, it should be noted that the differences between the three scales of industry vary from country to country and, particularly, between one branch of industry and another, which would seem to show that it is not possible to generalize about the effect of plant size on productivity, and that this relationship varies with each product. The point to be made here, however, is that even the productivity of what is known as large-scale industry (establishments employing over 100 persons) is in general far lower than the average in industrialized countries. 11 Clearly, these variations in productivity are closely linked with the degree of capital formation of enterprises and the techniques they use. If, in addition to these two concepts the consumption of energy per person employed, is considered, it will be seen that there is a constant relationship between the growth of energy consumption and that of productivity, although it would seem that a certain expansion of capacity has resulted in smaller increases in productivity in Latin America than in the more industrialized countries. 12/ The conclusion seems to be that the region's efforts in the fields of

Some fragmentary data show that even comparisons between enterprises of the same size are unfavourable to the Latin American establishment. In this respect, it is worth repeating what has already been said in connexion with technology, i.e., that in these cases the lower productivity in developing countries is probably due to the inadequacy or non-existence of external services or activities, which must therefore be provided by the enterprises themselves. It may be assumed from this fact that until the environment in which industry is developing is improved, the impact of technological progress in developing countries cannot be as violent as might be throught from its adverse effect on employment levels.

More research needs to be done on this hypotheses, on the basis of more data than are obtainable at present, i.e., on Brazil, Colombia and the United States. These countries have recorded annual increases in productivity of 2.6, 3.8 and 3.4 per cent respectively, while their installed capacity has grown by 3.7, 4.2 and 2.3 per cent.

capital formation and technology have not yielded the results that might have been expected, which confirms once again that these two factors alone are not sufficient to achieve greater productive efficiency.

From the foregoing considerations it may be inferred that in Latin American industry in general very little advantage is taken of economies of scale, even in the larger establishments. 13/ Although it is difficult to generalize on the subject, it is estimated that small establishments predominate in the region,  $\frac{14}{}$  and in a great many cases a country's total production is lower than what is currently considered an economic scale of production. This is particularly true of pulp and paper manufacture, steelmaking, and the production of many capital and durable consumer goods, a huge range of chemical and petrochemical products, and semi-processed products on non-ferrous metals such as copper and aluminium. In 1964 the paper industry (excluding newsprint) had 292 plants, of which only 25 had a capacity of 100 tons daily, which is considered the minimum economic size. In the chemical industry, too, there are many instances in which there is a wide gap between the plant sizes most frequently found in the region and the sizes constructed in the industrialized countries, as may be seen in table 7. Needless to say, the disadvantages deriving from the scales of production are an increasingly serious problem - differing in intensity according to the product - because of the industrialized countries! evident tendency to increase the size of their plants as they achieve further technological progress.

The question of scale is not necessarily dependent upon the size of the establishment, as defined by the number of persons engaged, but is associated rather with the manufacture of a specific product or a group of products with similar characteristics in so far as production techniques are concerned. Many large establishments in the region have attained that status through the gradual combination of widely diversified production lines or through a high degree of vertical integration. The advantages which may be derived from size are not technological in character.

Two of the reasons for the large number of small and medium-sized establishments probably are that their size involves the smallest investment risk and is most suited to the entrepreneurial capacity existing in the region.

Table 7

ANNUAL PRODUCTION CAPACITIES FOR SELECTED PRODUCTS

(Thousands of tons)

	Latin A (existing	merica ; plants)	Industrialized countries		
Product	Range of capacity	Approxima- te everage capacity (1965-66)	Economic capacity <u>a</u> /	Maximum capacity b/	
Sulphuric acid	5100	40	100	700	
Nitric acid	 • • •	27	•o•	90 <b>0 _</b> /	
Ammonia.	8-132	50	200	450	
Calcium carbide	4-36	23	50	300	
Polyvinyl chloride	3-20	15	50	85	
Polyethylene	1030	20	20	200	
Synthetic rubber (SBR)	3770	43	•••	260	
Carbon black	<b>7</b> <del>-</del> 33	18	15	80	
Ethylene	8-54	26	150	450	
Sodium carbonate	38-135	70	160	840	
Methanol	12-16	13	60	190	

a/ Estimated on the basis of present trends; not a strict definition.

b/ Order of magnitude; includes projects under way in 1968.

e/ Three units, each with a daily capacity of 900 tons (PULAWY, Poland).

The question of scale not only affects productivity levels, but also, and very particularly, the capital economy, i.e., investment per physical unit of production. Although here too a great many cases could be cited, the paper industry is once again taken as an example. The investment per ton in a bleached pulp plant with a daily capacity of 300 tons is about 50 per cent less than that required in a plant with a daily capacity of 50 tons; the difference is 30 per cent in integrated pulp and paper plants with capacities of 50 and 100 tons daily.

Control of the State of the Sta

Although economies of scale are important in these activities, the same cannot be said of all industry; in this respect it is interesting to note that productivity improvements in certain sectors of manufacturing are more closely linked with the degree of obsolescence of the machinery in use. This does not mean that the branches of industry that are highly sensitive to scales of production are not also affected by this problem, but only that a different emphasis is placed on one factor or the other. The textile industry is a typical case where increases in productivity depend more on the modernization of the machinery park than on plant size.

Other aspects of Latin American industry which are obstructing the achievement of greater productivity are evidently the institutional factors referred to later in this chapter. On this point, suffice it to say here that in some sectors of industry improvements in entrepreneurial levels and organizational methods may well constitute the prime factor in raising manpower productivity.

The other factor alluded to earlier is the poor use made of capital in Latin American industry, a fact that is connected with the underutilization of installed capacity. Here again it is difficult to draw conclusions for want of statistics, apart from which there are conceptual issues involved - which vary widely in each case - concerning what the capacity of an industrial establishment really is and this means that any description of Latin America's real position in this respect is far from clear. In addition, it would be almost impossible to identify the reasons for the under-utilization of existing capacity, which, in many cases, may be essentially fortuitous in character.

/Nevertheless, there

Nevertheless, there are some scattered data which bear out the existence of this anomaly in some branches of industry. In the manufacture of certain capital goods, particularly equipment for the basic industries (oil refining, electric energy generation, steelmaking, shipbuilding, and the production of railway equipment, cement, etc.), and the manufacture of machine-tools, the existence of substantial surplus capacity in relation to foreseeable demand has been proved in countries like Argentina and Brazil, and on a lesser scale in Chile and Colombia (in the last two countries mainly in respect of articles used in working boiler-plate). Without going into the sharp fluctuations characterizing the demand for this type of product or the differences that may exist between the nature and quality of the products manufactured locally and those required by the market, it has been determined that the factor mainly responsible for this state of affairs is the manufacturers' ignorance of the existence of a demand for their products, and the users' ignorance of the real capacity of the established industry. Perhaps the prime factor aggravating the under-utilization of capacity in the manufacture of capital goods, however, is the general lack of financing in the region; because of the practice of long-term sales and the allocation of orders for this type of equipment through international bids, the local producer is completely excluded since he is unable to grant credit on the advantageous terms usually offered by suppliers in industrialized countries. The underutilization of capacity is also partly due to the fact that some of the production equipment which is essential for the manufacture of these goods must be acquired as a whole unit.

This point is particularly important in steelmaking, where this problem causes serious disequilibria between the various departments of the steel plant. In this type of industry the most costly units, and also those which because of their part in the production cycle must not be halted in the event of expansion, are frequently over-sized. As a result, in the initial stages of operation part of the equipment (the over-sized part) operates at a fraction of its capacity. Thus, in the group of seventeen integrated steel plants in the region, the installed capacity of the blooming mills was 48 per cent larger than the output of these plants in

1966. Only four plants utilized more than 80 per cent of their blooming capacity that year, while nine used less than 51 per cent. The blooming mills also have an excess capacity of 25 per cent in relation to the hot-rolling mills in the same plants.

In other branches of industry, such as pulp and paper, the underutilization of capacity has other distinguishing features. According
to data for 1964, which are probably much the same as those for the
following years, the region utilized 71 per cent of its installed production
capacity in the case of paper and 68 per cent for pulp. The situation
varies from country to country, and some countries - such as Chile and
Peru - utilize about 95 per cent of their installed capacity. It should
be noted, however, that in the paper industry the lowest utilization of
capacity is recorded precisely in the smallest plants (with a daily
output of less than 30 tons), which constitute over 75 per cent of the
existing establishments but represent less than one-third of total
installed capacity. It would seem, therefore, that in the paper industry
the capacity that could be recovered is nominal rather than real, since
it is available in establishments whose size makes them far from
efficient.

The situation in the chemical sector varies considerably, but in general it may be said that nominal production capacity is not being fully used at the industry's present stage of development. This is a temporary state of affairs, however, due to the fact that a number of items are in the early stages of production and there is therefore a large proportion of new plants just being put into operation, and to the plant sizes, which have been selected with an eye to a rapid expansion of demand.

While there is obviously under-utilization of installed capacity, the true extent of this idle capacity and its significance for the region as a whole cannot be fully determined from the available facts. It is thought that advantage could be taken of the surplus capacity to produce for export, and that this would act as a stimulus to development and provide new job opportunities without additional investment. This may be so in some cases, but the data obtainable are not complete enough for definite

/conclusions to

conclusions to be reached and could even be interpreted in the opposite sense. To arrive at a more definite answer, it would be necessary to make a more extensive study of the situation for each product and country. Moreover, it should not be forgotten that capacity is a dynamic concept that changes over time as the technology advances. What is available today may thus be more apparent than real since the threat of technological obsolescence hangs over not only the production equipment but the way in which it is utilized to manufacture the products required by the markets of the future.

The set of factors described above - technological level, low labour productivity and poor capital utilization - have unquestionably raised production costs and hence the sale price of Latin American goods. There is an impression, which has moreover gained wide currency, that the prices of Latin American manufactures are much higher than those of goods produced in the industrialized countries, although the information that can be gathered together is not reliable enough for calculating the full force and causes of the problem, which may be high production costs, distribution and sales margins, indirect taxes, gross rates and profits, etc. The problem is extremely complex to analyse, and it is difficult to make generalizations that are valid for every country and branch of industry. The need to use exchange rates for purposes of comparison introduces a highly unstable element, since over- or under-valuation may completely change the figures in the comparisons and thus the conclusions to be drawn from them.

The weakness in Latin America's industrial development can only be appreciated through price levels. These indicate that production costs are beset by the same problems, although there is not necessarily a direct correlation between the two. To illustrate this, some examples will be given of price disparities between the region and normal world market quotations. These should of course be accepted with all due caution as being simply a basis for comparison. In the chemical industries, the prices for a representative group of basic intermediate goods produced in Latin America in 1965-66 were 50 to 300 per cent higher than the list prices on the United States market or the European average. In paper manufacture too,

/the prices

the prices in the region as a whole are far higher than on the world market; they are from 14 to 240 per cent more, but are generally about 60 per cent higher.

Apart from the part played by the above-mentioned factors relating to technology and the efficiency with which the region uses its capital and labour resources, there is yet another factor that is basically responsible for the high level of prices. This is the heavy cost of raw materials, including semi-manufactures and spare parts, which account for a large proportion of the costs. In an earlier ECLA study. 15/ which compared certain facets of the cost structure in the light of the findings of a survey of United States enterprises operating both at home and abroad, 16/ it was pointed out that raw materials represented 49 per cent of total costs. The views put forward at that time are still valid today, since the same situation has been found to exist up to a point at least, by more recent sectoral studies, such as the textile industry report, which puts the incidence of raw materials on total production costs as 41 to 62 per cent. This study also pointed out that the raw materials cost 142 per cent more in Latin America than in the United States. In the chemical industry, for instance, there are many electrolytic units that pay over 15 dollars per ton for salt, instead of the 5 to 7 dollars which is regarded as a reasonable price outside the region. The same applies to sulphur in most of the Latin American countries. The situation is less unfavourable for semi-manufactures, since the price of steel bars is lower in at least two countries than in the United States although it is 6 to 17 per cent higher than in Europe. Prices for steel sheet are 10 to 44 per cent higher than in the United States, and the lowest in the region exceed European prices by 7 to 20 per cent. Imported raw materials are more expensive in the region because of the transport and marketing costs, customs duties and so forth which have to be added to the price ex country of origin.

<sup>15/ &</sup>quot;Problemas y perspectivas del desarrollo industrial en Latinoamérica" (E.CN.12/664).

<sup>16/</sup> Costs and competition: American experience abroad, The National Industrial Conference Board (New York, 1961).

Unit labour costs are possibly the only item for which Latin America's position is a good deal better than that of the highly industrialized countries. The share of labour costs in total costs is usually small, and as the hourly rates are lower they do not have much influence on the total. What must be made quite clear, however, is that this comparative advantage is partly wiped out by the lower level of labour productivity.

Lastly, investment costs are another unfavourable item for Latin America, not only because investment in plant is higher than abroad, but also because of capital costs, the scale of operations and under-utilization of installed capacity. The experience of several Latin American countries goes to show that the volume of investment required for an industrial plant, including the infraestructure, is 30 to 40 per cent higher than for a plant of equivalent efficiency and size outside the region. Owing to high rates of interest, capital charges also add to production costs. In the chemical industry, for example, the financial charges borne by an enterprise are at least 13 per cent higher than in other areas, with the result that the final costs are raised by 2.5 to 5 per cent. The scale of operations in a particular important factor in such branches as petrochemicals and basic chemicals, steelmaking, and the production of semi-finished copper, aluminium, pulp and paper and similar products, whose manufacturing and investment costs are strongly influenced by it. Suffice it to say, for purposes of illustration, that capital charges in the pulp and paper industry for unbleached eucalypt pulp processing were brought down to under 56 per cent of their former level by changing over from a plant size of 50 tons a day to one of 200 tons a day. In the case of integrated pulp and paper mills using the same type of pulp, the switch from one size to another reduced the charges to under 49 per cent.

This brief review of the factors that influence the costs and prices of Latin American manufacturs is not intended to be a full analysis of the problem, which is undoubtedly a far more complex matter of even more varied origins. All that has been attempted is to bring out the most important of the underlying factors, which affect nearly all the manufacturing activities in the Latin American countries to one extent or another but which could be remedied by appropriate economic policy measures.

### 3. Institutional framework and financing

## (a) Characteristics of the enterprise

Small production units predominate in Latin American industry. Available data show that artisan-type industry, defined as the stratum of enterprises employing from one to four workers, accounts for 70 to 90 per cent of all industrial establishments. Moreover, in factory industry, enterprises employing from 5 to 19 workers represent about 70 per cent of the total number of manufacutring establishments in Brazil, Chile and Colombia, and over 80 per cent in Paraguay and Venezuela. In contrast, industries employing 100 workers and over represent about 6 per cent of the manufacturing establishments in the first three countries and only 2 per cent in the other two.

Thus, Latin American industry may be regarded as a collection of many small units contributing relatively little to production and a few large-scale production units whose contribution is considerable. Thus, although the lower stratum of factory industry comprises many more enterprises, it contributes only 10 per cent of the value added in manufacturing in Brazil, Chile and Colombia, and 20 per cent in Paraguay and Venezuela, whereas large-scale industry accounts for 70 and 50 per cent, respectively, in those two groups of countries. This is clear. from table 8, which shows the share of large-scales industry in manufacturing.

This situation is due, among other things, to the nature of the enterprises and their methods of production. At the artisan-type level and that of a large part of small and medium-scale industry, production units are mostly of the family type, organized around the person or persons who provided the initial capital and their own labour. In these units, the work of organization and management and the basic technical responsibility are concentrated in the hands of the small entrepreneur, who seldom has the knowledge, experience or staff to cope efficiently with administrative and financial problems. In addition, he uses traditional production processes and low-cost equipment which is either poor in quality or has been discarded by larger industries because it was considered obsolete or nearly worn out.

Table 8

SHARE OF LARGE-SCALE INDUSTRY IN MANUFACTURING IN SELECTED LATIN AMERICAN
COUNTRIES AND IN THE UNITED STATES

### (Persentages)

	Total number of factories	Share at employ- ment in manufac- turing	Value added in manufac- turing	Installed capacity
3razil	<b>6•5</b> :	61.1	68.0	69•6
Sentral America	4.6	37-1	48.2	47.2 <sup>b</sup> /
hile	6•3	57•2	68.8	71.4
olombia	6.0	54.0	70.6	73•9
ex1.00	13.3	67.5	76.5	85.6 <sup>b</sup> /
eraguay	1.9	29•6	48.6	₩.0
Tenezuela	2.6	37•2	59•5	77.0
Inited States	14.8	<i>7</i> 5∙5	79+4	86.0

Source: ECLA, on the basis of official censuses and surveys.

a/ Establishments employing more than 100 workers.

b/ Power consumed.

In contrast, the large-scale industries are generally organized in the form of corporations and therefore have easy acces to the stock market; their organization and production techniques are also more up to date, often because they use foreign patents and work with foreign capital. Even so, many of these units still show signs of the family type of control and management, since their organization is extremely inflexible as a result of the excessive concentration of decision-making powers in a small group of responsible persons.

As a direct consequence of these characteristics, most enterprises have gaps in their internal structure. They lack research and planning offices; decisions regarding markets and new products are based on the entrepreneur's direct experience without prior investigation controls are aimed more at preventing the misuse of funds than at improving productivity, etc. These defects are the outcome of lack of sound training among the managerial staff, who with few exceptions, do not yet recognized management as a modern technique requiring special training.

Taking Latin America as a whole, in nearly all countries of the region at least the large- and medium-scale entrepreneurs have formed manufacturers' associations, through which they maintain some form of contact and exchange information to safeguard their business interests. In the more industrialized countries entrepreneurial organizations also exist for branches of industry - in many cases the metallurgical industry, the chemical industry, etc. and for geographical areas - and they operate in co-ordination with the central associations. Small manufacturers and artisan-type workers are not usually members of these organizations, and what links they have are mainly through co-operatives, an arrangement which has been encouraged in recent years by government plans to promote small-scale industry and establish industrial estates.

Large-scale industrial enterprises are frequently associated also with private financing agencies and with commercial and other types of enterprise, and they form groups with diversified activities but common financial interests. Although this facilitates the transfer of resources between sectors, it represents limitations for the entrepreneurs not belonging to those groups, who are by far the more numerous.

There is a network of government bodies and legal provisions which, on the one hand, impose limits on the activities of industrial entrepreneurs and, on the other, provide various forms of help and incentives. Responsibility for the application of administrative provisions requiring enterprises to be on the industry and property registers, to comply with regulations, etc. lies with the ministries of industry or their subordinate bodies. Development activities are concentrated mainly in large corporations or industrial or general development banks, which normally provide financing and, in some cases technical assistance, particularly in the preparation of projects. Any programming that is done, is carried out by national planning offices or by sectoral offices set up in the relevant ministries.

As will be seen later, although government action has not succeeded in overcoming the many obstacles to a more rapid and sustained growth of industry, it has provided a fairly clear-cut, if not always stable, framework for industrial enterprises.

Despite the fact that they are outside the enterprise itself, certain infrastructure conditions have also acted as determinants of some of the important characteristics of the manufacturing sector. For example, the inadequacy of transport services has raised costs and prices and, in the past, has made for widespread dispersion of the production of consumer goods by small units supplying fairly limited areas in each country. On the other hand, the concentration of financial services and of government administrative services in the major urban centres has led to a geographical concentration of industrial enterprises, which in some cases is already excessive. Regional planning efforts have been few and far between and have done little to alter this situation.

(b) Financing of industry

The conditions of financing of Latin American industry 17 should be analysed bearing in mind the framework in which it operates, which is characterized by comparatively low average per capita income levels, with marked disparities between countries, and patterns of highly unequal

<sup>17/</sup> The comments in this section are not, in general, applicable to Cuba.

income distribution among the different population groups. These conditions determine a low per capita consumption of manufactured products — and in many cases limit the possibility of producing them in the various countries on an economically justifiable scale — and also leave little room for personal saving.

Within this very general context, the essential characteristics of the enterprise which are described above largely determine its internal capacity to generate investment funds.

The small production units, most of which have out-of-date or unsittable equipment, unskilled manpower, under-utilized capacity and a small output, have been able to survive largely because of high tariff protection. Their profit margins have therefore been too low, as a rule, to allow of the rapid capital formation that would make for steady growth; expansion has also been hindered by the limitations of entrepreneurial capacity that are typical of the early stages of industrialization in which these enterprises developed.

The medium- and large-scale enterprises, whose levels of production and productivity have been higher under the same protective conditions, have either failed to generate sufficient funds or have not always used them to expand and modernize their establishments, but have diverted them into other types of investment, often in activities which are quite unrelated to the industry which originally generated the funds, or else, in the case of foreign or joint national and foreign enterprises, a substantial proportion of those funds has been remitted abroad.

As a result of these factors, the re-investment of profits in industrial enterprises in Latin America, and often the provision of funds for replacement purposes, have been insufficient, and some legal provisions have been adopted in this connexion. With few exceptions, the tax measures designed to facilitate replacement and re-investment do not appear so far to have had much influence on the decisions taken by enterprises.

In view of the inadequacy of self-financing, the enterprises have resorted to other sources of funds outside their own activities; but these have not proved too satisfactory either. The stock market in most of the Latin American countries is not well developed, and even where it exists, its operation is not very dynamic, except in Mexico.

The lack

The lack of activity on the stock markets is largely due to the family nature of the enterprises, which is observable, as has already been said, even in many large-scale units. In these cases, capital is contributed directly without recourse to the stock market, except on a limited scale, to avoid any weakening of the control exercised by the central family group. Even companies which are floated with more capital from personal saving, through the public sale of shares, engage in some management practices which inhibit the growth of the stock market. These companies are controlled by small groups of shareholders holding a high proportion of the stock, and they decide the policy of the enterprise or group of enterprises they control and obtain special advantages from them, such as director's fees, etc., while the small shareholder usually has no say in the management of the enterprise, and no chance of receiving any immediate profits, or even of recovering the real value of his initial contribution.

Accordingly, the flow of personal savings goes into other forms of investment which may be less productive but are often safer and easier to realize.

The resources obtained through credit mechanisms have also been severely limited. The traditional banking system has never been in a position to supply credit on a scale and under the conditions of repayment and interest rates which industrial enterprises require. Although short-term credit for financing the operation of enterprises has in general sufficed, problems have arisen in connexion with financing stocks of finished products, and with the terms granted for credit sales, particularly when the final product has a high unit value and the manufacturing process is slow.

The most serious limitations are encountered in the supply of medium- and long-term credit for investment. In many cases commercial banks lack the necessary flexibility or even the legal authorization to grant this type of loan, and government development agencies generally have few resources for investment purposes.

In the face of the persistent demand for medium- and long-term credit and its constant diversion into other types of operations, especially the purchase of real estate, a number of private financial

/enterprises have

enterprises have been set up in several countries over the past few years, which have greater freedom of action as regards amortization periods but they have appreciably raised the cost of the credit they supply.

Furthermore, in some cases, special government funds have been established and are operated through the network of private banks and financial associations, their operations being both rapid and broad in scope.

In countries affected by persistent inflation, various types of adjustments or corrective monetary measures have been introduced to facilitate long-term saving so that it can supply some form of credit that can be used in part by industry.

In spite of the efforts described above, the financing of industry supplied by internal credit mechanisms has not been too satisfactory, either in volume, or in the terms offered.

To supplement the supply of credit, it has been possible to obtain a sizable, but insufficient volume of external credit, which, while increasing the funds available, also involves some limitations. Suppliers' credit tends to add to the price of the products purchased, thereby raising domestic production costs. Frequently, official bilateral credit, and sometimes multilateral credit, take the form of tied aid, and this "restricts the developing countries' opportunities of benefiting from the price and quality advantages which normally accrue from a free choice of suppliers ... Further, tying tends to reduce the real value of aid inasmuch as the definition and the choice of projects and of technology best suited to the requirements of the developing countries is limited".

In addition, the general trend in the second half of the nineteensixties has been towards a rise in the cost of obtaining external credit, whether public or private.

The proportion of these resources obtained from international institutions and public agencies in developed countries show a declining

See Report of the United Nations Conference on Trade and Development on its second session (TD/L.37), 18 April 1968, annex I, decision 29 (II).

E/CN.12/830 Page 42

trend; however, they have gradually been supplemented by funds from private commercial banks and financial associations abroad, which provide a relatively small but increasing volume of credit.

The Inter-American Development Bank stands out among the international agencies both because of the funds it has contributed for industry and because it has been quick to discern the region's pressing requirements. In the last few years IDB has financed over-all rather than direct loans. Although the former give the national body in charge of these funds more freedom to distribute them among specific industrial projects according to an over-all view of development possibilities, in practice they have not always yielded the best results, because the actual procedure for applying the funds does not help to link them with specific industrial development objectives.

In the next few years, any effort to revitalize the industrialization process in Latin America will require more external financial resources; but the excessive medium-term indebtedness of most Latin American countries makes the prospects of securing substantial additional external credit even more gloomy.

Moreover, the inflow of private foreign capital in the form of direct investment, whether independently or in association with national enterprises, while constituting a contribution of capital and often of technical know-how, represents pressively stiff competition for national investors, who have gradually been displaced from those industrial activities that offer the best financial prospects. Thus, the initial capital contribution usually severely limits the ultimate possibility of capital formation by national entrepreneurs.

Similarly, the growing tendency of foreign investors in recent years to purchase all or part of industrial enterprises that are already operating in Latin America, far from providing a stimulus to industrial activities in the region, entails an increasing outflow of financial resources, without the creation of new production capacity to justify it.

The efforts being made in the last few years to achieve a higher degree of regional economic integration highlight the important effect this is bound to have on the development of porduction units that take

/advantage of

advantage of economies of scale and attain productivity levels comparable to those of developed countries. The necessity is also stressed, however, of paying close attention to the problems of reconverting industries which may be displaced in the course of this process. These problems may well become proportionally more serious in Iatin America than in other areas advancing towards integration, if consideration is given to the huge number of artisan-type producers with low levels of productivity who might be eliminated by competition from a group of efficient up-to-date medium- and large-scale enterprises, once the tariff barriers between countries in the region were abolished,

Furthermore, the practical possibility of re-orienting the whole process of industrial development in Latin America, supported more and more by an increasing flow of intra- and extra-regional exports, largely depends upon the availability of additional financial resources, not only to expand and modernize production capacity, but also to reinforce export credit programmes and the related insurance schemes.

## 4. Employment and manpawer problems

Employment in manufacturing in Latin America has been growing slowly over the past twenty years. From 7.7 million workers in 1950 it rose to 9.8 million in 1960 and, if present trends continue it is expected to reach over 12 million by 1970. This means that the cumulative annual rate of growth declined from about 2.4 to 2.1 per cent between the two decades.

As a result of this sluggish growth, manufacturing employment has maintained a slightly declining share of total employment, i.e., just over 14 per cent. Thus, in view of the definite decline in agricultural employment as a percentage of the total, the industrial sector has remained relatively static, without doing much to absorb the redundant manpower in agriculture, which has gravitated towards the tertiary sector.

Thus, manufacturing has absorbed only some 3.8 million persons out of the 30 million who joined the ranks of the active population between 1950 and 1968, which represents about 13 per cent of that total.

In analysing this lack of dynamism, however, it should be taken into account that artisan-type industry's share in total employment has shrunk at the fastest rate, dropping form 7.5 per cent in 1950 to 6.8 per cent /in 1960,

in 1960, and estimates put it at only 6 per cent in 1970. In contrast, the factory stratum has increased its participation from 6.9 to 7.5 per cent from 1950 to 1960 and is expected to reach 8 per cent by 1970.

These figures appear to indicate that the growth of factory employment is largely attributable to the absorption of manpower from the artisan stratum, which holds out no possibilities for the creation of new employment at the same rate as the growth of the total active population.

Although this may be an essential feature of industrialization, its quantitative results seem unsatisfactory both from the viewpoint of the utilization of human productive resources, and its contribution to the attainment of a progressively higher level of social well-being.

Admittedly, at least part of the explanation of this trend may be found in the evolution of industrial production as regards its distribution by branches of industry. As stated previously, the output of the food, textile, footwear, clothing and, in general, the traditional industries which are labour-intensive, has been growing relatively slowly, while the chemical, petroleum and petroleum products, and basic metal industries have absorbed an increasing proportion of the new production capacities and have therefore expanded more rapidly, in terms of both production value and employment, although they have fewer workers per unit of production.

In addition, the tendency to set up larger establishments, as a result of the above-mentioned possibilities of capital formation attendant upon the expansion of markets and the rising level of internal development in the Latin American countries, has made for the assimilation of up-to-date production techniques in practically isolated large-scale units, without those techniques spreading to the smaller-scale establishments, even in the same branches of industry in which the large-scale units are operating.

The fact that in 1960 about 60 per cent of employment in the traditional branches of industry was concentrated in artisan-type industry, compared with only 35 per cent of employment in the chemical and metal-transforming industries, shows that any change in the structure of the

sector that implies a reduction in the share of the traditional industries will inevitably result, under present conditions, in a slower increase in industrial employment.

Although the effect of the evolution towards the dynamic branches of industry is the prime factor underlying the industrial sector's slow absorption of manpower, another factor which should not be overlooked is that the production techniques utilized have not always been the most suitable from the standpoint of the existing supply of productive resources in Latin America. This is explained firstly, by the tendency to take over, lock, stock, and barrel, the techniques developed by the industrial countries which "export" them together with the equipment specifically designed for them, and, secondly, by the fact that no thought has been given to other alternatives adapted to the particular conditions prevailing in the Latin American countries. Thus, the capital available in these countries has been used without obtaining the highest possible rates of employment of human resources that would be compatible with high productivity levels. Another contributory factor has been the lack of social objectives in the industrial policies adopted.

These are some of the conditions which, together with the general shortage of financial resources, have determined the slow absorption of manpower by industry.

In addition to the quantitative problems arising in relation to manpower, it is worth while analysing other aspects relating to the occupational categories in industry and their level of professional training.

Thus, for example, the existence of a broad artisan stratum is reflected in the high proportion of own-account and family workers (paid or unpaid) in the total population employed in manufacturing industry. Whereas in developed countries in other parts of the world this type of worker represents not more than 8 per cent of the total, 19/ the proportion is generally over 20 per cent, in the Latin American countries and in some - Ecuador, Haiti and Peru - it is nearly

<sup>19/</sup> Two per cent in the Netherlands, 3 per cent in Iceland, 5 per cent in Sweden, and 8 per cent in France.

E/CN.12/830 Page 46

50 per cent, as shown in table 9. These own-account and family workers, who are neither entrepreneurs nor wage-earners, are generally cut off from technical progress, and produce simply-processed products on a small scale, using primitive or outmoded techniques, at a very low level of productivity.

Moreover, industrial manpower training reveals considerable gaps in relation to industrial development requirements. Only 0.4 per cent of the population engaged in industry have had professional training, and only 1.2 per cent are technicians, while 87 per cent have had operatives and manual workers. In this category, 30 per cent have had no training at all and 50 per cent have had insufficient training.

This situation is attributable to deep-rooted problems related to the inadequacy of basic, technical and professional education in the region, which affects all sectors of activity; but it must also be recognized that, at least at the professional and technical level, there is one factor which depends exclusively on the industrial sector. This is its inability or lack of any desire to attract this type of worker, as shown by the small share of the total number of available professionals and technicians who are employed in industry - 8 per cent of the former and less than 7 per cent of the latter - while 76 and 85 per cent respectively are concentrated in servicing jobs (see table 10).

In the face of latin American industry's weak capacity to retain human resources, there has been a growing tendency in the developed countries, particularly the United States, to absorb professionals, technicians and scientific workers from the less developed countries, attracted as they are by better pay and a field of action that is richer in technical possibilities. This has still further reduced the supply of highly trained personnel.

Where the problem becomes really critical, however, is in the employment of intermediate-level workers and technicians.

Table 9

LATIN AMERICA (SELECTED COUNTRIES): DISTRIBUTION OF THE POPULATION EMPLOYED

IN INDUSTRY, BY OCCUPATIONAL CATEGORY, 1965

(Percentages of total population employed in industry)

Country	Employers	Own-account and family workers	Wage-earners	Other workers, not spe- oifled	Total
rgentina	10.7	14.2	75+1		100
Prazil	2•7	10-4	8609	•	100
<b>hile</b>	1,9	22.0	76.1	-	100
olombia.	5•2	28.1	65.7	1.0	100
osta Rica	3•7	22.2	71.3	2.8	100
ominican Republic	1.3	32•5	66.2	•	100
Suador	2.1	49.6	47.6	0•7	100
M Salvador	3.1	29.1	65.6	-	100
laiti	1,9	41.0	56.9	0+2	100
lex1 co	1.4	17.1	81.5	-	100
enama.	<b>3•7</b>	26.6	69•7	_	100
eru	1.9	141-14	53•5	~	100
ruguay	6.9	18.9	73.5	-	100
enezuela.	3•5	28+5	67.6	•	100

Source: ECLA, on the basis of data supplied by the various countries.

Table 10

LATIN AMERICA: OCCUPATIONAL STRUCTURE OF THE POPULATION EMPLOYED IN INDUSTRY AND PERCENTAGE OF EACH OCCUPATIONAL CATEGORY EMPLOYED (ESTIMATES)

Occupational category	Occupational structure of the population employed in industry (percentages)	Percentage at each occupational category employed in industry
Professionals	. OP1+	8.1
Teolmioians	1.2	6.6
Administrators and managers	2.6	13.3
Amployees and salesmen	7•9	11.0
Operatives skilled and manual workers	17.3	W.7
Semi-skilled	43+3	37•0
Unskilled	26.1	9•0
Service personal	1.2	1.4
Total	100.0	<u>15.,7</u>

Scurce: ECLA, Education, Human Resources and Development in Latin America, 1968. These figures are estimates given for illustrative purposes.

Although, in the last few years some countries have introduced new professional training services 20 which focus attention on training adult manpower, in addition to the traditional industrial and technical schools already existing in the region, this is still a crucial problem in relation to both industrial productivity levels and to social repercussions.

The lack of training of a high proportion of manpower, combined with the inadequacy or unsuitability of equipment and entrepreneurial weaknesses, results in low productivity, with a resulting rise in production costs which cannot be offset by paying low wages to unskilled personnel.

Further, as a result of the slow manpower absorption and the shortage of skilled personnel, a contradictory situation has arisen in Latin American industry: a steady demand for skilled operatives exists side by side with extremely high levels of unemployment. According to recent estimates, these average 6 per cent of the total population employed in industry, a figure which may easily rise in periods of economic contraction.

The foregoing considerations apply with varying force to the different countries of the region, conditions being more acute in the relatively less developed countries, and also in certain areas of each country because of the geographical concentration of industrial production in a few major centres.

The steps now being taken towards regional economic integration will probably lead to an even tighter situation with respect to requirements of human resources and their utilization. The gradual liberalization of trade and the establishment of large-scale production units in place of the great many minor enterprises that are already in existence may well increase unemployment in the short term to a scarcely tolerable extent.

Such as the National Training Service (Servicio Nacional de Aprendizaje - SENA) established in Golombia in 1957; the Educational Training Institute (Instituto de Capacitación Educativa - INCE) established in Venezuela in 1960; the National Industrial Training Service (Servicio Nacional de Aprendizaje de Trabajo Industrial - SENATI) established in Peru in 1961; the National Professional Training Institute (Instituto Nacional de Capacitación Profesional - INACAP) established in Chile in 1966; and the National Industrial Training Service (Servicio Nacional de Aprendizaje Industrial - SENAI), which has existed in Brasil since 1946.

Even if there were a growing volume of financial resources to help create new job opportunities in industry, therby offsetting the above-mentioned effects, it would no doubt become necessary to re-orient and re-train large manpower contingents who will have to shift to other activities in the industrial sector or to other parts of the country, or even to other parts of the region.

In view of these prospects, it would be wise to consider carefully, in establishing a development strategy for the next few years, whether the industrial sector can be forced to absorb a larger proportion of available manpower, or whether it would be better to concentrate efforts on creating new production capacities in more capital-intensive branches and products with a higher level of productivity per worker, leaving the above-mentioned responsibility to the services sectors. In all probability, this dilema will never arise, and it will be necessary to seek a balanced combination of the two opposite solutions, so that by specializing in some lines of industrial activity it will be possible to attain sufficiently high productivity levels to gain access to external markets, which is one of the prerequisites of future development, and by increasing the number of activities with lesser capital requirements a reasonable proportion of the manpower may be absorbed.

Any decision on this point should be based on a comprehensive and far-reaching knowledge of the alternative technological solutions. For this it would be necessary first to carry out a programme of technological research taking into consideration the supply of natural resources, capital and manpower existing in each of the Latin American countries. Another prerequisite for development is that the supply of skilled manpower at all levels should be rapidly increased, which in turn would require the mobilization of resources and instruments going far beyond the specific field of industry.

The IAFTA document entitled "Financiamiento de la reconversión industrial y de la reorientación de la mano de obra" (December 1967) deals with some of the problems discussed in the European Coal and Steel Community (ECSC) and the European Economic Community (EEC).

### 5. Integration and competition on the world market

Integration, in terms of import substitution at the regional level, and the promotion of exports of manufactures to world markets, are considered effective instruments for re-orienting industrial development in Latin America so that advantage may be taken of favourable conditions in different countries and technological advances by gradually opening the way for competition; this would be one means of revitalizing the weakened industrialization process and of overcoming the isolation and deficiencies noted in previous sections.

### (a) Integration systems

The economic co-operation systems striving to achieve those objectives in Latin America are the Latin American Free Trade Association (LAFTA), the Central American Common Market (CACM) and, more recently, the Caribbean Free Trade Association (CARIFTA), whose main characteristics are briefly described below.

(i) Latin American Free Trade Association. The Montevideo Treaty established the following instruments to achieve its objectives: the liberalization programme (National and Common Schedules) and complementarity agreements, in addition to the resolutions on harmonization and co-ordination of policies. It is a well-known fact that the target of the liberalization programme is to eliminate intra-Area tariff barriers for substantially all of existing trade, through annual commodity-by-commodity negotiations (micro-negotiation). The idea was that the negotiations for the reciprocal opening up of markets would lead to the development and/or establishment of industries that would satisfy the new demand for industrial products thus created.

The fact that in practice, however, the concessions granted by means of the National Schedules may be revoked or their effectiveness without much difficulty, either by withdrawing the concession or by granting favourable tariffs to third countries, has prevented the initial effects of this mechanism from producing as substantial results in the way of the expansion or creation of new lines of industrial production as might have been expected had there been some assurance that the tariffs thus removed or reduce would never be reinstated. Nevertheless,

an analysis - although somewhat superficial - of the trade flows between countries in the Area in recent years appears to indicate that the system, even with the aforementioned limitations has given rise to increasing flows of industrial products, many of which are highly processed.

In fact, 22/ while intra-Area imports of negotiated products rose from nearly 300 million dollars in 1962 to over 650 million in 1966, the proportion of manufactured products in those imports climbed from 18 to 25 per cent, total imports of manufactures reaching nearly 160 million dollars in 1966, compared with 53 million in 1962, as shown in table 11.

The largest increases in exports are recorded in the following groups: 23/ office machines (from 175,000 dollars in 1962 to over 7 million in 1966) mainly from Argentina and Brazil; metalworking machinery, mainly machine-tools (from 300,000 dollars to 3.2 million) from Brazil and Argentina; excavating and earth-moving machinery (from 5,000 dollars to 1.5 million) almost exclusively from Brazil; sewing-machines (from 32,000 dollars to 1.3 million) from Brazil; domestic electrical equipment mainly razors (from 70,000 dollars to 900,000) almost exclusively from Argentina; primary batteries and cells (from 400,000 dollars to 1.7 million) from Brazil and Mexico; electronic valves and tubes (from 175,000 dollars in 1963 to nearly 2 million in 1966), mainly from Brazil, Mexico and Chile; and condensers (from 3,000 dollars to 1.1 million from Brazil and Mexico.

<sup>22/</sup> The analysis is based on the figures available for imports between 1962 and 1966. They include not only trade generated by tariff reductions through the National Schedules, but also that deriving from the Common Schedule and from complementarity agreements.

<sup>23/</sup> The Standard International Trade Classification (SITC) has been used.

Table 11 INTRA-AREA TRADE: VALUE OF IMPORTS OF PRODUCTS INCLUDED IN THE LIBERALIZATION PROGRAMME
AND ESTIMATED SHARE OF INDUSTRIAL PRODUCTS 1962-66

(Thousands of dollars)

SITC classification					Year				<del>r</del>		
	DA vi	ru revn	Sub- group	Item	Description	1962	1963	1964	1965	1966	
Q					Food and live animals	177 614	213 852	283 375	328 557	315 150	
		013		}	Meat in airtight containers		1.0	102	304	237	
		024			Cheese and ourd	281	297	HHJ	532	671	
		032			Fish in airight containers	28	75	204	₩0	534	
	1	052			Dried fruit	4 255	5 051	8 262	7 032	5 978	
		053			Preserved fruit	595	2 298	2 138	1 819	2 902	
					Beverages and tobacco	82	213	<u>351</u>	392	510	
,	)				Inedible crude materials	67 227	87 553	116 415	155 669	155 927	
			231.2		Synthetic rubber	35	485	2 227	3 001	5 14	
			251.2		Chemical wood pulp	2 835	2 618	3 058	8 329	12 704	
			251-2	1	Mechanical wood pulp	•	118	406	672	649	
		266	!		Synthetic fibres	-	209	422	1 074	1 156	
					Fuels and lubricants	<u> 152</u>	29	123	<u>135</u>	291	
					Cils and fats	2 345	7 816	15 514	16 654	36 289	
					Chemicals	6 580	16 245	21 366	24 552	30 677	
			}							4	
					Manufactured goods classi-	on litro	65.50	MI 500	oh ogo	70 036	
					fied chiefly by material	33 473	65 528	74 502	94 082	73 216	
			629.1 641.1		Rubber tyres	519	433	7 680	7 721 7 618	5 992	
			653 <b>.</b> 4		Newsprint Jute febrics	1 871 90	3 584 528	4 125 3 710	7 618 8 785	7 434 2 622	
			661.2		Cement	90 74	149	675	818	1 780	
				673.2.3	Alloy steel bars	, , ,	1	389	1 776	3 770	
		674	}	~/ J024J	Steel plates and sheets	2 365	8 508	7 100	19 579	8 925	
		678			Iron or steel tubes	32	180	1 170	2 820	4 067	
		682			Copper	17 707	35 958	30 929	30 966	19 180	
		685			Lead	1 224	2 926	1 217	822	2 121	
		686	ĺ		Zino	5 723	6 206	8 717	10 210	7 932	
		695			Toole	25	43	199	457	676	
		696		1	Cutlery	••	573	286	. 529	1 447	
•					Machinery and transport	1 253	8 874	14 976	22 015	28 965	
		714			Office Machines	175	1 292	3 491	4 794	7 010	
			714.1		Typewriters	,		358	591	1 830	
			714.2 714.3		Calculating machines Statistical machines	13 162	1 277	1 773 1 353	1 674 2 502	7 804 2 100	
									- 11-0	0 -1.0	
		715	717-3		Metalworking machinery Sewing-machines	299 32	1 061 1 684	2 677 1 613	2 429 1 <b>336</b>	3 248 1 256	
				718-4-2	Excavating and levelling	_	,,,	105			
			7300		machinery	5 39	15 201	195 613	1 457	1 535 751	
			719-3	719.6.2	Lifting machinery	39	201	613	797	151	
			1	/17.002	Machines for cleaning or filling bottles	l	21	503	479	784	
			1	719-9-2	Taps, cooks, valves and	]	i			,	
	1				similar appliances	}	141	220	567	603	
	72		1		Electrical machinery	670	2 456	3 972	6 305	8 866	
		722	1	1	Electric power machinery	40	56	350	607	705	
		724	į		Telecommunications appa-	142	5	123	422	569	
	I	725	1		Partus Domestic electrical equip-	1	1	_			
			}		ment	67	1 013	1 389	952	898	
			ł	729-1-1	Primary batteries and cells	415	516	503	908	1 716	
	}	ļ	729•3		Valves	415	275	591 385	1 353	1 908	
			1	729-9-5	Condensers	5	79	229	670	1 120	
	1	713	j		Railway vehicles		12	1 226	-	13	
			}		Miscellaneous mamufactured			1			
	]	•			articles	4 167	2 752	6 395	7 681	10 516	
		891			Musical instruments	23	88	142	1404	882	
		892	1		Printed matter	3 705	1 774	4 294	5 234	7 809	
					I Value of total imports	292 894	403 282	533 024	649 754	650 872	
					II Value of imports of industrial products b/	52 371	96 679	124 290	159 794	158 442	
					Ratio II:I%	18%	24%	23%	25%	25%	
				ł	III Value imports of indus-	1		"			
			•		trial products, excludi	,		1			
	1				metals (682,685/6)	27 720	51 589	83 247	117 796	129 209	
	i	1	l	1	Ratio III% I	9%	13%	16%	18%	20%	

Source: LAFTA.

Includes imported of Argentina, Brazil, Chile, Colombia, Mexico, Paraguay and Peru.

/ Industrial products are taken to be those listed in sections 0 and 2, the whole of sections 1, 3, 6, 7 and 8, and half of sections 5 (chemicals); section 4 is considered to ocver primary products (not industrial items).

There were also considerable increases in rubber tyres (mainly exported by Brazil, Colombia and Uruguay), newsprint (from Chile), special steel bars (from Brazil), steel plates and sheets (from Brazil, Mexico and Chile), iron and steel tubes (from Mexico, Argentina and Brazil), razor-blades (from Argentina and Mexico), musical instruments (from Brazil and Mexico), printed matter (from Argentina and Mexico), synthetic rubber (from Brazil and Mexico), chemical wood pulp (from Chile and Brazil), mechanical wood pulp (from Brazil), synthetic fibres (from Colombia and Mexico), etc.

Under the head of food, the main increases were in sales of canned fish (from 30,000 dollars in 1962 to 500,000 in 1966), Peru and Chile being the chief exporters; preserved fruit rose from 600,000 dollars to nearly 3 million, with Argentina, Chile and Mexico as the main exporters.

Exports of chemical products are highly diversified, the total being made up of a wide range of products, mainly supplied by Mexico. If the total for industrial products excludes metals - copper, lead and zinc, which, besides not being greatly affected by reductions in tariffs, are more in the nature of primary products - the share of industrial products will be seen to have more than doubled between 1962 and 1966 (increasing from 9 to 20 per cent); it will be recalled that, when metals were included, the share increased by only 40 per cent (from 18 to 25 per cent). For a clearer measurement of the effect of the trade liberalization programme, however, special consideration is given to machinery and transport equipment, which face strong competition from the rest of the world. Imports of these products rose from 1.3 million dollars in 1962 to nearly 29 million in 1966, or from 4 to 20 per cent of the total value of industrial products, excluding metals.

These figures undoubtedly lose some of their significance if they are compared with negotiated intra-Area imports (650 million dollars in 1966), and still more in relation to total intra-Area imports (some 760 million dollars in 1966) or imports from all parts of the world (6,500 million dollars in 1966).

Although these relationships do nothing to disprove the central fact that trade in industrial products increased substantially, there

/is no

is no doubt that they raise the question of whether the above-mentioned objectives can be achieved by this means within the established time-limits. Unfortunately, there is no information to show how far the new trade in industrial products resulting from the LAFTA liberalization programme is reflected in additions to production capacity - whether in the form of new plants or the expansion of existing ones - or whether use was made of existing idle capacity. In either case, however, it had a fairly favourable impact on industrial development in the major countries of the region, and to some extent in Chile and Colombia, although on a far lesser scale.

Over and above the foregoing effects, however, even within its narrow limits, this trade in industrial products had the virtue of blazing a trail for industry in several countries, which thus either initiated or intensified a tendency to emerge from their isolation into a more competitive sphere.

As is well known, the commitment inherent in the Common Schedule is that the tariffs on the products included therein must irrevocably be reduced to zero, but the obligation becomes fully effective only at the end of the twelve-year period stipulated in the Treaty, that is, in 1973.

The multinational arrangement known as the Andean Group now embraces Bolivia, Chile, Colombia, Ecuador, Peru and Venezuela. According to the Declaration of Bogotá, it was established as a link in the process of integrating the whole region; the Declaration lays down the bases for an action programme which includes such aspects as the liberalization of reciprocal trade, co-ordination of industrial development policies, establishment of multinational enterprises, etc. It was also agreed to set up a subregional development corporation.

The formation of subregional groupings was viewed favourably at the Meeting of American Chiefs of State in April 1967 and the meeting of foreign ministers in September of that year, on the understanding that such subregional agreements should be temporary and compatible with the central objective of regional integration. In addition to the agreement on petrochemical products signed by four countries members of the Andean

Group (Bolivia, Chile, Colombia and Peru), referred to in chapter III, other interesting projects include complementarity agreements on the metal-transforming industry and the motor-vehicle industry, more headway having been made in the studies on the former.

Besides the annual tariff reduction regotiations through the National Schedules, the provisions in force also envisage other measures or instruments for ultimately attaining trade liberalization: the Common Schedule and complementarity agreements.

It is well known that the former mechanisms consists in including products in the liberalization programme in various three-year periods until "substantially all such trade" has been covered, but with the obligation to remove all duties, charges and other restrictions only after completion of the transition period established in the Montevideo Treaty, i.e., by 1973.

The first stage of the Common Schedule was negotiated in 1964, and in spite of the difficulties that arose it was completed within the stipulated period. As is known, the second stage, which should have been completed in 1967, is still pending, two attempts at negotiations having failed, the first in 1967, and the second ending in November 1968, without the objectives pursued having been achieved.

The prevailing idea was to include mainly agricultural commodities in the second stage; a project on trade in these commodities was carefully worked out, which, in the last analysis, provided safeguards in addition to those already existing to facilitate the inclusion of agricultural commodities. Not even in these terms, however, was it possible to secure the necessary approval for such decisions, since the economically relatively less developed countries refused to vote for them, with the result that the negotiations failed. It is only in the past year that activities in connexion with complementarity agreements have been more encouraging. These instruments, considered in the Treaty merely as ancillary mechanisms of the liberalization programme, have met with all kinds of difficulties since the programme was initiated.

is the property of the contact of the property of the contact of t

This imprecise term may be taken to mean any proportion between 75 and 100 per cent; the general impression is that it might represent as much as 80-85 per cent of the total volume of such trade.

At first, there was some reluctance to conclude them, because according to the provisions in force, all countries, whether or not parties to the agreement, could benefit from the tariff reductions concerned; thus only two were signed, one on statistical and other similar machines, and the other on electronic valves.

When the system was modified so as to ensure that countries not parties to the agreement - except the less developed nations, which would benefit from it in any case - would enjoy the same benefits only if they offered adequate compensation, five more agreements were signed between 1965 and 1968, most of them originating at meetings of entrepreneurs in the individual sectors, which had been initiated in ALALC almost at the same time as the modification of the above-mentioned system.

Accordingly, there are now seven agreements in force and several under consideration for various sectors of industry, as detailed in chapter III. In addition to these mechanisms established under the Treaty, other machinery currently in operation has resulted from the action of the Advisory Commission on Industrial Development (CADI) and the Working Groups composed of government experts, in the following sectors: steelmaking petrochemical products, pulp and paper, and fertilizers.

The purpose of these Groups and of CADI is to seek and propose to the Standing Executive Committee of ALALC specific integration formulas in each of the above sectors. After one unsuccessful attempt, a number of meetings have been scheduled for 1969, which should culminate by mid-year in consideration by CADI of the proposals put forward by the study groups concerned.

(ii) <u>Central American Common Market (CACM</u>). It is well known that the liberalization of trade has shown satisfactory results. Nearly all reciprocal trade (intra-regional imports amount to over 170 million dollars), which represents from 18 to 20 per cent of the total volume of trade, has been liberalized, and goods circulate freely throughout Central America. It is interesting to note the accelerated growth of the share of industrial products in this trade, which is now estimated at over 50 per cent.

A highly significant achievement is the adoption of a common external tariff which at present covers 85 to 90 per cent of the area's total imports.

The Central American Common Market represents the first attempt at subregional integration in Latin America. Besides being of longer standing than LAFTA, it has more instruments and institutions. The former include the General Treaty on Central American Integration instruments for the equalization of import duties and charges, for the harmonization of fiscal incentives to development and for the protection of industrial property, and two agreements or systems for the promotion of industry. It has made great strides in the liberalization of trade. The main instruments for promoting and guiding industrial development have been the Régime for Central American Integration Industries and the Special System for the Promotion of Production. The first is designed to promote industries which require access to the whole Central American market in order to operate on a reasonably economic scale; the tendency, therefore, is for only one industrial establishment to be classified as an integration industry.

Industries in this category enjoy a number of advantages: more favourable official base values than those in the common external tariff, exemption from customs duties on raw materials or semi-finished goods, and from taxes on their production or consumption, as well as the tax benefits to which they are entitled under the Central American Agreement on Fiscal Incentives to Industrial Development. In exchange for all this, there are a number of obligations and commitments such as compliance with quality standards, use of a minimum amount of Central American capital, and a minimum initial production capacity.

The Special System for the Promotion of Production consists in the establishment of regional tariff protection over and above that provided by the Central American Standard Import Tariff, which is not applicable until production covers at least 50 per cent of regional demand. This was a resource used to support the Régime for Central American Integration Industries and to bridge certain gaps that had been noted in its operation.

Lastly, the Central American Agreement on Fiscal Incentives to Industrial Development is intended to supplement the other systems in the promotion and orientation of new industries and the expansion of existing establishments; the incentives are scaled according to the type of product manufactured, the greatest benefits being extended in respect of capital and intermediate goods.

These incentives mainly comprise total or partial exemptions from customs duties, taxes on income and profits, and taxes on assets and net worth.

Honduras and Nicaragua - as economically relatively less developed countries in the area - have received preferential treatment through this group of promotional measures.

Broadly speaking, Central America's decided progress in the field of trade contrast with its sluggish industrial development. Active promotion is needed, and this in turn requires industrial development programming at the national and subregional level, which is definitely lacking in Central America.

As may be observed, although the integration process in Central America has more institutional instruments than its counterpart in the Latin American Free Trade Association, its achievements cannot be regarded as strikingly superior to LAFTA's. In both cases there have been negative and retarding factors whose action is analysed later.

(iii) The Caribbean Free Trade Association (CARIFTA), which was established at the end of 1965, originally comprised Antigua, Barbados and Guyana. Jamaica was admitted at the end of June 1968, and the West Indies Associated States a few days later. 25/

Its main commitment is to abolish import duties over a period of ten years (five for the smaller members) on a list of products covering about 75 per cent of present intra-area trade. Special treatment is given to agricultural commodities, particularly sugar.

The following is a complete list of the members of CARIFTA: Barbados, Guyana, Jamaica, Montserrat, St. Vincent, Trinidad and Tobago, and the West Indies Associated States (Antigua, Dominica, Grenada, St. Kitts-Nevis-Anguilla and Santa Lucia).

In the field of industry, Trinidad and Tobago is particularly interested in obtaining new markets for its petroleum products, while Barbados! chief hopes lie in expanding its re-export trade. Guyana, with its larger territorial area, is concerned with developing certain industrial crops and related industries.

Since CARIFTA is a recently established system, there has been no experience on which to base any opinion regarding its operation.

## (b) Promotion of exports of manufactures to the rest of the world

The Latin American countries, like all developing countries, have traditionally been exporters of primary products, including agricultural commodities and mining products. Some of them have also been traditional exporters of processed products: canned meat and semi-processed wool products (Argentina and Uruguay), copper (Chile), lead, silver and zinc (Mexico), petroleum products (Venezuela), etc. It is well known, however, that these industrial exports had very special characteristics and development trends; and in many cases the foreign exchange earnings were not even controlled by the countries concerned. The products were generally designed to satisfy a specific market, in the hands of foreign enterprises, which controlled both ends of the operation.

It was only at the beginning of the present decade that the Latin American countries became concerned with developing a genuinely autonomous flow of manufactured products to the world market.

This coincided with the institution of the integration systems

- LAFTA and CACM - and with the emergence on the world plane of
international co-operation trends towards focusing aid to developing
countries on the improvement of their trade, through, for example, the
opening up of the developed countries! markets to industrial exports from
developing countries.

Other factors, of a more national character, were also involved.

First, the major countries of the region were already at the point where manufacturing techniques imposed scales which in may cases went beyond the limits of the domestic markets; this naturally led them to consider the possibilities offered by external markets. Secondly, in at least two countries - Argentina and Brazil - a severe contraction of domestic demand, certainly had an effect also and spurred an interest in the external market.

/All this

All this took place concurrently with the efforts made at international meetings — as in the case of the United Nations Conference on Trade and Development (UNCTAD) — to secure access to the industrialized countries! markets for manufactures from the rest of the world.

In more recent years - especially since 1965 - the majority of the Latin American countries have devoted most of their efforts in this sphere to the establishment of an institutional system, or a set of norms achieving differing degrees of progress in that direction. Mexico was the first country to complete such a system, whose focal point was the Banco Nacional de Comercio Exterior, an autonomous public institution which, together with other bodies, fulfils the appropriate functions.

Although all these efforts, which in some countries cover virtually the whole range of government support for exports, have not produced any spectacular results, there is no doubt that, in some degree, whatever has been achieved thus far has been made possible by the relevant provisions adopted. It should be noted in this respect that, on occasion, the creation or expansion of export flows began to gather way largely as a result, not of deliberate action but of exchange, fiscal and other general measures aimed essentially at improving the market prospects for primary products. Exports of manufactured products amount to about 800-900 million dollars, 26 or less than 10 per cent of total exports.

They consist largely of exports to other countries in the region, particularly those belonging to the integration system. In 1966, 31 per cent of Argentine exports and 40 per cent of Brazilian exports found markets in Latin America. It is much more significant, however, to consider exports of non-traditional highly processed manufactures, i.e., to eliminate the effect of products such as hides, combed wool, canned meat, etc. from Argentina, and methol, coffee extract, etc. from Brazil, whose principal markets have traditionally been the industrial countries. For a more accurate - although still very rough - idea of the importance of the Latin American countries as the destination

<sup>26/</sup> Excluding exports of petroleum products, unprocessed metals - copper, lead, zinc, etc. - sugar, wood, oils and other tradional exports of manufactures and semi-manufactures.

of manufactures produced in the region, attention should be turned to comparatively recent exports of highly processed products. Thus, in 1966, Argentina dispatched 76 per cent of its total exports of metal products and machinery of all types to other Latin American countries, and Brazil 73 per cent.

An appreciable volume of exports to other areas has also been recorded, however: cotton textile products (yarn and fabrics) from Brazil and Colombia to the United States, Brazilian printed fabrics to South Africa and Angola, Chilean furniture and footwear to the United States and Chilean newsprint and pulp to Australia, communications materials from Argentina to Viet-Nam, etc.

As stated earlier in this study, the developing countries are concentrating their efforts on obtaining access for their manufactures to the markets of the industrialized countries through a system of general non-reciprocal preferences. The attitude of the developed countries at the second session of UNCTAD was obviously not very encouraging. It was decided there to set up a Special Committee on Preferences, as an ancillary organ of the Trade and Development Board, to continue the consultations with a view to working out a system of non-reciprocal and non-discriminatory preferences in favour of developing countries.

The first meeting of this Committee was held in November 1968, to initiate negotiations on the procedures and characteristics of the system of preferences.

The need to find some workable formula is becoming increasingly urgent, especially in view of the ratification and emergence of new systems or procedures giving special preferences to particular groups of countries, as is happening between the African nations, and the natural counterpart of this system, i.e., reverse preferences which benefit the developed countries.

### Chapter II

# OUTLINE DESCRIPTION OF LATIN AMERICA'S MAJOR INDUSTRIAL DEVELOPMENT PROBLEMS

The aim of the present chapter is to give a brief account of those aspects of industrial development in Latin America to which special attention should be devoted in the formulation of future policies. For the sake of simplicity and clarity, the problem will be classified in seven major categories, which are summarized below. It hardly need be added that this list should not be interpreted as an attempt to establish an order of priorities.

In the first place, underlying all the other difficulties, in the sense that it aggravates them in some degree or makes them even harder to solve, there is the persistent inflationary process which hinders the economic computation of costs, investment, internal and external competition, and all the other manifold variables that need to be estimated. This factor becomes a much more formidable obstacle to industrial development at the relatively advanced stage of industrialization upon which many of the latin American countries are entering.

Secondly, there is the exaggeratedly protectionist policy, unrelated to any consistent industrial development programme, which has been adopted in restricting imports by means of quantitative, exchange and customs tariff controls. Hence the application of investment resources has been seriously distorted, and high costs combined with technically weak and in some cases socially undesirable structures of production are the general rule in the region.

Thirdly, another set of administrative policies and practices, more specifically pertaining to the industrial sector, systematically make for inefficient utilization of capital, either by encouraging anti-economic scales of production, or by fostering marked under-utilization of installed capacity for long periods at a time or even as a permanent operational characteristic. Innumerable adverse effects ensue. Less capital is available, and therefore the expansion of the capital-intensive

/branches of

branches of industry - precisely those with the best growth prospects in terms of demand - is more heavily handicapped. Costs rise, and since the industries in question produce raw materials and semi-finished products, the consequent unfavourable repercussions spread throughout the whole of the economy, and, from the outset, possibilities of access to world markets are severely limited.

Fourthly, the incentives to the use of capital in place of manpower which are provided by many of the policies or practices in force sharpen the trend towards inefficient utilization of capital that stems from unduly small scales of production and other circumstances whose impact is much the same. In effect, not only does the price system seem to reveal, in significant respects, a bias in favour of the use of capital, but in addition the increasingly frequent application of measures representing capital subsidies (tax exemptions, and credits for industry or privileged terms) exert pressure in the same direction. The consequences are deplorable not only for the employment situation, but also, and above all, for the growth of the product, on which the inappropriate allocation of the region's scanty supply of capital has a detrimental effect.

Fifthly comes the entire problem of industrial financing, which consists, on the one hand, in all sorts of difficulties in obtaining funds from outside the enterprise, and, on the other, in the inadequacy on undistributed profits as a source of financing. The instability, and in some instances the total absence, of national capital markets, and the steady rise in world market rates of interest, accounts for the first of these obstacles; while the second is explained by the relatively low rates of return in the industrial sectors of key importance for future development, and their restrictive effects on self-financing.

Sixthly, attention must be drawn to the whole group of problems relating to Latin American enterprises and the need to strengthen their organization and technology so that they can play their full part, without running the risks incurred today, in the increasing competition and progressively greater freedom of interchange with the outside world - in the trade as in technology - that has been growing up in Latin America. This strengthening process seems to be a sine qua non

/if Latin

if latin American concerns are to enter into various forms of association with foreign capital and enterprises and are to take advantage of the potential benefits afforded by the exporting of manufactured goods and by the assimilation of up-to-date techniques.

Lastly, the present study reviews from an interpretative standpoint the stumbling-blocks which have been slowing up the progress of regional integration and of exports of manufactures to the world market.

For example, against the background of the regional integration of industry in relation to the Latin American Free-Trade Association (ALAIC), it pinpoints the institutional deficiencies in the way of the sectoral approach advocated by ALAIC itself; and it also offers a critical appraisal of the integration schemes that have been bandied to and fro, from the angle of their failure to make due allowance for the incapacity of the structures of production — in default of the appropriate remedial measures — to absorb the major changes and other implications deriving from the new formulas proposed. With regard to exports of manufactured goods, stress is laid on the comparatively little attention that has been paid to promotional activities in fields directly related to supply, and — here too — on the want of linkage between supply and demand in the shape of effective institutional instruments for the establishment of mutually beneficial conditions.

# 1. Economic calculation requirements in an industrialized society

Inflationary processes varying in intensity from one country to another, and often combined with the maintenance of artificially high exchange rates, have accompanied industrial development in Latin America, which has been based essentially on import substitution. At one time they may actually have facilitated the process, by making it easier for resources to be transferred from the traditional export sectors to the nascent industries. Today, however, the position is different. One of the most insuperable obstacles to the consolidation of the industrial development achieved by Latin America during the post-war years has been the persistence of inflation in many of the countries of the region.

The negative influence of monetary instability and the need to find some remedy for it became increasingly apparent as the progress of industrialization gave rise to new requirements in respect of long-term planning for industrial operations, whether these were conducted by private or by public enterprises. In present circumstances, the stabilization of the currency would seem to be a vital requisite if the current phase of relatively inefficient industrial development more or less cut off from world flows of trade and technology, is to be left behind, and a start is to be made on the progressive integration of latin American industry, at the level of both regional and world markets.

The structural changes that have occurred in Latin America during the past twenty years find synthetic expression in the high proportion of the gross product generated in manufacturing and construction — now some 30 per cent on an average, as against only about 18 per cent at the end of the Second World War. The corresponding figures are much higher still in some countries of the region, which from time to time in recent years have derived up to 40 per cent of their gross product from the transforming industries in question.

The foregoing data reflect sweeping changes in the structure of the economy, and reveal the need for corresponding adjustments in the institutional set-up and in economic policies as a whole. This is because the production, financing, distribution and internal and external marketing of so proportionally large an output of manufactured goods entails requirements different from those of economies where the product of the manufacturing sector is much smaller, and mainly primary commodities or semi-manufactured goods are produced.

These requirements make themselves felt from various angles. In the first place, in an economy at a relatively advanced stage of industrial development, a hard currency which makes economic estimates meaningful is indispensable for those aspects of entrepreneurial activity which consist in estimating costs, analysing rates of return, planning new investment that will take a long time to mature and programming the expansion of existing markets and the conquest of new ones, cannot do without.

Secondly, a large modern industry, characterized by increasing capital requirements and investments that is slow to mature, cannot be financed on an even moderately satisfactory basis in an atmosphere of persistent inflation, which discourages saving and virtually paralyses capital markets, which is an incitement to speculation and a scourge of long-term operations.

The need to strengthen the capacity for capital formation in both private and public enterprises is perhaps one of the most cogent arguments in favour of real stabilization of the currency, as a prerequisite for the acceleration of industrial development. An enterprise, especially a large one, is normally heavily dependent upon the capital market for resources to finance its expansion. Persistent inflation has hampered the operation of Latin America's incipient capital markets, and in one or two cases has even wiped out capital markets whose volume of transactions placed them in a comparatively outstanding position in relation to the industrialized countries themselves. And since dependency on capital markets for the financing of development is greater in the case of large enterprises than in that of medium-sized or small concerns, which can resort mainly to capital contributions from the restricted circle of their owner-partners, persistent inflation has the additional drawback of making it harder to build up and consolidate large-scale undertakings, which is a very important consideration from the standpoint of the assimilation of new techniques or the improvement of the position of Latin American enterprises via-à-vis their foreign counterparts. Similarly, this is another factor making for the increased dependence of Latin America's industrial development upon foreign private capital and thus aggravating one of the most serious problems that have to be faced by industrialization policy in the countries of the region.

Accordingly, the analysis of Latin America's recent experience in the field of industrial development suggests that if the process is to be speeded up and streamlined sufficiently to permit of a break-through into world markets, effective stabilization of the currency is essential, with all that the pursuit of this basic objective may entail in the way of steadfastness of purpose, supplementary policies, and efficiency and flexibility in the use of the appropriate instruments and notwithstanding the greater obstacles to its attainment in developing countries.

/2. Import

40,00

# 2. Import substitution, methods of industrial promotion and allocation of resources

Secondly, mention must be made of the distorting effects of import substitution policy on the allocation of resources. In many sectors of industry it results in high costs, and its repercussions spread through the economy in different ways, reducing the real income of consumers, cramping the growth possibilities of other sectors that use the products of the former groups as inputs, and limiting export opportunities.

The criticism levelled against import substitution should not be taken to imply a generalized disparagement of the validity of that method of achieving industrial development at the time when it was applied and in the circumstances then prevailing. An appraisal aiming at that sort of historical evaluation would probably bring to light certain negative factors that have had an adverse influence on the structure of industrial production deriving from tariff protection. They would include, in particular, the non-selective character of protectionist measures, or if they were selective, the unsuitable criteria applied, or the excessively high barriers set up, or the fact that import restriction measures were mainly or entirely subordinated to balance-of-payments objectives, regardless - or almost regardless - of the internal structure of production that was thus being established. For the time being, however, the aim is not to undertake a critical evaluation of past developments, for which purpose the different circumstances of the individual countries would have to be taken into account, but to point out what is needed in present conditions. The structure of production is now widely diversified, and in many countries of the region additional import substitution possibilities are largely confined to highly capitalintensive lines of production involving complex technology. Given

It must be borne in mind, of course, that existing conditions differ widely from one country to another. The comments formulated here relate primarily to those Latin American countries where industrial development has made most progress.

this situation, industrial development based on substitution and the somewhat rough—and—ready methods adapted by import substitution policy should give way to policies and instruments of a different type, more dependent on the operation of the market and more closely integrated with an over—all policy designed to promote efficiency and technical progress throughout the whole economy.

In this process of recrientation, an essential step will be to make industrial development increasingly independent of balance-of-payments problems and, above all, of quantitative, exchange and tariff restrictions on imports manipulated in relation to external payments problems. The fact that in most of the latin American countries industrial development has been subordinated to changing requirements in respect of external payments controls is largely responsible for many of the handicaps by which the structure of industrial production in the region is affected today. In this context, suffice it to mention three major difficulties.

In the first place, the scale of the protection afforded through import controls has often been out of proportion to what was really needed to offset initial disadvantages, deriving either from inadequate scales of production or from lack of technical and administrative experience. As the protectionist barriers were established with an eye to balance-of-payments problems, they were set so high as to pre-empt markets and thus create situations that were unfavourable to competition and to the constant improvement of manufacturing methods and processes.

Secondly, for the same reason - the predominance of external payments considerations in the management of import controls - there has been a tendency to extend protection indiscriminately to a very wide range of productive activities or even to all branches of production, which has militated against specialization and the channelling of investment in terms of comparative advantages. Even when selective criteria have been applied in relation to import controls, they have as a rule been based on social considerations, the idea being to restrict external purchases of "luxury" articles and encourage imports

of "essential" items, such as raw materials and capital goods. This has helped to distort the structure of production, giving it a bias towards the manufacture of non-essential consumer goods, and holding back the sectors of key importance for development, such as steel-making, the chemical and petrochemical industries, and the manufacture of industrial machinery and equipment. Thus the social objectives visualized (although as subsidiary aims) in the policy of controlling imports for balance-of-payments purposes have not been attained, since powerful incentives have been provided for the establishment of domestic consumer goods industries with over-emphasis on "luxury" items; and at the same time, flaws and disequilibria have been built into the structure of production which are still adversely affecting the prospects of accelerating industrial development in the region.

Admittedly, to draw a dividing-line between what is and what is not "essential" is a delicate matter, particularly from the standpoint of the composition of production. Many of the durable consumer goods that are regarded as "luxury" items - cars, for example - do or do not fall into that category according to the circumstances in which they are used. Moreover, the industries that produce them, besides being concerned in the manufacture of other products which are essential capital goods - lorries, tractors, stationary engines, etc. - constitute markets for industrial raw materials and intermediate products (steel and other metals, castings, forgings, parts of all types, etc.) which are used indiscriminately in the manufacture of both luxury and non-luxury consumer goods and of capital goods, and generally call for scales of production so that aggregate demand for all finished products of any kind is barely enough to sustain them. Nevertheless, despite the reservation implicit in these considerations, the distorting influence of import control criteria on the structure of industrial production in Latin America is beyond all question. It is evidenced, for instance, in the fact that Latin America still effects large-scale imports of items for the production of which the region clearly possesses potential

comparative advantages, either in the shape of the natural resources on which the corresponding manufactures are based (in the case of steel, aluminium, pulp and paper, and many basic chemical products, both organic and inorganic) or by virtue of other manufacturing characteristics and the natural or acquired aptitudes to be found in many of the Latin American countries (in the case of wood products, machinery and equipment, etc.).

Thirdly, another great drawback to industrialization obtained as a by-product of measures to stabilize the balance, of payments is the dissociation of the process from industrial programming. Either there is no such thing as systematic programming - for the very understandable reason that its introduction is not worth while, since the promotion instruments used are manipulated at the level or as a function of external payments problems - or where it does exist, it is ineffectual and academic, for want of instruments of action. This divorce between industrial development and programming is a particularly unfavourable factor for obvious reasons, only one of which will be singled out here: in increasingly complex modern economies, like those of many Latin American countries today, industrial activities are characterized by their close interdependence and self-sustained growth. The installation of certain industries is a sine qua non for the establishment of others which use their products as inputs, if the course followed is not to be that of undertaking solely finished manufactures, entirely dependent upon imports for the raw materials and machinery required. Conversely, the expansion of certain branches of industry manufacturing finished products may be an essential requisite for the formation of a market for a specific raw material (pulp, steel, aluminium, etc.) or intermediate product (forgings, miscellaneous semi-finished metal-transforming products, chemical products, etc.) compatible with minimum economic scales of production in the activities concerned. This consideration is all the more important in practice, inasmuch as it is in fact in these "basic" manufactures that the ratios between economic scales of production and the domestic markets of the Latin American countries are least satisfactory.

Hence it is clear that industrial development progarming normally has an important role to play, as a supplement to the operation of market forces, in the establishment of integrated and properly balanced industrial structures, through the adoption of selective criteria which in each case will ensure that new industries are established in the most appropriate order. If the promotion of industrial activities depends primarily upon the indiscriminate protection resulting from balance-of-payments stabilization policy, determined by criteria which are necessarily alien to the guiding principles of industrial development, industrial programming is deprived of the opportunity to fulfil its purpose, and is reduced to little more than a decorative appendage to national administrative structures, with no power to prevent the establishment of ill-balanced structures of industry.

As will be shown in more detail in a later chapter, the reorientation of economic policies called for in this case is a complex task, and has a bearing on a great many aspects of over-all economic policy. In part, it would entail an endeavour to solve external payments problems primarily by measures in depth closely linked to monetary policy, and as little as possible through the prolonged or permanent application of extremely stringent import controls. The attainment of such an objective of course depends upon the concurrent adoption of effective measures to stabilize the currency, in view of the intimate relation between inflationary pressures and external payments problems.

This change of direction should be accompanied, in the first place, by a radical revision of the customs tariff, which should be reinstated as an instrument solely or mainly for the protection of industry, to be applied in conformity with the objectives and orders

It has been suggested that programming as a supplement to market forces may assume even greater importance at the level of Latin America as a whole, in connexion with the relatively less developed countries and the economic integration of the region, than purely in the context of the individual Latin American countries, which is the approach primarily adopted here.

of priority resulting from industrial programming. Secondly, much more frequent and effective use should be made of industrial promotion instruments whose application has only recently begun to spread in Latin America: inter alia improved and diversified industrial credit facilities, tax exemptions, and the establishment of public utilities or infrastructure in close relation to private investment projects. It is true that these promotion instruments have been in use for some time in many Latin American countries. The point to be stressed here, however, is that the use made of them has been inadequate and relatively ineffectual, precisely for want of links - in practice impossible to forge, in the existing circumstances - with import substitution machinery which is based on foreign trade controls and in many cases produces results that run counter to the aims of industrial programming. Meanwhile, in other instances, the superimposition of one method of promotion on another - direct promotion on top of protectionism - on behalf of one and the same activity gives rise to pre-empting of markets and to capital subsidies that represent transfers of resources probably far in excess of what is needed to produce the intended promotional effect.

In a later chapter, consideration will be given to the instruments of promotional policy that should increasingly take the place of import controls as the mainspring of industrial development in the coming decade.

### 3. Economic use of capital and acceleration of development

Another important aspect of the requisite reorientation of industrial development in Latin America relates to the economic use of capital, which is adversely affected by specific policies and by a number of practices adopted particularly in connexion with the development of the more capital-intensive industries, such as steel-making, the chemical industries, pulp and paper manufactures, non-ferrous metal working, etc.

The first problem to be discussed is that of economic plant sizes, the magnitude of the economies of scale obtained in establishments approximating to the sizes in question, and the inadequacy of domestic markets in relation to such requirements. The sectoral analyses which complete the present study, together with the paragraphs in chapter I that deal with the various aspects of the technology problem, fully illustrates the point, and provide a basis for approximate quantification of the economies of scale that are lost because of the separation between the individual country markets for some major sectors of industry. The economic integration of Latin America is the appropriate instrument for steadily expanding scales of production and reducing the gap between the usual sizes of plants in Latin America and of those serving the external markets in which Latin American industry will be having to compete - it is to be hoped - in the near future. This topic will be analysed in the following chapter, which is concerned with the problems of regional economic integration and of access to world markets.

A question which in a way should come first, however, and which is perhaps of greater practical importance for the short and medium term, relates to the tendency for capital to be inefficiently utilized as the result of plant sizes below the economic minimum and, what is more, smaller than would be warranted by the corresponding domestic markets: in other words, the tendency not to take due advantage of all opportunities of making the industrial plants established as large as possible, within the limits set by existing volumes of apparent consumption. As long as countries fail to avail themselves of the chances that their own markets afford them

/of saving

of saving on investment and production costs by manufacturing on larger scales, how can the expansion of those same markets on a multinational basis be seriously considered as a practical proposition?

It is relatively common, where "basic" industries are concerned, to find that two or three plants are sharing a domestic market so small that in its entirety it would be barely sufficient on its own - or indeed totally insufficient - to sustain a single plant of moderately economic dimensions. The resulting diseconomies of scale represent a considerable waste of capital.

4

 $\mathbb{R}^{2}$ 

The following are three cases in point. In one of the Latin American countries there are two aluminium plants in operation, with an approximate annual capacity of 20,000 tons of metallic aluminium each, and a third, with an annual capacity of 25,000 tons, is under construction. The aggregate sum invested in the buildings and equipment (excluding social projects, infrastructure, etc.) of these three integrated plants (they also produce their own alumina) may be estimated, on the basis of technical coefficients taken from an ECLA publication, at 114 million dollars, or 1,750 dollars per ton of capacity. If the aggregate capacity of all three - 65,000 tons - were installed in a single plant, the investment that would be required may be estimated at some 83 million dollars (about 1,270 dollars per ton). In other words, a saving of 31 million dollars could be effected, i.e., nearly 30 per cent of the present estimated investment in the three plants. In actual fact, the saving of capital would probably be much greater, since for each of these plants substantial sums have to be invested in infrastructure projects (roads, water supply, power, etc.) which are not taken into account in the foregoing estimate. Furthermore, the construction of a single plant with a capacity of 65,000 tons would be far from exhausting the possibilities of achieving economies of scale in this line of production. One of its characteristics is the rapid decrease in unit investment up to a good deal more than 100,000 tons, which is the usual capacity of plants serving world markets.

The second example relates to steel-making. Two steel mills were built at the same time, each with an initial capacity of about 500,000 tons of steel ingots, to be expanded later to 2 million tons. The aggregate

/investment represented

investment represented by these two integrated plants certainly exceeds 600 million dollars, whereas the investment required for a single plant with twice the above-mentioned initial capacity would probably be little over half that sum. It is true that the initial investment figures for the two mills are inflated by over-sizing of a great deal of auxiliary plants because of the subsequent expansion projected, and that the investment per ton required for expansion purposes will be correspondingly lower. But this is no reason why the practice of over-sizing the plant in which the initial investment is placed, which is current in the iron and steel industry, could not have been applied in the construction of one mill with an initial capacity of 1 million tons of ingots, while construction of the second could have been deferred to a later date, in accordance with the growth of the market. The saving of capital during the period in which, as matters stand, the two plants are operating below the minimum economic level of capacity (about 1 million tons, since both mills manufacture flat rolled products) would have been considerable.

Lastly, a third example is afforded by the chemical industry. In one of the countries of the region three ethylene plants are in operation, using as raw material propane in some cases and naphtha in others. The total amount invested in these three plants, whose aggregate production capacity is about 35,500 tons (although their real output is less), was approximately 12 million dollars. The investment needed for a single plant with the same total production capacity would not be more than about 6 to 8 million dollars, i.e. (as in the foregoing example taken from the steel industry) little over half the sum invested in the existing split-up industry.

What circumstances or what policies are responsible for capitalwasting practices such as those illustrated above, which are current throughout the whole of Latin America? The causes differ, of course, from one country and from one branch of industry to another.

One of the contributing factors is the attitude of the authorities to the existence of several alternative projects for starting the same line of manufacturing. They are prone to consider that the decision to

/approve all

approve all these projects at once will be in the country's best interests, since it will supposedly result in the expansion of the total volume of capital formation. This view disregards, in the first place, the inevitable reduction of scales of production in each project, and, secondly, the illusory nature of the increase in investment at the level of the over-all economy. The blame may largely be laid on the lack of official advisory agencies qualified to make a satisfactory technical and economic evaluation of major projects, and also, in some instances, on the limited political and administrative importance of such agencies, where they exist, in the bureaucratic hierarchy of the country concerned.

Inefficient use of capital may also be partly imputable to the competition between international consortia to establish production facilities in countries that were formerly importers of the items they manufacture, and the leaning towards over-simplification that inclines national authorities to divide up the market arithmetically among the various would-be investors. They supplement this procedure, of course, by setting up protective tariff barriers in inverse proportion to the resulting scales of production, again under the illusory impression that they are helping to swell the volume of investment in "basic" industries, regardless of such essential aspects of the problem as scales of production, investment per ton of capacity and production costs.

The same attitude is often adopted by the central government in face of internal pressures in the interests of particular areas. In the Latin America of today, the preservation of the balance of development as between internal regions has become one of the prime concerns of national policy. As a result, a serious problem is arising in connexion with the location of basic industries, in view of the increasing subordination of considerations of efficiency and costs to motives of regional interest. The strong political pressure by which regional demands are often backed makes it difficult for the central authorities to adopt decisions which will imply selection of optimum locations and scales of production. Such situations are common to almost all the Latin American countries, and

affect a wide range of undertakings, from the installation of petroleum refineries to the establishment of iron and steel, petrochemical and even motor-vehicle industries.

A complementary problem is the extremely long time that major projects take to mature; apart from other drawbacks, this means that considerable amounts of capital are tied up for inconveniently lengthy Among the various determinants of this state of affairs is the failure of governments to give clearly-defined indications of the technical, financial and locational characteristics they would like the projects to embody. As a result, the necessary guiding principles are established in makeshift fashion in response to pressures and counterpressures on the part of the various interested groups, and the less well-equipped the government to formulate directives or at least to arbitrate between the potential investors, the longer this process goes on. The investors in question are not always private consortia or foreign enterprises; they sometimes include autonomous or semi-autonomous State institutions, whose interests or views are not always identical with those of the central authorities. To make matters worse, especially as far as the central government's difficulty in playing the role of arbiter is concerned, the official agencies whose function it should be to advise on final policy decisions have had little or no technical training for the task. This weakness on the part of the institutions that should evaluate from the technical and economic standpoints, in adequate depth and detail, the different characteristics and economic repercussions of alternative

Mention might also be made of other factors - many of them social and institutional in character - which make for inefficient use of capital and are linked to the difficulties in the way of running an industry on the basis of more than one shift in Latin America.

In many cases, too, a corollary of the protracted maturation period of major projects is the length of time it takes to obtain a marketable product in the early stages of industrial operation. But here factors of a different kind come into play, analysis of which is outside the scope of the present study.

investment projects, will very probably be aggravated in the future, not only because of the increasing technical complexity of the modern industries that will have to be established, but also on account of the rapid rise in the number of large-scale projects that will have to be handled every year, throughout the region, in consequence of the prospective growth of the main sectors of industry.

The conclusions to be drawn from the foregoing considerations, from the standpoint of a possible reorientation of Latin America's industrialization process in the course of the next development decade, relate to the introduction of basic changes both in policies for the major sectors of industry and in the institutions that lay down guidelines for investment policy, and will be more explicitly set forth in a later chapter.

#### 4. Use of manpower and alternative techniques

A salient feature of industrial development in Latin America has been the persistence of considerable margins of unemployment, even in cases where a good deal of effort has been devoted to industrial promotion and the establishment of new manufacturing activities. This persistent and in many cases rising rate of unemployment has aroused widespread concern as to the manpower absorption capacity of the industries that are growing up in the region, and has prompted investigation of its root causes. They may lie in the changes in the inter-sectoral structure of the economy that accompany development, in the proportions of the factors of production that characterize modern production techniques, or in both factors at once. Structural changes are represented mainly by the decline of the agricultural sector's share in the product and in employment of labour, and by the reduction of the volume of manpower employed in agricultural activities as a result of the improvement in agricultural productivity. The production techniques available for application in the manufacturing sector reflect the proportions in which the factors of production are to be found in developed countries, where such techniques have their origin, and therefore, by increasing the capital and reducing the labour required per unit of product, add yet more surplus manpower to

/the labour

the labour force released by the mechanization of agriculture. A vicious circle is thus created in Latin America's development process, since endeavours to modernize agriculture and to introduce the most up-to-date techniques in secondary activities will increase the aggregate product only at the cost of increasing "structural" unemployment.

Some aspects of this problem must be more carefully considered, at least from the angle of industrial development.

The manpower absorption capacity of an economy is a function of two main variables: the over-all growth rate of the product, and the proportions of the factors of production that are characteristic of "efficient techniques". If the growth rate of the product is too slow in relation to a given rate of population growth, there is bound to be a certain amount of unemployment, which will be the more considerable, the more capital-intensive the prevailing production techniques. Obviously, if the rate of increase of the economically active population - very high to begin with - is rising still further, the growth rate of the product must keep pace with it closely enough to guarantee full employment; and that growth rate depends primarily upon the rate of capital formation and, in addition, upon the efficiency with which capital is utilized, i.e., on the product-capital ratio.

Latin America's situation in this connexion is by no means favourable, in view of the population explosion and the slackening of the growth rate of the product. The latter in its turn reflects both external-sector difficulties (adverse trends in the capacity to import and unfavourable movements of capital), and deficiencies in capital formation, not only from the standpoint of the proportion of the product saved and invested, but in respect of the efficiency with which the investment concerned is distributed and utilized throughout the economy.

What are the specifically industrial factors contributing to this state of affairs? To take first the question of deficient capital formation, the determinants clearly include the low level of capital formation in industrial enterprises themselves — or in other words, as noted elsewhere in the present report, the inadequate degree of self-financing

/in most

in most branches of industry - and the relatively low rates of return which are prevalent, despite high tariff protection, in many industries, especially the most capital-intensive. These negative factors reflect the instability that still characterizes industrial and entrepreneurial structures in practically all the Latin American countries; moreover, their impact is reinforced by the fact that machinery for tapping savings, such as capital markets, for instance, is so shaky that it might as well not exist, and, as a result, capital formation in the entrepreneurial sector is hindered and reduced.

Secondly, the growth rate of the product is also weakened by the decline of the product-capital ratio in many branches of industry, and, once again, particularly in the more highly capital-intensive. Of the different circumstances that help to account for inefficient use of capital - defective formulation or execution of major projects, antieconomic scales of production, or lack of complementarity between private investment and public investment in infrastructure - some have already been mentioned in the present chapter; and they are discussed in depth in the sectoral analyses that substantiate this report. All of them have a depressive impact on the product-capital ratio. In other words, the obstacles and stumbling-blocks crowding in the way of major projects (mainly connected with steel-making and the non-ferrous metals and chemical industries), and determining disproportionate investment requirements per unit of product, constitute a key factor in the reduction of the economy's growth potential, and thus do much to undermine the manpower absorption capacity of the production system.

If this diagnosis is accurate, there can be no doubt as to the general direction that remedial measures should follow. Increasing demographic pressures, and the likelihood that the influence of the external sector will continue to be unfavourable in the predictable future, call for a drive to maximize the growth rate of the product through more vigorous mobilization of internal investment resources and progressively greater efficiency in the use of the region's meagre supply of capital.

/This improvement

This improvement in efficiency should take place in two directions. The distribution of capital throughout the economy should be brought into line with comparative advantages and the position in respect of competition at the world level; and more efficient structures of production should be established, designed to curb the downward trend and then raise the level of the product-capital ratio. The first of these two requisites — an allocation of resources more consonant with comparative advantages — presupposes increased reference to market prices as pointers to investment, together with elimination of the distortions affecting price systems. The second implies the indispensability of much more definite and precise policies and administrative procedures for the selection and channelling of investment in major projects: policies and procedures far more independent of local considerations that have nothing to do with development strategy, and far more closely linked to consistent and effective programming for the economy in general and for industry in particular.

The foregoing remarks rest on the assumption that the programming and execution of investment projects will be based on adoption of the "efficient" production techniques available in the countries which are the forcing-houses of technology. Is it to be inferred that the Latin American economies can expect no help in solving their employment problems from a modern technology which is evolving on capital-intensive lines? Does the "state of technique" offer them no alternative options? Is there absolutely no possibility of a technological development process that will be autonomous in the sense of being conditioned by determinants (market sizes, relative prices of factors of production, differential characteristics of locally available raw materials and productive resources) which exist in the economic and industrial life of Latin America and not in that of the highly industrialized countries?

Each of these questions must be briefly considered.

In the first place, it is true that in most cases the evolution of modern technology is characterized by production techniques which, in relative terms, require more and more capital and less and less manpower per unit of product. The findings of the studies on specific branches of

/industry testify

industry testify to the fact. How far this trend is determined by scientific and technical factors, irrespective of the economic interests of the countries in which basic and applied research is conducted, or by the growing disparity between the prices of capital and labour, which acts as an inducement to replace the latter factor of production by the former, is still a moot question. But in either case the result is the same: the production processes incorporated in modern techniques are becoming increasingly capital—intensive.

Although these techniques require more capital and absorb less manpower, developing countries such as those of Latin America are virtually compelled to adopt because they are generally more "efficient" in the economic sense of the term: that is, they increase the amount of product obtainable per unit of any factor of production applied, including the one that is in short supply in developing countries - capital. Consequently, although technological progress in the developed countries is motivated by the desire to economize labour, the fact that as a rule the new techniques also permit a saving of capital makes them attractive to developing countries, which thus find themselves faced with an unemployment problem in so far as the rate of economic development is too slow in relation to the prevailing "state of technique".

In other words, for the Latin American countries the substitution of labour for capital with a view to raising the level of employment would mean the sacrifice of a varying proportion of the product; i.e., it would be possible only through the adoption of less "efficient" production techniques. This is the crux of the technology problem for developing countries. Owing to the nature of the techniques available, and the direction in which modern technology is forging ahead increasingly fast, the steady assimilation of new techniques, upon which the modernization of backward economies depends, will be compatible with the employment of large proportions of the working-age population only if the rates of growth of the gross product are so high as to be quite out of line with Latin America's development process in the past.

/The second

E/CN .12/830 Page 84

The second question in the foregoing list, relating to the existence of alternative technological options, calls for more thorough investigation of the subject. The assertion that the "state of technique" is characterized by rigidity is a mere generalization, masking the differences between individual situations in different branches of industry.

The availability of technological alternatives - that is, the possibility of adjusting the degree of capital-intensiveness to the relative shortage of the factors of production - is negligible for all practical purposes in activities in which continuous transforming processes are applied, such as the chemical industries, steel-making, and the non-ferrous metal transforming industries. In some of these activities technology has developed at lightning speed in recent years, and the new techniques emerging represent substantial saving of manpower, increasingly large minimum economic scales of production, and the tying-up of more and more capital per unit of product. The "alternatives", in the case of such industries, are not contemporary and equally efficient techniques. They represent earlier stages in the evolution of technology, characterized, admittedly, by greater use of labour, but at the same time, in the sectors where techniques have developed most rapidly, involving a considerable loss of product per unit of capital. Thus, the adaptation of technology to the conditions of the environment would entail the adoption of old-fashioned and less productive techniques, which, moreover, in many cases are also inferior to the more advanced processes from the standpoint of the quality of the goods produced.

The situation is different, and somewhat more favourable, for activities such as the metal-transforming, textile and other consumer goods industries, in which a wider assortment of equipment is used, the degree of specialization varies, and, in many instances, the pace of technological progress is slower. The choice of machine-tools for performing a given steel-transforming operation or making a given product of the

/metal-transforming

Detailed information on these points will be found in the sectoral analyses (of the iron and steel, chemical and pulp and paper industries) supporting the present preliminary study.

metal-transforming industry affords a fair number of options both as regards the degree of automation and of specialization (as against universality) of the equipment, and in respect of other technical characteristics, dependent upon length of production series, workshop lay-out and relative prices of capital and labour. On the basis of a proper economic calculation, it is possible to select production techniques and equipment which, while still representing the most productive solution in relation to the factor in short supply, permit the use of a larger proportion of labour and a smaller proportion of capital. The range of economically sound technological alternatives thus available varies in accordance with the characteristics of the industry and the industrial milieu in which it is located. As a rule, the selection of production techniques and equipment for the industries under discussion is unsatisfactory in Latin America for several reasons. There is a want of technical know-how in entrepreneurial circles; the requisites for proper economic estimates are often lacking; and the existence of factors that distort the relative prices of labour and capital is conducive to the choice of unsuitable techniques (this last point will be discussed later).

It would be unreasonable to suppose that this type of distortion of entrepreneurial decisions could account to any large extent for the volume of unemployment or for the inadequate manpower absorption capacity of manufacturing industry in the Latin American countries. At best, the margin of substitution of labour for capital, even if the various distortions and other obstacles to appropriate decisions were removed would probably never be large enough to weight the scales appreciably in favour of a full employment policy. On the other hand, the adoption of "economic" decisions would do much to improve rates of return in the branches of industry mentioned; and that certainly would make an indirect contribution to solving the employment problem, through the improvement of capital formation at the level of the enterprise (and therefore in the economy), and the raising of the product-capital ratio in some branches of industry (and ultimately in the economy as a whole). Thus,

E/CN.12/830 Page 86

by helping to speed up the rate of development of the manufacturing sector and of the economy at large, the selection of more suitable production techniques would do something to alleviate the region's employment problems.

Another factor of great practical significance to be considered in this context is the impact of the industrial promotion policies and procedures applied in most of the Latin American countries. In relation to the channelling of investment and the selection of production techniques and equipment, they constitute a powerful economic incentive to the use of capital, with the correlative discouragement of increased use of labour. In recent years, industrial policy in Latin America has been based to a growing extent on the granting of tax exemptions and investment subsidies, which in practice give the calculation of rates of return a bias in favour of alternatives representing higher levels of capital formation, Other measures, such as tariff exemptions for imports of capital goods, lead to the same result. Lastly, in so far as the market prices of the factors of production diverge from the corresponding "break-even" prices, a similar influence is exerted by the procedures responsible for this distortion. Cases in point are the practices of charging relatively low rates of interest on industrial credits (besides pegging down the amounts repayable to the original figure, in environments where inflation prevails), and setting the same wage levels for all the different internal regions of a country, regardless of their stage of development and the productive resources with which they are endowed.

All these factors alike make for the establishment of structures of production that restrict employment opportunities and encourage over-investment.

Consideration must therefore be given to the question of "autonomous" technological development, achieved basically in the Latin American countries themselves, and therefore independently of the determinants in force in the industrialized regions of the world, which are out of line with the requirements of the Latin American economies. Clearly, what is of concern here is not the desirability of this type of development, which may be taken for granted, but its <u>viability</u>, in the conditions prevailing in the world of today.

/No-one who

No-one who is acquainted with the structural weakness of scientific and applied research in Latin America, its traditional lack of contact with industrial circles (even in the countries where most progress has been made in this respect), and official heedlessness of the role of research in national development in all the Latin American countries, can regard the prospect of such "autonomy" - whether complete or at least partial, or confined to certain branches of pure or applied science - as anything but a Utopian dream. Its impracticability is enhanced by the world picture in respect of the trading of technology. Technological dependence is not confined to the developing countries, but is typical first and foremost of the developed countries themselves. The exchange of information on technology that they keep up with one another is incomparably more intensive than their contacts in this field with the under-developed world, and, in addition, their interdependence extends to all the industrialized countries without exception. Not one of them stands out as the undisputed hub or fulcrum of the world technological system.

The balance of payments under the head of transfer of technology confirms that all the industrialized countries, including the United States, are heavily dependent upon imports of technical know-how. Even a country so highly industrialized and with so noteworthy a tradition of technological inventiveness as the Federal Republic of Germany shows only a slight surplus on its balance of income and expenditure in respect of technology.

Corroborative evidence, moreover, is afforded by the absence of any high-level positive correlation between the proportion of the gross product absorbed by public and private expenditure on technological research and the rate of expansion of the gross domestic product. The United Kingdom and the United States, which are the two countries whose proportion of research expenditure is highest, are precisely those whose growth rate has been most moderate since the Second World War; whereas France, Italy and Japan, which have developed appreciably faster, earmark much smaller proportions of their domestic product for pure and applied research, largely basing their industrial development on imported technical know-how and the reproduction of established technologies.

A two-fold conclusion may perhaps be drawn in this connexion. A considerable degree of dependence is inevitable, and is not intrinsically an obstacle to the attainment of higher rates of development than

**(b)** 

/Latin America

Latin America has achieved in the recent past, but the efficacy of this dependence is influenced, probably decisively, by whether the region has or has not a relatively high level of technological research of its own, directed specifically towards facilitating the adaptation of production techniques and processes to local conditions. It is the non-existence of this "middle way" of technological research in Latin America that intensifies the negative aspects of dependence and vitiates its positive features, saddling it with the fallacious reputation of a hindrance to the acceleration of Latin America's industrial development.

To sum up, the following are the views set forth in the successive paragraphs of the present section:

- (a) Roughly speaking, an economy's manpower absorption capacity is determined by the over-all rate of development and by the proportions of the factors of production used in the application of "efficient" techniques. Separate consideration of each of these determinants suggests that development in the coming decade will probably be more strongly influenced by the former than by the latter. In other words, from the standpoint of the orientation of economic policy, it is more important to try to raise the over-all rate of development (growth rate of the product) than to attempt to influence manpower absorption capacity directly, through selection of more labour-intensive processes and equipment, deliberate promotion of small-scale industries, etc.;
- (b) The foregoing conclusion is partly based on the conviction that in the world of today the technical alternatives open to industrial policy in the developing countries in general, and those of Latin America in particular, offer it only a very limited field for manoeuvre. Some of the different facets of this question have been briefly touched upon;
- (c) The selection of techniques with a view to increased use of manpower where feasible seems more potent as an instrument of indirect action, through the saving of capital it makes possible, than by virtue of its direct impact through the use of labour-intensive processes and equipment. Given the same rate of capital formation, the selection of appropriate techniques will enable the economy to grow faster, through the improvement of the product-capital ratio in several branches of industry. This appears to be the facet of the problem of alternative techniques and employment problem which it is most important to take into account in the strategy for the Second Development Decade.

/5. Financing

# 5. Financing of industrial expansion and efficiency and productivity of industrial activities

164

The obstacles and stumbling-blocks to industrial development in Latin America which derive from financing problems are many and complex, but for the purposes of the present outline diagnosis they may be reduced to a few essential questions and summed up in an account of the difficulties attendant upon the expansion of "basic industries".

The growth of those branches of industry which are of key importance for the acceleration of development - production of industrial raw materials based on the processing of natural resources, semi-manufactures and capital goods - is generally slowed up by the inadequacy of capital formation in the sectors concerned. This handicap is still further aggravated by two othe factors. One of these is the difficulty of attracting capital from other branches of industry (because of the weakness or virtual non-existence of national capital markets) or from abroad (owing to the inaccessibility of the international official capital market). The other consists in the existence of obstacles to the absorption of direct foreign investment (or in the recognition of possible drawbacks to this solution).

Hence three major categories of problems can be identified, relating to self-financing in industry, capital markets as a source of long-term financing, and the policy pursued with respect to foreign capital. These will now be discussed in turn.

To take first the question of capacity for capital formation in the industrial sectors themselves, its close relation to what is known as the "self-financing" of industry must be underlined.

The judge from the limited background data available, the average figures for capitalization of undistributed profits, or self-financing, in industry are generally lower in Latin America than in the developed countries, and in all likelihood the disparities are even greater in the branches of industry with a broader technological base and a higher rate of expansion. Furthermore, the disadvantage at which Latin America is placed in this respect is probably more marked than is apparent from the figures in question. Factual data (amplified by experience) shows that the sums earmarked for depreciation are extremely small in Latin America, owing to the application of a tax policy which many countries have

/maintained for

maintained for a long time without attempting to adjust it to the prevailing inflationary processes. As a result, a large proportion of the funds on which self-financing should be based have really been raided to make up the shortfall in the depreciation reserve, which means that the reinvestment of profits as a source of financing of industrial expansion is on a still more modest scale in Latin America industry. As an average order of magnitude for industry-as a whole, self-financing may be said to represent from 10 to 20 per cent of total sources of funds in the Latin American countries, as compared with 30 per cent in United States industry.

Since the foregoing figures are averages for industry as a whole, in the case of Latin America they probably mask significant variations from one branch of industry to another. Rates of return and proportions of self-financing are much higher in the current and durable consumer goods industries than in those manufacturing industrial raw materials and capital goods. The sectoral analyses relating to steel-making and the chemical industry reliably bear out this assertion.

One possible way of offsetting the inadequacy of internal capital formation in given branches of industry is to effect transfers of funds from other sectors through the long-term capital market or through the negotiation of external loans. What is Latin America's position in this respect?

The extent to which the region has had recourse to capital markets diminished rather than increased in recent years. Persistent inflation has impeded the activities of these markets with respect to the issue of debentures; and the extreme slowness with which the family type of enterprise is being replaced by modern corporative patterns holds up the issue of stocks and shares in their various forms.

The first aspect of the paralysing effects of inflation on the long-term capital markets was mentioned earlier, and no further arguments need be adduced. All that it is worth while to stress is the importance of the capital market as a gear in the machinery of a market economy, for the purpose of ensuring the constant distribution of capital resources throughout the economy at large. It has a key role to play in the reallocation of resources on lines that will make for greater rationality and economic efficiency because self-financing will be confined to

/cases in

cases in which the expansion of the enterprise that generated the capital is economically justifiable. In view of the non-existence of alternative possibilities for the productive use of resources, which at the same time represent a safeguard against the corroding effects of inflation, enterprises are often driven to reinvest their profits time after time in the same industrial operation, irrespective of the economic justifiability of this procedure. A factor thus comes into being which in many countries (in particular, those in which investment opportunities are less diversified) determines the wide margins of over-investment, or, alternatively, under-utilization of capacity, that are found in many branches of industry.

Another important issue concerns the inter-relationships between the capital market, self-financing and the need to resort to foreign investment. Low rates of return, by reducing self-financing, lead to increased dependence on capital from abroad. But if there were an active long-term capital market, based on genuine monetary stability, rates of return too low to sustain self-financing would not necessarily be a barrier to the expansion of the enterprise, since it would then be able to sell shares or debentures on the market. The drawbacks deriving from excessive dependence on direct foreign investment in some branches of industry would thus be obviated.

The problem of the family-based structure of most Latin American enterprises - including a high proportion of the proportion of the larger-scale undertakings engaged in branches of manufacturing with a substantial content of technology - will be discussed in the following section, in which the implications of the need to strengthen the Latin American enterprise are analysed.

The next step, therefore, is to devote brief consideration to the last of the three categories of problems listed at the beginning of the present section: policy with respect to foreign capital.

Long-term loans may first be discussed, and then direct investment.

As was shown in the relevant section of the preceding chapter, during the nineteen-sixties the use of foreign loans to finance industrial development projects accounted for a very modest proportion of Latin America's total borrowing, and has, moreover, followed a downward trend

/in recent

in recent years, which will probably continue and even sharpen as the result of certain tendencies that have become apparent of late.

One of these is a marked tendency to reduce the amount and coverage of external assistance allocations, which means that in the future it will become increasingly necessary to resort to commercial or bank loans instead of "soft" credits for the financing of Latin America's industrial development.

The cost of commercial loans is appreciably greater, not only by their very nature, but also because of the present situation of the world's capital markets. Hence a crucial question arises: is Latin American industry in a position to finance its development? In other words, will its rates of return be sufficiently high to defray the cost of the capital it has to borrow?

The factors that have to be taken into account are too many and too varied for a categorical reply to be attempted, but a few considerations may be put forward. Average rates of return in industry are probable lower in Latin America than in the more advanced countries, although no conclusive inference can be drawn from the scrappy data available on the subject. Needless to say, this comparison of averages must not be allowed to obscure significant differences between the two groups of countries as regards the profitability of particular branches of industry and individual enterprises. Although the over-all average may be lower in Latin America, the position is probably different, and in some cases may even be reversed, in certain branches or sub-branches of industry and, in particular, in the case of enterprises that enjoy what is practically a monopoly of the market. The important point to remember in connexion with financing, however, is that Latin America has less capacity to finance its expansion by ploughing back profits. Some of the available data mentioned above show that in relative terms, and on an average, the proportion of self-financing in industry is about one-half as great in Latin America as in the United States and probably also in Western Europe.

This situation is partly attributable to the low rates of profit due in their turn to the operational handicaps under which most of Latin America's industrial sector labours: market conditions, small scales of

/production, unsatisfactory

production, unsatisfactory levels of efficiency and productivity (for reasons relating both to technology and to internal organization and utilization of capacity), etc. Despite the protection of substantial tariff barriers which set the ceiling for sales prices very high, the pressure of costs forces profits down until enterprises find difficulty in financing their expansion on a basis of continuity. The shift of emphasis in external asistance from "soft" to "hard" loans to which latin America has to look forward in the coming years should be evaluated from the standpoint of its possible implications in relation to the situation described.

Other aspects of the industrial financing problem, in particular those linked to direct foreign investment, will be briefly discussed in the next section of the present chapter, dealing with the Latin American enterprise.

# 6. The Latin American enterprise and technical modernization requirements

The strengthening of the Latin American enterprise must be the cornerstone of any organized effort to speed up the rate of development in the countries of the region. To this end, a set of special measures which will enable it to survive and flourish in face of foreign competition must be devised and applied with energy and foresight. To do this effectively, without jeopardizing the external co-operation which Latin America cannot dispense with, is a complex objective, perhaps one of the most difficult to crystallize in the whole body of provisions whereby economic policy should seek to imbue the region's development with fresh vigour during the coming decade. For if measures to strengthen the position of the local entrepreneur were applied on a purely defensive basis, their effect would be to intensify the isolation of the Latin American economies and thus aggravate the problems deriving from want of the spur of competition and from the widening technological gap.

The requirements which the Latin American enterprise will have to meet are those dictated by the following factors:

- (a) internal and external competition;
- (b) technological innovations:
- (c) continuing external co-operation in respect of both capital

The ability to compete on foreign markets is an indispensable requisite in so far as the changes in the structure of production which accompany the advance of industrialization enable a start to be made on exporting manufactures, either to intra-regional or to extra-regional markets, but in both cases in competition with a great many producers. And the introduction of the new processes and products that are the fruit of technical progress calls for highly specific technological aptitudes and sound financing. Moreover, external co-operation, especially when it takes the form of direct investment, assumes the guise of "domination" only when there are no local firms technically competent and financially solvent enough for it to enter into association with them.

Competition, technical innovations and external co-operation in the fields of financing and technology require the Latin American enterprise to fulfil certain conditions, particularly in the following respects:

- (a) size;
- (b) readiness to expand and innovate;
- (c) ability to compete on the basis of decreasing costs and prices;
- (d) financial stability and flexibility.

As regards size, the weakness of the Latin American enterprise betrays itself in two major symptoms. In the first place, there is too high a proportion of artisan-type establishments with pre-factory characteristics. Technically they are very backward, and they have no practical possibilities of progressively acquiring the character of modern factory industries. existence of an artisan-type stratum, varying in size according to the sector concerned and the industrial milieu, is a universal feature in most branches of industry (not merely those producing consumer goods). It may be attributable either to the fact that demand for certain products with special characteristics is too limited to warrant mass production as in modern industry, or to geographical location factors. What is peculiar to Latin America is not the presence of artisan-type industry, but the disproportionate relative size of the stratum in question, as can be seen from the relevant figures in the preceding chapter. The root causes of this state of affairs are probably to be found in the weakness of

/non-artisan industry

non-artisan industry in the same branches of activity. It lacks sufficient drive to compete with small-scale producers, despite the extremely primitive conditions in which the latter operate.

Even in the factory stratum, moreover, enterprise and plant sizes often fall short of the scale that would be economic, given the technology in current use. In this respect Latin American enterprises are probably going from bad to worse, since in many branches of industry the effect of technological advances is a progressive increase in the maximum capacity of the "basic processing units" that is technically feasible, and this in turn causes shifts in "optimum" and "minimum economic" capacities. Cases in point are afforded by many branches of the chemical industry, especially those producing petrochemicals, in which economic scales have doubled in the past ten years. The same trend is likely to continue during the nineteen-seventies.

Again, readiness to expand and innovate is not one of the strong points of the Latin American enterprise. Nor is this surprising, in view of the competitive isolation in which enterprises in the region have had to develop. Their family-based structure in respect of the ownership of capital and the assumption of the functions of direction and management has slowed up their rate of growth in many cases. Under the family ownership system, recourse is frequently had to self-financing, since contributions of foreign capital might mean that control of the company passed into different hands; accordingly, the rate of expansion of the enterprise is kept down to the naturally slow pace of the self-financing process. And in Latin America, on an average, the level of self-financing is a good deal lower than in the industries of the United States and Washern Europe, as has also been previously pointed out.

The capacity to compete in respect of prices, which is a prime mover of industrial progress, presupposes the capacity to sustain, within the enterprise, a steady reduction of costs through investment in modernization and improvements and - no less important - through the constant overhauling of the methods of management, administration and operational organization applied. Dynamic evolution of this sort is hampered in the case of the Latin American enterprise not only by the "closed" type of company it

/represents (a

represents (a pattern which is, moreover, perpetuated by the virtual non-existence of capital markets), but also, up to a point by the shortage of professionally-trained administrative cadres and the frequently unsatisfactory situation as regards skilled labour. The picture of the difficulties of adaptation to competitive conditions would not, of course, be complete without reference to the obstructive effect of the use of protection as the primary instrument of industrial development.

Lastly, the financial difficulties besetting the Latin American enterprise stem from the inadequacy of the support obtainable from the bank system and from the capital market, which means that financing possibilities are very slight in respect of working capital and medium-term capital requirements (relating, for instance, to the production of capital goods for export). These handicaps particularly affect the capacity to introduce innovations or to explore new markets.

The structural deficiencies of the Latin American enterprise are, of course, the product of the difficulties with which it has been faced and the obstacles it has had to overcome in order to gain and keep a foothold in an economic environment not altogether favourable to its establishment and survival, or at least not favourable to the development of production units in line with the requirements of the world of today.

The following is a cursory account of some of the obstacles usually encountered by enterprises in Latin America.

Mention must first be made of the frequent existence of substantial external diseconomies. The inadequacy of public utilities lays a heavy burden on the enterprise, which often has to build roads, or pave streets, or explore and develop resources in order to obtain its own supplies of water or electric power, or train its own skilled workers, or organize a system of communications of its own to take the place of postal, telegraph and telephone services which are to all intents and purposes non-existent, or build housing units for its personnel, or lay its own branch railway lines or sidings, or maintain unduly large stocks of raw materials as a precaution against the irregularity of public transport services. The resulting surcharges on investment and operational costs are extremely heavy, and in addition there are the no less important indirect consequences consisting

in the disruption of operations and in the fact that the management is obliged to devote time and energy to matters which should really have no claim on its attention.

4

Secondly, the enterprise is virtually unsupported by any institutional infrastructure - such as commonly exists in the industrialized countries - consisting in entrepreneurs! or workers! associations, or State or joint public and private organizations, to which the enterprise could always resort, as a matter of routine, for the solution of the operational problems that are all the more likely to crop up where levels of efficiency and productivity are rising. It could obtain help from them in relation to analyses of market trends and studies of new products, new production processes and new raw materials; in the field of industrial advisory services; in matters of internal organization; and so forth. The region's institutional deficiencies in these respects deprive the enterprise of powerful external instruments for increasing its dynamic vigour. It is dependent upon itself upon its own resources and its own motivations, for all or most of the mainsprings of improvement and progress that in the industrialized countries are largely provided by the external environment.

Thirdly, there are sometimes very strong incentives to the adoption of a pre-eminently commercial and speculative line of action, at the expense of the economic and technical of the firm's activities. Tendencies of this kind, which have their origin in the social and professional background of certain entrepreneurial groups, instead of finding themselves frowned upon by official policies are actually encouraged by the very instability and vagueness of the policies in question, as well as by the chronic inflationary processes prevailing in many countries.

Fourthly, mention may be made of a major financing difficulty: the lack of a capital market through which savings could be distributed in accordance with growth requirements and aptitudes in the different sectors of the economy, so that sectoral development could be freed from dependence upon each sector's capacity for self-financing, and upon a bank system and credit and financing procedures that are anachronistic from the standpoint of a modern industrial economy.

Lastly comes the whole vast and diversified problem of the unwisdom of national economic policies in many vital respects. To cite a simple example, policies relating to major investment projects (and to foreign investment) make for the proliferation of similar undertakings and the splitting-up of scales of production, as a precaution against the establishment of monopolies. They overlook the advantages of economies of scale and the possibilities of defending the interests of the consumer and of the national economy by administrative measures, such as are widely applied in other regions. Nor do they take into account the many drawbacks attaching to a prolonged period of indecision regarding major projects, or to the want of appropriate criteria for settling the question of private enterprise versus public enterprise. Moreover, in this last connexion there is often a tendency to state the problem in terms of ideological options or inmutable principles of economic policy, with no explicit reference to what ought to be a matter of vital concern, namely, the efficiency and productivity of the enterprise, which may weight the scales in favour of public or of private enterprise, according to the special circumstances prevailing in the industrial milieu and in the branch of manufacturing in question.

It would be out of place here to dwell on this last issue, which is one of the most difficult in the field of Latin America's industrial development. The present aim is merely to suggest the need for it to be discussed - and the relevant economic policy measures adopted - in a broader frame of reference than hitherto, with due regard to such questions as the following for example. If in the past the economic and social environment of a given Latin American country has been unable to breed generations of entrepreneurs in sufficient numbers and of the requisite quality, are there legitimate grounds for inferring that it will also be unable to produce them in the future? And can this eventuality reasonably be discussed without at the same time taking into account the establishment of conditions favourable to such a blossoming of entrepreneurial talent? Such conditions do not relate solely, or even primarily, to rates of profit, but to motivation and operational efficiency. Again, will the conditions necessary for the formation of efficient managers of public enterprises be very different from those required in the private sector?

/Lastly, mention

Lastly, mention must be made of yet one more of the obstacles that the Latin American enterprise has to surmount in order to survive and develop. Nowadays, requisites for the incorporation of new enterprises and new entrepreneurs are much more exigent than they were in the past, when today's developed countries took their first steps along the road to industrialization. The respects in which these increased difficulties are encountered may include the economic size of the enterprise, investment per worker, the level of technical qualifications required for entrepreneurship, or the small-scale enterprise's possibilities of growing into a medium-sized or large concern.

Along what general lines should action be taken to remove the above-mentioned obstacles and enable the Latin American enterprise to be progressively strengthened? In the light of the list of handicaps given in the preceding paragraphs the appropriate measures can easily be identified, so that it will be enough to sum them up briefly and in broad outline.

In the first place, perhaps the aspect of the problem to which the greatest practical importance attaches is the necessity of increasing stability and continuity in national economic policies that affect the enterprise and influence its line of conduct in respect of costs and investment, so that it can broaden its economic planning outlook. In addition, clearly-defined policies should be perseveringly applied to maintain an adequate degree of internal and external monetary stability. A supplementary requirement is that national economic policies should be designed and implemented in such a way as to counteract and eliminate as fully as possible the impulses towards instability which have their origin in the external sector of economy.

Secondly, public and private investment should be more closely co-ordinated, so that the former may help to create the external economies on which the improvement of investment efficiency and productivity is dependent in no small measure.

Moreover, deliberate and unremitting efforts should be made to organize an up-to-date and efficacious finance and credit structure, adapted to the needs of a manufacturing industry which is growing in size and complexity.

/Another urgent

Another urgent need is for enterprises, through the industrialists' associations and through the State, to join forces in systematically establishing the indispensable institutional infrastructure for technological research, industrial extension services, advisory assistance in the various fields of industrial activity, etc.

Lastly, with regard to foreign capital, the appropriate path to take would seem to be the promulgation of measures to encourage forms of partnership between foreign investors and local enterprise. This line of policy, however, will be effective only in so far as other measures, designed to strengthen the internal and organizational structures of the Latin American enterprise, are gradually applied with successful results. Little could be expected of formulas for association and co-operation between partners whose degrees of economic and financial stability differed too widely. The same condition holds good as a requisite for more frequent and more intensive recourse to licences to manufacture and know-how agreements in general as a mechanism for the transfer of technology alternative to direct foreign investment. Experience has shown that it is difficult for technology from abroad to be effectively assimilated when the technical level of the recipient enterprise is much lower than that of the firm granting the licence to manufacture. In other words, the separation of the contribution of capital from the contribution of techniques is a problem which can be only partly tackled by means of international co-operation formulas to reduce the costs and increase the operational flexibility of royalty agreements. There is still the difficulty of the capacity to assimilate technical innovations from abroad on the basis of this procedure.

## 7. Problems relating to regional integration and progressive opening of markets to external competition

The preceding chapter reviewed the most salient features of the present situation as regards the efforts that are being made to give fresh impetus to the industrialization process in Latin America by expanding markets and introducing competition as a spur to industrial development. In this context, a balance was cursorily drawn up between the advances achieved and the setbacks encountered in the evolution of Latin American integration systems — the Latin American Free-Trade Association (LAFTA), the Central American Common Market and the Caribbean Free-Trade Association (CARIFTA) — and was supplemented by a brief glance at trends in exports of manufactures, the promotion of which has been undertaken by many Latin American countries in recent years.

In addition to a description of the most outstanding features of the above-mentioned integration systems and of export promotion policies, critical evaluations of the results obtained from the use of these instruments were also formulated. The present chapter's chief aim is to present an interpretative approach to the deficiencies referred to in the preceding chapter.

It was shown that basically the chosen paths towards the goals of integration programmes lay in the liberalization of trade on the one hand and complementarity agreements on the other. These were to be supplemented by the co-ordination of economic and trade policies and the harmonization of instruments for regulating foreign trade.

As is common knowledge, LAFTA pursued the first of these lines of action - the liberalization or integration of trade - by way of a series of product-by-product negotiations.

The availability of broader markets would thus constitute a powerful incentive to the industrial development processes concerned.

So far, the results of this approach cannot be held to have decisively influenced the reorientation and reorganization of Latin America's industrial development. It is true (and has already been pointed out) that such limited trade in industrial products as has taken place hitherto

has had favourable effects on the industries already established, and in other cases has also encouraged the installation of new manufacturing activities. But for those Latin American economies whose industries are under-diversified and traditionally geared almost exclusively to the domestic market, this cannot be a sufficiently dynamic factor of growth. The instrument under discussion might really be described as static or indirect, as regards its ability to influence industrial development. As previously suggested, it would be a suitable means to the ends pursued in the case of more complex and diversified economies, with a considerable reciprocal trade in industrial products, and endowed with other requisites relating to infrastructure and mobility of the factors of production.

Among the countries members of LAFTA, it was a very difficult matter to base any achievement on the mere elimination of reciprocal tariff barriers, especially when they were applied to small volumes of trade, as in the case of manufactures.

The evolution of inter-latin American trade betrays some disquieting features. If intra-regional imports are analysed, it will be noted that after following an uninterrupted upward trend until 1964, they remained almost stationary from 1965 to 1967 inclusive, hovering around 750 million dollars. The negative significance of this fact is even greater with respect to 1967, since stagnation continued in circumstances in which intra-regional imports might have been expected to increase, by yirtue of the reduction of imports from the rest of the world.

The conviction was voiced in earlier paragraphs that although the liberalization programme has generated trade flows in industrial products, and has thus promoted the expansion or installation of industrial capacity, its effects have fallen far short of the expectations formed at the time when the Free-Trade Area and its instruments were established. From the very outset, LAFTA has always been regarded as an agency whose objectives transcended the bounds of trade liberalization. The intention that it should be an instrument of over-all development and even specifically of

Excluding Bolivia and Venezuela, whose national schedules came into force during 1968 and at the end of 1967, respectively.

industrial growth was present from the start, becoming more and more explicit and taking an increasingly important place in every formula devised by the Area for the fulfillment of its objectives.

The point to be emphasized here is that the liberalization programme has basically served to promote an industrial trade whose modest volume does not deprive it of significance for the traditionally inwarded directed Latin American economies; but it has had no major impact on their development processes. The contribution made by trade in manufactures — which has not acquired much relative importance within the Area's over-all trade — may well be described as marginal where its incidence on the corresponding industrial development processes is concerned.

Something has already been said of the causes to which this weakness may be ascribed. In many cases it is attributable to the reversibility of the concessions granted, which prevents them from providing a firm basis for steady trade. However, while on the one hand this same factor appears to be responsible for the unsatisfactoriness of the rate of progress achieved through specific mechanisms (national schedules), on the other hand its opposite - irreversibility - arouses antagonism in the interested sectors in the various countries and thus stands in the way of the advances that might be made by means of instruments (a common schedule and complementary agreements) which incorporate—the element of irrevocability.

It was highly unlikely that assigning the leading role to the liberalization of trade would enable a genuine integration of development processes to be achieved. Such a belief implied the assumption that if tariff barriers were lifted and trade were left to the relatively free interplay of economic forces, investors would be induced to take advantage of the opportunities afforded by the trade thus liberalized. Obstructive attitudes and other stumbling-blocks are numerous and in many cases justifiable. For example, how can markets be opened to competitive imports without making sure that the basic inputs for the two competing industries will enjoy the same treatment, or that official incentives to the installation of foreign enterprises will be proportionate to one another?

These problems, together with the mainly static character of the liberalization programme (including complementarity agreements, which served solely as an additional avenue of approach to the establishment of schedules) led LAFTA to consider what is commonly referred to as a regional investment policy, and a programme for the co-ordination of economic and trade policies and the harmonization of instruments to regulate foreign trade, as the factors which might impart dynamic impetus to the integration process. These were the ideas underlying LAFTA resolution 100, in which the concept of programmed location of industries of a regional character was adopted. The resolution explicitly stated that the objective of the programme should be equitable distribution of the benefits of integration, and stipulated that the measures and incentives to be applied should be all those capable of influencing an industrial integration process, not merely those deriving from trade policy.

Furthermore, the conviction that it is all but impossible to advance along the road to integration unless policies are co-ordinated and instruments harmonized, and unless national development programmes are likewise co-ordinated, is also prompting activities in all these spheres. The field in which the greatest relative progress has been made is probably that of research on the possibility of a common external tariff. The stage of collecting data by means of a sample survey has just been embarked upon. Here too, it will be difficult to make headway unless governments previously adopt certain decisions (for instance, as to what industries should be protected and how far protection should be carried, relations with the establishment of the exchange rate, etc.). In this case, as in other instances where policies have to be co-ordinated or instruments harmonized, it is precisely the vagueness and the lacunae of the national policies themselves that constitute the stumbling-block.

Resolutions 99 and 100 fastened great expectations upon the possibility of substantial progress in the field of industrial integration, laying the major responsibility for its achievement on the study groups and on the Advisory Commission on Industrial Development (CADI), which were to draft specific formulas for integration by sectors, with the aid of the new régime for complementarity agreements established under the

terms of resolution 99. Resolution 100 also recommends that due heed be paid to the importance of ratifying sectoral integration studies by a policy decision of the contracting parties, so that their conclusions can be rapidly implemented.

Alongside this new means of attaining industrial integration objectives which it was desired to place at the disposal of the Latin American countries, another parallel procedure continued in operation. It found expression, as previously stated, in several complementarity agreements (already signed, or in process of negotiation) whose provisions followed the trend described above. Whereas at first they merely established tariff concessions which were incorporated in the national schedule and were extended to all parties, after the adoption of resolution 99, their extension was no longer automatic, and other provisions began to be introduced, such as the commitment to harmonize treatment of third countries in the future. At the same time much longer lists of products were included.

In these lines of action, too, the headway made has been insignificant. Neither the complementarity agreements already signed, nor the other agreements, including those currently in process of negotiation, will make any essential difference to this state of stagnation. It is not merely that their contribution, although increasing, will continue to be slight in quantitative terms; in addition, the proliferation of such agreements, to which as a rule only some of the countries of the region are parties, is unlikely for that very reason, to prove the most appropriate method of attaining the objectives in view.

The petrochemical agreement (No. 6) includes features which clearly distinguish it from the other agreements signed, such as reciprocal reservation of markets, establishment of a common external tariff, regulation of competition (anti-dumping procedures), etc. Some apprehensions are felt lest the provisions for regulating competition may be incompatible with the intention that the agreement should operate at competitive levels. Nevertheless, when all factors have been taken into account, this agreement is felt to represent a definite step forward.

The activities of CADI have constituted another aspect of the industrial integration movement. In their initial phase, as was fully described in the preceding chapter, integration formulas were proposed for two sectors, i.e., the petrochemical industry and steel-making, although in the latter case the scope of the formulas was a good deal more limited.

The lack of progress towards integration in conformity with the recommendations of resolutions 99 and 100 has been imputed to causes falling into two categories. One of these might be termed the institutional deficiencies of the Montevideo Treaty, of LAFTA resolutions 99 and 100 and, in general, of the whole juridical structure of LAFTA. They are inadequate to deal with complementarity agreements incorporating specific commitments to promote a given industrial activity, particularly as regards official supervision of their implementation, and investment in technical assistance programmes to foster or reactivate changes in existing industries.

In this connexion, it should be pointed out that for the future implementation of the petrochemical complementarity agreement recently concerted between several Latin American countries (Bolivia, Chile, Colombia and Peru) not only the administrative agency envisaged in the provisions of the agreement will be available, but in addition the Andean Development Corporation (Corporación Andina de Fomento) which in this case will supply the lack referred to above.

The second category of causes, which may perhaps account for the failure of the integration formulas discussed by CADI, especially for the petrochemical sector, likewise relates to another deficiency: the incapacity of the said formulas to dispel the misgivings — many of them well-founded — with which the governments approached these negotiations. The indecision or lack of drive in policy-making which has so often been mentioned, reflects the governments! inability to abandon existing industries to their fate, or to subject them to competition for which they are not prepared, or even to relinquish projects whose benefits seem much more immediate and concrete than those offered by integration formulas. As regards this official attitude to the industries already

/installed (which

installed (which in the larger countries and several of those of medium size include virtually all or the great majority of manufacturing activities), it should not be forgotten that the capacity of the structures of production in Latin America to undergo and absorb changes is relatively slight, and in any case far less than that of European industry, for example. In Europe it was possible to rely upon the capacity of the corresponding structures for what might be designated "peaceful" change under the impact of competition, in view of the major role played by technological innovation in the economies in question, the higher level of qualifications in their entrepreneurial sectors, and a whole series of factors relating to technical and industrial infrastructure which facilitate the absorption of the shocks of competition and their conversion into dynamic forces. Several of these elements are lacking, in greater or in lesser degree, in the developing economies. The whole undertaking is inevitably difficult and hazardous, and attended by considerable risks. It would therefore seem essential that in the Latin American countries the entire set of remedial measures should be designed to prepare the structure of production for the necessary - in fact, indispensable - changes. To this end sectoral agreements must be concluded on broader bases, as will be suggested later.

Hence proposals for integration formulas should comprise, in addition to the development and liberalization programme itself, provisions designed to maximize the viability of the said formulas in each individual country. In this connexion it is a <u>sine qua non</u> to include clauses which take into account the obstacles in the way of a more resolute approach to integration processes. The aim of such clauses would be not only to establish programmes of corrective measures whereby the negative effects of integration (closing-down of industrial establishments, etc.) could be lessened, but also to take advantage of the opportunity to promote the reorganization of industry on the basis of a dynamic approach to the task of fitting the Latin American enterprise, in respect of scales and efficiency of production, etc., to compete with the great international corporations.

As can be seen from the foregoing paragraphs, since the adoption of resolutions 99 and 100 the procedure adopted for tackling industrial integration problems has been to envisage solutions in the framework of the various industrial sectors considered. This <u>modus operandi</u> has inadvertently encouraged, in many instances, expectations of a balance of benefits within each sector for all countries.

It would seem that any attempt to deal with the problem of the balance of benefits which implies their measurement, whatever the variable chosen (contribution to the gross product, expansion of consumption or of investment, etc.), will set up obstacles that may prove insurmountable. This is partly because, in the economic and social development conditions that characterize developing countries, a very substantial proportion of the benefits in question take forms that hardly can be measured. For instance, they may consist in the creation of external economies, in the fulfillment of conditions of material complementarity indispensable for the development of certain other industries, or in the promotion of balanced growth as between internal regions in the participating countries. Naturally, this does not preclude the possibility that each of the countries in question may undertake an evaluation of the benefits it will gain from participation in the integration process, within the framework of its own economic and social development programming; it merely means that evaluations of this kind are very difficult to express in quantitative terms in such a way that comparisons can be drawn, with countries which attach some quantitative significance to the term "balance of benefits".

In earlier paragraphs, in the context of a critical appraisal of integration programmes which place emphasis on what can only constitute a preparatory phase - the negotiation of tariff concessions - this approach was described as static, since it took for granted that the market mechanisms and forces in operation would have sufficient dynamic energy to generate trade in manufactured goods which would be a decisive factor in the reactivation of the industrial sectors concerned.

It was also pointed out that in economies like those of the Latin American countries - all of them in process of development, but currently at widely differing stages, and traditionally characterized by very little intercommunication - events have confirmed the obvious inadequacy of such trade incentives pure and simple as spurs to the attainment of the integrationist objectives pursued.

Something similar has happened in the case of national efforts to promote exports of manufactures.

The countries of the region have approached the task from two standpoints. On the supply side, they have gradually built up a whole institutional apparatus designed to support and encourage industrial exports, through customs, tax or fiscal, credit, technical assistance and other measures. On the demand side, they have concentrated their attention on the efforts they are making, together with the rest of the developing world, in the various international forums and primarily in UNCTAD, to secure favourable conditions of access to the markets of the industrialized countries, in the form of general non-discriminatory and non-reciprocal preferences.

There is nothing to object to in this approach as regards either the national measures adopted or the efforts that are being made at the international level. In both cases, the general guiding principles followed are conducive either to the establishment of favourable conditions or to the removal of obstacles, with a view to considerable expansion of the flow of industrial exports.

The deficiencies or lacunae in these lines of action are to be noted mainly in connexion with two very closely inter-related categories of problems. The first of these derives from the relatively little importance attached to supply promotion questions. It would have been desirable for each actual or potential exporter country to try to determine what products could be exported, in what quantities, and to what markets of destination, what difficulties were encountered both in their production and in their sale, etc. — in short, for export programmes to be drawn up, which might even have indicated the international co-operation needed for the attainment of the targets established.

Once again (and herein lies the analogy with the modes of action selected for the fulfilment of industrial integration aims), not enough has been done to establish a steady flow of exports of manufactures, too many hopes having perhaps been pinned on the possible opening-up of the industrial countries' markets. There has been a certain tendency to devote most effort to securing this improvement in the demand situation, without adopting an integrated industrial export policy designed to link up supply and demand by means of institutional formulas which might effectively serve to establish mutually beneficial conditions. The developed countries might well grant the concessions urged by the developing countries for a short time, on an experimental basis, and after this observation period the meagre results obtained with regard to the use made of the concessions by the developing countries might undermine the whole of the arrangement so toilsomely negotiated.

Thus there is a danger that once the long-pursued objective relating to the opening-up of the industrialized countries! markets were attained, the expected benefits might not materialize for want of promotion on the supply side. More specifically, the Latin American countries might be unable to take advantage of the sales opportunities thus guaranteed, either because they did not possess the necessary exportable surpluses, or because their costs were very high, or because the specifications of the products concerned were not in line with world market requirements and quality controls and packing were unsatisfactory, or because, excluding a few modern enterprises which are subsidiaries of foreign firms, the organization of other concerns is not adequate to ensure that external sales are a profitable operation.

This list of lacunae or deficiencies on the supply side should be taken as a broad generalization with regard to its applicability to the countries of the region. In many of them awareness of the problem exists, and in several of those that have acquired more experience in exporting industrial products, measures have been adopted to counteract the shortcomings in question.

The fact that countries do too little to promote supply is only one aspect of the problem under consideration. The other is represented by the want of linkage between the efforts made at each end of the potential export flow, through mechanisms such as national export programmes prepared by the developing countries, which would include proposals for the international co-operation required in order to meet the targets established, and even for the tariff concessions considered necessary (all on the lines set forth in the relevant section of chapter IV). There is obviously a reciprocal inter-action between the chances of obtaining specific concessions and the possibilities of their more efficient utilization.

This does not of course mean that there is not a broad field for action in the system of promotional measures already tried out by some countries. Even in these, there are features of the system - such as insurance of export and pre-embarkation credits - which call for further analyses and adjustments to improve their operation. In many countries, hardly any headway has been made with such programmes of support measures, and it is therefore essential that governments should provide the usual well-known customs, tax, credit, institutional and other incentives.

Thus, the preceding paragraphs bring to light some of the shortcomings in the approaches adopted to integration and the opening of markets to external competition. At the same time it is suggested that the new proposals formulated for the achievement of progress in these fields must necessarily contain elements designed to maximize their viability, since on many occasions the handicaps and weaknesses inherent in economies like those of Latin America make the instruments or formulas in question, however intrinsically right and appropriate, insufficient for the attainment of the objectives pursued.

# Chapter III

#### THE INSTRUMENTS OF INDUSTRIAL DEVELOPMENT POLICY

### 1. General industrial policy measures

There has perhaps been no goal in Latin American development in recent decades that has been publicised and popularized as much as industrialization, and yet there are few goals in respect of which action has been so diverse.

The sudden frustration of the consumption aspirations of the middle strata of the population - the strata whose demand is most significant, both in quantity and in quality - during the period beginning with the onset of the depression in 1930 gave an unexpected impetus to the need to achieve higher levels of industrial development. It became necessary to satisfy demand that suddenly could not be met, and domestic production began to fill the gaps left by imports, although with differences in quality and cost which were both inevitable and justifiable at the time. While private enterprise directed its efforts in the main towards the production of consumer goods, State activities were concentrated on a few large-scale projects to improve the infrastructure or to establish basic industries and on protecting domestic production from the renewed pressure of foreign competition by means of tariffs.

Indiscriminate and unrestricted protectionism, which enable many enterprises to continue operation at a low level of efficiency and with high costs, or allowed some enterprises to take advantage of their monopoly position with adverse effects on other branches of domestic production, involved social costs which, while perhaps justifiable in the early stages of industrialization, subsequently tended to impede development, and it became necessary to reduce tariff protection to reasonable levels.

Perhaps excessive reliance on protectionist measures, prompted mainly by their substantial initial effect, explains why other measures with similar effect were not adopted later when circumstances changing made them necessary.

/Admittedly, several

Admittedly, several mechanisms were tried but, although practice varied greatly from country to country, in general this was done without sufficient co-ordination or continuity. Often, over-all economic policy measures had aims which were at variance with those of the industrial sector and had indirect effects on industrial development which had not been anticipated and which were usually not analysed after the event with a view to keeping their consequences within bounds.

For example, exchange policy was usually directed towards solving balance-of-payments problems and providing special incentives for the major exporters of primary commodities, without taking account of the effect upon industry of an increase in the cost of imported inputs, or of the even more difficult financial problems it caused entrepreneurs who had purchased machinery and equipment with external suppliers' credits. Similarly, taxation policy was mainly aimed at producing revenue, more thought being given to the potential yield of taxation than to its effects on the productive process.

Within these broad and varying guidelines, some policy measures designed specifically for the industrial sector have formed the framework within which industry has developed over the past twenty years.

In the first place, the machinery for protection, i.e., tariff mechanisms and import licences and authorizations, began to be used more and more selectively, in so far as was possible, as a reaction to some of its adverse effects on industrial development. Frequent changes have been made in customs tariffs and other similar mechanisms, especially in the countries that have achieved a relatively advanced stage of industrialization and that have had to ensure a high degree of protection for capital goods. In Mexico, for example, customs tariffs were substantially modified in 1951, 1954, 1955, 1961 and 1965, the last being a year in which new import controls were placed first on goods whose domestic price was not more than 25 per cent higher than the international price. In Brazil, the Customs Tariff Act of 1957 set up a customs policy board and authorized it to adjust tariffs periodically to promote the development of certain industries. The new customs tariff in Colombia, which dates from 1965, may be modified by a customs policy board, subject

to the authorization of other bodies, up to a ceiling of 30 per cent of the c.i.f. value of the goods concerned. The changes in customs nomenclature in Argentina in December 1965, and in Chile in December 1967, the main aim of which was to bring nomenclature into line with the LAFTA Tariff Nomenclature (NABALAIC), were also used to revise tariffs with a view to rationalizing the system of protection.

Despite these changes, it has not proved possible to endow tariff mechanisms with sufficient flexibility to guide industrial development along new lines in which tariff protection has to be extremely selective and flexible in order to provide a safety margin in the initial stages while at the same time promoting subsequent rises in productivity.

Given the difficulties in tariff protection, there has been a trend to increase the use of tax incentives to promote industrial development. Several types of tax exemption, especially exemptions from income tax, the accelerated depreciation of assets, the periodic revaluation of capital, exemptions from customs duties for imports of machinery and equipment, and drawbacks on exports have been frequently used although not always well controlled. The effect of these incentives to date is a matter of opinion: in both Argentina and Mexico, exemptions from income tax seem to have exerted little influence on the investment decisions of entrepreneurs. Even in cases where they may have had favourable effects, their usefulness as instruments of development has been reduced owing to faults in the way they were applied. Extending the benefits of tax incentives to all newly-established enterprises has promoted the formation of excess capacity in certain branches of industry, often with adverse affects on older enterprises whose production equipment and techniques, irrespective of how efficiently they are used, have not been able to compete with new plants. Moreover, examptions from taxation have often been allowed to run beyond the cut-off dates initially fixed because of pressure from enterprises benefiting from them, even though the profits of such enterprises may exceed what might be considered a normal level.

Generally speaking, tax incentives are included in a large number of legal provisions, most of which relate to income tax legislation. This is the case in Chile, Colombia and Venezuela, while in Argentina and Brazil they are scattered through a number of acts and decrees.

/In order

In order to guide and encourage industrial development, other countries have promulgated special development legislation which, but although it reflects an effort to simplify and co-ordinate a number of different legal provisions, it normally deals only with matters of taxation and does not form a coherent set of industrial policy measures. This legislation usually includes exemptions for new industries which fulfil certain requirements. Such exemptions usually comprise total or partial exemptions from charges in respect of the incorporation of enterprises; exemptions from customs duties on imports of machinery, equipment, and sometimes even raw materials, to be used in the enterprise; reductions in income tax; the accelerated depreciation of fixed assets or the revaluation of capital assets, which involves an indirect reduction in income tax; exemption from export duties; reduction of taxes on profits, etc.

Examples of this kind of development legislation are Mexico's Act on the Promotion of New Essential Industries of January 1955; Ecuador's Industrial Promotion Act N° 3,005 of December 1964; Peru's Industrial Promotion Act of November 1959, as amplified by Act N° 17,044 (Title II) of July 1968; Bolivia's Legislative Decree for the Development, Promotion and Assistance of Private Industry of October 1965; Paraguay's Industrial Promotion Acts of 1953 and 1955, amendments to which were being discussed at the end of 1968; and Panama's Act N° 12 of 1950, together with Act N° 25, which expanded it, and Decree N° 114 of 1965, which brought it up to date.

The industrial development legislation adopted in 1958 in Honduras and Nicaragua, in 1959 in Costa Rica and Guatemala and in 1961 in El Salvador followed very similar lines. In recent years, however, these countries have tended to standardize their legislation with a view to implementing the Central American Agreement on Fiscal Incentives to Industrial Development.

As indicated earlier, the tax incentives contained either in special development legislation or scattered through a number of different legal provisions, seem to have been relatively weak in their effects. Part of this is attributable, at least in the Central American countries and other countries at a similar stage of development, to the low levels of income tax and in some cases to the fact that income tax is of relatively recent date.

/Another method

Another method of promoting industrial development which has played an important role in the establishment of new industrial capacity has been direct State action, either through the provision of external economies by providing the power and transport infrastructure, or through the direct establishment of industrial enterprises, sometimes in association with strictly private interests. This has been of particular importance in such countries as Colombia which, through its Industrial Development Institute (Instituto de Fomento Industrial), has set up some thirty large enterprises over the past twenty years, including Planta Colombiana de Soda, Industria Colombiana de Llantas, Acerías Paz del Río, Cementos Boyacá, Celulosa y Papel de Colombia, Forjas de Colombia, etc. Over the same period, over forty large industrial enterprises have been established in Chile, including Compañía de Acero del Pacífico, Impregnadora de Maderas, Industria Azucarera Nacional, Manufactura de Metales S.A., Manufacturas de Cobre, Corporación de Radio de Chile, Empresa Nacional del Petróleo, etc. Many enterprises in Mexico have been established through State action or with a large measure of State support.

In some countries, it has often been the practice to transfer total or partial control of State industrial enterprises to the private sector once they have passed through the initial stages in which difficulties and risks are greatest, the State sometimes retaining control only of enterprises which are of special strategic importance for the development of the country. Over the past decade, State action in industry has been relatively limited, although an exception to the rule is Venezuela, where many new enterprises have emerged, including the Venezuelan Petrochemical Institute (Instituto Venezolano de Petroquímica), Siderúrgica del Orinoco, Aluminio del Caroní, etc.

The government sector has also had an impact through its various efforts to develop over-all programming for the industrial sector.

As industry developed beneath its protectionist umbrella, the imbalances due to haphazard and spontaneous growth became gradually more evident and there was growing awareness of the need to direct the development process. Early attempts at industrial planning had to overcome the opposition of the private sector, which viewed them as unnecessary

/State intervention,

State intervention, and they were unsuccessful precisely because they lacked a policy for plan implementation, or rather because they existed side by side with policies that often conflicted with the planned objectives.

One of the instruments that has had a large influence on industrial development has been the use of credit and in general the management of capital markets. In some cases, banking or financial bodies have been set up under government agencies with the specific aim of providing credit for industrial enterprises, as a complement to the credit available from private financial institutions. In other cases, the State has worked indirectly, either by encouraging the participation of commercial banks in the financing of enterprises or by supporting the operation of stock markets, although without giving special attention to the needs of industry. Some foreign credit institutions and large firms have also participated directly in the flow of capital to the industrial sector. While all such credit mechanisms, which are discussed in detail in a later section, have played a decisive role in the industrialization process, they have big problems and limitations in meeting specific current needs and, in the relatively less developed countries of the region, either have not yet become experienced enough or broad enough in scope, or have had some adverse effects.

The various industrial policy instruments outlined above have gradually accumulated over the past decades without any widespread effort having been made to co-ordinate them or give them a unified approach. The lack of co-ordination between the various measures has led in some instances to paradoxical situations: for example, industries producing capital goods are encouraged by appropriate tariff protection, and sometimes even by measure prohibiting public bodies from purchasing capital goods abroad if a domestic equivalent exists, and yet they are unable to develop because they lack medium-term credit facilities or because their market is not large or stable enough owing to the large number of exemptions contained in the tariff protection machinery.

If, in the years ahead, a development strategy which has more far-reaching and ambitious objectives than those of the recent past, is to be adopted there must be a complete change of emphasis in the use of the instruments of industrial development policy. As will be shown in later sections, a whole host of instruments and bodies have been established in the countries of the region over the past two decades covering a wide field of industrial policy; but for various reasons they are not being properly used and they must be carefully evaluated if they are to be used more rationally in the future.

Efforts to promote regional integration and, even more, the need to compete in world markets, require a decisive change in the way tariff mechanisms are used, leading to the gradual replacement of tariffs by a coherent set of development measures based on other instruments of economic policy. Among such instruments, tax incentives, which so far seem generally to have had a minor influence on industrial activity, may in future acquire growing importance as excessively high tariff barriers disappear. Similarly, direct State action, either through the establishment of industrial enterprises or through State participation in semi-public enterprises, may have a decisive effect on the development of certain branches of basic industry in the relatively less developed countries, where the scarcity of financial resources places very narrow limits on action by domestic private enterprises. The operation of credit mechanisms should also be modernized and made more flexible in order to meet the new and very varied needs that will arise out of the development strategy being worked out for the coming decade. At the same time, stock markets will have to seek the most direct and expeditious way to match the resources generated by savings with the possibilities of investment in industrial enterprises.

The experience of the past two decades may yield some important conclusions which will help to guide future action in each country, in line with its own special characteristics, and within the region as an integrated whole.

Hence, it will be necessary to make a very detailed analysis of past experience in connexion with the various instruments of industrial policy. The sections that follow give a preliminary review of the measures adopted in some countries of the region to deal specifically with critical areas of industrial development.

## 2. Technology, efficiency and productivity

One of the consequences of indiscriminate protectionism is the establishment of a large number of productive units of inadequate size with antiquated techniques and often outmoded equipment. Side by side with these, there is surplus installed capacity in some industries which is either designed to ensure monopoly control or is the result of an uncontrolled flood of investment in a particular branch of industry. In both these cases, productivity is lower than it could be if resources were used more rationally.

Although in earlier days nobody worried much about such anomalies, as industry has gradually developed and the need to export more and more manufactures has made itself felt, it has become evident that low productivity is a difficult problem to overcome, particularly since its effects usually build up as goods move through the various stages of the manufacturing process.

Over the past twenty years concern about low productivity has become widespread, even in the relatively less developed countries, in view of the prospect of trade liberalization as a result of the establishment of an integrated regional market. This is why industrial policy instruments, especially those based on exemptions from taxation, began to be used in an attempt to influence some of the important decisions of entrepreneurs, mainly with the idea of encouraging them to modernize their machinery and equipment and, to a lesser extent, to make more intensive use of their installed capacity.

In Argentina, for example, what is termed the "priority for equipment" régime authorizes the importation, free of all taxes, exchange charges and customs duties, of machinery and equipment for which there is no domestically produced equivalent, provided that certain conditions are met, the first of which is that the investment should yield technical and technological improvements and should help to increase domestic production, improve its quality and lower its cost. Similarly, the industrial development act of Ecuador provides that, when calculating the proportion of their income subject to income tax, enterprises may deduct any sums invested or reinvested in the expansion or improvement of their industrial /plant, and

plant, and also any sums spent on research to improve existing production techniques or to develop new ones. The development act of Paraguay also provides tax incentives for existing industrial enterprises which expand or modernize their installations, and for new enterprises which incorporate new installations and modern production techniques into their plant, provided it is shown that this will help to develop the industry concerned. Under the act relating to exemptions in respect of machinery, equipment and raw materials in Venezuela, one of the conditions is that entrepreneurs must modernize their machinery and equipment from time to time.

Although these legislative provisions do show that there is a degree of awareness of the problem, they are not very effective in practice owing to their vagueness and the difficulty of providing for every particular case. More direct results might perhaps be obtained, although in an indirect way, by authorizing the accelerated depreciation of fixed assets. Decree N° 54,298 of September 1964 in Brazil established a special coefficient for accelerated depreciation in order to stimulate investment for the renovation and modernization of industrial installations. The industrial promotion act in Peru allows enterprises to increase the annual rate of their depreciation allowances or reserves in respect of industrial machinery or equipment if, because of unusually long workdays or other causes, they are subject to wear in excess of the normal, or if they have been replaced or it is guaranteed that they will be replaced by more efficient machinery or equipment.

There are similar provisions in the development act of Ecuador, and in the legislation of Chile, Colombia and other countries which, while not explicitly stating that their aim is to encourage the speedy renovation of equipment, in practice facilitate it by providing for the accelerated recovery of the financial outlay required.

A special provision has been used in Mexico to prevent the installation of excess capacity under which certain industries are declared to be "saturated". The application of this provision has been confined to a few relatively simple manufactures, and if it became more widespread it might lead to the legalization of monopolies or oligopolies which would impede rather than encourage improvements in productivity.

In some more recent instances credit incentives have been used to promote industrial development. The Fund for Expansion of Productivity (Fundo de Desenvolvimento da Productividade - FUNDEPRO) established in Brazil in 1967 assists industrial enterprises in the preparation or implementation of projects to increase productivity and provides five-year credits at an interest rate of 6 per cent, plus commissions and monetary adjustments, up to a total of 60 per cent, or in special cases 80 per cent, of the cost of the project. In other countries, the granting of loans has been linked to the adoption of recommendations on the internal functioning of enterprises, although this has generally been confined to assistance programmes for small-scale and artisan-type industry.

These efforts, however, seem to have had but a marginal effect and have not been successful in increasing efficiency in the use of resources or in raising levels of productivity to any significant extent.

A more detailed analysis would certainly reveal that this is partly due to a number of factors, one of which is the fact that many enterprises are family-owned. Because the family cannot supervise all the time, this makes for a single work shift per day. Another factor is the difficulty of obtaining financing, which encourage the medium-sized and small producer to use his equipment for excessively long periods. One factor among the many that have to be considered is of special importance: the techniques used.

It is a well-known fact that both the production techniques and the types of machinery and equipment being used in Latin America come from countries which have reached their present high level of development through a process that is appreciably different from the development process in Latin America. Both the supply and relative prices of the factors of production - human and natural resources and capital - and the historical and social background of their development are so different that the effectiveness of transferring such techniques without change and the likelihood of their prompt assimilation and dissemination have been questioned on more than one occasion.

However, little has been done so far to adapt imported techniques in a systematic and rational way to Latin American conditions, and there have been few efforts to initiate a process through which new techniques would be evolved specifically for the region. The demonstration effect of the consumption habits of the developed countries is often so strong as to obscure the need to make rational use of regional resources. The gradual replacement of textiles made largely of wool and cotton - of which there is an abundant supply in several of the Latin American countries - by synthetic textiles of comparable quality is merely one example of this trend.

The aim is not to halt the introduction of technological improvements - which have undeniably made a valuable contribution to the development of the region - simply because they come from abroad; but, on the other hand, neither is it to accept all imported techniques without first checking their suitability, as has happened in recent years.

As a result of technological progress, many newly established enterprises have been able to achieve high levels of efficiency, while older enterprises have been able to modernize, benefiting both from new techniques and from the advantages of using internationally known trade marks. But the direct costs in respect of royalties, patents and registered trade marks paid to the foreign enterprises supplying the technology, the premium on the value of special machinery and equipment, and the cost of technical assistance for the installation and periodic inspection of plant, may come to represent a substantial burden, depending upon market conditions and the size and financial soundness of the enterprise concerned. If to this are added all the restrictions usually included in contracts covering the size of the market, distribution, and prohibitions on the use of other trade marks, and also the social costs - which are difficult to calculate -due to the fact that the techniques are not suited to the actual resources available, it can be seen that there is ample justification for a more detailed study of the matter.

It should be recognized that some valuable work has been done recently to find a suitable approach to the question of technological research. The establishment of the Central American Research Institute for Industry

/(Instituto Centroamericano

(Instituto Centroamericano de Investigación y Tecnología Industrial) in 1955, the National Institute of Industrial Technology (Instituto Nacional de Tecnología Industrial) in Argentina in 1957; the Institute of Technological Research (Instituto de Investigaciones Tecnológicas) in Colombia; the Mexican Institute of Technological Research (Instituto Mexicano de Investigaciones Tecnológicas) in 1950; the Research Institute (Instituto de Investigaciones), affiliated to the Monterrey Institute of Higher Technical Studies (Instituto Tecnológico de Estudios Superiores) in 1961; the Venezuelan Institute of Technological and Industrial Research (Instituto Venezolano de Investigación Tecnológica e Industrial) in 1958; and the National Institute of Technology (Instituto Nacional de Tecnología) of Paraguay in 1963, shows that there is a desire to give definite encouragement to this kind of activity. Similary, in Brazil, the work being done by the National Institute of Technology (Instituto Nacional de Tecnología) and by the Institute of Technological Research of the State of Sao Paulo (Instituto de Investigações Tecnológicas do Estado de Sao Paulo), is being supported by the work of the Foundation for Assistance to Research of the State of São Paulo (Fundação de Ampara a la Pesquisa do Estado do São Paulo - FAPESP) which makes the resources it receives - a contribution of 0.5 per cent of its revenue by the state government available to research laboratories and centres, while maintaining the necesary control to ensure that the resources are used effectively. Since 1964, funds for research have also been provided by Brazil's Fund for the Development of Science and Technology (Fundo de Desenvolvimento Técnico-Científico - FUNTEC), administered by the Banco Nacional de Desenvolvimento Economico (BNDE), which finances research to facilitate and channel the introduction of technological innovations into industry, the adaptation of processes and techniques to local conditions and the invention and improvement of industrial production methods to make intensive use of the country's natural resources.

Generally speaking, these institutions, and all the others that have been in operation in the region for some time, have found their capacity for action limited by lack of financial resources, which has at times made it impossible for them to modernize even their oven equipment and laboratories.

/In addition,

In addition, the lack of communication between institutes, laboratories and universities in the various countries of the region has deprived them of the possibility of complementing each other's work. This particular problem has been discussed on many occasions by representatives of the various countries, in conjunction with UNESCO and ECLA, and it was decided to establish the Centre for the Application of Science and Technology to Development in Latin America (Centro para la Aplicación de la Ciencia y la Tecnología al Desarrollo de America Latina - CECTAL), which began operation in Brazil in 1968.

Together with this work on research and the adaptation of techniques, work has also been done on industrial standards, initially at the national level, with a view to achieving uniform standards in all the countries of the region.

In some countries, the establishment of industrial standards institutions is of relatively recent date. In Peru, the National Institute for Industrial Technical Standards and Certification (Instituto Nacional de Normas Técnicas Industriales y Certificación) was established in 1959, and in the same year Venezuela established the Venezuelan Industrial Standards Commission (Comisión Venezolana de Normalización Industrial), while the Colombian Institute of Technical Standards (Instituto Colombiano de Normalización Técnica) dates from 1964. Even in countries where institutions of this kind have been in existence for some time, efforts have recently been made to rectify existing deficiencies. For example, a new general law covering standards and weights and measures was enacted in Mexico in 1960, and in Brazil, where the Brazilian Association of Technical Standards (Associação Brasileira de Normas Tecnicas - ABNT) was already in existance, a private body has been established, the Brazilian Association for the Development of Basic Industries (Associação Brasileira para o Desenvolvimiento das Industrias de Base - ABDIB), which co-operates in setting standards and organizing quality control for basic industry.

Spurred on by the process of regional integration in which they are engaged, the Latin American countries have declared their intention of adopting common technical standards to facilitate trade. The Pan American Commission for Technical Standards (Comité Panamericano de Normas Técnicas -

/COPANT), which

COPANT), which was established in 1961, has begun the work of harmonizing the various standards existing in the region.

Noteworthy, too, among efforts to encourage industrial enterprises to increase productivity, are the activities of the productivity centres which have been set up over the past two decades. The technical co-operation department of the Chilean Institute of Productivity (Instituto Chileno de Productividad) began operation in 1951, the National Productivity Centre (Centro Nacional de Productividad) of Mexico in 1955; shortly afterwards the National Productivity Centre (Centro Nacional de Productividade) was set up in Brazil, and now has twenty state centres. This was followed by the establishment of the National Centre for the Increase of Productivity (Centro Nacional de Incremento de la Productividad) in Peru in 1960, the Venezuelan Institute of productivity (Instituto Venezolano de Productividad) in 1962 and of productivity centres in Costa Rica, Guatemala and Panama in 1963, in Uruguay in 1965 and in Paraguay in 1967.

These centres, generally established by entrepreneurial institutions, sometimes with government support, have received financial assistance from the United States Agency for International Development (AID), the Organization of American States (OAS) and the Inter-American Productivity Association (Asociación Interamericana de Productividad), and technical assistance from the IIO. In most cases, their work has consisted in organizing seminars and courses for supervisors, managers and administrators and in disseminating information about productivity.

The various efforts made to encourage enterprises to modernize their equipment and raise their levels of productivity, as well as the work done on research and standardization, will have to acquire a great deal of momentum in the coming years if they are to promote rather than hamper regional integration. While slow but sure progress is being made in technological research and the adoption of standards for industrial products and processes, a special effort has to be made to reconvert and modernize outmoded enterprises which will otherwise inevitably be shouldered out by new firms with more modern ideas of production techniques and efficiency.

### 3. Institutional framework and financing

Over the past twenty years the actual structure of Latin American enterprises has not changed to any significant extent. Efforts to improve management capacity and the internal organization of the productive process, mainly initiated in productivity centres or in such organizations as the development centres in Venezuela and Ecuador, are slow to take effect and are still not very broad in scope because they are so recent.

Nevertheless, a number of efforts have been made at the State level to provide institutional support for industrial enterprises. In most countries of the region industrial development programmes have been designed to induce private enterprise to adopt decisions which are most in the interest of the community as a whole. These programmes sometimes form part of over-all programmes, and sometimes relate to the industrial sector exclusively, either covering the main branches or concentrating on a particular branch or on small-scale industry. Although there has been progress in this respect in virtually all countries, the implementation of these programmes has been seriously hampered by the lack of continuity in political decision-making or by switches of policy. Added to this is the fact that in many cases no specific projects through which the programmes could be put into effect or no sufficiently detailed policy measures to facilitate their implementation have been included in the programmes. Moreover, there has been an absence of any real contact between planning offices and the government agencies responsible for putting plans into effect.

Nevertheless, side by side with the work done on industrial planning, and as a result of the joint endeavours of a number of isolated elements, both public and private, some work has been done to develop specific projects in line with the priorities recommended in the plans.

In a number of countries, for instance Chile, Mexico and Venezuela, it has sometimes been common practice for development organizations to prepare projects which are then handed over to private investors. In Brazil the Finance Company for the Study of Programmes and Projects (Financiadora de Estudos e Proyectos), was set up in 1965 under BNDE to finance project

/preparation and

preparation and feasibility studies through loans with repayment periods of as much as ten years. In Mexico, the Fund for Pre-investment Studies (Fondo de Estudios de Preinversión), a trust fund of the Nacional Financiera, was set up at the end of 1967 for similar purposes. The industrial promotion department of the Venezuelan Development Corporation (Corporación Venezolana de Fomento) prepares projects which are then handed over to entrepreneurs, who then do the work and provide a portion of the capital required.

These efforts have been supported financially and complemented at the regional level by the Pre-investment Fund for the Integration of Latin America, established by IDB in 1966. The Fund's resources have been made available to government agencies, development corporations, multinational bodies, private organizations, etc., to finance pre-investment studies for programmes or projects promoting Latin American integration. This Fund covers various fields of activity, but some of its resources may be used for industrial programmes and projects.

As a complement to these recent activities, in some countries of the region - Mexico, Ecuador and Venezuela - periodic lists of investment opportunities have been sent to investors, and in some cases sets of draft projects are available upon request. In order to channel investment and prevent the accumulation of excess capacity in particular branches of industry, since 1962 Venezuela has had a project register in which the names of persons requesting State aid or financial assistance must be recorded.

All these efforts — and the industrial development legislation — are helping to form a more suitable institutional framework for the development of industrial activities. However, the process of economic integration is bringing new needs to which, with some exceptions, no adequate response has yet been made. Some isolated pieces of legislation — for instance Decree N° 284 68 HC, adopted in Peru in August 1968, which paves the way for multinational enterprises by establishing a clearly defined framework of legislation and taxation — give grounds for hope that certain critical problems will eventually be solved. Nevertheless, there are still some strong institutional barriers to be overcome. For example, the possibility of co-ordinating industrial programmes and harmonizing industrial policy in the countries of the region will remain a distant hope until stable and well—defined machinery is established within each country.

If Latin American industry is to be in a position in the future to deal successfully with the problems of its development and if, in addition to promoting the flow of inter-regional trade it is to secure its due share of world markets, substantial changes will have to be made in the institutional framework, which may well become one of the key factors for future development.

Another equally critical factor, and one which has traditionally hampered industrial development possibilities in Latin America, is financing.

The financial status of industrial enterprises depends on a great variety of factors whose effects are difficult to isolate. Protectionist policy, price-fixing, wages policy, taxation and exemptions from taxation, and even some administrative provisions, all have an effect on the capacity of enterprises to generate their own funds. The effects of some of these policy measures were discussed in earlier sections, especially in relation to tariff protection and tax legislation that affect the investment or re-investment of funds. The measures adopted in recent years with regard to the supply of external funds to enterprises in the form of direct contributions, loans and foreign investment are discussed in the following paragraphs.

The slow pace at which per capita income has grown, together with certain persistent structural deficiencies, has meant that savings in Latin America have remained at a generally low level. Given this trend, the industrial sector has had to compete with the other sectors of production in order to attract its share of the resources available, not always with success.

Personal savings, which could become direct capital inflows, are generally attracted into other forms of investment which offer comparable or higher returns and are easier to recover, for example, time deposits in savings banks or associations, or speculation with foreign currency. Given this situation, there has been no effective way to channel such savings towards industry.

In the vast majority of cases, the position of stock markets has weakened in recent years, particularly in so far as their capacity to channel financial resources to industry is concerned. Even in Mexico,

/where the

where the buying and selling of the shares of the Nacional Financiera make the market specially dynamic, transactions in the shares of industrial enterprises are of little significance. In the other countries which have stock markets there has been a steady decline, both in the real value of securities and in quotations of industrial shares. In an effort to reverse this trend some countries are taking definite steps to try to recover - or to win - the confidence of investors.

In Argentina, for example, a new Stock Market Act was adopted in September 1968 which made some changes both in the market itself and in the provisions governing incorporated companies. In Brazil, legislative decrees N° 157 and N° 238 of August 1967 grant exemptions from taxation to purchasers of shares, allowing deductions from income tax of up to 10 per cent for persons and up to 5 per cent for enterprises for this purpose. In Colombia, Decree N° 2229 of August 1968 requires the administrators of incorporated companies, inter alia to submit data on the salaries, fees, travel allowances and other income of company directors, with the aim of controlling and protecting the interests of small shareholders. In 1965, the first stock market in Central America was opened in El Salvador, and at the end of 1968 Paraguay was planning to establish a stock market to channel savings towards investment in industrial securities.

Despite all these efforts, however, it appears that savers tend to have more confidence in fixed-income securities issued by large institutions than in industrial securities.

The direct contributions made by some State financial corporations, such as the Nacional Financiera of Mexico or the Venezuelan Development Corporation, have helped to support private investment and channel it towards the industrial sector, with fairly successful results, and it is hoped that the Andean Development Corporation (Corporación Andina de Fomento) will be able to do the same on a subregional scale, although these institutions generally do not operate through stocks markets but rather compete with them. Financial enterprises that operate as investment funds have shown the same weaknesses as have affected stock markets.

In view of the above, it is clear that a careful review is needed of the current machinery through which stock markets operate, since such markets can play an important role in the future if the proper channels are provided.

In contrast to the inflexibility of stock markets, and the decline in their operations, credit mechanisms have been supplying an increasing volume of financial resources to industrial enterprises. While it is true that the traditional banking system has had - and still has in some countries - rather serious limitations in terms of fulfilling the needs of industry, it must be recognized that in recent years - with varying degrees of success - various measures have been adopted to make credit mechanisms more flexible and effective.

The shortage of medium-term and long-term credit, which has long been one of the most critical problems in industrial financing, has received special attention. In addition, the supply of working capital has been expanded and special mechanisms have been sought to solve the acute problems of the capital goods industry.

In order to do this some countries have endeavoured to eliminate legal restrictions on bank credit operations, and have also authorized the formation of other private financial bodies, such as financing companies, development banks etc., with more flexible regulations.

More rapid and effective action has been achieved through the establishment of machinery which takes advantage of the direct contacts between commercial banks or other private financial institutions and enterprises in order to transfer State resources, most of which come from external loans, to enterprises.

In Brazil, for example, a group of financing funds were set up in 1964 and 1965 under the National Economic Development Bank, to provide credits for the purchase of domestically produced equipment and machinery (FINAME), for the financing of small-scale and medium-sized enterprises (FIPEME) and of studies and projects (FINEP), and for the provision of working capital (FUNDECE). In October 1968, Colombia established an Industrial Fund within the Banco de la Republica which is authorized to rediscount loans granted by banks and financial corporations to small and

/medium-sized industrial

medium-sized industrial enterprises. In Peru, the functions of the Banco Industrial were expanded to include development promotion functions when the National Institute for Industrial Promotion (Instituto Nacional de Promoción Industrial) was amalgamated with it.

Together with domestic resources of credit external loans from international institutions - the International Bank for Reconstruction and Development, the Inter-American Development Bank, and others - and from government financial agencies - the Export Import Bank, AID, etc. - have played an important role in recent decades. Although only a portion of the resources made available by these bodies has gone to the industrial sector, it has been sufficient to cover the foreign exchange expenditures of some important new ventures, especially in the field of chemicals, petroleum products, cellulose and paper, and basic metals.

The trend over the past ten years has been for these resources to decline, while interest rates have generally tended to climb. So far, despite repeated efforts, it has not proved possible to modify one of the features of external credit which places Latin America at a special disadvantage: the tying of credits to the origin and destination of the goods purchased, together with the restrictions relating to transport and insurance.

Given the above, it will be necessary to ensure that in the future there is a growing volume of external resources to help Latin American industry through the critical stage of transformation now before it. This will not be possible unless the developed countries commit a somewhat larger proportion of their resources to assisting the countries of Latin America.

A further reason for enlisting external support is the fact that conditions will change in the region as the process of economic integration progresses. The experience of more advanced countries shows that additional financing is required to reconvert industries which are being ousted by new and more efficient enterprises. Quite probably this need will be particularly acute in Latin America, where, because of the relatively high proportion of medium-sized and small enterprises and artisan-type industries, relatively more enterprises may be expected to find themselves completely unable to compete as markets are gradually liberalized.

/In recent

In recent years, foreign private investment has also played an important part in the industrial sector.

In earlier years, foreign private investors showed little interest in Latin American industry, except in those countries which had relatively large domestic markets, such as Argentina, Brazil and Mexico. However, over the past twenty years, the amount of foreign private investment has grown and, while it does not represent a large proportion of total industrial capital, it has gone predominantly to some of the fastest growing branches, for example, the motor-vehicle, petrochemical, electrical machinery and electronics industries, etc. The countries of the region have adopted conflicting attitudes towards this situation. Some think that accepting foreign capital in these branches of industry is the most direct method of incorporating modern production techniques into industry, while others think that, since these are the branches with the highest potential growth, they should remain under national control. Added to this, there is the growing tendency of foreign investors to take over Latin American enterprises that are already in operation; this may mean nothing more than a transfer unless the resources thus freed are re-invested in the sector.

Despite the changes in the way that foreign investment reaches Latin America, few industrial policy measures seem to have been taken to channel this investment. In general there has been no change in the traditional policy of attracting capital from all and sundry by offering a variety of exemptions and incentives, with limitations in only a few cases.

For example, under Act N° 14,780 of 1958 in Argentina, foreign capital has the same rights as domestic capital, although subsequent legislation granted preferences in some cases and incentives in others. In September 1967 a foreign investment promotion service (Servicio de Promoción de Inversiones Extranjeras) was established, while has endeavoured to give even greater facilities to foreign ivestors. In Brazil, Act N° 4390 of 1964 and Decree N° 55,762 of 1965 guarantee foreign investors broad freedom of operation, while resolution N° 7 of 1968 in Colombia raised the percentage of profits that could be repatriated. In Chile, foreign investors are granted a number of exemptions on imports of machinery and

and the state of the

equipment, and accelerated depreciation of fixed assets, etc. In Mexico, foreign capital may not exceed 49 per cent of the total capital of enterprises covered by the Act on the Promotion of New Essential Industries; and in a few cases the capital must all come from domestic sources. In Paraguay, Act N° 246 of 1955 granted foreign investors wide-ranging guarantees and customs and tax benefits, and also authorized them to purchase foreign exchange from the Central Bank for remittances abroad.

The contribution that foreign industrial enterprises can make to the Latin American countries in terms of both technology and administrative efficiency and organization must be channelled in such a way that the maximum benefit is derived from it. This necessarily implies the more or less uniform treatment of foreign capital in the various countries to prevent the countries from competing with each other to their own detriment, in the incentives they offer to investors. It also means that the interests of local entrepreneurs will have to be safeguarded to ensure that they are not excluded from the most dynamic industrial activities which offer the best financial prospects.

Hence, it may be affirmed that in terms of financing there have been serious short comings in the mechanisms involved in the flow of funds to Latin American industrial enterprises, and that judging by recent trends the problems of Latin American industry are becoming more acute.

Great efforts will therefore have to be made to improve financing if future development is to be possible. Expansion of the volume of resources flowing to industry and diversification of the methods of financing, with the emphasis on longer repayment periods, are both essential prerequisites of this improvement. This cannot be achieved unless important decisions are taken on internal economic policy, added to which there must be a substantial inflow of external financial assistance.

### 4. Employment and labour problems

Because of the rapid growth of the population, and hence the labour force in Latin America, and the inevitable migration to the cities of a part of the rural population, all the sectors of production except agriculture have been subject to strong pressures caused by the demand for new employment opportunities in the last few decades; but the secondary sector, which has its own limitations on growth, has not reacted forcefully to this pressure. Part of the surplus agricultural population of working age, which is virtually completely untrained, has been absorbed into the building industry or in low-productivity services, while the remainder have swelled the ranks of the unemployed, gradually aggravating the problem of marginality.

As they naturally are not organized, the segments of the population affected by unemployment have not been strong enough to press for the adoption of measures to improve matters. The specific objective of raising employment levels has not been one of the major concerns of those who frame and control economic policy in Latin America. An unemployment rate of 5 to 6 per cent of the labour force has come to be considered normal, and when this rate has been exceeded the State has been given the responsibility for absorbing the excess manpower either in public works or by over-staffing State enterprises and bodies.

It was hoped that the level of employment would rise automatically as the over-all economic development process gained momentum; and, given the continued stagnation of agriculture and the inevitable migration of the rural population because of improvements in productivity, responsibility for absorbing a growing proportion of the labour force began to shift to industry, it being relatively the most dynamic sector. However, this was not done in an explicit fashion. It would be difficult to find any industrial policy measure solely directed towards increasing employment in industry, although there are some measures that indirectly or partially seek this goal.

For example, one of the basic objectives of the policies for the promotion of artisan-type and small-scale industry adopted in some countries has been to raise, or at least to maintain the level of employment in plant with relatively modest capital requirements.

The Banco Industrial of Argentina has been administering a system of special loans for the establishment, expansion and modernization of small-scale industry in the interior of the country, whose basic objectives include using local raw materials and employing locally available manpower. Similarly, the credit programme of the Venezuelan Ministry of Development, which operates through the National Commission for the Financing of Small-scale and Medium-sized Industry (Comisión Nacional de Financiamiento de la Pequeña y Mediana Industria), established in 1959, includes among its basic objectives ensuring permanent sources of employment and promoting the training of entrepreneurs and industrial manpower. Although such objectives are not explicitly states in Mexico's programmes for the development of small-scale and medium-sized industry, they are referred to in article 11 of the Act on the Promotion of New Essential Industries, which lists the secondary priorities that may affect tax exemptions or the amount of tax reductions granted under the Act, and states that one of the factors considered will be the quantity and quality of the manpower employed or to be employed.

Furthermore, regional development policies may also be interpreted as attempts, albeit partial, to retain manpower in its area of origin in order to prevent increased migration to the industrial centres.

This seems to be a major objective in the countries which are geographically the largest. It has been stated \( \frac{1}{2} \) that regional planning in Mexico is focused mainly on the problem of employment, seeking systems and methods that will provide employment for the many unemployed or underemployed within each region. Accordingly, since the nineteen-fifties the formation of regional industrial centres has been encouraged by extending electricity networks, reducing railway transport rates, etc.

<sup>1/</sup> Statement by Alfredo Navarrete, Director of Nacional Financiera, at the <u>Jornadas industriales de Jalisco</u> (August 1967).

The state governments have assisted by enacting industrial development legislation granting tax exemptions for up to thirty years in some cases and releasing land for the construction of industrial estates. As a result, new industries have been developing in the states of Morelos, Puebla, Querétaro and in other relatively backward areas.

Similarly, one of the basic objectives of the Departments for the Development of the Nordeste (Superinténdencia de Desenvolvimento do Nordeste - SUDENE) and Amazonia (Superinténdencia de Desenvolvimento da Amazonia - SUDAM), which were set up in 1959, was to promote new activity in the two regions, especially in industry, to absorb the unemployed labour force formerly employed in agriculture. For this purpose, companies were allowed to apply 50 per cent of their income tax to activities promoted by the two Departments, provided they supplied an equal amount of matching capital a large proportion of which they could obtain through regional banks.

There has been some discussion as to whether the measures to promote artisan-type and small-scale industry and the regional development policies adopted in Latin America are justified, either in terms of their employment objectives or in terms of their effect on the costs of industrial production.

Clearly, the indiscriminate of granting incentives to all small-scale industrial enterprises would conflict with the need to raise productivity and lower costs. It is worth looking, however, to see in which branches or products there is - or there could be - any real choice of techniques, given the current supply and relative cost of capital and labour.

There is some evidence that in the metal-transforming industries, for example, there is a great deal of scope for small enterprises operating as subcontractors. There may also be some benefit in establishing small rural and fisheries industries to meet local needs. Similarly, it would be useful to examine to what extent and under what conditions industrial growth based on highly productive units is capable of generating a margin of indirect employment - in transport, marketing and other services - which would equal or even exceed the amount of employment that can be obtained directly from less productive but more labour-intensive units.

/Furthermore, it

Furthermore, it would be advisable to examine how in some cases the bottlenecks of public, administrative, transport and other services actually cancel out the external economies of centralization, and thus justify the formation of new development centres at greater distances from one another.

Answers to these questions may assist in the adoption of employment objectives compatible with a rapid growth of production and harmonious regional development thanks to development within each country.

Industrial manpower problems, however, are not confined to the quantitative side of employment. Equally or even more important are deficiencies in vocational training and the low wage levels of unskilled workers.

Admittedly, the fact that the labour force lacks skills is one part of a complex social structure of which industry is but one component. Because of its specific needs, however, industry has made some attempt to solve this problem.

Much more effort has been made in recent years to improve the level of skills of adult workers. The few existing traditional institutions, generally coming under the various ministries, have been joined by new bodies which can operate more flexibly although but have a more limited educational range.

The National Industrial Training Service (Serviço Nacional de Aprendizagem Industrial - SENAI), established in Brazil in 1942; the National Training Service (Servicio Nacional de Adiestramiento - SENA) established in Colombia in 1957; the National Institute for Educational Co-operation (INCE) established in Venezuela in 1959; the National Service for Industrial Training and Labour (Servicio Nacional de Aprendizaje y Trabajo Industrial - SENATI) established in Peru in 1960; the Accelerated Manpower Vocational Training Programme (Programa de Formación Profesional Acelerada de Mano de Obra) established in Chile in 1960, which in 1966 became the National Institute of Vocational Training (Instituto Nacional de Capacitación Profesional - INACAP); the training centres for industrial labour established in Mexico in 1963; the National Training Institute (Instituto Nacional de Aprendizaje) established in Costs Rica in 1965; the Institute for the Training and Development of Human Resources

(Instituto para la Formación y Aprovechamiento de Recursos Humanos) established in Panama in 1965; the accelerated vocational training schools started in the Dominican Republic in 1966; and the Vocational Training Service (Servicio de Capacitación Profesional) of more recent date in Ecuador — all these institutions have somewhat similar characteristics.

Although some of them come under the State system and others under entrepreneurial organizations, it is the latter organizations which direct and determine the course of action to be followed. They generally provide vocational training for young apprentices and advanced training for adults, with a view to providing workers with skills. Almost all such institutions provide theoretical and practical training through in-service courses or courses at training centres in different areas of the country which cover a number of trades, such as the various types of mechanic, electrician, welder, etc. The courses are usually short, ranging from a few weeks to one year, taking the minimum amount of time required to learn a trade.

In some countries, recent legislation has endeavoured to combine the aim of increasing regional employment with that of manpower training; for example, an act adopted in Brazil in 1968 provided that 5 per cent of the total sums received by SUDENE and SUDAM in respect of fiscal incentives must be used for manpower education and training projects in the two regions.

Although such efforts are not a satisfactory response to the need to incorporate workers into the industrial community - not just as factors of production, but as human beings within a culture whose values they must of necessity share - they are at least helping to alleviate in part the high rate of unemployment and the acute shortage of skilled labour.

So far, however, it has not proved possible to bring a large proportion of unskilled labour into the consumer market since their low wages seriously limit their potential demand for manufactures. Raising the level of employment and increasing wages can probably only be done through a massive training effort, combined with significant changes in the productive structure, especially in the agricultural sector, although

this would certainly require great changes in other more general factors - which are not within the scope of the present document - responsible for the continuance of the current situation.

It is quite likely that employment and manpower training problems will become more acute in the near future. On the one hand, the fact that the rate of population increase is on the rise means that more and more young people are entering the labour market, while on the other, the process of economic integration should bring with it economies in the use of resources, especially labour. Finding a solution to these problems, in which the industrial sector will have to play a not insignificant part, will require very careful reflection since more than purely economic factors are involved.

### 5. Regional integration and the world market

The limitations to which the over-all development of Latin America is subject, which have become narrower in recent years, have gradually shown — as has been repeatedly pointed out — that there is a need to change the strategy which has governed development so far. One of the essential components of this new strategy is the regional integration of domestic markets, in which the industrial sector will have to play a central role in speeding up development. A question which arises in connexion with regional integration, is that of increasing the flow of exports of Latin American manufactures to the rest of the world.

Although these two problems have to be tackled simultaneously, since they are very closely interrelated, the measures required may be considered separately, for in recent years various specific policy measures have been adopted for each of them.

### (a) Regional integration

The first proposals for the creation of a Latin American common market were put forward in 1949, but it was some years before a start could be made on putting them into effect.

The initial agreements, adopted in 1951, related to Central American integration, although it was only in 1958, when the first multilateral agreements were signed, that the Central American Economic Integration Programme began to operate, two years before the conclusion of the

/General Treaty

General Treaty on Central American Economic Integration and the establishment of the Permanent Secretariat (SIECA). The rapid process of tariff liberalization and the adoption of uniform external tariff led to marked increase in trade between the countries of the region.

The instruments in force for the industrial sector are designed to facilitate investment decision-making by enterprises concentrating on production for the common market.

The Régime for Central American Integration Industries, adopted in 1958, implicitly provides that only one industry in each branch of production will have free access to the regional market and qualify to be designated an "integration industry". Such industries are guaranteed, inter alia, that any competitor plant that may be established in another part of the region will enjoy similar access to the market only ten years after its establishment. A further provision prevents a second "integration industry" being designated in any one country until all five signatory countries each have one such industry.

To date only two plants have been declared integration industries: a rubber tyre and tube plant in Guatemala and a caustic soda and chlorinated insecticides plant in Nicaragua, the latter having been in operation since 1967. There are also plans for plants for which admission to the Régime has been requested: two nylon filament plants, one in Guatemala and one in El Salvador, two pulp and paper plants, one in Guatemala and one in Honduras, and two iron and steel plants, one in Honduras and one in Costa Rica.

The number of actual achievements and projects planned is hardly satisfactory in view of the fact that the Régime has been in operation for five years and in comparison with the rapid progress that has been made in the elimination of trade barriers. This was probably why a further scheme to protect industrial development was put into effect under which surcharges may be placed on the common external tariff. A plant requesting the imposition of this surcharge must show that it is capable of satisfying at least 50 per cent of the regional demand for the goods it produces. Price-control machinery was also established under

/this arrangement.

this arrangement. To date, only two enterprises have taken advantage of the scheme: one producing electric lighting-bulbs and one producing glass bottles, although there are many requests from other enterprises for admittance.

Another instrument which completes the set of measures adopted to promote industrial integration is the Central American Agreement on Fiscal Incentives to Industrial Development, concluded in 1962, which establishes a uniform régime for fiscal incentives to industry. The Agreement applies to both new industries and the expansion of existing industries and establishes a scale of graduated exemptions and incentives varying in accordance with the type of goods produced; industries producing capital and intermediate goods, for example, receive the highest benefits, and assembly plants the lowest. Because of its relative stage of development within Central America, Honduras receives special treatment under which it can grant additional incentives for certain periods. Nicaragua is also entitled to similar incentives, but for shorter periods. Taking advantage of this additional benefit, Honduras requested that its large-scale projects for a pulp and paper plant at Olancho and an iron and steel plant at Morazán should be designated integration industries.

Evidently, while the integration process in Central America does have a number of different instruments of an institutional character, the industrial achievements of the process to date have been somewhat limited.

The Latin American Free-Trade Association (LAFTA), established in 1960 by the Montevideo Treaty, has evolved in a different way and has also used its instruments differently. While the programme for the gradual liberalization of trade by means of annual negotiations, the results of which appear on the National Schedules and the Common Schedule, made rapid progress initially, it has now slowed down, as the negotiations have begun to deal with products of greater importance.

As is known, the commitment to a Common Schedule means that products included in it must be completely and irrevocably freed from all duties and charges and other restrictions, although this obligation only becomes binding at the end of the twelve-year period stipulated in the Treaty, i.e., in 1973.

Although in the first section of the Common Schedule, approved in 1964, agricultural products (coffee, bananas, cocoa, cotton, etc) and mining products predominate, some industrial products of some importance were also included, for example long-fibred chemical wood pulp, which is traded in some volume between the LAFTA countries. The certainty that this product would circulate freely in the LAFTA area from 1973 onwards was probably one of the factors prompting Chile, for example, to develop projects for increasing its pulp production capacity; although the lowering of tariffs for third countries (alteration of the margin of preference) in the traditional importing countries of the area has caused some difficulties, they are expected to be only temporary.

Another of the major instruments, in addition to the Common and National Schedules, by which the Montevideo Treaty aims to achieve its objectives is the complementarity agreements. In the early years of operation of the Treaty, the prevailing view of such agreements was that they would basically form, together with the National Schedules, a method whereby products could be included in the Common Schedule, until the Schedule had achieved its purposes. It was thought that a specific and autonomous programme of liberalization for particular groups of products or lines of industrial production would form a suitable additional mechanism to speed up the over-all liberalization programme.

The initial régime - resolutions 15 (I) and 48 (II) - established that products coming under the complementarity agreement must be included in the National Schedules; this automatically meant that all countries benefited from the concessions in the agreement, i.e., that the effect of concluding such an agreement differed very little from the effect of including a product in the National Schedules.

Two complementarity agreements were signed under this régime. The first, concluded in July 1962, covered statistical and similar machines, together with parts, accessories and punched cards, and was signed by Argentina, Brazil, Chile and Uruguay. Under this agreement, import duties were abolished between the LAFTA countries

but retained for imports from third countries. The agreement has operated normally and trade has steadily increased since it came into force in 1962, since in 1963 imports of such products totalled almost 360,000 dollars while in 1966 - the most recent year for which data are available - they had grown to over 1.3 million dollars.

The second agreement covered electronic valves for radio and television sets, including parts and components, and was signed by Argentina, Brazil, Chile, Mexico and Uruguay. In addition to providing for the elimination of import duties as between the signatory States, the agreement includes provisions to harmonize duties on imports from third countries. The agreement initially excluded certain types of valve, on the understanding that they would gradually be included over a six-year period. The list of exceptions has already been revised twice.

Unlike the first agreement, the second contains provisions designed, not to prevent the introduction of restrictions on imports of parts and components from third countries, but rather to encourage production in the LAFTA area by establishing certain requirements and at the same time setting up a commission to administer the agreement.

During the first complete year in which the agreement was in force - 1965 - imports totalled 1.2 million dollars, rising to almost 1.7 million in 1966.

These were the only two agreements which were signed during the period of effect of resolutions 15 (I) and 48 (II), i.e. over a period of almost four years.

Resolution 99 (IV), adopted at the end of 1964, opened up new prospects for complementarity agreements by eliminating the provision making it obligatory to include products covered by such agreements in the National Schedules and by providing that countries not participating in an agreement would benefit from its provisions only if they provided adequate compensation - this, as will be realized, affects the working of the most-favoured-nation clause. The resolution also contained another exception to the clause by providing that the relatively less developed countries would be eligible unconditionally for all the benefits negotiated in the complementarity agreements, irrespective of whether they were parties to them.

This new system, which did away with the automatic extension of benefits, promoted increased confidence among countries and enterprises. In 1965, the entrepreneurs attending the sectoral meetings - which, together with government efforts and the proposals worked out at a different type of entrepreneurial meeting, constitute the machinery for developing complementarity agreements - recommended the conclusion of some thirty complementarity agreements liberalizing more than a thousand items. However, the governments only signed two of them, both between Brazil and Uruguay, one covering household electrical, mechanical and heating appliances, and the other covering certain products of the electronics and electrical communication industries.

After a short transitional period, a number of factors led governments to be somewhat reticent about embarking upon further complementarity agreements. One was the fear that resolution 99 (IV) might lead to a large number of bilateral agreements which would distort the concept of multilaterality that pervades both the spirit and the letter of the Treaty. Another was the concern that there might be two or more agreements on the same product which, if different countries were involved, would mean that there would be various different requirements with respect to origin, something which would modify one of LAFTA's basic principles.

The result was that in 1966, at the sixth regular session of the LAFTA Conference, governments did not negotiate on any of the products in the proposed agreements, although they did implement more than half of the liberalization recommendations made by the sectoral meetings regarding the inclusion of products in the National Schedules.

Starting in late 1966 and continuing throughout 1967, however, complementarity agreements made a notable come-back, and there began to be proposals designed to make them more than mere instruments for more rapid tariff liberalization.

At the end of 1967 the fifth complementarity agreement was signed, covering a large sector of the chemical industry. This agreement, which was also the outcome of the sectoral meetings, is of particular importance

/both because

both because it is the first to which all the countries are parties and because of the wide range of products which have been liberalized irrevocably.

The sixth agreement - on petrochemicals - signed by Bolivia, Chile, Colombia and Peru in July 1968, has a special character since it contains a complete plan for the development of the branches of the petrochemical industry covered by the agreement through the planning of investment, the co-ordination of production policies and the location of plant in the various countries. It establishes an automatic and irrevocable programme of liberalization, and a common external tariff varying in accordance with the degree of processing of products. These features demonstrate the very special potential of this kind of agreement as an instrument for integration or development, in contrast with the other agreements which merely eliminate tariff barriers. 2/

In August 1968, Argentina and Uruguay signed the seventh complementarity agreement - covering household goods - which is the standard type of liberalization agreement with revocable concessions. Also at the negotiation stage are two agreements developed at sectoral meetings, one on products of the glass making industry (Argentina, Brazil, Chile, Colombia, Mexico, Peru and Uruguay) and one on electronic products for household use (all countries). There are also a number of draft agreements which are at the stage prior to negotiation proper: on products of the cold storage and household appliance industry (Argentina, Brazil and Mexico); on electricity generation, transmission and distribution equipment (Brazil and Mexico); on canned and preserved fruit and vegetables (Argentina, Brazil, Chile, Colombia, Mexico, Paraguay and Uruguay); on products of the electronics and electrical communication industries (Argentina, Brazil and Mexico); on valves for industrial use (Brazil, Colombia and Mexico); and on the plastics industry (Argentina, Chile, Colombia, Mexico, Peru and Uruguay).

<sup>2/</sup> See chapter II, footnote 7.

Parallel with these activities in connexion with complementarity agreements, mainly stemming from efforts at the entrepreneurial level - five of the seven agreements in force and the two under negotiation were initiated by entrepreneurs - another approach was developed in line with the decisions of the meeting of planning and development agencies held at Lima in 1963 and the fourth regular session of the LAFTA Conference (resolution 100 (IV)). This approach stemmed from the conviction that tariff liberalization alone was not enough to achieve all the aims of integration.

The adoption of resolution 100 (IV) was the reflection and the result of this new approach, which is to seek and apply measures to promote the harmonious economic and social development of the member countries through gradual expansion of economic complementarity. The resolution listed the basic guidelines for economic policy and laid down a programme of action based on the recommendations of the LAFTA Standing Executive Committee and the Advisory Committee on Industrial Development (CADI) regarding the reactivation of existing machinery to intensify efforts to promote sectoral integration which should lead to recommendations for specific sectoral integration measures.

This machinery basically comprised the CADI study groups which cover four industrial sectors: steelmaking, pulp and paper, petrochemicals, and other chemicals. Each study group was to propose specific integration formulas for its respective sector on the basis of information and data to be supplied by all the LAFTA countries.

At its third meeting in June 1967, CADI considered the progress achieved by each of the groups; the groups on steelmaking and petrochemicals had developed some proposals which could be considered as integration formulas, originating not only within the groups themselves but also from the LAFTA secretariat, which collected their proposals in a report.

Certain subsequent events, for example, delays in the receipt of information from countries, made it necessary to postpone the meetings of CADI, and hence progress in this respect has been relatively slight.

/The growing

The growing number of difficulties encountered by the LAFTA integration process led some countries in the region to seek a new approach through the formation of subregional markets. In September 1967, the countries that had signed the Declaration of Bogotá, joined by Bolivia, approved the bases for the formation of an Andean market and agreed to set up the Andean Development Corporation which will be responsible for directly promoting projects of common interest to the countries concerned and providing them with technical assistance.

Independently of these internal regroupings, progress has also been made in the co-ordination of measures with respect to the convergence of the Central American Common Market and LAFTA, paving the way for the negotiation of a general treaty or whatever agreements may be required for the creation of a Latin American common market. With this in view, the LAFTA-CACM Co-ordinating Committee, which was set up in June 1967, has already begun its work and held its first meeting in October 1968.

There are, however, still some countries and territories within the region which are not part of the integration movements of these various organizations.

Some of them - Barbados, Guyana, Trinidad and Tobago and other Caribbean islands - have joined together in the Caribbean Free Trade Association (CARIFTA), which was formed in 1965, with a view to gradually liberalizing their reciprocal trade.

As can be seen from what has been said above, there are many problems hampering more rapid progress in Latin American integration. Chapter IV contains some observations that may be of help in directing the process of integration in the years to come.

### (b) The world market and exports of manufactures

The increasingly acute balance-of-payments problems that have affected the Latin American countries in the last few decades, and the relationship between those problems and the dependence of their foreign trade on primary exports, have impelled them to place more and more emphasis on opening up their foreign trade. To that end they have had to diversify exports, giving more importance to manufactured goods.

/The difficulties

The difficulties encountered in placing these products on markets outside - and even inside - the region, however, have necessitated the adoption of various measures providing incentives which at least partly compensate for the comparative advantages accompanying competition from the industrialized countries that have traditionally dominated those markets.

The first measures to promote exports of manufactures adopted at the end of the nineteen-fifties were not always effective enough, but the experience derived from them has made it possible gradually to modify or supplement them.

Thus, various countries have provided for the exemption or refund of duties and taxes paid on imports of materials, or of other taxes levied on production, sales or export earnings.

In Argentina the drawback system, consisting in the refund of customs duties and charges paid on imports of raw materials and semi-processed products, has been in operation since 1960; the temporary admission of raw materials or semi-processed goods was provided for later, and a system for the refund of internal taxes has been in force since 1965. Brazil too, has used the drawback system since 1957, the procedure of refunding taxes on consumption since 1964 and taxes on income since 1965, and various exchange and administrative incentives. In Colombia, imports of raw materials and equipment for the manufacture of export goods have been free of customs duties since 1959 - under the Vallejo Plan, which was modified in 1964 - and taxable net income deriving from those exports is exempt from income tax by virtue of Act 81 of 1960 and Decree 1,394 of 1964. In addition, there are various exchange incentives, priorities for importing equipment, spare parts and raw materials, and provisions for the extension of periods for relinquishing foreign exchange, etc. In Chile, provisions of this kind are more recent. In 1966, under Act 16,528, the Government established various exemptions from taxes affecting costs and prices, and provided for the refund of other taxes. In Mexico, a 1961 presidential decision provided for the refund of import taxes and a reduction in those levied on trade earnings and on income; there are also special subsidies for imports of raw materials used in the

manufacture of export products. In Peru, the 1959 Industrial Promotion Law established the refund of specific and advalorem duties levied on imports of raw materials for processing and export, and exemption from the payment of export duties. Act 17,044, adopted in 1968, maintained these two provisions for a further period of fifteen years.

In some cases, in addition to incentives based on tariff and tax provisions, financial instruments have been created to give more support to industrial exports.

In Argentina, for instance, the Central Bank put into effect in 1960 a procedure for the purchase of medium-term letters of credit for non-traditional exports, which was amplified in 1962. A year later a system was established for financing the period covered from the beginning of the productive process to shipment of the export product; in 1965 (circular B.502) additional credit support was provided in the form of loans extended for up to 180 days. In Brazil, the Banco do Brasil has been operating since 1962, and through its Foreign Trade Department (Carteira de Comercio Exterior - CACEX) it provides medium- and long-term financing for exports of durable consumer and capital goods, the Fund for the Democratization of Enterprises (Fundo de Democratização das Empresas - FUNDECE) began operating in 1964, and provides financing during the period of manufacture of export goods. In Colombia, the Private Investment Fund (Fondo de Inversiones Privadas), established in 1963 as a subsidiary of the Banco de la República, can finance primary and processing activities which, among other things, facilitates the expansion and diversification of exports; this bank is also authorized to grant short-term loans in order to promote non-traditional exports. In addition, the Export Promotion Fund (Fondo de Promoción de Exportaciones) was established in 1967 with the purpose of diversifying exports, strengthening the balance of payments and stepping up the volume of trade. In 1966 Chile established two credit lines - which operated through the Export Development Department of the Central Bank - to facilitate exports of various products, mainly manufactures. One of the credit lines is intended to finance pre-embarkation costs and the other to finance marketing abroad, the maximum terms being six months and two and a half

years, respectively. In Mexico, the Fund for the Promotion of Exports of Manufactures (Fondo para el Fomento de las Exportaciones de Productos Manufacturados) was established in 1964 as a subsidiary of the Banco de México, with the proceeds of an additional tax of 10 per cent ad valorem levied on imports of luxury goods. The Fund's financial programme permits it to rediscount export documents, extend guarantees and compensate the cost of external bank guarantees. Peru's Act 17,044, of 1968, provides that public institutions must grant credit for exports of manufactures on the same terms as those in force in other LAFTA countries. Moreover, the functions of promoting and financing such exports have been assigned to the Banco Industrial, through its Foreign Trade Division, which also acts as the technical secretariat for the industrial affairs of the National Trade and Integration Committee (Comisión Nacional de Comercio e Integración). The Venezuelan Development Corporation has had two programmes in force since 1964, under which producers are provided with raw materials for their exports and six months' credit is extended to foreign buyers.

By way of supplementing the systems of credit financing, some countries have established special credit insurance systems which generally cover trade and political risks. The operations of the Fund for the Promotion of Exports of Manufactures in Mexico include the provision of guarantees covering up to five years' credit to the exporter or to the national institution that is financing him. In Brazil, export credit insurance was instituted in 1965 and operates through a consortium comprising the Banco Nacional de Desarrollo Económico, the Reinsurance Institute and private insurance companies. In Chile, export credit insurance is governed by the regulations laid down in Legislative Decree N° 3 of 1967, and in Argentina a system of insurance against exceptional risks was established in August 1967 to supplement and improve the existing forms of guarantee.

Lastly, as an additional method of stimulating the sale of manufactured products abroad, some countries have launched information programmes and established direct contact with potential markets.

/The Foreign

The Foreign Trade Information Centre (Centro de Información sobre Comercio Exterior) in Mexico, which provides data on external markets, demand for products, etc., the Venezuelan External Trade Information Centres (Centros de Información Comercial en el Exterior), the Export Promotion Office (Oficina de Promoción de Exportaciones) in El Salvador, and the tours of the LAFTA countries by Brazil's National Association of Exporters of Industrial Products testify to the growing interest in strengthening contacts with other countries. Similar efforts are being made by the Ecuadorian Trade Organization for Artisan Products (Organización Comercial Ecuatoriana de Productos Artesanales), although they are more limited in scope.

The measures taken by each individual country, which have differing characteristics and effects, are being gradually focused on targets of regional interest through LAFTA and CACM, which are studying ways of co-ordinating them. The Inter-American Development Bank has been providing technical and financial assistance for strengthening trade between countries. The programme for refinancing medium-term credit for intra-regional exports of capital goods, which was launched in 1964, has produced excellent results.

Although as a result of all these measures the last few years have marked an increase in exports of manufactures, the most important items from the angle of their high degree of processing, such as those produced in the metal-transforming sector, have mostly remained within the narrow confines of the region and few have ever reached the world markets.

The only result of the additional steps taken - in conjunction with other developing countries - at the two sessions of UNCTAD to bring the developed countries to agree to the preferential or free entry to their markets of manufactures and semi-manufactures from developing countries, under a widespread non-reciprocal and non-discriminatory system, has been the establishment of a Special Committee on Preferences, 3/ which is to prepare a report for

/consideration by

See resolution 21 (II) in the report on the second session of the United Nations Conference on Trade and Development (TD/L.37), April 1968.

consideration by the Trade and Development Board in 1969. Although the attitude of the industrialized countries, which has prevented more favourable results, is a difficult obstacle to surmount, there is no doubt that the greatest efforts that must be made are connected with the internal transformation of Latin American industry.

If, as has been stated several times in this study, the expansion of Latin America's share of world trade in manufactures is essential for its future development, every possible measure must be taken to place the goods produced in the region on a more competitive footing. This means that high levels of quality, productivity and efficiency must be attained both in producer establishments and in financing mechanisms and administrative instruments.

Further, if a substantial and sustained increase is to be obtained in exports of manufactures to the rest of the world, it cannot be based only on a few efficient major enterprises. Such concerns can initiate the process of opening up markets, but in order to maintain and expand those markets the process of industrial modernization must gradually be extended to all strata of manufacturing. This in turn will require a far-reaching reform of the outdated structures in other sectors which limit the possibilities of expanding domestic markets for industrial products.

### Chapter IV

#### ELEMENTS OF AN INDUSTRIAL DEVELOPMENT STRATEGY

# L. Policies for the promotion of industry, the modernization of techniques and the strengthening of Latin America's entrepreneurial capacity

As indicated in chapter II, the promotion of industry has been based mainly on tariff protection, which has given rise to many difficulties, resulting in distortions in the distribution of investment by sectors and in exorbitant costs. The re-orientation of policies and the redefinition of the instruments that seem to be required in this field should take into account, <u>inter alia</u>, the following questions:

- (a) For the reasons given earlier, it is necessary to find some way of reducing or, where possible, eliminating the existing instability in the types and levels of protection applied to industry in each country, in relation to both manufactured products and the imported inputs used. This instability is due to the fact that the various instruments for controlling foreign trade are used having in mind the objectives involved in stabilizing the balance of payments, which are completely unrelated to any industrial development strategy. Such a policy, of course, implies having more recourse to monetary and fiscal measures in relation to external payments problems, and giving higher priority to the achievement of greater internal monetary stability. On the success of this initial basic objective largely depend the practical possibilities of achieving continuity in the development of industry, particularly if the aim is to improve its efficiency and techniques.
- (b) As a supplementary measure, the time has come gradually to replace tariff protection by other promotion instruments (credit, fiscal exemptions, the planned creation of external economies, etc.) which can be more easily applied on a selective basis and which do not contribute directly or indirectly to raising production costs, as tends to happen

when external competition is eliminated. It seems essential that the instruments used in implementing industrial promotion policy should be carefully selected in order to ensure the efficient allocation of investment.

(c) In all probability, even if a substitute is found for tariff protection as the sole or predominating instrument of industrial promotion, it will continue to be required on an appreciable scale during a fairly long period. In addition to defining and applying such protection on a temporary basis until the new industry can surmount the obstacles encountered in starting production, it would have to be integrated with other non-tariff promotion measures instead of becoming a permanent measure, as it is today. It would be best, in this respect if the protection afforded by the customs tariff and other foreign trade controls were brought into line with clear-cut industrial objectives of a sectoral character. This could be achieved either by making protectionist policy subject to sectoral development norms, embodied in an over-all development programme, or by adopting development programmes for specific categories of industries for the administration - in ... accordance with a uniform economic approach - of import tariffs for both the equipment and the final products of those industries, and of other development measures (credit, fiscal exemptions, etc.).

In practice, sectoral programming of industry has been the procedure most frequently used by some Latin American countries, but it has important limitations. First, while sectoral programming provides for total or partial exemption from the customs duties applied, it does not generally cover the establishment of "normal" levels for those duties. Secondly, due account is not usually taken of the questions of compatibility and consistency between the different branches of industry, or between manufacturing industry and other sectors of activity or factors of production, e.g., labour (skilled and semi-skilled manpower) and credit, according to the requirements of industrial development.

Another major problem which arises in practice using the customs tariff as part of a set of sectoral promotion measures is that, in some cases, the customs tariff is established in such a way as to take into

/account both

account both the industry which produces or is going to produce the equipment, and the branch of industry that uses the equipment as an input for its own production and which may be affected by the protection extended to the former.

(d) Another important step in reformulating industrial promotion policies with a view to greater efficiency would be the establishment of a systematic policy for the creation of external economies for productive investment, on the basis of complementary action in the field of public and private investment. As noted earlier, the lack of such complementarity — and in some cases the almost complete absence of co-ordination — has considerably weakened the position of the Latin American enterprise vis—a-vis its foreign competitors. To achieve such complementarity, improvements must be made in the administrative methods of planning and carrying out public investment — in roads, energy and water supply, transport and communications, etc. — and planning procedures must take into account both public and private investment, at a sufficiently low level of aggregation, although the latter would be included only on an indicative basis.

Another consequence of efficient programming in the public sector would be that better market possibilities — and prospects of market stability — would be opened up to local producers of the basic industrial equipment used by the public sector or by sectors of activity which in one way or another depend heavily on public financing, such as energy, transport, etc.

Equally important for improving the efficiency of productive investment and expanding it in the light of the comparative advantages of each country is the systematic study and evaluation of natural resources. This calls for more efficient public institutions with more financial resources, whose action would be consistent with planning goals and priorities. The study of natural resources should normally be carried out by the public authorities, but a flexible dynamic policy in this respect should also allow advantages to be taken of the practical knowledge of enterprises engaged in exploiting those resources, through appropriate methods of public co-operation and financing.

/In short,

In short, a policy designed to create external economies for productive investment would find a particularly rich sphere of application in each country's regional development programmes. These programmes are generally intended almost exclusively to promote public investment, as in the case of providing infrastructure for transport, communications and energy, or to promote private investment in cases where they provide powerful fiscal incentives in order to channel private capital into certain regions. It would be best, however, to combine investment in infrastructure with productive investment on a well-balanced basis through sufficiently detailed programming.

(e) With the partial replacement of tariff protection as an instrument of industrial promotion by other measures which may be easier to apply on a selective basis, the forms of industrial credit offered would also have to be further diversified to meet the requirements of increasingly complex industrial structures. The new forms of industrial credit that should be established in the region (or expanded and reinforced in the few countries that have already instituted them) are mainly medium-term credit for exports (including medium-term credit for production prior to exportation), internal financing of sales of machinery and equipment, supervised credit for small-scale industry, and the financing of feasibility studies and analyses.

This last type of credit constitutes a departure from the usual credit measures, since the financing of feasibility analyses requires a joint system of credit and donations or non-recoverable contributions, according to the circumstances in each case. The existence of institutional machinery for promoting and even supporting the systematic carrying out of feasibility studies for the establishment of new industrial activities with the necessary technical capacity and financial resources is of, outstanding importance at the present stage of Latin American industrialization where the aim is to replace reservation of the market as an instrument of indiscriminate premotion by deliberate, selective and planned promotion.

(f) Lastly, it is also important for a more rational industrial promotion policy that a well-defined sectoral approach should be adopted to foreign investment policy in this connexion. involve not only admiting foreign capital provided it fitted into the context of clearly defined sectoral promotion programmes, but also applying the advantages and incentives established for developing the sectors concerned, administering the programmes of incentives irrespective of the origin of the capital. Another question which is more difficult to bring into line with the broadly applicable rules, in view of the peculiar circumstances existing in each country and in each sector of industry, would be the acceptance by foreign investors of certain arrangements for association with local enterprises. The feasibility and effectiveness of this association are dependent upon the degree to which it has been possible to strengthen the Latin American enterprise; there are also certain factors deriving from the prevailing world market situation in relation to the activities in question which cannot but influence the feasibility of such an association.

The industrial promotion policies applied thus far in Latin America have almost completely neglected the qualitative aspect of industrialization, particularly that relating to technology and other factors of concern to industrial enterprises, such as plant size, which has great influence on efficiency and productivity levels and the ability to compete. It is imperative to introduce progressively in Latin America's industrial policies certain provisions relating to technology, with a view to encouraging the modernization of industrial activities and the adoption of production processes and equipment that are in keeping with Latin American conditions as regards plant size, type of raw materials and other resources, wages and cost of capital, etc. This could also be done through specific technological provisions.

A first step towards a policy of technological modernization would be the adoption of provisions designed to promote competition, as an instrument for achieving technical progress and reducing production costs. Such a policy should comprise three complementary types of measures: (a) first, regulations would have to be laid down for restricting the

/power of

power of enterprises to reach agreement among themselves with a view to manipulating prices and establishing price levels; (b) similarly, limits should be set on the concentration of enterprises in one sector of activity in the light of the position with respect to competition in the market. With the same end in view, the system of authorizing new activities - if such a system exists - should be so regulated as to increase competition instead of dimishing it, as tends to happen in Latin America; and (c) a policy of moderation and even of progressive reduction in customs protection should be adopted in order to stimulate competition. There are many complex practical problems involved in the definition and implementation of a technological modernization policy and this preliminary study is not the place to go into them. It must be stressed, however, that some of those problems are the result of the small size of the domestic markets for certain products and the excessively large economic size of plants in relation to those markets, which brings the objective of competition into conflict with that of achieving maximum scales of production. Each particular case would therefore have to be considered separately, taking into account the sector's technology, the relationship between the market and economic plant size, etc., sacrificing one objective or the other according to the particular circumstances of the case and the order of priority for economic policy objectives in each country.

It should also be considered that technical progress does not always depend in the same degree on market situations. Competition, as a means of defending or strengthening a given relative position in the market, is a powerful engine of technical progress in certain activities, but it can be replaced by other motive forces in activities more closely linked to the public sector.

Another instrument of technological modernization would consist in deliberately encouraging the concentration of enterprises in one sector of activity and of economic plant sizes as a means of promoting production units with a larger financial capacity that would be able to face investment with longer maturity periods, which is normally the type of investment with a high technological content. This method

would also enable such enterprises to maintain technical departments capable of adapting techniques and designing processes and products, and of developing costly applied technological research programmes over an equally long period and subject to a high risk. Larger scales of production - which may or may not require a high degree of concentration, depending on the size of the market for the industry concerned - not only help to make these enterprises more financially sound, but also reinforce their solvency through the levels of investment and operational costs they permit. The public authorities have different instruments for modifying the trend towards the concentration of enterprises in specific sectors of industry. In this respect, it is worth mentioning the experience of the following countries, which differs in the methods used but is similar in regard to aims: in the United Kingdom, a specialized agency administers credit and technical assistance with the purpose of encouraging the reorganization and merging of enterprises; France also uses credit as an instrument for merging and reorganizing enterprises, through special procedures which are usually administered by the Ministries of Finance and Industry; and in Spain, the existing system covering compulsory licences for new activities has led to the establishment of minimum scales of operation for the manufacture of industrial products with greater economies of scale. Credit is a powerful instrument for promoting the internal reorganization and modernization of enterprises, even independently of the desire to obtain larger scales of production; in this context Latin America's "traditional" industries offer vast possibilities for the implementation of programmes of supervised credit or of financing combined with technical assistance.

There is, of course, the problem of making the policies favouring the concentration of enterprises compatible with those mentioned above in connexion with safeguarding competition. In the majority of cases, compatibility between those two objectives is obtained, in practice, by the selective application of each of those objectives at a sectoral level. In other cases, the general economic policy approach may require that one of the objectives be imposed without prejudice to the other and without taking the sectors of industry into account.

/Another group

Another group of policies is aimed at encouraging the transfer of technical know-how from abroad, both by means of licensing agreements between enterprises and through programmes for training manpower in other countries, exchanging scientific and technological information, etc., organized or sponsored by various public agencies. As regards agreements between enterprises, the most powerful incentive would appear to be of a fiscal nature, consisting in granting enterprises more favourable treatment in relation to income and other taxes connected with their expenditure on acquiring technical know-how from abroad, and also fairly liberal exchange treatment in that connexion in countries where foreign exchange is controlled.

The main difficulties likely to arise from the practical application of this type of policy relate, first, to the tendency of enterprises in new industrial settings towards a certain technological inertia which causes them to resort too easily to agreements with other countries in order to obtain technical know-how for their operations. This tendency is fostered in some cases by over-liberal fiscal and foreign exchange treatment. Secondly, it is difficult to define technical know-how accurately, so as to avoid extending the same fiscal and exchange advantages in the case of licensing agreements covering essentially marketable brands and patents of no great technological value. This is not always an easy distinction to make in practice and it calls for a somewhat delicate process of selection which must be made by duly competent institutions.

The development of national technological research with the purpose of making better use of local resources, both natural and acquired, and of better adapting foreign techniques is another industrial policy aim of vital importance in reshaping Latin America's economic and social development. In addition to all the government promotion measures and incentives required in this field, it is imperative to establish provisions for improving the financing of such research activities. The many fiscal and financial measures that might be adopted to that end include two which may be of particular practical importance in spurring on industrial development. The first consists in the systematic

4.5. P. C.

Arrest Commence

/exemption from

exemption from taxes on expenditure that may be incurred by enterprises under the head of applied technological research, whether this is carried out by the enterprise itself or by duly recognized public or private institutes. The second important measures would be to regulate a system of partial subsidies extended by the public authorities for research designed to develop new products and processes, and also for research on adapting technical know-how from abroad, which is carried out and partly financed by the enterprises themselves. A similar system, but with variable operating mechanisms, is used in virtually all industrialized countries, even those where industrial development is a comparatively recent process, such as Canada, Japan, Australia, etc.

The structure and operational methods of enterprises largely reflects a country's over-all economic policy and the framework created by that policy. In the strengthening of entrepreneurial capacity, more than in other questions referred to in this chapter, there is a considerable degree of interdependence between the various over-all economic policies and guidelines, which makes it very difficult to formulate specific measures. Latin America's entreprenuerial capacity will slowly be strengthened as over-all economic policies are gradually rationalized and as the slow progress being made in economic development creates, through higher levels of education, skills that are more in line with the requirements of a modern industrialized society and provides a clearer understanding of the machinery and expedients on which such a society is based.

There are, however, some specific industrial policy issues which are worth-while taking into account in order to speed up the proposed evolution.

(a) First, it may be useful to analyse the possible role of fiscal incentives in "opening up" family enterprises, since experience indicates that "closed" enterprises offer more resistance to growth and technological modernization.

- (b) The success of measures for the modernization of ownership and management structures of enterprises would, however, depend upon the existence of capital markets, access to which would open up a new source of financing for enterprises and favour the incorporation of more professional entrepreneurs and administrators. The adequate structure of capital markets is therefore another vital factor in strengthening the Latin American enterprise; but this objective can never be attained without first reformulating the existing monetary and tax policies and instruments.
- (c) Another possible means of achieving the above objective is to find new legal formulas that will permit the co-operative association of national enterprises engaged in the same branch of activity, for purposes of research, market surveys, supply of raw materials, etc., by means of fiscal incentives and perhaps also of some direct assistance in the form of credit or subsidies. This policy is already being applied in some of the more industrialized Latin American countries and in developing countries in other parts of the world.
- (d) As foreign know-how will continue to be essential for the development of Latin American industry, policies should be framed to encourage agreements with countries outside the region, while endeavouring to avoid the above-mentioned negative effects resulting from the "technological inertia" that characterizes incipient industrial settings such as those found in Latin America.
- (e) In relation with foreign capital and enterprises, it is also necessary to explore new forms of association that will offset the relative financial and technological weakness of Latin American enterprises but will not be restrictive or repressive, or detract from the dynamic force of the joint enterprises concerned.

## 2. Regional integration policy

The preceding section reviewed the current status of efforts in Latin America to imbue the industrialization process with new mamentum by redirecting it to derive the maximum benefit from comparative advantage and technological progress. The systems of integration and the policies followed to promote exports of manufactures were described, and some critical comments were made on the policies pursued by countries and the machinery of the integration bodies.

This section presents some approaches to problems and also suggests methods of action, i.e., it proposes some elements that can be used to shape a development policy that will place import substitution policy on a regional footing and promote the gradual access of the Latin American economies to the competitive world market.

First of all, the central objective of this strategy should be to bring about substantial improvements in the ability to compete of Latin American industry so that it can fulfil its role as the motive force of over-all economic development. In other words, a profound change must be sought in the direction of the industrialization process so that industry may have larger markets, make the best possible use of its comparative advantage and technological progress and maintain an increasing flow of trade both with the other associated developing countries and with the developed countries. Hence, systems of industrial integration and the promotion of exports to world markets are two aspects of but one strategy.

The Declaration of the Presidents of America deals in fact with both these aspects. The Action Program designed to create a common market includes among its measures the promotion of "the conclusion of sectoral agreements for industrial complementation, endeavoring to obtain the participation of the countries of relatively less economic development" and the adoption of measures "to improve international trade conditions" based on systems of general preferential treatment for exports and the adoption of measures to make Latin American export products more competitive in world markets.

See Meeting of American Chiefs of State, Punta del Este, Uruguay, April 12-14, 1957 (OAS Official Records, OEA/SeroC/IX-1), p. 63.
 Ibid., p. 69.

On the basis of these guidelines, this section offers some suggestions for the redirection of industrial integration and the promotion of exports of manufactures, bearing in mind the general observation made above that these are both aspects of a single policy aimed at making better use of comparative advantage, creating the ability to compete and introducing technological progress.

While trade liberalization has proved to be valuable in that it generates a certain amount of trade and encourages the expansion or establishment of industry, it is not enough in itself to bring about industrial integration in Latin America.

Generally speaking, it may be expected that during the nineteenseventies some system of automatic liberalization applying to all products will come into operation and that some kind of gradual tariff harmonization will also probably be in its initial stages, aimed at achieving a common external tariff.

Within this context, agreements covering large sectors or branches of industry could be the main instrument for the promotion of industrial integration.

Which agreements would lay down the ways and means for tariff liberalization and harmonization, together with complementary development or development promotion measures.

They would cover the whole range of goods produced in a particular sector or branch of industry and would contain provisions under which tariffs for the goods concerned would be liberalized more rapidly up to a point below the over-all tariff ceiling, if it were decided - as would seem advisable - that general tariffs would not be lowered to zero, so that the residual tariff would act as a kind of buffer to smooth out the differences in costs and the ability to compete that would exist during the initial stages.

The agreements would also contain provisions to speed up the harmonization of tariffs in respect of third countries.

In addition to these provisions on tariffs, they would also contain other provisions covering the investment and technical assistance which would be required as a basic complement to, and in some cases preparatory to, the adoption of tariff liberalization commitments.

/The main

The main purpose of such provisions covering investment and technical assistance, on which the scope of the development of the sector depends, would be to facilitate the negotiation of sectoral agreements by countries, on the understanding that ways and means would be available enabling them to improve their ability to compete to a significant extent.

A sectoral complementarity agreement of this kind might, therefore, include the following points:

- (a) An indicative regional development programme, outlining the future development prospects of the sector, projected demand, resources available in the region, the countries likely to have difficulties in competing and a diagnosis of the situation.
- (b) A tariff liberalization programme for the sector, stipulating the rate more rapid than the over-all rate and the measures for special tariff reductions and tariff harmonization, together with exceptions, special regimes, escape clauses and sub-regional provisions, in line with the characteristics of the sector and the regional development objectives of the indicative programme.
- (c) A programme of investment and technical assistance, designed both to strengthen the ability to compete of countries and to speed up the growth of industry at the regional level in line with the objectives of the indicative programme.
- (d) A set of provisions to harmonize regimes governing fiscal incentives, exchange regulations, social security, foreign capital, etc., in line with the rate and type of tariff liberalization agreed upon by the signatory countries for the sector and with the individual features of the particular industry concerned.

It should be pointed out that the programming features to be included in this kind of agreement would not only be designed to correct the existing situation but would also be forward—looking in nature so that enterprises can take advantages of the opportunities of an expanded market. They would, for example, range from assistance in connexion with productivity, technological improvements and surveys of domestic markets to assistance in merging or reconverting enterprises and even for new enterprises established to take advantage of the benefits of integration.

/The latter

The latter point is of particular interest for the economically relatively less developed countries which might thus be able to reap very valuable benefits. Clearly, some main guidelines would have to be agreed upon which would define the particular cases to which such action should apply.

One would normally expect that a re-organization of this kind, as a basic component of an investment programme aimed either at speeding up the development of industry in the region as a whole or at moving it in particular directions, would occur to the degree that the factors determining a given situation, in which countries cannot compete with the essential minimum chance of success, are circumstantial in nature.

Having given a general outline of these sectoral complementarity agreements, which are viewed as the most suitable instrument to begin fully-fledged industrial integration, it may now be useful to add some suggestions.

One must ask, first of all, which industries or sectors these agreements should cover. The prevailing view, that they should be limited to "new" or "dynamic" sectors, does not seem appropriate.

For various reasons it would seem advisable to include the "traditional industries" in such formulas for integration. The first reason, which is of a general and quantitative nature, is that excluding such industries would not be a positive step towards integration of the kind desired, i.e. integration that will have a decisive influence on the economic development of the countries of the region, particularly taking into account that the proportion of investment in new industries is relatively low compared with that in traditional industries. Hence, it is proposed that integration should not be limited to new industries, although this approach may have some use in the adoption of different formulas and methods.

Another reason is connected with exports of manufactures to the world market. Without ignoring the potential of the "dynamic" industries

Recent surveys of the industrial development programmes of various countries in the region show that the average amount of investment, by country, in new industry is 20 per cent, the remaining 80 per cent is to existing industry.

(generally producing intermediate highly-processed or complex goods), it is certain that the prospects, in the immediate future at least, of gaining access to the markets of the industrialized countries through the channels opened up by UNCTAD lie with the goods produced by the traditional industries, or those industries which are firmly established (textiles, made-up textile goods, foodstuffs, etc.). However, these industries will never find competition easy on the world market and therefore the kind of re-organization or re-orientation, combined with participation in a scheme of regional integration, advocated here is virtually essential. Admittedly, this does not mean that there is no order of priorities for beginning work and studies on these agreements.

As noted above, a certain amount of work exists on the various sectors dealt with by the study groups of CADI, for example, steelmaking, petrochemicals, fertilizers, and pulp and paper. Moreover, ECLA has completed studies on other branches, such as the aluminium, sodium alkalis and automobile industries, which provide abundant material on the basis of which the LAFTA bodies responsible for seeking formulas for integration can begin their work.

A reasonable approach to laying the groundwork for the sectoral complementarity agreements might be to begin with the sectors in which some progress has already been made, either within LAFTA or in basic studies.4

With regard to the traditional industries, which, as already stated, have considerable potential in terms of exports to the world market, special attention should be given to the possibility of developing a sectoral agreement covering the food canning and preserving industry. The fact that some progress has already been made in talks between entrepreneurs, and that the prospects for increased access to the world market are very encouraging, make possible co-operation in this field between the countries of the region of particular significance.

In this respect it should be noted that the CADI study groups have received the studies prepared by ECLA on each of these sectors, and that ECLA has also made available to LAFTA reports and studies on other industrial sectors or branches on which work might begin.

Hence, the key component of these elements of strategy will be the investment and technical assistance programme, which will parallel, or in many cases precede, the tariff liberalization programme.

The main feature of these indicative programmes for sectoral development would be that they would complement national investment programmes in particular branches of industry. Their main objective, as stated earlier, would not merely be to rectify deficiencies to ensure that competition within the region gradually becomes free and widespread, but also to help speed up the development of the sector at a rate faster than that of the combined potential of the individual countries.

Sectoral investment programmes would include an analysis of development trends in the countries of the region and an identification of the weak points and deficiencies of particular branches of industry, and would provide a standard against which the trends of trade and of the location of industry could be judged and evaluated.

This would then give an idea of the investment required to meet the growth of demand, and also of the investment and technical assistance expenditure needed to overcome the rectjiable weaknesses or deficiencies, i.e. following the principles expressed above, those that were not simply the result of a lack of basic ability or resources.

Studies would show the amount of financial and technical assistance which would be needed to place industries on an equal footing to meet regional competition, and responsibility for such assistance would be collective, require close co-operation between the countries. This would not mean, however, that there would be any centralization of decisions on investment and the location of industry which are at present the province of each individual country. The development of the industrial sector would continue to be a national responsibility, in both the public and the private sector, in accordance with the organizational structure of each country, since a joint approach to the investment required to develop a branch of industry for which a sectoral agreement had been prepared and negotiated would not necessarily involve the collective responsibility of the member countries, nor would it mean that decisions about the use of the main investments or about the location of particular industrial activities would

be centralized. On the other hand, it would be necessary to co-ordinate such decisions at the regional level, and this could be done through negotiations among the participating countries with a view to administering a programme of indirect industrial promotion on the basis of fiscal incentives and credits, with the accent on regional specialization. The incentives would be designed to speed up the development of industry in certain key areas with a view to distributing the opportunities for regional integration evenly throughout the region, and this distribution would be negotiated in advance among the parties.

In brief, introducing this element of financial and technical assistance, which combines negotiation with the financing of industrial integration, would make instruments or means available to countries that would enable them to overcome or reduce the natural attitude of resistance to integration. This attitude stems from a fear of competition for which enterprises are not prepared, or, in some cases, from simple ignorance of the consequences of decisions of this kind. Using the ideas proposed, it would be possible to have negotiations and come to decisions advisedly, and also to accompany such decisions with safeguards to ensure that the situation in each country is compatible with an optimum level of benefits throughout the region and thus reduce disparities to the minimum. Obviously, this kind of arrangement is incompatible with autocratic policies or objectives, since in no case are the principles of regional specialization abandoned; rather they are sought through competition on a roughly equal footing.

With respect to institutional instruments, it is possible that the funds required - regional and extra-regional 5/ might be collected and generally administered by existing bodies like the IDB. Both financial and technical assistance would be channelled through official organs in each country; with regard to the position of the economically relatively less developed countries in the distribution of funds, there

At the Meeting of American Chiefs of State, held at Punta del Este, Uruguay, on 12-14 April 1967, the Government of the United States made an offer of funds.

f3.+

would be two alternatives: either such countries would receive a proportionally larger share of the assistance available, or they would receive their share on more advantageous credit terms.

The preceding section referred to the problems that arose when trying to strike a balance between the benefits of participants in order to achieve significant progress in industrial integration. To find this balance it will be necessary to use some method of measuring or quantifying such variables as share of the gross product, increment in net exports, etc. If this kind of balance is sought in each sectoral agreement, however, it would probably lead to almost insuperable problems, not only because of the intrinsic difficulty of evaluating phenomena which are not at all easy to quantify, for example the creation of external economies — and expanding them for the development of other industries — chain reactions, etc., but also because it may occur that in anyone sectoral agreement it may not be possible to balance cut the benefits evenly.

Therefore, it would seem that regular parallel negotiations of sectoral agreements for a number of industries are essential in order to achieve the proper balance of benefits.

# 3. Policy governing exports of manufactures to the world market

In dealing with exports of manufactures in earlier chapters, some gaps and weak points were revealed which in themselves indicate lines of action or policies to be adopted.

Consideration was given to the promotion measures and systems that had entered into force in some countries of the region, with the purpose of supporting and boosting what was to them an essentially new activity. Several of those countries were said to have made great strides towards the constitution of a system of incentives that would enable exporters to launch out successfully for the world market. This hitherto incipient trend towards exports of manufactures would thus be duly regulated and it would have a favourable impact on Latin American industrial development, far transcending the role of mechanism compensating for internal depressions which in some cases and to a varying degree it had been required to play in the past.

This will therefore be an additional means of re-orienting industrial development and among other advantages, it will introduce the dynamic element of international trade into a milieu in which competition has hitherto played a very small part.

A first line of action would be in response to the need for all countries of the region to adopt a consistent export promotion system, completing the existing machinery or establishing the new mechanisms required.

First, each Latin American country should have a national export development institution, and where they already exist steps should be taken to improve them. This does not mean that such institutions must be established along rigid lines; obviously, due allowance must be made for the widely varying circumstances in each country, and it is to be hoped that export promotion will be in the hands of a single agency.

The prime function of this national institution should be to identify products that can be exported and to explore new market possibilities for traditional exports. It would also be responsible for studies and advisory services in connexion with all other essential aspects of export promotion,

/which are

which are taken care of either by other agencies or by the institution itself, according to the practice in each country. These would comprise customs and fiscal incentives, export credit or financing, quality control, information and publicity services, and other services relating to the organization of industry for the marketing of exports.

Because of their importance and the fact that they constitute weak points even in countries which have made most progress in this direction, attention is drawn to the position with respect to export financing and the organization of industry for the marketing of exports, and some suggestions are put forward in this connexion.

There are several aspects of financing in which action could be taken to make this type of incentive more effective.

In the first place, the IDB programme covering exports of capital goods could be extended to cover exports to other regions as well as intraregional exports. The possibility should also be considered of the programme including other manufactures besides capital goods, a measure that would particularly benefit countries with insufficient markets, and still more so the economically relatively less developed nations.

Two other questions requiring special attention from Governments and international agencies are pre-embarkation financing and adequate coverage of export credit insurance. While recognizing the fact that these systems are first and foremost a national responsibility, IDB could do much to help them operate efficiently.

In the case of pre-embarkation financing, for example, IDB could institute a system that would be applicable to cases where the operations involve high sums and the period of production is very long. As regards credit insurance, whose institution and operation in the region have been fraught with serious difficulties, different suggestions have been put forward, such as, the establishment of a regional institution that would assume responsibility for commercial risks while the political risks would be taken care of by national agencies, or the establishment of a multinational institution that would take over the total coverage.

Besides these aspects of financing, another field in which government promotion activities could have excellent results is, as mentioned above, the organization of manufacturers with a view to marketing and selling their exports.

It would be advisable to include among the governments' recognized functions of promoting exports that of encouraging the combination, in varying degrees, of the export activities of several enterprises, with a view to strengthening their position on the external market. These government promotion activities could be carried out through the provision of technical and even financial assistance, the latter, for example, by means of total or partial exemption from certain taxes for the enterprises thus pooling their efforts. In a word, the aim is to encourage the formation of exporters' consortia, with which the State may or may not be associated according to circumstances.

As regards the institution of a system of non-reciprocal and non-discriminatory preferences, this has already been described as a potentially valuable tool for the establishment of a considerable flow of exports of manufactured products from Latin America to the developed countries.

It is a well-known fact that manufactures from Latin America, and from developing countries in general, are subject to higher nominal and real customs duties and charges in the industrialized countries than the more highly-processed products in which they trade with one another. Accordingly, among other factors, the total or partial elimination of those tariff barriers could be expected, under certain conditions, to act as a fillip to the flow of exports of manufactured goods.

It is therefore considered that the developing countries should continue to press for negotiations with the developed countries at UNCTAD meetings, with the aim of reaching an agreement as soon as possible, which would recognize their right to play some part in satisfying the developed countries' demand for certain manufactured products.

The possible action proposed - i.e., the improvement, or where appropriate the introduction, of a whole group of government measures to stimulate exports, such as those relating to financing and the internal

/organization of

organization of industry with a view toothe proper marketing of exports, and the adoption of a policy designed to secure access for Latin American manufactures to the markets of industrial countries - may to some extent be described as practically indispensable in achieving the aims pursued, and in this respect there can be no doubt of the wisdom of making a determined effort in that direction. The Governments! action to enhance export prospects and to increase the developing countries! co-operation in opening up markets, however, would have to be co-ordinated in the form of international action that would combine the resources of the countries and international agencies concerned in an institutional mechanism or formula which, by relating supply to demand, would create conditions in which the achievements obtained in connexion with either would be mutually reinforced. Actually, the effectiveness of the action exclusively or mainly directed at opening up markets is necessarily limited in relation to the promotion objectives aimed at. Despite the fact that to supplement this action by measures to improve supply conditions would represent a big step forward, it is considered that only by linking or realizing both these efforts can the system be perfected and have the best possible chance of success.

The proposed approach to the diversification and expansion of exports from developing countries would rest on two basic factors: first, these countries' commitment to prepare specific programmes for the export of manufactures, which would serve as guidelines in their negotiations at UNCTAD meetings to obtain concessions from the industrial countries; secondly, a technical assistance mechanism organized by UNCTAD, UNIDO and the regional commissions, in co-operation with the United Nations Development Programme, which would help the developing countries to comply with their undertaking to prepare such programmes.

The country programmes, which would be essentially the responsibility of the Governments, would indicate the products the country intends to export and in what quantities. They would also present the group of government measures relating to the proposed export goals, and proposals concerning the international co-operation - multilateral or bilateral -

required in order to attain the stipulated targets, and also, where appropriate, proposals regarding the concessions that might be needed, or the market surveys that might be desirable, in the case of specific products.

To help countries prepare their programmes, the United Nations, in collaboration with the above-mentioned agencies, would organize a system of technical assistance which could have recourse to a team of experts drawn from the participating agencies. These experts would furnish assistance not merely in preparing the programme but also, as far as possible and on a continuing basis, in connexion with all the problems identified as arising from the preparation of the programmes, for which purpose it would be necessary to co-ordinate the activities with those of other organizations also operating in this field. With that end in view, the competent agencies should provide the services of experts to carry out those tasks.

The scene for these technical assistance activities would, of course, be the countries of the three developing regions of the world, and the experience acquired by the team of specialists in charge of these technical assistance missions to countries, and the ideas and proposals that would be gradually worked out, would be vital for the success of those missions.

In the programme described somewhat briefly in the previous section, mention was made of the need, in a first stage of international co-operation, to undertake market surveys in connexion with aspects of supply. In this respect, it is considered advisable that the market surveys should be linked to the specific possibilities that might arise from the studies of supply, and that there should be the closest co-ordination between the two questions. Market survey, because of their complexity and particular characteristics, should be conducted by firms or other organizations specializing in this type of work.

It would also be useful if this machinery, which is designed to complete the line of study by including aspects of demand, could function in co-ordination with the recently established inter-American export

/promotion agency,

promotion agency, which is to operate under the aegis of OAS and the Inter-American Committee on the Alliance for Progress (Comisión Interamericana de la Alianza para el Progreso - CIAP). Its functions are basically to facilitate access to markets for Latin American manufactures, also through market surveys by international firms of specialists. In this wide sphere of action it should not be too difficult to avoid overlapping and duplication of work.

The developed countries' contribution would consist in financing these market surveys or analyses, and doing everything in their power to facilitate the tasks covered by those studies. They would further be requested - within the context of UNCTAD negotiations - to facilitate access to their markets for manufactures from developing countries, and to abolish any type of restriction that might obstruct it.

The Inter-American Export Promotion Centre, with headquarters at Bogotá; this Centre was set up at the fifth session of the Inter-American Economic and Social Council, held at Viña del Mar, Chile, in June 1967.

, , Q 9 . **4**° . c ·