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THE PROCESS OF INDUSTRIAL DEVELOPMENT IN LATIN AMERICA

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Chapter III

INDUSTRIALIZATION POLICY

1. Measures and instruments of industrial policy

The past evolution and present features of Latin American industry stem from a number of structural factors that have affected its rate and pattern of development, and have helped to determine the different ways in which the manufacturing sector has evolved in the various Latin American countries. However, regardless of the effect of these factors, it is obvious that development has also been considerably influenced by all the different actions taken by public bodies, either as a consequence of provisions and measures deliberately adopted to facilitate and guide the industrialization process, or by steps taken with other aims. That is, many of the factors that have governed the patterns of development of manufacturing are related to the degree of consistency, continuity and efficiency of what might be termed industrial policy.

The expression "industrial policy" summons up a picture of a series of properly co-ordinated measures and instruments used in pursuit of certain clearly defined aims. Perhaps it should be recognized from the outset that this has not been the general rule in Latin America. Although a series of provisions and a number of agencies have existed that have undoubtedly affected the pace and pattern of industrialization, yet their effect has been haphazard, or incidental to other aims, or has resulted from the expected outcome of the action taken. This does not mean that there have not also been specific agencies concerned with industrial development requirements, or that no special provisions have been adopted to stimulate and guide manufacturing activities. On the contrary, much has been done on these lines, as will be made clear in later pages. However, it must be recognized that the action and efficiency of these agencies and measures have been governed by other instruments and provisions of a more general nature. Moreover, the activities resulting from specific industrialization measures have not always been governed by the same aims and principles.

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Thus it is not easy to identify, among this body of actions, those that may be considered as constituting an industrial policy properly speaking, which can be used as a yardstick to measure the scope and affectiveness of the quantitative results.

More broadly speaking, economic policy as a whole can be included among the relevant factors, since a sector such as manufacturing can hardly fail to feel its effects. Since such a factor as economic policy in general cannot be the subject of a study of the nature undertaken here, it must be dealt with in more restricted terms, without losing sight of the fact that this imposes certain limitations.

The first step is to define certain functions that have been carried out, and certain types of aims that have been put forward. On a somewhat arbitrary basis, it might be considered, for example, that industrial policy has consisted of four kinds of action, measures and aims: protection of domestic industry from foreign competition; general measures for the control and encouragement of industry; direct State promotion of new industrial lines, or of the expansion of existing lines; and industrial technical assistance and other steps aimed at facilitating the assimilation of technology.

The present section analyses each of these types of action in turn, and a prior warning is in order about the problems and limitations of such an analysis. In the first place, it deals with functions and aims that cannot always be clearly distinguished, and which are often grouped together as the responsibility of a single body or department. Secondly, it leaves out of account important elements of general economic policy that may strongly influence industrial development, and even excludes certain actions of public bodies directly concerned with industry. This applies, for example, to State action aimed at extending or improving basic social capital.

From another standpoint, it must be borne in mind that many of the provisions and measures of industrial policy that are included in the categories listed have the same basic aim, to facilitate the financing of industrial expansion. In view of this feature, and its intrinsic importance, the subject of financing is dealt with separately in the second section

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of the present chapter, and the third section is reserved for the consideration of the institutional form taken by industrial policy, that is, the type of agencies responsible for its formulation, application and control, and how they are related and co-ordinated.

It is hoped that the foregoing general comments may help to place in proper perspective the subjects that are dealt with below.

(a) Protecting industry from foreign competition

It is hardly necessary to refer to the reasons why some degree of protection from foreign competition has been essential in the past, and still is, to permit in the Latin American economies, as in other under-developed areas, the emergence of industrial activities that can build up into a manufacturing sector in line with general development needs. Similarly, it is generally recognized that industry in Latin America has developed in general in an atmosphere free of competition from imported manufactures, as a result either of deliberate encouragement of the domestic industry, or of steps taken for other reasons.

Thus it appears less important to evaluate whether or not the degree of protection has been sufficient, than to study certain features of the measures and machinery of protection, and their form of application, in order to assess their influence on certain characteristics of development and on the present structure of Latin American industry.

This may well be regarded as a typical example of how the lines of action of certain basic instruments of industrial policy are determined by considerations and aims extraneous to industry itself, although they may well have a favourable or unfavourable effect on industry. In fact, on the long-term view the protectionist policy followed by most Latin American countries has resulted from action which, either in addition to or instead of protectionism as such, have had other purposes, such as to increase public revenue or reduce balance-of-payments deficits. According to the predominant aim at each stage specific instruments have been emphasized, while others used previously were neglected or played down. Although such changes did not deprive industry of the stimulus of a rather wide-based protection, they involved certain handicaps, while the very fact that

/changes were

changes were likely to take place did not encourage long-term decisions or the adoption of selective criteria that could help to stress protection for certain branches in a way that would promote a more rational structure of industry. In fact a brief glance at the evolution of industry over the past forty years reveals a series of stages at which the various instruments of protection and control have alternated or combined, right up to the present day.[1/]

During the first stage, which may be regarded as ending early in the thirties, the Latin American countries resorted mainly to customs tariffs, and the principal aim was to increase or maintain the level of government revenue, although in some countries tariffs were also used to stimulate certain types of manufacturing.

The crisis resulting from the Depression in the thirties made it necessary to adopt a series of emergency measures to deal with the violent disruption of the balance of payments. Exchange controls, and subsequently quantitative restrictions and multiple exchange rates, were used in the main, partly because they were flexible and more easily adaptable to the conditions of bilateral negotiation which prevailed during the period.

The restriction of external supplies during the Second World War encouraged the introduction of many new industrial lines, often on very shaky foundations and with little regard for rational principles and economicity. Thus in the immediate post-war years the Latin American countries had to resort to frankly protectionist measures in order to shield these industries from renewed foreign competition. The imbalances between import requirements and capacity to import appeared again, in an aggravated form, and consequently Governments resorted not only to the same instruments of direct control that had been so useful in the preceding period, but also to various other measures, usually in the form of composite systems including, in order of importance, multiple exchange rates, import permits, auctioning of foreign exchange, and additional duties and charges.

1/ For a more detailed description of the evolution of the instruments of import control and other points dealt with in the present section, see Santiago Macario, "Protectionism and industrialization in Latin America", Economic Bulletin for Latin America, Vol. IX, N° 1 (1964), pp. 61 et. seq.

/In more

In more recent years, especially during the second half of the fifties, the Latin American countries began to simplify their systems, whose complexity had become such as to make them ineffective. Thus by the end of the fifties the prevailing rule was a simple exchange control, or none, a single rate of exchange or a limited number, and restrictions in the form of moderate customs duties, or additional duties or charges of equivalent effect, and in some cases the requirement of a prior deposit on imports.

More recently a new factor conducing to substantial changes in tariff systems and other instruments of foreign trade policy has arisen, in the form of the aim of regional integration.

Within this long-term development the effect of the various aims pursued has varied, and even now is in fact very different from one country to another.

Firstly, this applies to the use of the customs tariff as a means of obtaining government revenue. In one group of Latin American countries there has been a considerable decline in the importance of tariffs from this standpoint. In Mexico, for example, where import duties represented 34 per cent of government revenue in 1930, the proportion fell to 18 per cent in 1940, 14 per cent in 1950 and less than 13 per cent in 1963. In Argentina the corresponding figures were an average of 22.5 per cent in 1935-39, 9.9 per cent in 1940-44, 6.2 per cent in 1945-49 and 3 per cent in 1955, although the figure rose to 25 per cent in 1960-61 as a result of other factors. In other countries, such as Chile and Colombia, this source provides only about 20 per cent of government revenue. In the second group, however, which includes most of the Latin American countries that are at a lower level of industrial development, the proportion of all tax revenue attributable to import duties is much higher: 50 per cent or over in Costa Rica, Nicaragua and Panama, about 40 per cent or over in El Salvador and Guatemala, and slightly over 30 per cent in Ecuador.

This difference does not always relate to the levels of customs charges on the unit value of imports, but rather to the development of other domestic sources of government revenue. Even so, it is still significant from the standpoint of the difference between the two groups of countries as regards the possibility of reducing the emphasis on revenue production as a criterion governing decisions in the tariff field.

/The aim

The aim of reducing balance-of-payments deficits, although persisting over the long-term, has varied considerably in importance, becoming paramount in some periods and much less significant in others. These fluctuations made changes in the tariff levels less likely, since such changes usually require legislative measures that take a long time to enact. Hence the desire to improve the balance of payments has encouraged recourse to such instruments as exchange policy measures, quantitative restrictions on imports, or the establishment of other charges of equivalent effect to customs duties. Nevertheless, successive revisions of foreign trade policy led in many cases to a situation where the levels of customs tariffs proper also have the purpose of reducing the pressure of the demand for imports, in view of an inadequate capacity to import.

In brief, what might be regarded as protectionist policy is really the result of a mixture of measures and instruments that are governed (in a form that varies according to the country and the period in question) both by the strictly protectionist aim and by the need to obtain more revenue or to improve the balance of payments. In any case, whatever the real influence of the protectionist aim may have been, the general climate created resulted in a high degree of protection for domestic industry. The high average level reflects great differences from country to country, but in a way that does not indicate any correlation with the level of industrial development.

In fact it is estimated 2/ that in a group of eleven Latin American countries the arithmetic averages of the level of customs tariffs and other charges of equivalent effect on the c.i.f. value of imports are as follows: over 90 per cent in one country (Argentina), about 50 per cent in three (Ecuador, Paraguay and Venezuela), and 40 per cent in another three (Brazil, Colombia and Chile), whereas in the other four countries it ranged from 18 per cent (Mexico) to 30 per cent (Bolivia), with levels between those

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2/ See "Customs duties and other import charges and restrictions in Latin American countries: average levels of incidence", Multilateral Economic co-operation in Latin America (United Nations publication, Sales N° 62.II.G.3), Vol. I, pp. 106-123.

two extremes for Peru and Uruguay. These figures not only reflect general levels that are relatively high compared with those in the industrial economies (for example, between 10 and 20 per cent in the Federal Republic of Germany, Canada, the United States, France, Norway and the United Kingdom, and less than 10 per cent in Denmark and Sweden), but in some cases are only part of the real protection applied, since they do not include prior deposits on imports, import permits and other forms of quantitative restriction. Furthermore, since the protectionist aim is not always the principal governing factor, the relative levels in the various countries are not directly related to the level of industrialization, because of the influence of the considerations of revenue and balance of payments referred to above.

Consequently it must again be concluded that Latin American industry as a whole has relied on tariff protection at high and even excessive levels. This description would be incomplete without some additional comments on tariff structure, which are essential from two standpoints. In the first place, the real degree of protection is not determined only by the general tariff level, but also by the differences in the rates applied to particular products and those applying to intermediate imported goods needed for the production process;[3/] and secondly, it is in fact the tariff structure that allows the tariff instrument not only to act as a general stimulus, but also to affect the direction taken by industrial development.

With respect to the first point, the consideration of criteria extraneous to strict protectionism leads in some cases to situations that must be regarded as anomalous. Thus, for example, in Venezuela the average rate applied to raw materials is higher than that for imports as a whole, and even higher than the average for the group of ordinary consumer goods. More generally speaking, if absolute levels are disregarded, and attention is concentrated on the ratio between the levels of tariffs on raw materials and the average tariffs as a whole, it can be seen that in a country such

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3/ For a detailed account of this concept of net protection, see Santiago Macario, op.cit.

as France this ratio is less than half that for Argentina, Brazil and Chile, although these are the three Latin American countries in which the ratio is lowest. That is, at least a part of the protectionist effect of the Latin American tariffs is lost because there is not enough difference between the rates applied to raw materials and to the finished products containing them. This feature has other consequences that are referred to later in this section.

This treatment of raw materials is part of a tariff structure that can be described from a broader standpoint in terms of the distinction between other categories of products, mainly those for current consumption, durable consumer goods, intermediate goods and capital goods. Similarly, to some extent the respective rates should be linked with the level of industrialization in the various groups of Latin American countries, and in this respect three different situations are encountered. In the least industrialized countries the rates are higher for current consumer goods, while for other types of goods the rates are below the average; in the second group of countries the accent is on duties on certain intermediate products, while they are low for capital goods and at an intermediate level for consumer goods, whether durable or non-durable; in the third group, which includes the most industrialized Latin American countries, the lowest rates are for current consumer goods, and those for other categories are higher. It should be noted that this classification is based on rather broad categories of goods, and in all cases the reference is to average levels of general application. Moreover there are a number of individual exceptions to this general picture.

Among the first group of countries Bolivia and Ecuador reflect the pattern rather accurately, since the rates are lower than the average in all categories except current consumer goods and (for reasons other than protectionism) durable consumer goods. The same is true of Paraguay, although the differences between categories is much less. The second group includes Chile, Colombia, Peru and Uruguay, although in Uruguay the rates for certain types of consumer goods, such as food products, tobbacco, and chemical and pharmaceutical products, are much lower than the average, and

/the rate

the rate for many intermediate and capital goods are much higher. The third group includes Argentina and Brazil, which both have lower duties on current consumer goods, although the rates are still above the average, and higher rates on capital goods. Mexico is a case appart, since although it belongs to the most industrialized group, there is nevertheless a higher rate of duty for current consumer goods. However, it also has the lowest general level of tariff rates, and consequently the main protectionist function is performed by other instruments such as import permits.

If, in addition to this picture of the existing situation, it can be established that at earlier periods the tariff structure of the countries that are now the most industrialized were similar to those that are further back on the path to industrialization, it can be concluded that the use of the tariff instrument broadly reflects a fairly well-defined model of industrial development. There will be a series of successive stages in line with this model, in which the expansion of the industries producing non-durable consumer goods will follow the expansion of other industries, beginning with the manufacture of certain intermediate products, and going on to the production of durable consumer goods and capital goods, in line with the requirements of capital and assimilation of technology usually associated with these industrial categories. This has been the case in the general development of Latin American industry, and these, too, have been more or less the stages the countries have passed through in the process of import substitution, although certain important exceptions must be recognized. Thus from this standpoint it can be concluded that protectionist policy, as reflected in the tariff structure, has had a marked effect on the pattern of industrialization in Latin America.

Another question is how far the model adopted, or to which industrial policy had to adapt itself by the force of events, was the most desirable and rational in the light of the general features of the economies of the region. Certain doubts and criticisms have been expressed on this point.

One relates to the general discrimination in favour of current consumer goods in the tariff structure, over periods that differ from country to country. This preferential treatment is mainly a reflection of the importance attached to import substitution as an immediate requirement

of industrialization, which involves a minimum of difficulties in the way of technical and capital needs, although with considerable sacrifice of productive efficiency and a rational industrial base. The result was an extensive rather than intensive type of growth (referred to earlier in this study), although an intensive growth would have encouraged increasing specialization, as a result of a more critical selection of alternative forms of industrial development based on long-term criteria.

For similar reasons industry was directed mainly towards production lines related to the demand for final consumer goods, even though only the final processing stages were covered. Thus market considerations prevailed over those relating to the availability of particular basic resources, which could have provided the foundation for a more self-supporting type of industrialization that could even have been aimed at exports to other areas, greater specialization and intra-regional trade.

Moreover, as the changes in the tariff structure took place when general tariff levels were rather high, the result was to maintain absolute levels of protection on such a large scale that there was no pressure on the industrial branches already established to effect a steady improvement in their productivity and efficiency. The consequences for costs and prices of manufactured goods produced in Latin America have already been examined in earlier sections.

These forms of protectionist policy had the effect, although such was not their deliberate aim, of creating conditions which made it difficult to combine import substitution with the introduction and expansion of a substantial flow of exports of manufactures. Here the question is not so much that the export aim has been neglected, as that it was impossible to work towards it within the particular patterns imposed by the protectionist policy.[4/]

4/ For a detailed examination of this problem, mainly in terms of exchange policy, see Nicholas Kaldor, "Dual exchange rates and economic development", Economic Bulletin for Latin America, Vol. IX, N° 2 (1964), pp. 215-223.

/These effects

These effects also underlie the difficulties that are now hampering the industrial integration of the Latin American countries. The characteristics of the earlier extensive type of growth have led to the present situation, where the industries in each country cover practically the whole range of manufactures in a given category. The great differences that exist reflect the varying levels of industrial development now reached by the Latin American countries, and not specialization in particular lines within a given category based on the country's natural resources and other factors.

This point will be dealt with in greater detail in chapter IV of this study. Nevertheless, the general considerations set forth above need to be supplemented here by a final reference to the relationship between the structure of the protectionist systems and the relative prices of manufactured products in Latin America.

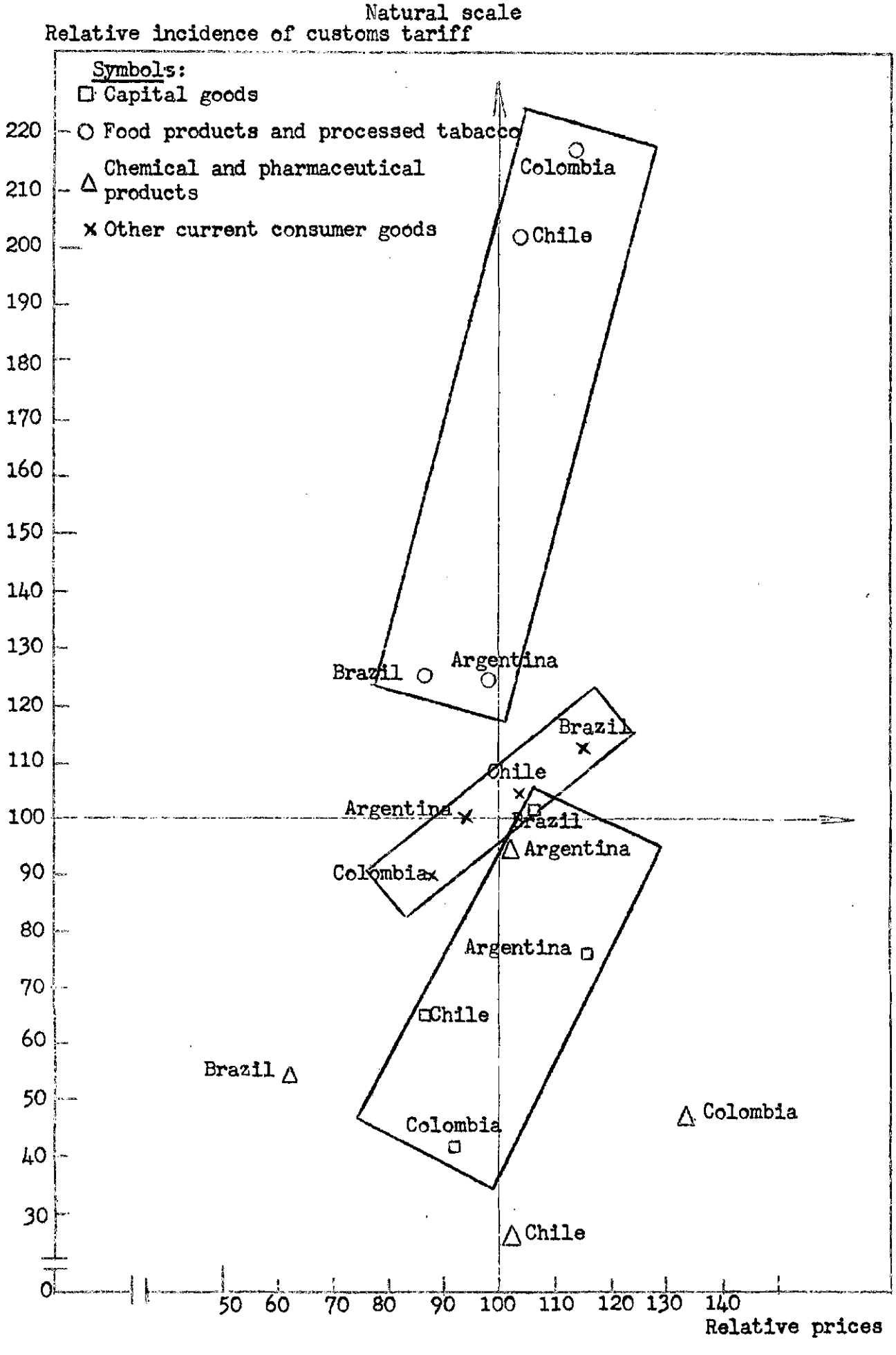
When this subject was dealt with in chapter II it was concluded that the relatively high prices of manufactures in relation to the general price level was the result of high production costs and other factors, which made themselves felt to different degrees in different countries and different types of manufactures. Figure XIII indicates that these factors include the level and structure of customs tariffs, which to some extent affect the domestic price ratios of at least some Latin American countries.

This figure deals with four Latin American countries - Argentina, Brazil, Chile and Colombia - which have high tariff charges and are at relatively advanced stage of industrial development, and with four categories of manufactures - food products and tobacco, chemical and pharmaceutical products, other current consumer goods, and capital goods. The comparison refers, firstly, to the relative structure of the various tariffs, expressed for each country as the arithmetic mean of the tariffs for each category, as a percentage of the average for the average for all four categories; and secondly, to the price ratios within a single category, deduced from the cost figures for the sample of products referred to in chapter II. The first comparison involves leaving out of account the actual level of the tariffs and considering only the internal structure for each country, that is, how

/Figure XIII

Figure XIII

FOUR LATIN AMERICAN COUNTRIES : RATIOS BETWEEN RELATIVE PRICES AND INCIDENCE OF CUSTOMS TARIFFS IN RESPECT OF SPECIFIC CATEGORIES OF MANUFACTURED GOODS



far the burden is heavier for some categories of products than for others. The second comparison, on the other hand, involves ratios referred in each individual case to the group of four countries as a whole, in order to reflect how far the price of a particular category of industrial products is higher or lower than that of other categories.

Despite the undoubted shortcomings of such comparisons, they point to certain important conclusions. Firstly, it seems clear that for each category of manufactures there is some degree of association between relative price and the tariff rate. The exception is chemical and pharmaceutical products, where the scattered nature of the results precludes recognition of any definite effect. For food preparations and tobacco products, the customs charges applied in Argentina and Brazil are, compared with Chile and Colombia, relatively lower than those for other categories and the same applies to the relative prices of these products in the two groups of countries. The reverse is true of capital goods, since in Chile and Colombia tariff levels and relative prices are both lower than in Argentina and Brazil. For the category "other current consumer goods" the figure shows clearly that the two variables increase in parallel form from the figures for Colombia to those of Argentina, Chile and Brazil, in that order.

In addition to the cualitative association, certain quantitative assessments can be made. For processed foods and tobacco products a considerable range in tariff levels is associated with a small range in relative prices, whereas the correlation between the two variables is more marked for capital goods, and still more so for other current consumer goods.

This correlation is not surprising for a group of four countries whose over-all import coefficient is fairly low, and where the contribution of imports to the supply of these categories of goods (except for capital goods) is very small compared with that of domestic production. In the absence of other factors - which may well exist, even though they are not explicitly included in the present analysis - it can be concluded that in many cases the prices of manufactures on the domestic market tend to fall into line with the levels of protection afforded by the tariff system, and are to some degree independent of the domestic production costs.

/If that

If that were so, it would mean that protectionist systems had been so applied as to bring about consequences that were both unforeseen and by no means desirable. This underlines yet again the need to make tariff systems more flexible, and to base the selection of tariff rates on practical criteria that will ensure that the tariff will act as an effective stimulus without entailing unfortunate side effects.

(b) General measures of industrial promotion

Industrial development may be considerably affected by the incidence and pattern of taxation, and by certain features of monetary and credit policy, both because of the relative effect on this sector in comparison with others, and because of the possible effect on the actual patterns of industrial expansion. Moreover these are typical instruments of general economic policy, and consequently unless deliberate and systematic action is taken the effects on industry are likely to be residual because of concentration on other aims, as previously stated.

From the long-term standpoint, the body of general development provisions aimed at encouraging industrial growth through indirect incentives of this type have existed as a fairly widely used instruments of industrial policy in Latin America only since the end of the fifties. Before then there were legal provisions and systems of this type, but they were either not aimed at providing significant stimuli to manufacturing, or else were not sufficiently selective to act as such.

The actual process of making such instruments a major part of industrial policy has not been the same throughout the region. In some countries it has taken the form of specific industrial development legislation, unifying and expanding the relevant legal provisions, but in most cases there has been a collection of miscellaneous provisions, either of a general nature, such as income-tax legislation, or relating specifically to the development of particular areas or branches of industry.

The failure thus far to formulate an exact body of criteria is made clear by the fact that not only are the relevant provisions dispersed among the various laws and ordinances of public bodies, but in recent years there has been a great lack of consistency: decree follows decree, amending what has gone before, and even in some cases changing major principles embodied in earlier provisions.

/How far

How far existing development provisions are rational and effective, can best be appreciated in the light of three main aims. The first is to introduce certain discriminatory incentives by favouring industry over other sectors in such a way as to encourage the channelling of resources into manufacturing. Secondly, there should be preferential treatment of certain branches of industry so that the Government can not only encourage the sector as a whole, but can also influence its lines of development and internal structure. Thirdly, the incentives should also encourage a certain type of behaviour on the part of existing enterprises, facilitating expansion and raising efficiency and productivity.

Broadly speaking the first aim has been largely overlooked in applying these instruments of industrial policy. To make clearer the meaning of this conclusion, it should be explained that this section deals only with such very specific fields as tax provisions and measures for the general control of private credit, since the other means of industrial development (protectionist policy and direct State promotion, including public credit) are examined separately.

On the other hand, there is no doubt about the intention to apply selective stimuli to particular industries, which is reflected in definitions of industries described as "necessary", "of national importance", etc.

The list of the criteria that qualify an industry to be recognized as of this special character may vary in length, and is not always very clear; in fact these criteria, as specifically reflected in the legal provisions, relate to such conditions as whether or not the industry is engaged in import substitution, has a contribution to make in the form of manpower absorption, is located in particular zones, uses given proportions of domestic raw materials or, more recently, is able to export a part of its output.

It should also be noted that the deliberate intention is that such incentives should affect certain important decisions by enterprises, mainly concerning reinvestment of profits, replacement of fixed capital at the right time, and better use of available capital.

/In terms

In terms of these objectives incentives relating to credit (apart from action taken through the credit of public bodies) is usually confined to special authorizations to private banks to conduct more long-term operations, issue bonds and other industrial development securities, or establish special funds for industrial loans, in addition to provisions relating to differential rediscount rates. In other words, these are all incentives of a general nature, that do not lend themselves to application with any great degree of selectivity.

Selective application is easier in relation to tax incentives, since these are granted in on the basis of the nature of the activities they benefit. Existing provisions make this the criterion for the following: granting partial or total exemptions, of a temporary or permanent nature, from the main taxes; differentiating between distributed and undistributed profits; establishing special systems of depreciation of assets; granting total or partial exemption from customs tariffs on imports of machinery or raw materials; reimbursing such charges paid on that part of output is subsequently exported, etc.

The content and scope of this body of provisions can be better appreciated in the light of the following brief account of its features in certain Latin American countries.

The promotional system established in Argentina in 1944 by means of Act Nº 14630, which remained in force until 1957, defined as being "in the national interest" industries that used only domestic raw materials and whose output supplied the domestic market, together with those producing essential items or items of importance to the national defence. The benefits granted to the protected industries consist mainly of additional customs duties on competitive foreign items and import quotas for such items, subsidies, preferential credit arrangements, and in some cases exemption of import duties on imports of the machinery or raw materials used, or both. The maximum period for which such benefits were granted was five years, but this could be extended by the Government. This system functioned effectively up to 1952, when the consideration of applications for these benefits came to a stop.

/In 1959

In 1959 Act N° 14781 abolished this system of protection and promotion, and replaced it by another giving the Government extensive powers to formulate a flexible industrial policy, stipulating only the aims and instruments to be used, in very broad terms. However, the result of the absence of any complete body of regulations was that the system outlined in the legislation was never established.

Between 1961 and 1962 various decrees provided for systems of sectoral promotion (for the steel, petrochemical and pulp industries) and regional promotion (for Patagonia and the north east). In 1963 decree N° 5263 repealed the provisions of the earlier legislation and laid down new provisions, and in 1964 decree N° 3133 amended the 1963 decree, and was embodied in the regulations established by Act N° 14781, now in force.

The most recent decree establishes an optional system of benefits for enterprises or investors, consisting essentially of the following: reduction of payment of taxes on interest, on a percentage scale declining over a period of ten years; exemption from the stamp tax on certain types of contracts; facilities for bringing the necessary foreign technical staff into the country; granting of special rates for gas, electricity, fuels and transport, and priority for machinery. There are also other special benefits for certain priority activities. The application of these incentives is confined to particular sectors, including steel, petrochemicals, pulp, mining (excluding petroleum, gas and certain ores), forestry and reforestation, fishing and whaling, etc., and construction. The promotional measures are applied in particular in Patagonia, the north east and the north west, and in those areas other activities are included.

In addition to the system of Federal promotion, there are also certain provincial development laws, based on exemption from provincial and municipal taxes and the granting of loans and subsidies.

In Brazil there are no general provisions for industrial development, apart from the tariff and exchange system. However, a number of laws have been enacted, both Federal and State, to promote specific branches of industry or to develop particular areas of the country, on the basis of total or partial exemption of taxes on income, sales and consignments, for periods that range up to ten years.

/The criteria

The criteria determining which activities are to benefit are not always the same, although those relating to the use of domestic raw materials and to import substitution predominate.

An example that illustrates the government policy of incentives is the option available to juridical persons to use 50 per cent of their income tax in activities promoted by the Superintendencia de Desarrollo del Nordeste, or SUDENE (the agency for the development of the Nordeste region of Brazil). In the area covered the various States have enacted legislation granting tax incentives, on the basis of different criteria and periods, for the industries that are established in their territory. Furthermore, the Superintendencia da Moneda y Crédito (Currency and Credit Agency), responsible among other tasks for the fixing of differential rediscount rates, has established a more favourable rate for operations in the least economically developed regions, which include the Nordeste.

Thus industrial promotion takes the form of a collection of measures adopted by various agencies, based on principles that are not always the same.

Colombia is another country that has no specific industrial development legislation. The incentive measures are dispersed among different laws and decrees, but may be classified into three groups, according to whether they relate to taxes, currency and credit, or tariffs and exchange rates.

The tax measures include Act N° 81 of 1960 on income tax, which provides for the following: (a) an exemption form income tax for corporations that establish, in addition to the compulsory reserves, an extraordinary economic development reserve of up to 5 per cent per annum of their liquid trade profits for the purpose of increasing the production of raw materials and import substitution items. Natural persons may benefit from the same exemption if they are engaged in the specified activities provided that they invest in those activities the amount of the exemption; (b) an income tax exemption of up to 100 per cent for existing or new corporations whose sole purpose is the conducting of basic industries, provided that they use at least 60 per cent of domestic raw materials; (c) the same exemption is granted to corporations which have the permanent and exclusive aim of conducting industries related to the production of iron, and which use over 50 per cent of items produced by Acerías Paz del Río in their processing operations.

/Other provisions

Other provisions relating to taxes that represent a stimulus to industrial activities provide for an exemption on liquid income from exports (excluding exports of unprocessed coffee, petroleum, bananas, raw hides and precious metals), and authorization for acelerated capital depreciation when machinery is used for a working day of over ten hours.

The monetary and credit measures include: (a) authorization of commercial banks (contained in decree N° 384 of 1950) to grant loans for periods of up to five years for economic development projects, at rates of interest lower than the standard rates, this being made possible through rediscounting by the Bank of Colombia; (b) authorization under decree 1564 of 1955 for commercial banks to issue industrial credit bonds for periods of up to ten years and at an annual interest of up to 7 per cent, together with an obligation imposed on commercial banks to buy industrial bonds for an amount of 5 per cent of their total callable capital; (c) the establishment in 1963 of a Private Investment Fund, under the Bank of Colombia, which provides credits for periods of up to ten years at rates of interest of between 8 and 10 per cent, and (d) the possibility of obtaining credits for feasibility studies for new industries.

In Ecuador, an Industrial Development Act (Ley de Fomento Industrial) was promulgated in 1957, and abrogated in 1962 by an emergency decree (N° 47) which amended the previous legislation and gave a new slant to State policy. In December 1964 the Industrial Development Act now in force was passed, and established new incentives for private enterprise.

The provisions of this law are specifically and exclusively applicable to transforming industries, whether new or already in existence, and the basic principles underlying it are the expansion of exports and import substitution. The benefits it confers comprise total exemption from various taxes and duties currently levied on the following items or activities: (a) statutes of comporations and amendments thereto, as well as the issue of securities or shares and transactions relating to these; (b) working capital; (c) exports of industrial products; and (d) imports of raw materials not produced in the country and used in the manufacture of

goods for export. Partial exemptions from duties and taxes on imports of new machinery and its spare parts are also established, and new industrial enterprises are granted a 20 per cent reduction of sales taxes, for a period of three years.

Apart from these general benefits, special income tax deductions are authorized for enterprises that reinvest profits or use credits to make new investment, and for those that allocate funds to research, training of personnel and contributions to technical education agencies.

Each of the categories in which the enterprises covered by the law are classified enjoys specific tax and tariff concessions over and above the foregoing.

Lastly, all registered industrial concerns are entitled to take advantage of a system of accelerated depreciation in eight years, a period which can be reduced to five as an alternative to income tax exemption.

In addition to the Industrial Development Act, other legislation establishes special investment conditions for parts of the country regarded as emergency areas.

The Transforming Industries Act (Ley de Industrias de Transformación) passed in Mexico in 1940 granted exemption from certain taxes for a maximum period of ten years in the case of new industries considered as essential. As in the other Latin American countries, however, the chief stimulus to industrialization was long provided by tariff protection. The year 1955 witnessed the promulgation of the legislation on the development of new and essential industries (Ley de Fomento de Industrias Nuevas y Necesarias) which is at present in force.

The criteria determining eligibility for the benefits accorded under this law relate to the measure in which the industries in question contribute to import substitution, the development of exports, the expansion of employment and the use of domestically-produced equipment and raw materials. The concessions established under the Act comprise exemptions or reductions in respect of import, export and stamp duties, taxes on trade earnings, and income tax.

/Furthermore, the

Furthermore, the Income Tax Act (Ley del Impuesto sobre la Renta) exempts from income tax up to 10 per cent of the profits of trading companies that build up reinvestment reserves and up to 100 per cent of the profits of industrial firms, agricultural and stock-breeding enterprises and fisheries that comply with the same requisite.

The 1962 income legislation included an announcement that a fund was to be created for the development of exports of manufactured goods, on the basis of a supplementary tax on certain non-essential imports.

Besides the Federal laws, there are also State acts, passed between 1941 and 1964, establishing tax incentives for the development of industry and of other sectors in the States concerned. Their underlying principles are not all the same, nor are the incentives they offer.

In Peru, Act N° 9140, passed in 1940, empowered the Executive to grant exemptions from duties and taxes for the purposes of protecting and encouraging industrialization. In conformity with this legislation, successive decrees accorded tax exemption to a number of branches of industry, such as the manufacture of synthetic nitrogenous fertilizers and of man-made fibres, the metallurgical and canning industries, and the industrial activities established in the Selva area.

Subsequently, in 1959, legislation on industrial promotion (Act N° 13270) was promulgated in favour of new and established industries, different incentives being offered to those producing goods classified as basic items and to those manufacturing products of any other type.

The following are the special concessions granted under this Act: (a) total or partial exemption from import duties on new machinery and equipment not competing with similar domestic products, and on raw materials or intermediate goods not produced in Peru; (b) exemption from several taxes during the enterprise's first few years in operation; (c) authorization to reinvest a proportion of profits tax-free; (d) provision for accelerated depreciation, in proportion to the degree of utilization; (e) authorization to revalue fixed capital whenever a devaluation of the currency takes place; (f) reduction of profit tax rates for enterprises established in the provinces; (g) the right to adequate tariff protection; (h) drawback facilities in respect of exports of manufactured goods; (i) protection against dumping and unfair competitive practices.

/In several

In several of the Central American countries, too, there are industrial promotion laws of relatively recent date. Those of Honduras, El Salvador and Nicaragua were passed in 1958, that of Costa Rica in 1959 - although it abrogates another enacted in 1940 -, and that of Guatemala in 1960. Almost all of these offer as an incentive partial or total exemption from import duties on capital goods and raw materials used by industry, as well as income tax reductions.

Over against the measures aiming at the indirect encouragement and promotion of industrial development, mention may also be made of specific restrictions incorporated in anti-monopolistic and price-control legislation, and other more general provisions relating to public health and town planning.

The political constitution of several of the Latin American countries expressly forbids the formation of private monopolies, while the State is authorized to keep in its own hands certain branches of industry or exploitation of natural resources, or specific services, considered to be of public interest.5/

In other countries, where the constitution does not contain such prohibitions, special legislation has been passed. In Argentina, a law promulgated in 1923, ammended by another in 1946 and supplemented with procedural regulations in 1949, established sanctions for acts creating or seeking to create monopolies. In Chile, Act N° 13305 (1959) stipulated that no monopoly could be granted to individual entrepreneurs in respect of industrial or commercial activities.

Article 28 of the constitution of Mexico was supplemented by an organic law in 1934, and in 1955 the Penal Code stigmatized cornering, practices militating against free competition in production or trade, and others of a similar nature as "offences against national consumption and wealth".

5/ See, for example, the following articles in the respective political constitutions: Ecuador, 198; El Salvador, 142; Mexico, 28; Nicaragua, 87 and Venezuela, 97.

/As regards

As regards price controls, different conditions seem to prevail, since several of the Latin American countries have not yet adopted legal measures to authorize them. In Argentina, they existed up to the year 1959, the date of expiry of the extension period of Act N° 12130, repressing agios and speculation; no price controls have since been re-established. In Chile, the Government is empowered to declare such products as it deems necessary to be essential goods, and to fix and control their prices. Ecuador's Industrial Development Act establishes "the fixing of prices at levels prejudicial to consumers" as a reason for the temporary suspension of the benefits it accords. In Mexico's case, price controls are grounded on article 28 of the political constitution, and the pertinent regulations are found in legislation on the terms of reference of the Federal Executive in the economic field (Ley sobre Atribuciones del Ejecutivo Federal en Materia Económica), under which price controls are applied to foodstuffs and clothing classifiable as current consumer goods, essential raw materials, products of basic or staple industries, etc. In Venezuela, the Ministry of Development controls the prices of essential goods, and those of the products of protected industries.

Neither anti-monopolistic measures nor price controls seem to discourage investment in industry, and the same might be said of other provisions which in some instances stipulate that specific registration formalities must be complied with, or official authorization obtained, before new manufacturing activities can be undertaken.

It is not difficult to infer from the foregoing account that these instruments of industrial policy do not as a rule imply preferential treatment for the industrial sector as a whole vis-à-vis other sectors of economic activity. Except for occasional measures, the provisions designed to channel the credit operations of private financing agencies are of a general nature, and are dictated mainly by the needs of short-term economic policy. As far as taxation is concerned, the fact that in most of the Latin American countries a very high proportion of fiscal revenue accrues from foreign trade duties and charges and from indirect taxes means that the incidence of taxation on the profits of industrial enterprises

/is rather

is rather light than otherwise. The same is true of other activities, and it is even likely that the position of industry may be relatively disadvantageous, not on account of differential rates or régimes, but because less tax evasion takes place, owing, in turn, to the predominance of the corporation or joint-stock company - which is subject to stricter control - as the legal organization pattern of manufacturing enterprises. Neverthless, the incentive that could be provided through taxation should not be under-estimated especially in relation to those countries where direct taxation has become comparatively important.

On the other hand, this relatively neutral operation of tax machinery in respect of industry as against other sectors is certainly not the prevailing characteristic of the provisions in force when it comes to discrimination by branches of manufacturing, or by the allocation of profits, or by the use made of available capital resources. The efficacy of the incentives established in these connexions can be viewed in broader perspective in a later section, when the problem of the financing of industry is considered as a whole, and an attempt is made to assess the contribution deriving from the enterprises' own internal sources, chiefly in terms of reinvestment of profits, amortization funds and the constitution of other reserves. Application of the principle of selectiveness by branches of industry has undoubtedly exerted a significant influence on the orientation of industrial development, and may do so to a still greater extent, provided that the type of activity eligible for the benefits conceded is defined with precision; the criteria embodied in the relevant legislation seem to be formulated in unduly general terms.

The efficacy of such stimuli is more open to question where influencing the location of industries is concerned. In the first place, the equalization of incentives depending upon local - as distinct from national - taxes or duties sets up industrial "decentralization" as a generally desirable objective, without particularly favouring any specific location. Secondly, tax advantages at the national level seem very inadequate, even when given locations are specified, in comparison with the disadvantages connected with external economies and other institutional factors, which call for the use of more direct instruments of promotion.

/From another

From another angle, a provisional conclusion might also be suggested to the effect that the instruments under discussion are likely to prove more effective in relation to new developments than in respect of existing industry, and will thus help to widen the range of manufacturing activities rather than to improve the productivity and efficiency of the enterprises already installed. More detailed study should therefore be devoted to what exactly is meant by the references, so frequently recurring in the legislation in force, to the "newness" of the activities eligible for the benefits it accords.

Lastly, it must be pointed out that in view of the mode of presentation adopted, the foregoing data do not give a sufficiently clear idea of one of the unfavourable features characterizing the use of these instruments of industrial policy, namely, the lack of continuity caused by frequent changes in the nature, the scope and even the orientation of the provisions established. The result is an atmosphere of uncertainty which weakens or frustrates the effects that should be produced by the stimuli and incentives offered.

(c) Direct State promotion

In addition to the general incentives deriving from protectionist policy and from other measures and instruments designed to encourage the installation and expansion of manufacturing industries, as outlined in the preceding sections, an enormous amount of work is done in the field of direct industrial promotion. It has followed widely varying patterns, both within one and the same country and from one Latin American country to another; even so, however, within this diversity some common features can be discerned, which it is useful to bear in mind in evaluating the possible scope of direct promotion as a basic instrument of industrial policy, in the broadest sense of the term.

Accordingly, it is worth while to review in broad outline the activities carried out in this field at least in some countries of the region, more for illustrative purposes than with any intention of presenting a complete and systematic picture, for which much more thorought supplementary research would be required.

/Table 33

Table 33

SEVEN LATIN AMERICAN COUNTRIES: MOST IMPORTANT PUBLIC INDUSTRIAL PROMOTION AGENCIES

Country and agency	Date of foundation	Type of activity	Sectors served
Argentina			
Office of the Secretary for Trade and Industry		Guidance and co-ordination	Industry and mining
Banco Industrial	1944	General promotion, capital contributions and credit	Industry and mining
Local development corporations and institutes		General promotion, capital contributions	Industry and others
Brazil			
Ministry of Industry and Commerce	1960	Orientation and general co-ordination	
Banco Nacional do Desenvolvimento Econômico	1952	General promotion and credits	Industry and others
Banco do Brasil (Agricultural and Industrial Credit Portfolio)		Credit	Agriculture and industry
Local banks		Credit	Industry and others
Executive Groups		Promotion of specific branches of industry	
Chile			
Development Corporation (Corporación de Fomento de la Producción, CORFO)	1939	General promotion, capital contributions and credit	Industry and others
Banco del Estado	1953	Credit	Industry and others
Colombia			
Institute of Industrial Development (Instituto de Fomento Industrial)	1940	Promotion and capital contributions	Industry
Caja de Crédito Agrícola, Industrial y Minero		Credit	Agriculture, industry and mining
Banco de la República (Private Investment Fund)	1963	Credit	Agriculture, industry and mining
Banco Popular (Special Fund)	1963	Credit	Small- and medium-scale industry
Mexico			
Nacional Financiera S.A.	1934	General promotion, capital contributions and credit	Industry and others
Banco de México		Credit	Industry and others
Banco Nacional de Fomento Cooperativo		Credit	Small- and medium-scale industry
Banco Nacional de Crédito Egidal		Credit	Agricultural industries
Financiera Nacional Azucarera		Credit	Sugar industry

/Table 33 (conc.)

Table 33 (conc.)

Country and agency	Date of foundation	Type of activity	Sectors served
Peru			
Banco Industrial	1936	General promotion, capital contributions and credit	Industry
Ministry of Development and Public Works (Department of Industry and Electric Power)		Capital contributions	Industry, electric power and others
Development corporation and local boards		Capital contributions and credit	Industry and others
Venezuela			
Ministry of Development		Miscellaneous functions	Industry and others
Venezuelan Development Corporation (Corporación Venezolana de Fomento)	1946	General promotion, capital contributions and credit	Industry and others
Banco Industrial de Venezuela	1937	Credit	Industry and mining
Ministry of Development (Commission for the Financing of Small- and Medium-Scale Industry)		Credit	Small- and medium-scale industry
Venezuelan Corporation for Guiana (Corporación Venezolana de Guayana)	1960	Promotion and capital contributions	Several branches of industry
Ministry of Mines and Hydrocarbons, Venezuelan Institute of Petrochemistry (Ministerio de Minas e Hidrocarburos, Instituto Venezolano de Petroquímica)		Promotion and capital contributions	Several branches of industry

Table 33 presents in summarized form some indications of the most important public bodies concerned with the promotion of industry in seven Latin American countries: Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. As can be noted, the oldest of these institutions - except for those specializing in credit operations - were first established in the second half of the thirties, but others are of much more recent date. Up to a point, this coincides with a striking change in the importance attached to industrial policy, whose reliance upon indirect instruments alone has given way to active and deliberate participation in the promotion of new industries, either by setting up State enterprises and maintaining them as such, or by transferring them to the private sector once they are consolidated, or by getting private enterprise to back them from the start, in which case undertakings are proposed and assistance in their execution is provided, or support is given to those already launched by individual entrepreneurs.

It is difficult to judge how far the strengthening of this type of State action has been the result of a definite intention to speed up the industrialization process, and how far it has stemmed from the broader aim of intensifying government incentives to over-all economic development. The nature of the agencies listed in table 33 seems to weight the scales in favour of the latter, as they are not usually connected exclusively with manufacturing industry, but are also concerned with other sectors of the economy. What is more, in several cases, at least during an initial phase, the bulk of their efforts and resources have been channelled towards activities only indirectly related to industrial development - investment in infrastructure in the main, although the latter objective has gradually been acquiring more importance in their subsequent operations.

The types of activity carried out by these agencies have also varied considerably. In some instances, they might be described as general promotional procedures: basic economic studies for the purpose of defining enterprises that it would be expedient to develop; suggestions as to special incentives for their encouragement; contacts with the private sector to

/awaken its

awaken its interest; assistance in the establishment of the enterprises in question, etc.[6/] In other cases, the bodies concerned operate mainly by channelling credit resources so as to facilitate the financing of the installation or expansion of such industries. The same ends have often been served by means of direct contributions of public capital, resulting in the establishment of enterprises in which both the State and private interests participate in varying degrees. Lastly, the work of these agencies has frequently taken the form of setting up State enterprises, some of which have permanently retained their public character, while others have been transferred to the private sector once they have achieved operational conditions capable of attracting private investment.

It is not always possible to identify a given agency with any one of the specific participation patterns described above, since it often happens that one and the same agency operates in all these various ways, the nature of its intervention being determined by the specific requirements of the undertaking concerned. This circumstance has given direct State promotion policy great flexibility, and has enabled it to exert a particularly marked influence on the intensity and direction of industrial development.

The measure of its real success has of course been contingent upon the resources at the disposal of the instrumental agencies, as well as on the more general definitions of economic policy by which they have been actuated in each period.

A preliminary impression of the results achieved can be deduced from the scale and nature of the enterprises owned and run by the State or developed by the public sector. Table 34 sums up, in relation to eight Latin American countries, data or their number and on the chief activities in which they have engaged, together with some indicators of their relative importance within industrial activity as a whole or the corresponding branches of industry.

6/ See the next section for a separate discussion of more specific activities, such as technical assistance in the field of industry, training of technical personnel, and so forth.

The information given makes it clear that as a general rule State effort has been channelled in the direction of basic industrial activities, calling for relatively substantial investment, in absolute terms, and entailing, in the conditions prevalent in Latin America, relatively greater risks. In this sense, the role of State enterprise has not been to compete with private capital, but rather to meet the growth requirements of industrial sectors which private enterprise was not in a position to serve, either because of the aggregate amount of resources needed or because of the risks involved. Thus, the iron and steel industry, particularly during the forties, and subsequently others which to a large extent implied the opening-up of new fields for Latin America's industrial production, came into being as public enterprises, benefiting by external resources that could be drawn upon through State channels.

In relation to industrial production as a whole, State enterprises have not attained significant proportions, to judge from the two cases in which an evaluation of this kind is available. In Argentina, their contribution to total industrial output has amounted to only 1 per cent, while the enterprises in the hands of the Federal Government of Brazil have accounted for a little over 6 per cent of the country's industrial product. On the other hand, as can be seen in table 34, their importance has been preponderant, or at any rate considerable, in specific sectors of industry, especially steel-making and the manufacture of petroleum derivatives, fertilizers and other chemical products.7/

Qualitatively, as distinct from quantitatively, it must be recognized that their contribution has been of a different order, inasmuch as they have paved the way for the development of new basic industries. The switch-over from the provision of indirect industrial development incentives to direct promotional activities seems to have corresponded to a stage when radical changes in the structure of industrial capacity were becoming imperatively

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7/ In addition to the State enterprises listed in table 34, a fair number have been set up for the purpose of directly supplying public-sector agencies. Cases in point are afforded by the manufacture of furniture for Government offices and of clothing for the Armed Forces; engineering and railway workshops; etc.

Table 34

EIGHT LATIN AMERICAN COUNTRIES: RELATIVE IMPORTANCE AND CHARACTERISTICS OF ENTERPRISES OWNED BY THE STATE OR DEVELOPED BY THE PUBLIC SECTOR

Country	Approximate number and nature of enterprises	Principal activities	Relative importance
Argentina	A considerable number of enterprises, including dependencies of the Dirección General de Fabricaciones Militares (14), of the Dirección Nacional de Fabricaciones e Investigaciones Aeronáuticas, or DINFIA Group (11), and of the Dirección Nacional de Industrias del Estado, or DINIE Group (38). A large proportion were later transferred to the private sector	Steel-making, manufacture of metal products and machinery, motor vehicles, petrochemicals	In the aggregate, 1 per cent of total industrial production; 60 per cent of production of steel ingots; 5 per cent of that of metal products and machinery; and 4 per cent of that of motor vehicles
Brazil	Several important enterprises in the hands of the Federal Government, besides those developed by State authorities (separate consideration is given to most of those in whose establishment BNDE took part)	Steel-making, petroleum refining and the manufacture of petrochemicals, motor vehicles, rubber	Federal Government enterprises account for 6.3 per cent of the total industrial product; 85 per cent of petroleum refining; 45 per cent of production of steel ingots; and 1 per cent of that of motor vehicles
Chile	A considerable number of enterprises promoted by the Development Corporation (CORFO) through various types of participation (contributions, loans, loan guarantees); some kept in the hands of the State, others transferred to the private sector, and yet others in which the latter has played a predominant part from the outset	Steel-making, manufacture of petroleum derivatives, metallurgical, metal-transforming and fishing industries, production of cement, beet sugar, chemicals, textiles and wood manufactures	Almost 100 per cent of steel production and manufacture of petroleum derivatives (excluding fuel oil) 20 per cent of sugar production
Colombia	Several enterprises developed by the central Government or through the Institute of Industrial Development, some transferred to the private sector; in addition, many small enterprises owned and run by departmental authorities	Steel-making, petroleum refining, manufacture of alkalis, fertilizers, tyres, spirits, salts	100 per cent of steel and caustic soda production; 60 per cent of petroleum refining; and 40 per cent of production of fertilizers
Ecuador	Several enterprises promoted by central Government agencies, including the Department of Monopoly Control (Dirección de Estancos), and others established by the municipios	Manufacture of cement fertilizers and spirits; pasteurization of milk	

/Table 34 (conc.)

Table 34 (conc.)

Country	Approximate number and nature of enterprises	Principal activities	Relative importance
Mexico			
	Several State enterprises developed by agencies other than the Nacional Financiera, and a large number promoted by this latter through various types of participation, including assistance in the expansion or consolidation of existing enterprises	Steel-making, manufacture of petroleum derivatives, metallurgical and metal-transforming industries, production of fertilizers, cement, sugar	Taking into account State enterprises only: 45 per cent of production of steel ingots, 20 per cent of sugar production and 100 per cent of that of petroleum derivatives
Peru			
	Several enterprises developed by the central Government and others by local development agencies, in addition to the tobacco and salt monopolies	Steel-making, manufacture of fertilizers, tobacco products, cement, petroleum derivatives	
Venezuela			
	Apart from the private concerns which the Venezuelan Development Corporation (CVF) has helped to build up, State enterprises include the Siderúrgica del Orinoco and several sugar mills	Steel-making, sugar production	CVF sugar mills account for 40 per cent of the country's production

/necessary, and

necessary, and were not being carried out more or less spontaneously by private enterprise with the requisite speed. Once a start had been made on the introduction of these changes, the appropriate conditions for the more active participation of private capital were also created, with the result that in many instances undertakings already consolidated by the competent public bodies were handed over to the private sector, and financial resources were thus recovered that could be used to further other new lines of development. From this point of view, the role of public institutions has been "promotional" rather than "entrepreneurial" in the true sense of the word. Hence, the operational conditions and performance of the whole group of State enterprises that have retained their public character cannot be strictly evaluated, for it must not be forgotten that although their efficiency is often found to be relatively low, it was precisely those registering higher levels of productivity that were transferred in many cases to private interests.

As has been pointed out, the establishment and expansion of public-sector enterprises has constituted one of several forms of direct State promotion, often closely linked to the activities of a single agency. This makes it difficult to differentiate clearly between the various types of operation undertaken by any given body. In order, therefore, to form a broader picture of the scope and patterns of such promotional action, a few data illustrative of the modus operandi in selected Latin American countries may usefully be assembled.

In Argentina, the development of the iron and steel industry has been mainly in the hands of the Dirección General de Fabricaciones Militares, an autonomous agency set up in 1941 as a subsidiary of the War Office. One of its dependencies is Altos Hornos de Zapla, which up to 1959 was the only plant in the country producing pig iron, with a maximum annual capacity of 60,000 tons. Also under its control and guidance is the Sociedad Mixta Siderúrgica Argentina (SOMISA), which was established in 1947 on the basis of public funds representing 80 per cent of the total capital. SOMISA's first blast furnace (whose annual output is currently about 700,000 tons of steel ingots) was brought into operation in 1960, and a year later its statutes were amended, an increase in its capital being accompanied by

/the equalization

the equalization of the shares of the public and private sectors. The Dirección Nacional de Fabricaciones e Investigaciones Aeronáuticas (DINFIA) had its origin in the Fábrica Militar de Aviones established in 1927, and subsequently undertook the manufacture of military and civil aircraft, later joining forces with foreign companies to promote the development of the motor-vehicle industry. Astilleros y Fábricas Navales del Estado (AFNE) has been mainly concerned with shipbuilding and repairs and the manufacture of explosives. The Dirección Nacional de Industrias del Estado (DINIE) was formed to act as a controlling and co-ordinating agency for the State-owned industrial establishments transferred to it by the Executive, a function for whose discharge no specific agency existed, and which acquired great importance upon the purchase, in 1947, of a group of so-called "enemy capital" enterprises. These concerns, which had been more or less at a standstill since the war, included chemical, metallurgical, textile, electrical and other manufactures; from 1957 onwards they were handed over one after another to the private sector, only the petrochemical industry remaining in the possession of the State.

The first public agency for the granting of industrial credit was the Banco Industrial de Argentina, established in 1944. The volume of its operations became so significant after the nationalization of bank deposits in 1946 that during the period 1947-51 it came to provide 60 per cent of the total credit resources available to industry. The further change in the banking system that took place in 1957 substantially reduced its contribution, which represented only 14 per cent in 1959-63.

Lastly, some more recently established local development agencies have served to strengthen the promotion machinery; they include the Corporación de Fomento del Rio Colorado, formed in 1960, and the Corporación de Fomento del Rio Chubut and the Instituto de Desarrollo del Valle Interior del Rio Negro (IDEVI), both set up in 1962.

In Brazil, one of the chief promotional instruments has been the Banco Nacional de Desenvolvimiento Econômico (BNDE), founded in 1952 to further the implementation of the Economic Re-equipment Programme, and empowered to operate through various procedures, ranging from the extension of conventional types of credit to subscribing for shares, underwriting and

so forth. Its initial activities were primarily channelled towards the development of railways and electric power, but later on increasing importance was gradually attached to manufacturing industry, which absorbed 49 per cent of the Bank's resources in 1957-63, as compared with only 10 per cent in 1952-56. It has been the principal source of financing for the steel-making programme, and has even acquired a controlling share in some of the major enterprises; at the same time, it has granted and endorsed loans and has subscribed for shares in metallurgical, metal-transforming, transport equipment, shipbuilding, electrical equipment and chemical industries, besides discharging other promotional functions of a more general nature. It has also had something to do with the installation or expansion of several State enterprises, although two of the most important are exceptions, i.e., Petroleo Brasileiro (PETROBRAS), which includes refineries and petrochemical complexes, and the Companhia Siderurgica Nacional, which dates from 1941 and contributes about 45 per cent of Brazil's total output of steel ingots.

Furthermore, to facilitate co-ordinated action on the part of the various Federal Agencies responsible for the formulation and execution of special industrial development programmes, the so-called "Executive Groups" were organized as dependencies of the Industrial Development Commission of the Ministry of Industry and Commerce. A decree issued in June 1964 reshuffled the existing groups to form seven: the metal-transforming group, which absorbed the motor-vehicle, agricultural machinery and engineering industries; the metallurgical industry; the group manufacturing textiles, leather products and derivatives, which absorbed the textile and leather industries that had formerly operated separately; the chemical industries including those manufacturing pharmaceutical products and fertilizers; the cinematographic industry; the group manufacturing electrical and telecommunications equipment; and the food processing group.

The industrial promotion machinery also comprises certain agencies responsible for the development of specific areas, such as the Superintendência do Desenvolvimento do Nordeste (SUDENE) and the regional

banks operating in Amazonas, the Nordeste, the Extremo Sul and elsewhere. An Agricultural and Industrial Credit Portfolio was specifically established in the Banco do Brasil to strengthen the credit facilities available to the sectors in question.

Direct State promotional activities in Chile have been channelled mainly through the Development Corporation (Corporación de Fomento de la Producción - CORFO). Set up in 1939 to stimulate the expansion of the national economy as a whole, during its first ten years in operation CORFO allocated one-third of its resources to the development of manufacturing industry and about 40 per cent to electric power development. Its main sources of financing have consisted in State contributions and external loans, most of the latter having been extended by the Export-Import Bank (EXIMBANK) and the International Bank for Reconstruction and Development (IBRD). In addition to its general promotional activities, it is authorized to make direct contributions, even amounting to the whole of the capital required, to become a partner or shareholder in enterprises already existing or in process of formation, and to grant and endorse loans. It has been concerned in the development of basic national industries, such as steel-making - the Compañía de Acero del Pacífico (CAP), established in 1947 and subsequently handed over to private enterprise -, petroleum products, and beet sugar. Similarly, it has made contributions, has granted or endorsed loans, and has given direct help through preliminary studies and organizational assistance, in connexion with the establishment or expansion of a wide range of activities, including the metallurgical, metal-transforming and fishing industries, and the manufacture of wood products, textiles, chemicals and pharmaceutical products, cement and asbestos cement, etc.

The Institute of Industrial Development (Instituto de Fomento Industrial) has been the principal agency responsible for the direct promotion of industry in Colombia. Established in 1940, entirely on the basis of government funds, it was entrusted with the task of promoting the installation and expansion of basic industries, and primary transforming industries using domestically-produced raw materials, that private capital or enterprise could not have developed satisfactorily on their own account.

/Since then

Since then it has acted as the promoter of about twenty important industrial concerns, through such procedures as subscribing for shares, granting credit and endorsing loans. Its activities were most effective during the period 1940-50, when it launched basic enterprises in such fields as steel-making, soda, tyres and so on, which, with significant exceptions such as the soda plant, were subsequently transferred for the most part to the private sector. In 1963, amendments to the statutes of the Institute authorized it to carry out the operations typically undertaken by financing corporations and augmented its capital, although the additional State contributions did not immediately materialize.

Promotion through public credit has been supplemented by other activities, including those of the Caja de Crédito Agrario, Industrial y Minero, and, in 1963, by the establishment of a Private Investment Fund in the Banco de la República. The interest felt in making access to credit easier for small- and medium-scale industries has led to the constitution of a special fund for that purpose in the Banco Popular.

In Mexico, direct promotional activities are particularly important in view of the substantial share of public investment in total investment (47 per cent in 1961-63) and the considerable proportion of the former which is channelled into the manufacturing sector (38 per cent in the same period, including electric power investment). The leading promotion agency has been the National Financiera S.A., founded in 1934. The Federal Government's initial contribution to its funds was afterwards reinforced from other sources: for example, in 1941 share certificates were issued which enabled it to channel substantial volumes of savings; since 1942 it has been able to obtain external loans, which have allowed it to conduct its credit operations with greater flexibility and on easier terms as regards repayment deadlines; the ownership of stock has represented yet another in flow of resources; and, lastly, in 1964 it sold part of its equity on the open market, thus becoming a semi-public corporation. Like other promotional agencies, it is authorized to grant credit, subscribe for shares and bonds, provide technical assistance and carry out over-all studies to guide investors. Although investment in infrastructure

/- electric power,

- electric power, transport, irrigation - accounted for about two-thirds of the resources channelled through the Nacional Financiera up to March 1964, its direct contribution to manufacturing industry has been of great significance. As a shareholder alone, it participates in more than 60 industrial enterprises - to which its contribution exceeds 1,000 million pesos -, in addition to a long list of others in whose installation or expansion it co-operated through the various procedures indicated. Only part of this list represents the development of State enterprises proper (particularly in the fields of steel-making, metallurgy, and the metal-transforming and fertilizer industries, etc.), while there are others in which Nacional Financiera has not been concerned (petroleum and petroleum products, food, cement and other branches of industry).

Besides the Nacional Financiera, the Banco de México has also played an important role as a promoter, mainly through industrial loans. The same end has been served by other credit agencies geared to the satisfaction of more specific requirements, as in the case of credit for small- and medium-scale industry (Banco Nacional de Fomento Cooperativo) or for the industrial processing of agricultural commodities (Banco Nacional de Crédito Egidal and Financiera Nacional Azucarera).

In Peru's case, the Banco Industrial, which was established in 1936 but had little operational capacity during its first twenty years of financing plays a considerable part in promotional activities. Although it was founded as a semi-public company, no contributions of private capital were made to begin with, so that its funds were severely limited until new legislation gave it access to other sources; in 1959 it was authorized to issue bonds, and later it enjoyed the co-operation of the Inter-American Development Bank (IDB) and other financing institutions. A series of amendments to its statutes also broadened its terms of reference, with a view to empowering it to adopt promotional procedures other than those strictly relating to credit. For example, in 1961 it obtained authorization to participate in the formation or expansion of private enterprises by subscribing for shares to an amount not exceeding 50 per cent of their capital, so long as not more than

35 per cent of resources was allocated to direct investment; and in 1963 it absorbed the National Institute of Industrial Promotion (Instituto Nacional de Promoción Industrial), which carries out research and technical assistance activities.

Since the Banco Industrial is primarily concerned with the provision of credit, the promotion of State enterprises proper - apart from the Empresa Petrolera Estatal, the Corporación Nacional de Fertilizantes and the tobacco and salt monopolies - has been undertaken by other bodies. In 1956, for instance, the Corporación Peruana del Santa established the Sociedad Siderúrgica de Chimbote S.A., which by now satisfies about 35 per cent of the country's requirements in respect of rolled steel products; the Department of Industry and Electric Power of the Ministry of Development, with the co-operation of the Reconstruction and Development Corporation of Cuzco (Corporación de Reconstrucción y Fomento del Cuzco), gave assistance in the installation of a plant for the manufacture of synthetic nitrogenous fertilizers; and Arequipa's Rehabilitation and Development Board (Junta de Rehabilitación y Desarrollo de Arequipa) has been promoting the establishment of a new cement factory.

Lastly, in Venezuela several of the most significant of the industrial enterprises recently launched are also linked to the promotional work of public agencies. The Venezuelan Corporation for Guiana (Corporación Venezolana de Guayana), set up in 1960, is responsible for the development of a large industrial complex of which the most important components are the iron and steel and the aluminium industries, with others allied to or deriving from these; while it is a function of the Venezuelan Institute of Petrochemistry (Instituto Venezolano de Petroquímica) to foster the industries manufacturing fertilizers, other petroleum products and sodium chloride.

In the field of more general promotion activities, the most outstanding contribution is that of the Venezuelan Development Corporation (Corporación Venezolana de Fomento - CVF), which was set up in 1946 to encourage economic development as a whole. It is empowered, inter alia, to carry out direct promotional operations through the organization, development and administration of productive activities on its own account;

/to underwrite

to underwrite and purchase shares in private undertakings that are entering or expanding production; and to issue stock certificates. As regards direct promotion, however, its activities have been chiefly confined to the establishment and consolidation of sugar mills, the major emphasis having been laid on its credit operations, which, moreover, have been increasingly channelled towards manufacturing industry. In 1948-58, this latter sector benefited by only 26 per cent of the CVF credits granted, while in 1959-63 its share rose to 86 per cent. In 1962, the credits extended by CVF totalled about 74 million bolivars, whereas only a little over 2 million were allocated to the purchase of stock. Credit operations in favour of industry proper have covered the various branches of manufacturing production, but in recent years have been mainly concentrated in the following industries: chemicals (27 per cent); food and beverages (25 per cent); and textiles (10 per cent).

It is worth while drawing attention to the new credit procedure initiated by CVF in 1962, with the primary aim of backing small and medium-scale industrialists. Under the so-called "plan for the hire of fixed assets with option to purchase", the Corporation, after evaluating and approving the project concerned, finances the fixed assets, and the private entrepreneur contributes only the working capital and his own entrepreneurial capacity, paying a monthly sum for the hire of the fixed capital. These instalments are regarded as amortization payments, after deduction of interest, so that on the expiry of the hire-purchase period, which is usually 96 months, the entrepreneur can buy the equipment by paying a small residual sum. In a little over two years, about 60 credits of this type, representing over 33 million bolivars, have been approved.

Since 1958, CVF has also been providing technical assistance to private industry, in connexion with problems relating to production, organization, financing and other economic questions, technical supervision and so forth, as well as through market reports and studies, engineering studies, inspection and purchase of machinery, etc. Similarly, it has stimulated and participated in the establishment of regional development banks, private financing associations and enterprises

/for the

for the development of industrial areas - these last in conjunction with certain municipios - and has helped to finance exports.

Besides CVF, the Banco Industrial too has played a part. Founded in 1937, it operated to most effect in 1947-56, during which period its annual credits averaged 46.1 million bolivars, as against CVF's 13.4 million. Subsequently, the latter agency became the executing instrument of development policy, and increased its annual operations to 76.5 million bolivars in 1958-62, while those of the Banco Industrial were reduced to a yearly average of 13.8 million. In 1962, the Corporation underwrote an expansion of the Bank's capital which gave it control over 98 per cent of the total capital. Since then, the Bank has operated under the guidance of CVF, and has confined itself, de facto, to granting credits for working capital, through promissory notes, discounts and letters of credit, for periods ranging from 90 days to 2 years.

Lastly, to serve more specific ends, the National Commission for the Financing of Small- and Medium-Scale Industry (Comisión Nacional de Financiamiento a la Pequeña y Mediana Industria) was established in 1959 as a dependency of the Ministry of development. During its first three years in operation, this agency granted about 2,000 loans to small-scale industry, amounting in all to about 30 million bolivars, and in 1961 extended its field of activity to include industries on a medium scale.

From this general background information on the public agencies for industrial promotion in selected Latin American countries, and on their aims, sources of funds and patterns of operation, it can be inferred that the region now possesses a considerable stock of widely-varying experience, whose careful evaluation could be of great use as a means to perfecting future efforts. Such an evaluation would probably lead to conclusions beyond the scope of the present study, although one of them may be indicated mainly for illustrative purposes. It would seem that instruments of direct promotion - understood in the broad sense of the term, as including State enterprises, participation of government agencies in the organization and expansion of private concerns, the allocation of public funds to the purchase of shares in these latter, the provision of State credit for industry, and the channelling of more substantial resources into the

manufacturing sector - have had a stronger influence on the intensity and patterns of industrial growth than the instruments of indirect action to which reference was made in earlier sections, with the exception of protectionist measures. The development of many of the so-called "dynamic" industries, in particular, is linked to the direct promotional activities of the State. Steel-making, certain branches of the basic chemical industries, the metal-transforming and motor-vehicle industries, and others of equal importance, have often come into being as State enterprises (in some instances remaining as such, and in others passing into the hands of the private sector), or as a result of promotional activities on the part of public agencies whose scope extends far beyond the mere use of indirect incentives to create a favourable climate for industrial investment.

The importance of these methods of promotion may differ considerably from one country to another, not only on account of certain general characteristics of the economies concerned, but also in accordance with the stage of industrial development they have reached. It seems to have been the phases characterized by the introduction of new enterprises with far-reaching implications in respect of capital requirements or assimilation of technology that have made the most intensive demands on State promotional activities, as a means of facilitating changes in the structure of industry or the fuller and more efficient utilization of natural resources whose industrial processing may call for heavier additional investment in infrastructure than private capital can afford.

It should be noted in passing that alongside inter-country differences, changes in the degree of intensity of State promotion in specific periods can also be deduced, in those countries where the machinery concerned had already acquired a measure of effectiveness by the early forties. In some - especially Brazil and Mexico - direct State promotion seems to have been steadily gaining in importance. In others - among which Argentina and Chile should probably be included - efforts in this direction seem to have slackened, after a burst of activity which was reflected in highly significant industrial progress.

(d) Technical assistance to industry, and other instruments designed to facilitate the assimilation of technology

The foregoing review of general industrial development measures and direct State promotional activities suggests that a very substantial proportion of the efforts made has been directed towards encouraging the installation of new manufacturing activities. This has been a basic objective; but it would be a mistake to overlook the importance of concurrent action whose primary aim has been to secure the necessary improvement in the productivity and efficiency of existing enterprises.

Hence the need to supplement the observations formulated above with some reference to this other type of responsibility assumed by the competent public bodies, including, in particular, technical assistance to private enterprise, training of skilled personnel, technological research and similar activities.

The story of the technical assistance given by development agencies to private industry varies greatly from one country to another.

In the case of Chile's Development Corporation, for example, direct technical assistance had become fairly important by the end of the forties, when its field of application ranged from the formulation of projects to the financial and technical reorganization of enterprises; but it subsequently declined, and some of the technical experts left the official agency to become directors in the establishments they had helped to consolidate. The much more recently created Venezuelan corporations prepare projects for transmission to private enterprise, and give advisory assistance, on a small scale as yet, in matters relating to management, financing, organization, inventories of equipment, etc. The Brazilian Association for the Development of Basic Industries (Associacao Brasileira para o Desenvolvimento da Indústria de Base - ABDIB) co-ordinates industrial activities under joint equipment and installation programmes. The Colombian Institute of Technological Research (Instituto de Investigaciones Tecnológicas), established in 1955, prepares specific projects for various types of industry by contract with the interested parties, and, in addition, provides technical assistance to small - and medium-scale industry in respect of organizational problems.

/Furthermore, in

Furthermore, in several of the Latin American countries credit institutions give advice on accounting and legal matters to entrepreneurs requesting their co-operation.

Mention must also be made of a special form of technical assistance - first made available less than ten years ago - provided by certain productivity centres through courses for executive personnel and in other ways. Mexico has an Industrial Productivity Centre (Centro Industrial de Productividad), established in 1955, whose objectives are the organization of courses for supervisors, managers and senior administrative personnel, and the diffusion of the idea of productivity. The National Centre for Action to Increase Productivity (Centro Nacional de Acción para el Incremento de la Productividad), set up in Peru in 1960, also carries out technical assistance activities through its Advisory and Consultative Services (Departamento de Asesoría y Consultas). The Venezuelan Institute of Productivity (Instituto Venezolano de Productividad) and the Colombian Institute of Management (Instituto Colombiano de Administración), both established very lately, are private foundations, under the sponsorship of the Agency for International Development (AID), which offer technical assistance to executive personnel, although on a small scale.

Yet another form of co-operation consists in the guidance given by State agencies concerned with economic and technical research. It ranges from the outlining of a national development programme - in the case of the planning offices in certain countries - to the recommendation of specific articles whose manufacture it would be expedient to undertake.

In this latter connexion, the Central American Research Institute for Industry (Instituto Centroamericano de Investigación y Tecnología Industrial, ICAITI) has embarked upon the study of various branches of industry. In Peru, the National Institute of Industrial Promotion (Instituto Nacional de Promoción Industrial) has likewise carried out studies of industrial activities, accompanying them with recommendations as to the general lines that should be followed. The Industrial Research Department (Departamento de Investigaciones Industriales) of the Banco de México has conducted systematic research on the various branches of industry, and the Ministry of Industry and Trade (Secretaría de Industria y Comercio) and that of

Finance and Public Credit (Secretaría de Hacienda y Crédito Público) undertake surveys designed to furnish interested parties with the preliminary background data required for the promotion of industrial activities in Mexico. The Mexican Government has issued lists of articles whose manufacture is economically feasible and necessary for the purposes of industrial integration.

No less urgently needed than the technical assistance activities of public bodies is their co-operation in the task of training personnel. The available supply of skilled labour has tended to lag behind the real requirements of industrial development, largely on account of the general bent of the region's educational systems. Admittedly, however, the number of new technical schools has risen considerably in absolute terms. The technical schools run by the Federal Government and the National Industry Services (Servico Nacional de Industria) in Brazil, the technical schools and institutes of technology dependent upon the Ministry of Education (Secretaría de Educación Pública) in Mexico, and the national and provincial industrial schools in Argentina have all increased in number. But in none of these countries have they sufficed to produce a large enough supply of workers trained in up-to-date production techniques, with the result that other solutions have been put forward in recent years.

One of these expedients has consisted in the establishment of training centres for workers already in employment, who are given short and practical intensive courses. This has been the sort of action initially taken by the National Industrial Apprenticeship Service (Servico Nacional de Aprendizagem Industrial - SENAI) in Brazil, by the National Industrial Apprenticeship and Employment Service (Servicio Nacional de Aprendizaje y Trabajo Industrial) set up in Peru in 1961, and by Colombia's National Apprenticeship Service (Servicio Nacional de Aprendizaje), established a little earlier. All these institutions display very similar characteristics. Chile has been experimenting for some years in the creation of centres for intensive manpower training, and new labour training centres were established in Mexico in 1963. All these agencies train workers for a number of sectors, with special emphasis on agriculture, industry and trade.

/The system

The system of in-service training, supplemented by special courses, has also been tried out. Typical institutions of this kind are the eight industrial centres recently set up by the Venezuelan National Institute of Educational Co-operation (Instituto Nacional de Cooperación Educativa de Venezuela), and, at the level of intermediate personnel, the Institute of Technology (Instituto de Tecnología) of the Universidad Nacional de Ingeniería in Peru.

Lastly, the State enterprises themselves, and some of the leading private firms, have helped to build up the supply of technicians, especially in specific branches of industry, by training their own workers. Cases in point are afforded by PETROBRAS, in Brazil, and by DINFIA, in Argentina. When DINFIA launched Argentina's aircraft and motor-vehicle industries, it trained staff for the original enterprise and then for the new ones that were gradually installed.

With a view to systematizing these efforts on a broader basis, some countries have begun studies on human resources at the national level, as a groundwork for future programmes relating to the training of technical and scientific personnel.

The shortage of activities of the type under discussion is probably most marked in the field of technological research. Tradition has assigned research work mainly to the universities, and its functions have been primarily scientific and geared to the training of professional workers. To meet the need for studies of problems relating to specific manufactured products or branches of industry, ad hoc institutes have been set up, such as the Institute of Technology (Instituto de Tecnología) and the Research Institute (Instituto de Pesquisas) in Brazil, the Textiles Institute (Instituto Textil) - a dependency of the Universidad Nacional de Ingeniería - in Peru, and the Materials Research and Testing Institute (Instituto de Investigaciones y Ensayos de Materiales) of the Universidad de Chile.

Only in the last few years have specialized institutions been established in some of the Latin American countries. Among these, the Mexican Institute of Technological Research (Instituto Mexicano de Investigaciones Tecnológicas), set up in 1950, carries out studies and experiments in respect of domestically-produced raw materials and the possibilities

/for their

for their use, as well as on the techniques best suited to the country's characteristics. Although the Institute is now a private corporation, it was originally a dependency of the Industrial Research Department of the Banco de México.

The Central American Research Institute for Industry (ICAITI), established in 1955 under the Integration Programme, is concerned, inter alia, with research on natural resources, the study of Central American industry with a view to the improvement of production methods, the adaptation of techniques, and the provision of technical services. Although it has been able to cover these ambitious objectives only in part, it has carried out studies on specific branches of industry, including the manufacture of pharmaceutical products, building materials and leather goods.

In Argentina, the National Institute of Industrial Technology (Instituto Nacional de Tecnología Industrial), established in 1960, is responsible for research on industrial processes, studies on standardization, testing of materials for strength, and quality control studies. At the present time, it has over 20 centres in operation, with a coverage ranging from welding and die-stamping to applied mathematics, management techniques and industrial bacteriology.

It is also comparatively recently, in most of the Latin American countries, that the standardization of industrial products and processes has become a matter of interest. One of the first agencies to be created with this end in view was the National Institute of Technological Research and Standardization, established in Chile in or around 1950, and dealing not only with industry but with all technical activities. The Brazilian Technical Standards Association (Associacao Brasileira de Normas Técnicas) lays down specifications for the standardization of equipment and processes of importance to industry. In Venezuela, the Venezuelan Commission on Industrial Standards (Comisión Venezolana de Normas Industriales), attached to the Ministry of Development, was instituted in 1958 to study and formulate

industrial standards and supervise their application. A similar responsibility is carried by the National Institute of Industrial Standards and Certification (Instituto Nacional de Normas Técnicas Industriales y Certificación), established in Peru under the 1959 Industrial Promotion Act (Ley de Promoción Industrial).

All these are, in short, fields of activity in which significant efforts are being made, whose scope is not easy to evaluate correctly. An indirect pointer to their inadequacy is the extent to which Latin American enterprises are increasingly resorting to other ways and means of facilitating their technical progress, particularly through agreements or arrangements with foreign firms.

For example, in recent years the use of foreign licences or patents has become a good deal commoner, as a means of obtaining readier access to more efficient techniques and the latest scientific discoveries resulting from research whose costs would be too high for industries in most Latin American countries to afford.

The moves made in this direction have been distinctly successful from the strictly technical standpoint, since old-established firms have been enabled to modernize their procedures and new enterprises to enter production with a high level of efficiency, apart from the fact that the prestige of the trade names they represent gives them easier access to markets.

These advantages, however, bring certain drawbacks in their train. In the first place, the cost of royalties seems quite high, as it varies between 3 and 5 per cent of gross sales values, or even more in the special case of the pharmaceutical industry, and these proportions in turn may represent from 6 to 10 per cent of the fixed capital of the enterprise, which is unquestionably a heavy burden. In 1955 as much as 32.2 per cent of the remittances of United States manufacturing companies operating in Latin America corresponded to royalties, and that between 1961 and 1963 the royalties received by industrial consortia in the United States from

their Latin American subsidiaries averaged 46 millions dollars yearly.8/ In addition, there are the royalties paid to European firms, on the amount of which no precise information is to hand.

Secondly, contracts of this kind are usually tied to commitments not only to purchase special parts from the firm granting the licence, but also to finance the expenditure entailed by the periodic visits of inspection of the technical experts who supervise production. In some instances, the licensor enterprise also imposes other conditions; for example, exports to third countries are prohibited, or may be effected only through its own representatives abroad. In other agreements, stipulations are made as to types of advertising, distribution systems, etc., and production under trade names other than that to which the contract relates is almost always forbidden. All these restrictions may, among their other consequences, hamper the expansion of intra-regional trade and militate against Latin America's chances of exporting its manufactures to other parts of the world.

8/ United States Departmento de Commerce, Survey of Concurrent Business, August 1964.

2. The financing of industrial development

A number of the measures and instruments of industrial policy described are mainly concerned with the financing of the sector's development. Such is the case with the general credit regulations, the organization and control of the transactions undertaken by institutions in the capital market, a number of tax provisions - covering depreciation, reserves and reinvestment of profits - and the activities of State agencies responsible for industrial development. Consequently the efficacy of these measures and instruments can only be gauged by analysing the characteristics of industrial financing and the importance of the contribution made by each of the principal sources of funds.

In its broader sense, the problem must be tackled as part of a more general evaluation of economic development financing, in which the level and origin of aggregate investment resources are taken into account and the share of manufacturing industry can be weighed against those of the other sectors of the economy. But a study of this kind does not come within the province of the present section, whose main purpose is to examine the internal structure of industrial financing, and will only touch very briefly on the basic but more general questions of whether its volume has been consonant with industrialization requirements and whether resources have been satisfactorily distributed among the different economic sectors.

It is of particular interest here to examine the results of what may be regarded as two kinds of industrial policy measures connected with financing: the first designed to strengthen the sources of the external funds used by enterprises - chiefly the stock market and credit policy - and the second to encourage the mobilization of potential domestic recources in the form of depreciation reserves and profit reinvestment. A useful starting-point for this examination would be the studies that have been undertaken on the sources and uses of funds in respect of certain industrial enterprises surveyed in various Latin American countries, although allowance would have to be made in a comparative analysis for the differences in the sample methodologies and period of coverage It should also be borne in mind that the samples mainly deal with privately-owned national concerns with the legal status of a corporation. Moreover,

/they cover

they cover only those forms that were already established by the time the surveys were launched, and thus reveal the financial characteristics of industrial expansion rather than of the introduction of new manufacturing lines.9/

Table 35 presents some of the more significant findings of these studies, adjusted to make them more comparable,10/ and adds similar data for France and the United States which help to highlight the nature of the problem in the Latin American countries.

It is apparent from a comparison of the figures that in Latin American industry domestic sources usually accounted for a smaller proportion of the total funds used during the periods in question than in France and the United States. Moreover, the proportions supplied by undistributed and depreciation reserves vary widely from one country and period to another, as illustrated by the two countries on which studies for different years are available.

In the United States depreciation reserves constituted an unvaring proportion of the total funds in 1945-56 and 1960, whereas in Latin America they ranged widely from less than 7 per cent in Brazil and 10 per cent in Chile to over 30 per cent in Colombia (1953-58) and Ecuador, and in Argentina expanded from 12 to 26 per cent between the two periods under consideration. The contribution of undistributed profits is equally irregular, but tends to move in the opposite sense. Up to a point, this connexion between the two kinds of domestic funds is traceable to the lack of a clear-cut depreciation policy. In fact, depreciation reserves

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9/ These limitations will be remedied to some extent by duscussing State-owned and foreign enterprises separately and by distinguishing as far as possible between the different strata of a corporation on the assumption that modes of financing suitable to the lower category could be adapted to the requirements of industrial firms with another form of legal status.

10/ One of the problems that cropped up was whether resources that are generally officially classified as capital contributions can be described as internal or external sources when they consist of profits distributed in the form of bonus stock and are thus essentially funds retained for reinvestment. In table 35, the original figures for Brazil, Colombia, Ecuador and Venezuela have been adjusted to allow for this factor, in accordance with the criteria set forth in the statistical annex.

/Table 35

Table 35

COMPOSITION OF FUNDS FOR FINANCING INDUSTRIAL DEVELOPMENT IN SELECTED LATIN AMERICAN (ON THE BASIS OF ENTERPRISE SAMPLES) AND OTHER COUNTRIES

(Percentages)

		Domestic funds			External funds		
		Total	Undistributed	Depreciation reserves	Total	Capital	Other
Argentina	(1960-61)	40.0	14.0	26.0	60.0	9.0	51.0
	(1952-55)	60.0	47.8	12.2	40.0	9.4	30.6
Brazil	(1959-62)	43.2	36.4	6.8	56.8	8.2	48.6
Chile	(1949-61)	52.3	42.3	10.0	47.7	4.5	43.2
Colombia	(1958-62)	49.9	39.2	10.7	50.0	12.1	37.9
	(1953-58)	60.7	23.3	37.3	39.3	13.7	25.6
Ecuador	(1953-57)	56.5	22.7	33.8	43.5	12.6	30.9
Uruguay	(1960)	42.0	...	...	58.0	16.0	42.0
Venezuela	(1961)	50.5	21.3	29.2	49.5	10.6	38.9
United States	(1960)	64.0	34.0	30.0	36.0	2.0	34.0
	(1946-56)	58.3	28.1	30.2	41.7	18.1	23.6
France	(1955)	63.3	...	...	36.7	11.1	25.6

/that are

that are too small to meet real replacement requirements, generally because of the underestimation of net worth, are supplemented by resources that are officially listed as undistributed profits but actually constitute a depreciation fund. If the proportion recorded for depreciation reserves in the United States is taken as the norm, the undistributed profits that are not merely a supplement for inadequate depreciation reserves would supply from 10 to a little over 20 per cent of the total available funds in the Latin American countries as against about 30 per cent in the United States.

In the circumstances, the part played by external funds is naturally larger than it would be in an industrialized economy. The composition of such funds is also very varied, comprising both new capital contributions and other sources in the form of short and long-term loans, suppliers' credits and special funds. In assessing their respective significance, it must be remembered that the figures refer to the percentage composition of the total sources of funds and throw no light on their absolute volume or their relation to other variables such as the industrial product, which could be used as a yardstick. Accordingly the fact that certain external sources account for a larger share of the total does not necessarily mean that their machinery is particularly effective, but simply that domestic funds are more inadequate than usual.

This applies to some extent to capital contributions, which form a substantial if highly variable proportion of the total amount of funds available. In spite of this some of the typical machinery for drawing upon these resources is still rather rudimentary in Latin America and has even deteriorated in a number of countries as the following analysis indicates.

The information available on the structure of the other external sources is not detailed enough. In the United States, long-term loans accounted for 14 per cent of total funds in 1960, short-term loans and suppliers' credits for a further 14 per cent and special funds for 7 per cent.

/The latter

The latter are a particularly important source of funds in some Latin American countries, amounting to as much as 11 per cent of the total in Argentina (1960-61) and 20 per cent in Chile, the only countries in which enterprises enter this source of funds as a separate item in their books. Such resources are, however, very uncertain, since they consist of funds earmarked for taxes and social security contributions which, pending payment, are used by the firms for other purposes. This practice is particularly common in times of inflation, since it enables part of the burden to be shifted on to the tax and social insurance systems.

Loans and suppliers' credits received by Argentina and Chile respectively together constitute 40 and 23.2 per cent of the total in comparison with 27 per cent in the United States and 25 per cent in France. However, the data for Argentina indicate that 30 per cent of the total, i.e., three-quarters of the funds deriving from this type of source, consisted of suppliers' credits, short and long-term loans being only 10 per cent. This proportion is much smaller than in the highly industrialized economies of France and the United States. Long-term loans are not classified individually except in Chile and Venezuela, where they account for 1.9 and 23.1 per cent each of the total amount of funds, and thus compare with France and the United States in two entirely different ways: one adverse and the other favourable.[11/]

These data may give the impression that bank loans and suppliers' credits are, in general, relatively effective sources for financing industrial enterprises in Latin America. But the same reservations apply to these as to capital contributions, for reasons which will be set forth in some detail later. Moreover, type of resource should be set against the demands for sales credits with which Latin American industry is besieged, so as to determine the net balance available for financing the growth of industrial activities from these two sources.

11/ The corresponding proportion in France was 10.3 per cent in 1955 and in the United States 3.8 per cent in 1945-56 and 14 per cent in 1960.

A comparison on these lines will show that conditions for industrial financing are extremely unfavourable (see table 36). While United States industry grants credits equal to half its receipts from suppliers and banking agencies, the proportion is far higher for Latin American industry, and in two cases a net deficit was recorded which had to be supplied from other assets.

It should be pointed out once more that the observations made so far concern industrial corporations as a whole on which information has been obtained through the samples of enterprises. There are, however, some significant differences to be noted.

Corporations represent a relatively small proportion of the actual number of industrial enterprises, although their share of the sector's capital, output and employment is a good deal higher. For instance, in 1959, only 6.8 per cent of all industrial firms in Brazil were corporations, but they accounted for 68.5 per cent of total production. In Colombia the proportions in terms of number of establishments and industrial value added were a little over 4 per cent and 53 per cent. In Venezuela 6.5 per cent of the industrial firms in 1963 were corporations and held slightly over 60 per cent of all industrial capital, and in Chile, 8 per cent employed 45.9 per cent of the industrial labour force in 1957.

Despite the dearth of first-hand information, it might be interesting to review the sources from which the smaller corporations obtain their funds since the results would be fairly representative of other forms of industrial organization as well (partnerships, limited liability companies, etc.). However, for the reasons given earlier, this is not feasible except in the case of Chile, where the enterprises included in the sample were classified by size.

The pertinent figures show that small enterprises have a much smaller volume of domestic sources (39 per cent) to draw on than the big enterprises (54.5 per cent), mainly because of the limited nature of the depreciation reserves which are as little as 5.7 per cent of the total (see table 37).

/Table 36

Table 36

ESTIMATED NET CREDITS USED FOR FINANCING INDUSTRIAL DEVELOPMENT IN SELECTED LATIN AMERICAN COUNTRIES [a/] (ON THE BASIS OF ENTERPRISE SAMPLES) AND IN THE UNITED STATES

(Percentage of total funds available)

		Source of funds [b/]	Use [c/]	Net resources
Argentina	(1960-61)	40.0	29.7	10.3
	(1952-55)	25.1	30.4	-5.3
Brazil	(1959-62)	48.6 [d/]	43.8	4.8
Chile	(1949-61)	23.2	28.1	-4.9
Colombia	(1958-62)	37.9 [d/]	24.9	13.0
Venezuela	(1961)	38.9 [d/]	19.1	19.8
United States	(1960)	28.0	14.0	14.0

a/ Fewer countries are covered than in table 35 because of deficiencies in the classification of the use of funds.

b/ Short and long-term loans and suppliers' credits received by industry.

c/ Sales credits extended by industry.

d/ Including other funds.

/Table 37

Table 37

CHILE: SOURCES AND USES OF FUNDS BY SIZE OF ENTERPRISE, 1949-61

(Percentages)

	Large-scale industry	Medium-scale industry	Small industry
Sources			
Domestic	54.5	46.5	39.0
Undistributed profits	43.7	38.6	33.3
Depreciation reserves	10.8	7.9	5.7
External	45.5	53.5	61.0
Capital	3.9	5.5	10.7
Long-term loans	1.5	3.4	1.5
Short-term loans	16.6	34.2	41.9
Other	23.5	10.4	6.9
Uses			
Fixed capital	25.6	20.1	21.5
Working capital	71.1	78.2	77.4
Inventories	41.1	33.8	38.7
Credits	24.8	38.3	34.8
Cash and bank deposits	3.1	4.6	3.4
Securities	2.1	1.5	0.5
Other assets	3.3	1.7	1.1

Source: El financiamiento de la industria en Chile, INSORA, University of Chile, 1962.

A fair proportion of external funds amounting to 10.7 per cent is made up of capital contributions. Other sources are of minor importance, accounting for only 6.9 per cent. Bank and suppliers' credits, on the other hand, play a notable part, especially short-term loans (41.9 per cent) although their net effect is largely invalidated by the high proportion of credits granted by industry itself.

If the financing characteristics of small corporations are looked at in the aggregate, it may be concluded, in Chile's case at least, that partnerships and family-type concerns would have even slenderer depreciation reserves and rely more heavily on short-term loans.

Side by side with the features they share in common, the funds used by the individual branches of the manufacturing sector are likely to display marked differences in composition as well, particularly between the slow-growing and the dynamic sectors. Unfortunately only one of the studies available (on Venezuela) supplies data that could be used to classify funds by origin, and the conclusions to be drawn from them are limited in applicability because only one year is dealt with. Some illuminating information has been collected from another source altogether with respect to the financing of the development of some Latin American steel mills (see table 38). They show that although the over-all structure of domestic and foreign sources of funds has remained much the same in proportional distribution, two distinctive features can be observed in the composition of external sources: a much greater contribution by long-term loans, which, in four out of the five mills, varies from one-third to half the total amount of funds available; and the special case of Acerías Paz del Río, whose main contribution takes the form of increases in capital stock owing to the particular policy adopted by the Colombian Government for financing steel development.[12/]

12/ Under the terms of a tax law, natural persons, unliquidated successions, corporations and limited liability companies are subject to a special 3 per cent tax on their net taxable income, the revenue accruing therefrom to being earmarked for developing electric energy and steel making. Taxpayers can pay by buying stocks and bonds issued by the Empresa Acerías Paz del Río, S.A. Neither the securities, nor the dividends and interest, are liable either to income tax or to the supplementary net wealth tax (Act 81 of 1960 reorganizing income tax).

/Table 38

Table 38

ESTIMATED SOURCES AND USES OF FUNDS IN RESPECT OF SELECTED LATIN AMERICAN STEEL ENTERPRISES a/

(Percentage)

	Compañía Fundidora de Fierro y Acero Monterrey S.A. (Mexico) 1955-62	Altos Hornos de México S.A. (Mexico) 1957-62	Compañía Siderúrgica Nacional Volta Redonda (Brazil) 1955-62	Acerías Paz del Río (Colombia) 1958-62	Compañía de Acero del Pacífico (Chile) 1955-63
Sources	100.0	100.0	100.0	100.0	100.0
Domestic	24.5	54.2	62.6	51.5	56.5
Undistributed profits	11.0	8.3	48.0	15.9	19.8
Depreciation reserves	11.2	41.6	14.6	29.5	36.7
Other	2.3	4.4	-	6.1	-
External	75.5	45.8	37.4	49.5	43.5
Long-term loans	50.8 b/	31.0 b/	34.0 b/	-	38.6 b/
Increases in capital stock	12.8	14.8	0.7	49.5	3.3
Other	11.9	-	2.7	-	1.6
Uses	100.0	100.0	100.0	100.0	100.0
Fixed capital	83.5	72.4	63.8	40.4	104.0
Increases in working capital	14.4	17.7	29.1	47.0	-4.0
Amortization of long-term debts	-	-	-	12.6	-
Financial investment and other	2.1	9.9	7.1	-	-

a/ Estimates based on data supplied by the companies themselves.

b/ Net funds available from long-term loans.

/The relatively

The relatively important part played by long-term loans is a fairly common feature of financing by State enterprises or undertakings set up under the aegis of public agencies. The reasons are twofold. First, certain public agencies have easier access to funds of this kind that are mainly drawn from foreign sources and international organizations, secondly, the very nature of the industrial activities promoted by the State, usually involving heavy investment that is slow to mature (steel making, basic chemical industries).

The information available on the financing practices of foreign enterprises operating in Latin America relates to 1955 and to United States firms only. From the data that can be pieced together it will be seen that 32.1 per cent of the funds used by manufacturing firms consisted of undistributed profits, 13.5 per cent of drawings on sinking funds, 33.2 per cent of net inflows from the United States and 21.2 per cent from other sources. Thus, 45.6 per cent was of domestic origin and 54.4 per cent foreign, the latter including net United States funds.

It should be added that this proportion for domestic funds is smaller than the figures recorded by manufacturing firms in the United States, France and even in India which are all close to 60 per cent. But as the share of undistributed profits is much the same, the difference must be attributed to the low proportion of depreciation funds, since retained profits represent 30 to 35 per cent of the total in those three countries against only 13.5 per cent for United States concerns in Latin America.

The differences are equally substantial in the case of United States firms operating in Latin America outside the province of the manufacturing sector, since only 10.9 per cent of their funds comes from reinvested profits and 56 per cent from depreciation reserves.[13/]

In 1955 the allocation of funds by these same enterprises displayed certain striking characteristics, including the very low proportion of 29 per cent for investment in fixed capital as against 62 to 64 per cent in the three countries named above and 75.7 per cent in other United States firms active in Latin America.

13/ These ratios are a result of the special privileges enjoyed by the petroleum and mining companies as regards depreciation.

/The aggregate

The aggregate ratios quoted for foreign firms vary appreciably from one country to another. In Argentina, Brazil and Mexico, where nearly 70 per cent of these enterprises' funds are concentrated, the relation of undistributed profits to the total is rather larger, and in Brazil domestic funds account for as much as 75 per cent of the over-all sum.

From other pieces of information it can be estimated that between 1950 and 1962 reinvested profits financed 40 to 56 per cent of the industrial investment of United States concerns in Latin America, and are tending to account for an even larger share.

Although incomplete, these data do give a general picture of the composition of the funds used to finance the expansion of industrial enterprises in Latin America. A rather more detailed examination should now be made of some of the main components, in order to relate them to other significant orders of magnitude which would help to indicate the amount of influence wielded by the specific industrial policy measures and instruments that the Latin American countries have been introducing and strengthening.

(a) Domestic sources

The information that has been reviewed shows that the contribution of domestic sources to the supply of funds for financing the development of industrial enterprises in Latin America has generally been rather limited. The two main components of such sources - depreciation reserves and profit reinvestment rates - vary extensively from one country and period to another. Their movements also show that they are closely inter-related in the sense that an increase in profit reinvestment may in certain circumstances be used to make up for a shortage of depreciation funds.

Despite their interdependence, there are differences in both the structural and institutional factors of industrial policy underlying the movements of domestic sources of financing, depending on whether depreciation reserves or reinvestment rates are being considered. It has therefore been thought best to deal with these two individually.

/(i) Sinking

(i) Sinking funds. The depreciation rates authorized by tax legislation in the Latin American countries are usually much the same as those in force in the developed countries. As a rule, they imply the replacement of real estate in a period of 20 years, of machinery and equipment in 10 years and of vehicles in 5 years.

Thus, the legal rates do not seem to be one of the factors determining the relatively weak role played by sinking funds, as indicated above. On the contrary, if it is taken into account that in Latin America the operation of industrial assets is usually less intensive in terms of working hours or days, and that they are generally kept in use for longer periods, the rates incorporated in Latin American industrial legislation might well be regarded as on the easy side, and might therefore be expected to boost the contribution made by sinking funds to industrial financing. The same end would appear to be served by other provisions more recently established in several countries - including Colombia, Mexico and Peru -, under the terms of which depreciation can be speeded up in proportion to the degree of intensity with which the capital is used, as an incentive to more efficient utilization of installed capacity.

On the other hand, legal provisions do not seem to have been equally efficacious with respect to what may be considered the root problem underlying the insignificance of the part played by sinking funds, namely, the valuation of industrial assets. The rapid inflationary processes and the successive devaluations of the currency that have taken place in many of the Latin American countries give rise to a progressive under-valuation of assets, so that depreciation rates are applied to a book capital which becomes more and more meaningless in relation to the real or replacement value of the assets in question.

As this problem has grown increasingly serious, attempts have been made to tackle it through the instruments of industrial policy themselves, in which special provisions relating to the revaluation of assets are incorporated in many cases. In Argentina, for example, measures combining exceptional amortization schedules with reassessment of the book value of

fixed assets were adopted one after another. As from 1952, a specific percentage increase in sinking funds was authorized; a subsequent amendment established a scale varying in accordance with the age of the equipment, and among later provisions, Act N° 15272, passed in 1960, allowed the value of fixed assets to be brought up to date, 50 per cent of the amount resulting from the reassessment being subject to special taxation at a relatively low rate. Similarly, in Brazil a series of decrees were issued, culminating in the Income Tax Act (N° 4357) of July 1964, which made it compulsory for assets to be periodically revalued in accordance with the coefficients determined by the National Economic Council. In Colombia, Act N° 81 (1960) grants special exemptions increasing depreciation rates for assets purchased prior to the 1957 currency devaluation, within given limits; but similar provisions were not adopted in relation to the further devaluation that took place on December 1962. In Chile, Act N° 13305, promulgated in April 1959, amended previous legislation on the same subject, and authorized the annual revaluation of capital including movable assets, in conformity with the variations in the cost-of-living index or in stock exchange quotations, according to the nature of the assets concerned. The Industrial Promotion Act (N° 13270) passed in Peru in 1959 provides for the application of depreciation rates to the reassessed value of machinery, spare parts and fixtures, if and when there has been a fluctuation of more than 5 per cent in the ratio between the national currency and the dollar.

In some cases, legislation of this kind has exerted a significant influence as a short-term corrective factor. In Chile, for instance, amortization had barely accounted for about 8 per cent of the total sources of funds of industrial enterprises in 1955-59, whereas in 1960, immediately after the revaluation of assets had been authorized, this proportion rose to 27 per cent. But since the measures in question were occasional in character and not part of a continuing policy, they seem to have been much less efficacious over the long term. Hence, the relative

importance of sinking funds as a source of financing is still closely linked to the degree of general stability prevailing in price levels and exchange policy.

This interdependence can be appreciated from figure XIV, in which (with reference to the same countries and periods as are included in table 35) the proportions of total sources of financing represented by sinking funds are related to the fluctuations in internal price levels and the variations in exchange rates.

To sum up, it may be concluded that the relative smallness of the contribution made by sinking funds to the financing of the expansion of manufacturing activity is attributable mainly to the undervaluation generally implicit in the book value of industrial capital. The corrective measures adopted do not seem to have been sufficiently efficacious, for the following reasons: they have, as a rule, lacked continuity, being mainly in the nature of sporadic expedients, whreas the problem is perennial; in some cases, they have been linked exclusively to devaluations in the exchange rate, taking no account of fluctuations in internal price levels; and they have sometimes evaded overt recognition of a de facto situation, merely mitigating its adverse effects by authorizing the constitution of special sinking funds.

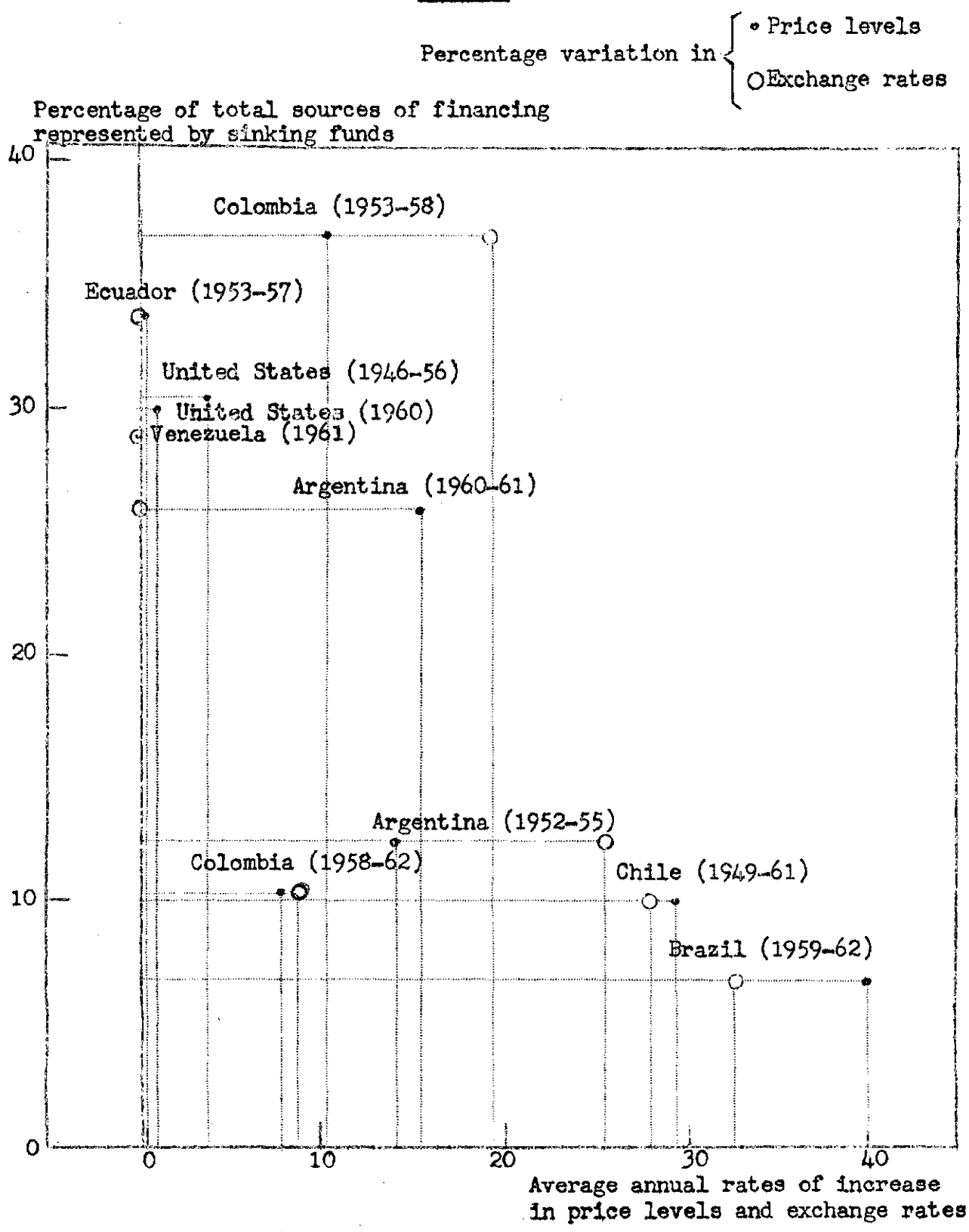
(ii) Reinvestment of profits. In so far as factors like these conduce to the establishment of sinking funds that are not large enough to meet real replacement needs, the rates of reinvestment of profits reflected in the estimates of sources and uses of funds to which reference has been made have not the same significance as is commonly ascribed to them. In more than one instance they become up to a point, an indirect instrument for the provision of sufficient financing capacity to cover the replacement of equipment at the proper time. Thus, they only partly represent an effort directed towards the actual expansion of production capacity. Accordingly, apart from the fact that their contribution is relatively small in proportion to total sources of funds, their real significance from the standpoint of expansion still has to be assessed in each individual case, with simultaneous reference to the size of sinking funds.

/Figure XIV

Figure XIV

RELATIONSHIP BETWEEN THE PROPORTION OF TOTAL FINANCIAL RESOURCES FOR INDUSTRIAL EXPANSION REPRESENTED BY SINKING FUNDS, AND FLUCTUATIONS IN PRICE LEVELS AND EXCHANGE RATES

Natural scale



/The evaluation

The evaluation of the contribution made to industrial financing is a much more complex matter in the case of reinvestment of profits than with respect to sinking funds, since a number of structural and institutional factors come into play on which it is difficult to obtain sufficient quantitative data. This applies, in the first place, to the ratio between reinvested profits and total profits, which it is indispensable to take into consideration in order to envisage the problem not only in terms of the share of non-distributed profits in total available funds, but also from the angle of real reinvestment possibilities.

Broadly speaking, unless rates of return in industry were to be much lower than in other sectors of the economy - which is highly unlikely, to say the least - the possibilities of increasing the savings of manufacturing enterprises are subtantial. This assumption is borne out by two other considerations.

Firstly, the preponderant role that external sources of funds have been shown to play in the financing of industrial enterprises signifies, de facto, a transfer of funds from other sectors, which contribute resources for this purpose other than those generated in manufacturing activity itself. Secondly, the fact that the share of wages and salaries in value added in industry is relatively low constitutes yet another indication of the availability of domestic financial resources for the financing of enterprises.

Broadly speaking, such scanty statistical data as are available tend to confirm the foregoing postulates at least in the case of estimates relating to the fifties. For example, it has been noted that while undistributed profits constituted 60 per cent of total industrial profits, in the United Kingdom, and 40 per cent the United States, in Chile the corresponding proportion was only 14 per cent.[14/] The statistics for Colombia presented by the Office of the Superintendent of Joint Stock Companies

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14/ Estimates formulated by Nicholas Kaldor, "Problemas económicos de Chile", El Trimestre Económico, Nº 102, Mexico, April-June 1959, pp. 179 (footnote 8) and 189 (table 10). Probably the exceptionally low percentage given for Chilean enterprises does not take into account the "ploughing-back" of profits in the form of issues of bonus stock, an operation which is generally registered as an external capital contribution.

/(Superintendencia de

(Superintendencia de Sociedades Anónimas) set the figure at a little below 39 per cent for 1953, and other estimates relating to in 1950-55 place it at about 30 per cent.

With regard to its subsequent evolution, the data to hand are still more fragmentary and frequently contradict one another. According to the source quoted above, the proportion of profits reinvested in Colombia enterprises would seem to have reached 58.5 per cent by 1962, a development which coincides in its general direction with the increase registered between 1953-58 and 1959-62 in the relative importance of reinvestment within total sources of funds (see again table 35). In Argentina's case, it is estimated that in 1960-63 the proportion in question climbed to about 60 per cent, a figure which is clearly hard to reconcile with the decrease that took place between 1952-55 and 1960-61 in the contribution of undistributed profits to total available funds (see again table 35).

Other evaluations of a similar nature suggest that in manufacturing concerns in Mexico and Peru, likewise the ratio between undistributed and total profits is rising.

In so far as this upward movement, which would help to remedy what seems to be a significant weakness in the patterns of industrial development financing, is in fact taking place, it may be partly ascribed to the relevant legislation that industrial policy has been introducing or strengthening. In Argentina, for example, upon the expiry of certain provisions which allowed a limited proportion of reinvested profits to be deducted from taxable income, a special régime was established in 1966, authorizing deduction of 50 per cent of any sums invested in the expansion of production capacity, irrespective of the amount represented by total profits. The scope of this legislation which was at first confined to agricultural enterprises, was extended in 1956 to cover industrial and other undertaking, and it was later the object of frequent derogations, additions and amendments. In Colombia, under Act N° 81 (1960), referred to above, joint stock companies can constitute, tax-free, a special economic development reserve, up to an annual limit of 5 per cent of liquid profits, with the aim of increasing production of raw materials and goods to replace imports. In Ecuador,

the Industrial Development Act (Ley de Fomento Industrial) of 1964 authorizes, for the purposes of determining income tax liabilities, the deduction of sums reinvested, or of new investment financed by loans or new capital contribution, when the objective is the expansion and improvement of industrial plant. Under the industrial development legislation referred to in the case of Peru, annual profits can be invested tax-free in the expansion or diversification of production capacity, or to serve other ends, in proportions which vary according to the location of the industries concerned: 30 per cent in the Lima-Callao area, 50 per cent in other coastal districts, 80 per cent in the Sierra and 100 per cent in the selva or jungle areas. In Venezuela, the Income Tax Act (Ley de Impuestos sobre la Renta) of 1961 establishes progressive reductions - up to 25 per cent - of the so-called complementary tax (impuesto complementario) for the benefit of taxpayers who invest in specific activities, in accordance with a scale based on the ratio between investment and net income.

In any event, it has not been possible to collect enough quantitative data for conclusions to be drawn as to the levels and variations of the proportions of profits reinvested, or as regards the effects that may be ascribed to the specific provisions for the encouragement of reinvestment that have been incorporated in the industrial legislation of many Latin American countries.

In the last analysis, the question of reinvestment is one aspect of the basic and more general problem of stepping up the mobilization of internal resources in order to expedite the development of the Latin American economies. Accordingly, it is subject to the influence of widely varying factors, and can hardly be approached from the standpoint of a specific instrument of industrial policy although this does not mean that the latter's importance should be under-estimated. On the contrary, supreme importance must be attached to the improvement of its efficacy; and to that end, consideration of the set of circumstances in which it is to be applied is an indispensable requisite.

In this as in other contexts, it seems essential to introduce highly flexible criteria in the design and application of the relevant instruments of industrial policy. It should be noted in this connexion that what

matters is not only the amount reinvested in absolute terms or its relation, in the aggregate, to total profits, but also how the funds accruing from the profits in question are turned to account. For example, indiscriminate encouragement might in the upshot widen the margins of idle capacity displayed in specific sectors of Latin American industry, its sole effect being to divert real resources from other possible uses. Nor would the channelling of such resources be very efficacious if the result were an intensification of Latin American industry's characteristic tendency, pointed out in other chapters, to horizontal expansion at the expense of increased consolidation and integration. On the other hand, it may be a powerful instrument for the gradual establishement of a more rational and efficient industrial base, if and when more selective criteria can be introduced to ensure wiser application of the incentives provided.

Consequently, the aim of such incentives must not merely be to promote reinvestment of profits in the actual enterprises concerned, since it may often be more important to deflect the new resources into other manufacturing activities. Hence the effectiveness of measures designed to encourage reinvestment comes to depend upon the efficacy of other instruments whereby the transfer of savings is facilitated, a case in point being that of the capital market. In this sense, the distinction between internal and external sources of funds is of value only for specific analytical purposes; final results depend upon the progress concurrently achieved by instruments intended to stimulate and channel both external and internal financing.

(b) External sources

The weakness shown in many instances by industrial enterprises, own by internal sources of financing for expansion purposes, together with the fact that as has just been shown, the ability of such sources to play a more effective role is contingent upon the efficacy of other machinery, enhances the importance of external sources of financing as a basic factor in industrial development.

In earlier paragraphs, some attention was devoted to quantitative data illustrating the share of external sources in the total sources of funds

available to specific samples of manufacturing enterprises in different Latin American countries and at different times. It was pointed out that the relatively high proportion for which they generally seem to account must be viewed with a measure of caution, since by itself it would not warrant the conclusion that external sources of financing for Latin American industry offer particularly favourable conditions. It is worth while pausing here to make a more detailed examination of the part played by the two instruments through which such resources are principally channelled: the banking system and the stock exchange.

(i) Part played by the banking system in the financing of industry. The channelling of loan and credit resources constitutes one of the leading instruments whereby economic policy can encourage the development of specific sectors. In the particular case of manufacturing industry in Latin America, incentives of this kind have derived both from general provisions governing the allocation of bank credit and from the establishment of public bodies for the special purpose of offering industry more credit on better terms.

An evaluation of the results achieved by such measures and instruments, over and above those indications of the proportion of total funds for industrial expansion represented by loans to which reference has been made, in general terms, entails the consideration of several pertinent factors.

In the first place, the over-all contribution that credit resources have been making to the economic development of Latin America as a whole must be borne in mind in order to assess the share in it that has fallen to manufacturing industry. In this connexion, it is enlightening to collect a few data on the relations between total credit volumes and the corresponding domestic product levels, although in interpreting them the structural differences between the economies concerned must be taken into account.

During the period 1961-62, in countries such as Denmark, the Federal Republic of Germany, Japan, Norway, Sweden and the United States, the percentage relations between internal credit and the gross national product ranged from over 100 per cent in Japan's case to 43.8 per cent in that of the United States. In the same years, the corresponding figures registered in Latin American countries like Bolivia, Haiti, Honduras,

/Paraguay and

Paraguay and even Venezuela fluctuated between a mere 10 and 20 per cent. In another group of Latin American countries, including some at a relatively more advanced stage of industrial development - such as Chile, Colombia and Peru - they reached 20 to 30 per cent, and only in four countries - Argentina, Brazil, Mexico and Uruguay - were they comparable to those noted in the industrialized countries. Outstanding in this last groups is Brazil, where the proportion was 61.8 per cent, as against 48.6 per cent in Uruguay and under 40 per cent in Argentina and Mexico. This shortage of bank credit seems to have been even more serious in earlier years, as only a decade previously the percentage relations in the same countries were lower as a rule, Argentina being among the few exceptions.

Within the general framework of this relative scarcity of bank credit, the position with regard to loans specifically channelled towards the manufacturing sector shows variations which, up to a point, can be linked with the degree of industrial development attained by the countries concerned.

In some of these, the situation seems to be more unfavourable in industry than in the economy as a whole. For example, in Panama in 1958-60 the loans received by manufacturing industry represented a lower percentage in relation to the gross product in that sector (18.5 per cent) than did total credit in relation to the total product. In Costa Rica (1957), industrial credit was equivalent to 22.2 per cent of the product of the sector, while 23.4 per cent was the corresponding figure for the economy as a whole. Industrial credit in Ecuador, between 1950 and 1961, did not amount to more than 20 per cent of the product of the manufacturing sector, whereas total credit approached 35 per cent of the national product. Much the same happened in Peru, and a similar situation probably prevails in other countries of the region.[15/]

The position is different, apparently, in countries at a more advanced stage of industrialization. In Argentina, the relation between total credits

15/ It will be noted that these percentage relations are not expressed in terms of the contribution of industrial credit to total credit resources, which would be largely determined by the relative importance of the manufacturing sector within the economy as a whole, but in each instance relate the amount of credit to the product concerned.

/and the

and the domestic product fluctuated between 9.4 per cent in 1943-53, while in industry credit was equivalent to proportions of the product varying between 12.5 and 28.7 per cent; in the following decade, the corresponding coefficients were 12.7 and 17.9 per cent, respectively. In Brazil, total credit during the ten-year period 1952-62 represented between 22.4 and 29.3 per cent of the total product, as against levels ranging from 45 to 50 per cent for the relation between loans to industry and the product in the manufacturing sector.

In Mexico, prior to 1940, the relation of credit to product was much the same in the industrial sector as in the economy as a whole - about 20 per cent -, but from 1940 onwards, it gradually increased and by 1960 had reached 61.3 per cent in the case of industry, as against only 28.5 per cent for the total; what is more, after 1960 both relations seems to have continued rising, at a still more rapid rate, until proportions amounting to 83 per cent and 34 per cent, respectively, were registered for industry and for the economy as a whole. On a lesser scale, the same process is observable in Colombia, where in 1945-60 total credits corresponded to 19.7 per cent of the gross domestic product, in comparison with an average figure of 28.9 per cent in the industrial sector.

These data support two conclusions. Firstly, the amount of credit allocated to the industrial sector is generally smaller, in relative terms, in countries at less advanced stages of industrialization, although it is precisely in these that the greatest importance would seem to attach to the transfer of saving from other sectors of the economy to underprop the expansion of manufacturing industry, in view of the industrial sector's more limited capacity to generate internal resources. Secondly, a fairly general trend can be noted, at the different levels corresponding to different countries, towards an increase in the share of credit resources applied in the sector in question.

In contrast to what might be supposed, in many instances there does not seem to be much connexion between these two facts and the degree of intensity and efficacy with which public industrial credit institutions have been operating. Their percentage contribution to the total amounts lent to manufacturing enterprises varies widely from one country to

/another, but

another, but it is not necessarily correlative with each country's level of industrial development or with the proportions of the product to which credit resources correspond in the industrial sector and in the economy as a whole. Similarly, the relative improvement in the supply of credit for industry to which reference has been made is seldom attributable to a more rapid expansion of the industrial financing granted by public bodies. In other words, the proportions and tends in question are mainly determined by the behaviour of the banking system as a whole, rather than by the specific influence of State credit.

It will be useful to check this observation against developments in selected countries, so that its scope may be more accurately evaluated, and, in addition, attention may be drawn to the differences between individual situations, among which there are significant exceptions to the foregoing general rule.

In Argentina, the role played by the Banco Industrial, especially since 1957, seems to have consisted in supplementing the activities of the private banks rather than in the continuing promotion of industrial credit. Its share in total loans to industry granted by the banking system in the aggregate was as much as 78 per cent in 1949, reached 50 per cent in 1951-55, and in subsequent years declined appreciably, until by 1963 it had dropped to 13.6 per cent.

Brazil is one of the countries in which the proportion of total loans represented by industrial credit is highest. But at the same time, this proportion does not seem to differ significantly as between loans granted by the monetary authorities and those extended by commercial banks, since during the past decade the evolution of both types of credit has been similar, in the sense that parallel increases have taken place in the share falling to industry.

In Ecuador, the central bank and the development banks were allocating about 20 per cent of their loans to industrial purposes in the early fifties, whereas in 1960-61 the corresponding proportion did not exceed 12 or 13 per cent. Over the same period, the private banks increased their loans to industry from approximately 5 per cent to a little over 10 per cent, which has brought their distribution almost level with that of the

credits issued by public institutions. In addition, particular importance attaches to the policy of direct allocation of funds pursued by the latter since even after the changes indicated above, they still contribute more than half of total loans to industry.

Among the countries at a relatively less advanced stage of industrial development, Panama and Nicaragua exemplify two situations that differ widely as regards the part played by public institutions in supplying credit to the manufacturing sector. The proportion of total loans constituted by such credits is less than 10 per cent in Panama, whereas in Nicaragua it is over two-thirds. In Panama, moreover, loans to industry decreased in recent years in both absolute and relative terms, so that by 1961 they represented 5 per cent as against over 14 per cent in 1958; while in Nicaragua's case their relative importance increased slightly, and their aggregate volume substantially, between 1958 and 1963.

Mexico and Peru register situations and trends different from those mentioned in connexion with most of the countries cited. In Mexico, the high proportion of total credits allocated to manufacturing industry - more than 50 per cent in recent years - comes largely from the public institutions, which account for over 65 per cent of industrial loans, although this proportion is not much bigger than their contribution to credit granted for other purposes (57 per cent in 1963). As regards Peru, where the share of industry in total credits is smaller, the Banco Industrial has been steadily increasing its contribution to industrial financing, especially since 1957, so that by 1963 it accounted for almost 24 per cent of total loans to industry, in comparison with under 10 per cent 1950.

Such cases as these last should not distract attention from others in which public institutions do not seem to be playing a particularly dynamic role in the process of strengthening industrial credit. It must be pointed out in this connexion that few Latin American countries possess special credit institutions for industry, since in many instances State development and credit agencies are likewise responsible for helping to finance other sectors of the economy, including agriculture, housing and basic

social capital. Cases in point are those of CORFO in Chile, the Nacional Financiera, S.A. in Mexico, or the Venezuelan Development Corporation (Corporación Venezolana de Fomento).[16/]

What is relevant here is not to grade the advantages offered by channelling funds through public or through private institutions, but to establish certain facts which may help to shed light on the efficacy of the measures and instruments of industrial policy that have been in current use. It must be recognized, moreover, that the distinction in question becomes much more meaningful as soon as consideration of the problem on an over-all and quantitative basis gives place to analysis of the terms on which the two types of loan are generally granted.

In this context, amortization periods are of the first importance. Long-term credits have traditionally constituted a low proportion of the total, and their recent expansion has been largely linked to the operations of public institutions. In Mexico, for example, whereas in the year 1935 only 20 per cent of the credits granted by the banking system as a whole medium- and long-term loans, these afterwards came to constitute more than 40 per cent of the total; but in 1962-63 only 30 per cent of the loans extended by private institutions were issued for periods of more than 360 days, and the proportion of this percentage that fell to the industrial sector was very small. In the case of the operations of development institutions, on the other hand, longer-term loans accounted for 60 per cent of the total, and industry's share in them was much larger. In other Latin American countries, the average proportion of total loans represented by long- and medium-term credits does not seem to exceed 30 per cent, and in some cases is almost nil.

The responsibility assumed by public institutions in respect of long-term credit is enhanced in certain countries by the fact that commercial banks are forbidden by law to concert operations of this type. When they are negotiated, they take the form of periodic renewals of

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16/ The last-named may serve to illustrate the changes in the general criteria for the allocation of resources to which this aggregation of responsibilities may give rise, since the distribution of the Corporation's long-term credits has altered in such a way as appreciably to strengthen the supply of credit resources available to industry, whose share in loan operations increased from a little over 26 per cent in 1948-58 to nearly 86 per cent in 1959-63.

/short-term loans

short-term loans or overdrafts, with the corresponding surchages on the cost of the loan concerned, and the elements of uncertainty involved in the successive renewals.

The widespread shortage of bank credit also means that its cost is high. For example, the rate of interest charged by commercial banks in Caracas was 7 per cent in 1959 and had risen to 9 per cent by 1963, although Venezuela is one of the countries where the credit shortage is least acute. In Chile's case, the ordinaly bank interest rate was 9 per cent in 1945, and climbed to 10.4 per cent in 1950, 13.5 per cent in 1955 and 16.6 per cent in 1960. In Colombia, the rate of interest on loans extended for more than 150 days, inclusive of commissions and other charges, is about 14 per cent, and the rate payable on loans granted by insurance companies for periods of one to two years is 15 per cent.

The rate of interest charged by the banking system in Argentina was approximately 7.5 per cent in 1951, increased to 10.1 per cent in 1960 and is estimated at 14 per cent for 1963.

In countries where the commercial banks are not authorized to grant medium- and long term loans, the banking institutions themselves usually operate through subsidiary financing enterprises which are not subject to such strict regulations and controls. Loans extended in this way may entail interest and other charges which substantially raise the cost of credit.

Again, save in exceptional cases or periods, the shortage of bank credit is most serious in respect of loans in foreign currency. Although the relative importance of suppliers' credits has been increasing, their higher cost and short-term character are unsuited to the requirements of Latin American industrialists. The foreign currency credit lines at the disposal of the commercial banks are limited. In Peru, for example, the loans issued by commercial banks in foreign currency accounted for 10 per cent of total loan operations in 1938-39, a proportion which gradually declined until by 1950-51 it had sunk to 0.2 per cent; it subsequently increased, and by 1962 had regained a level of 9 per cent.

Both the problem of amortization periods and that of the proportion needed in foreign currency have been gradually relieved by means of external

credits, channelled mainly through the Export-Import Bank (EXIMBANK), the Inter-American Development Bank (IDB), the International Bank for Reconstruction and Development and other international agencies, as will be shown in greater detail in a separate section.

The inadequacy of the available statistical data precludes analysis of other important aspects of the influence exerted on the industrial development of the Latin American countries by the volume and distribution of bank credit. Certain fragmentary data would seem to suggest, for example, that in many cases the allocation of loans to the various branches of industry shows a somewhat conservative bias in favour of those already consolidated, one reason being the scarcity of new investment projects and another the higher proportion of long-term credit required for the development of new industrial enterprises. Similarly, the work and worry entailed in the constant renewal of short-term credits induces producers to locate industries in the neighbourhood of the chief urban centres, where financial facilities are greater; and this procedure helps to aggravate the process of increasing industrial concentration that has been discussed in other sections.

Lastly, it should be recalled that the accessibility of credit resources to manufacturing industry, as determined by this group of factors, must be evaluated in the light of the financing requirements which industry in its turn has to meet in order to sell its products. These requirements are ultimately reflected in a considerable reduction of the net contribution made by credit resources to the actual expansion of industrial activities.

(ii) The organization and operation of the stock market. The other external source of funds for industrial expansion - new capital - usually takes the form of funds obtained through the stock market. Hence it is relevant to study the stage of development attained by this machinery in Latin America, and the role it has played in directing further funds to the industrial sector.

Table 39 gives some indicators of the recent activity of the stock markets in Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay

Table 39

INDICATORS OF STOCK EXCHANGE ACTIVITY IN EIGHT LATIN AMERICAN COUNTRIES, 1962

	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Uruguay	Venezuela
1. Number of stock exchanges	3	21	2	2	3	1	1	1
2. Number of registered companies								
(a) Total	552		372	107	350	115	...	91
(b) Industrial	351		150	63	138	20	...	30
3. Relative importance of volume of transactions (percentages)								
(a) Ratio between total transactions and gross domestic product	1.5	1.2	0.8	1.1	10.9	0.7	1.3	1.1
(b) Ratio between transaction in shares and gross domestic product	1.4	0.4	0.7	0.6	0.1	0.4	0.1	0.1
(c) Ratio between transaction in industrial shares and the industrial product		0.9	1.9	2.6	0.2	0.1		0.3
4. Ratio between transactions in industrial shares and total transactions (percentages)	30	15 a/	35	40	0.5 b/	10	6.5	6

a/ In 1960 the corresponding ratio was 50 per cent.

b/ In 1961 the corresponding ratio was 6.3 per cent.

/and Venezuela.

and Venezuela.[17] Broadly speaking these are the Latin American countries in which the capital market is relatively more developed, since of the remaining countries some have not yet established any stock exchange, and in others the stock exchange is not very active, or the regulations governing its operation are somewhat ineffective.

Although the data given are consequently confined to the most favourable situations, they indicate the lack of development thus far of stock markets in Latin America. In fact it is clear that relatively few of the companies are registered on the stock exchanges concerned, and the stock exchange operations are not significant in volume in relation to such general indicators as the total gross domestic product. Except for Mexico the ratio between the two is less than two per cent, whereas 1962 and 1963 the levels in countries like the United States and Japan were over 11 and approximately 20 per cent, respectively, and at least 3 per cent in others, such as Canada and Spain. In the Latin American countries these over-all ratios are largely determined by the negotiation of government bonds and securities, and consequently transactions in shares in the strict sense constitute an even lower proportion.

Against this general picture of the weak stock market, the transactions in industrial shares show a relatively more favourable trend, in many cases surpassing 30 per cent of the total number of shares subject to transactions, although they too are of only minor significance in absolute terms, or in comparison with the levels of the industrial product.

Furthermore, the small scale of the stock market in Latin American does not usually reflect an initial stage of development of such markets, which, although the level is low, development is satisfactory. On the contrary, some of the institutions governing these operations are old-established (the stock exchanges of Buenos Aires and Rio de Janeiro, for example, officially began operating in 1854 and 1876, respectively), and in many cases achieved substantially higher volumes of transactions in

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17/ The information given here is included merely for the purpose of illustrating general stock market activity in Latin America, and does not provide any basis for comparison between the various countries included, because the transactions covered vary widely.

earlier periods. Thus their present levels are the result of a steady contraction of their activities in real terms.

In this respect it is revealing to note the trends shown in figure XV relating to the evolution of the values of stock exchange operations deflated by the respective domestic price levels.[18/] The stagnation or decline of operations in real terms seems to be a fairly general feature in Latin America, except in Mexico, where the trends since 1956 suggest that a really significant stock market has been developed. In this respect it should be pointed out that in many cases the reductions shown in figure XV are largely due to government bonds and securities. Part of the reason for this is the gradual replacement of bond issues abroad by the securing of loans directly from banking institutions. Transactions in private securities have not declined so sharply. Nevertheless, the information available does not always permit operations to be classified so that trends in the latter type of transaction can be studied separately, whereas this can be done for at least six of the eight countries included in the earlier comparison by confining attention to transactions in industrial shares.

The figures for this shares follow a somewhat more satisfactory trend than those for total operations, but even so there is no significant long-term progress (see figure XVI). However, in addition to the particularly rapid growth of the transactions in industrial shares in Mexico (although they started from very low initial levels) the development in Brazil and Venezuela is also relatively satisfactory.

These comments are supplemented by figures XVII and XVIII, which illustrate the changes in the ratios between the transactions in shares and the domestic product (in relation both to the economy as a whole and to the industrial sector in particular) during the last twenty years. These trends are more unfavourable than those in the absolute volume of transactions. Even when the latter does not show any sharp decline, its behaviour appears rather more unsatisfactory if account is taken of the increases that have ocurred during the period in the levels of economic activity in general and industry in particular. In several countries there has been a strikingly

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18/ Although pre-1950 data were available for a few countries only, the trends shown in Figure XVI seem to be the same in all of them.

TREND OF THE VALUE (AT CONSTANT PRICES) OF STOCK EXCHANGE OPERATIONS IN SELECTED LATIN AMERICAN COUNTRIES

(Millions of national currency units)

Semi-logarithmic scale

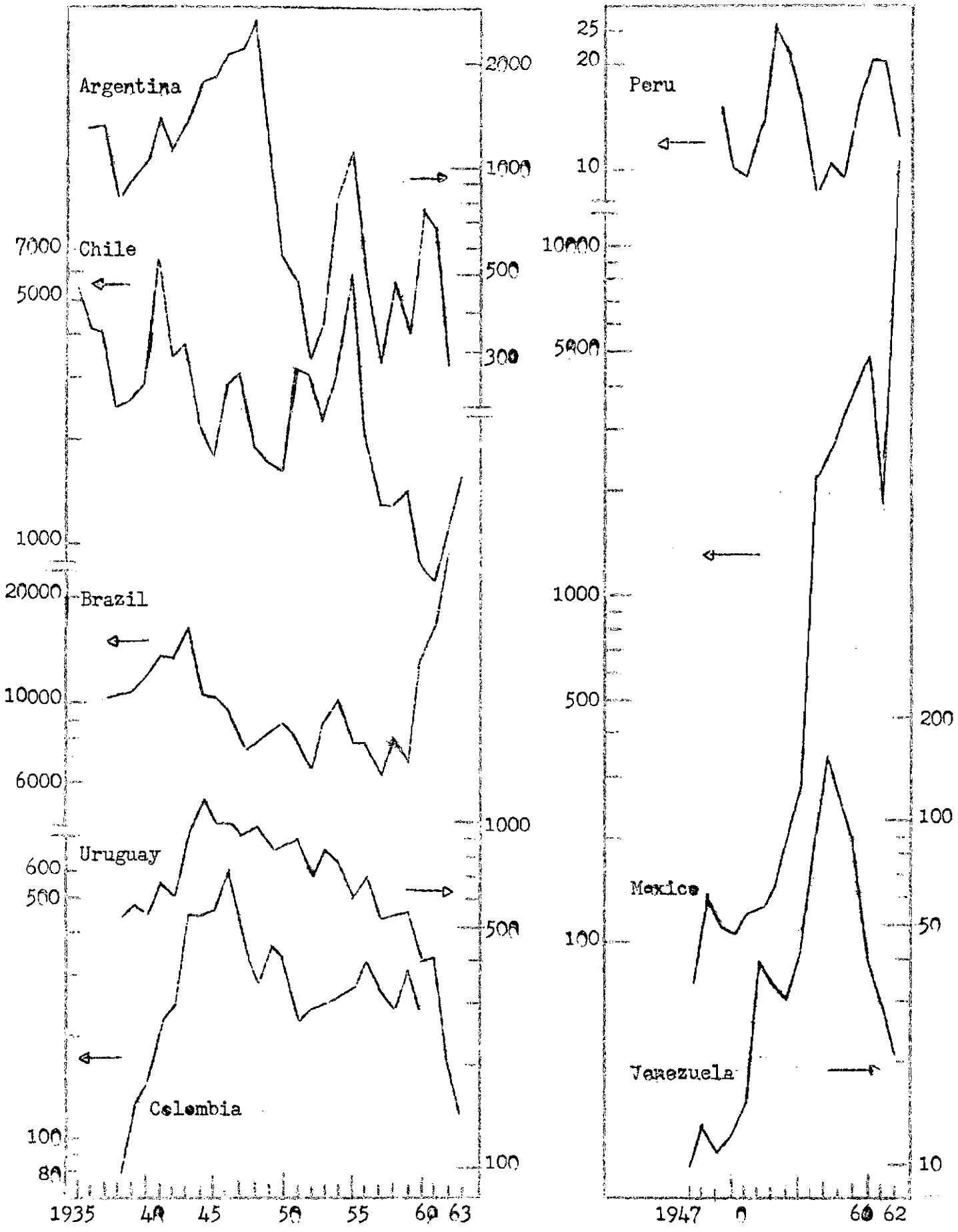


Figure XVI

TREND OF THE VALUE (AT CONSTANT PRICES) OF STOCK EXCHANGE TRANSACTIONS IN INDUSTRIAL SHARES IN SELECTED LATIN AMERICAN COUNTRIES

(Millions of national currency units)

Semi-logarithmic scale

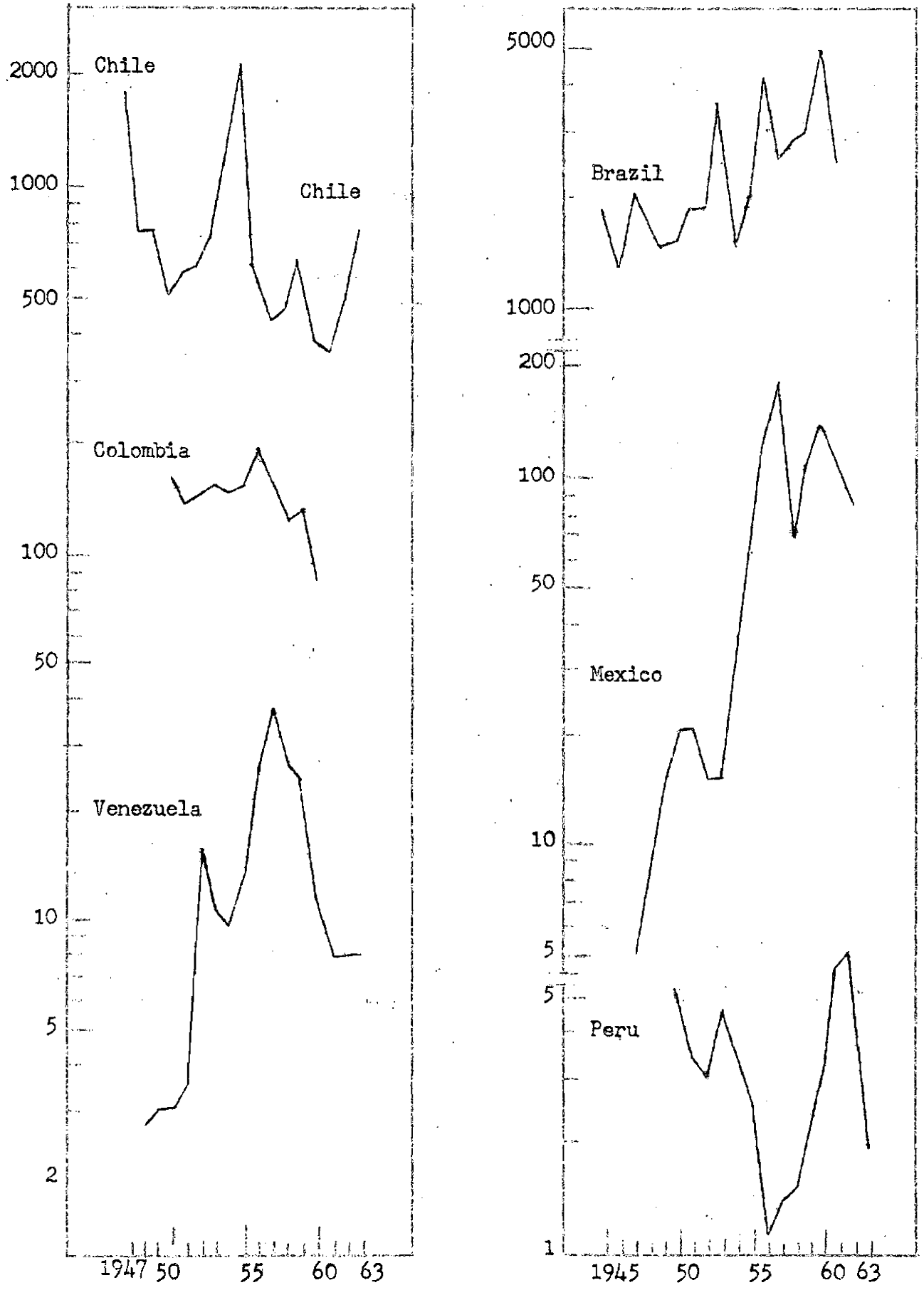
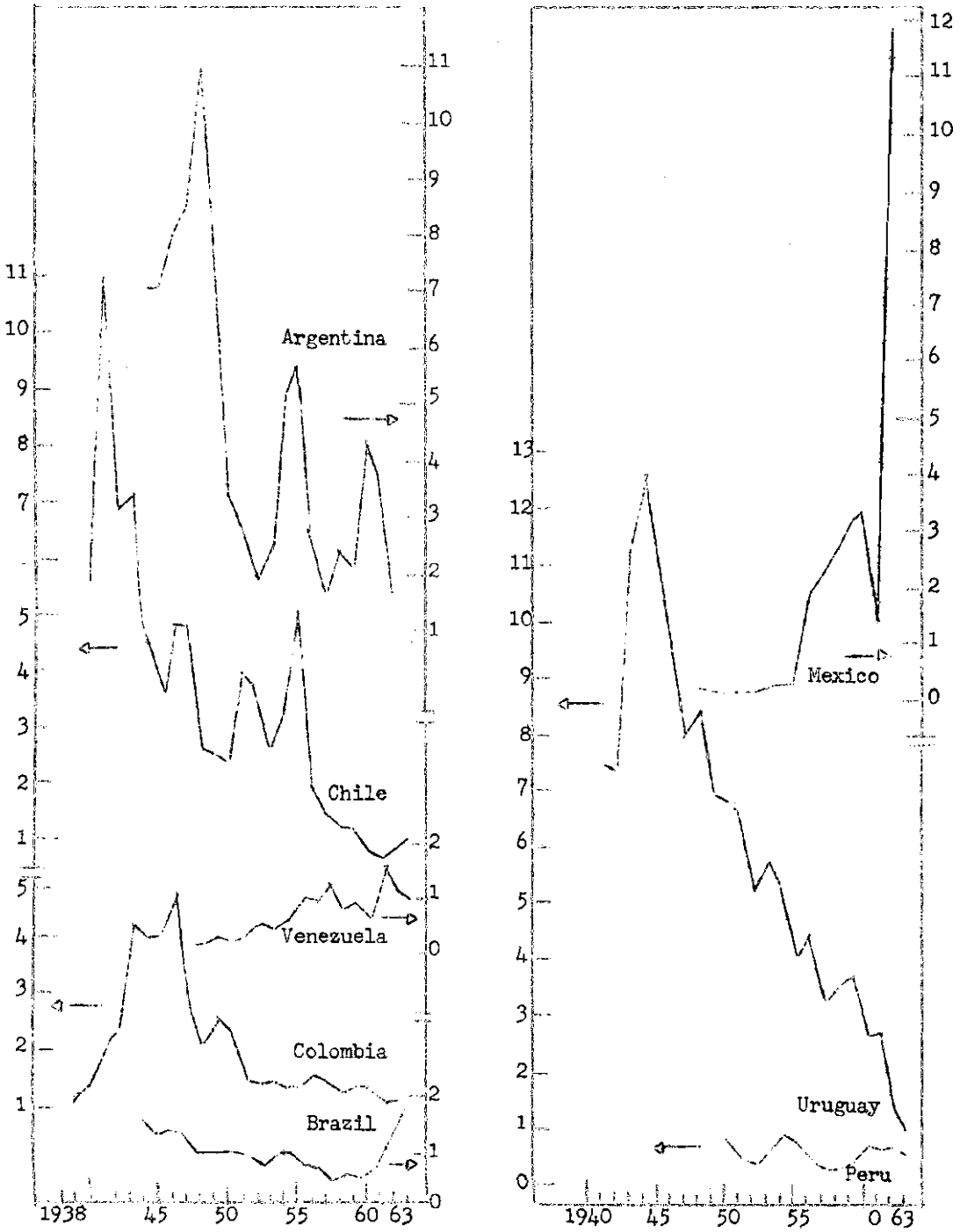


Figure XVII

TREND OF THE RELATION BETWEEN STOCK EXCHANGE TRANSACTIONS AND THE GROSS DOMESTIC PRODUCT IN SELECTED LATIN AMERICAN COUNTRIES

(Percentages)

Natural scale

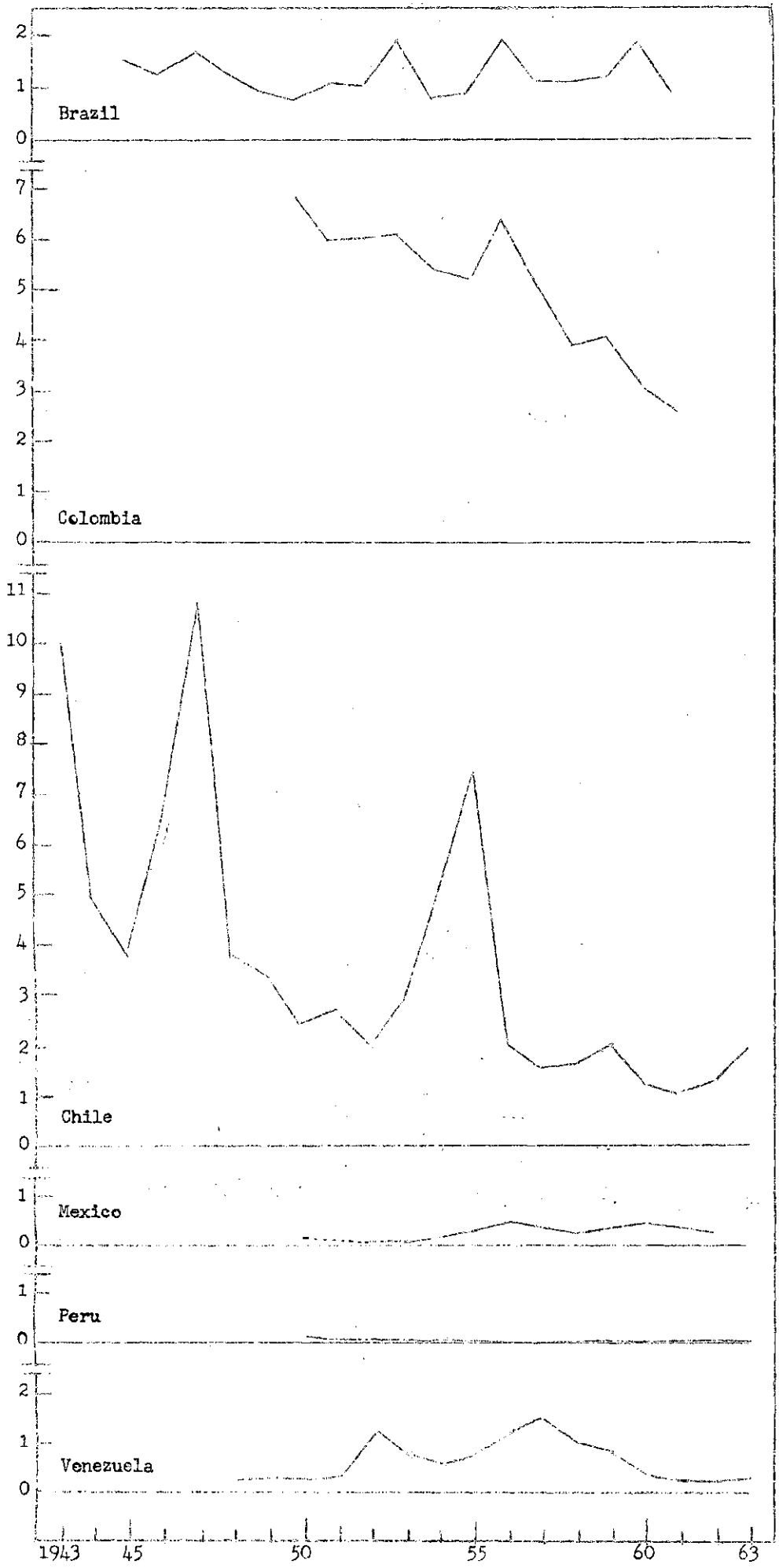


/Figure XVIII

Figure XVIII

TREND OF THE RELATION BETWEEN STOCK EXCHANGE TRANSACTIONS IN INDUSTRIAL SHARES AND THE INDUSTRIAL PRODUCT IN SELECTED LATIN AMERICAN COUNTRIES

(Percentages)



sharp decline, which in nearly all (except for Mexico for total transactions, though not for industrial transactions alone) has led to ratios that reflect a notably low level in relation to the product.

The indicators referred to cover only transactions made through the organized stock market. In some countries, as in most of the Central American countries, there are no specialized institutions for the purpose, and even in the others they appear to act as the channel for only a fraction of the total volume of transactions. The shares issued by new enterprises generally have to be sold directly to the public, since they cannot be quoted on the stock exchange until they meet certain requirements. In fact many transactions in the shares of existing enterprises take place through other media, or through direct contacts between enterprises and individuals. Most of the negotiations thus represent free market operations, to such an extent that it is estimated that in Brazil, although it is compulsory by law to register shares on the stock exchange, the number of those actually traded on the organized market probably amounts to no more than fifty. In Mexico it is estimated that the stock exchange in 1963 dealt with only 13 per cent of the total volume of transactions, the remaining 87 per cent, which includes the operations of Nacional Financiera, the Bank of Mexico and private credit institutions, being handled in the free market.

In brief, the decline or slow growth of the transactions reflect, in the last analysis, a transfer from a market that is organized but weak to a free market where the promotional machinery is more dynamic. In some cases the change has affected industrial shares less than other securities, and this has resulted in an increase in the share of the former in the total volume of transactions. This applies, for example, to Argentina, where industrial shares represented 4 per cent of total transactions in 1930-39, 10 per cent in 1940-49 and about 30 per cent in 1960, and also to Chile, where the corresponding figures were less than 30 per cent in 1941-47 and over 35 per cent in 1959-63. On the other hand the proportion declined in Colombia (from an annual average of 50 per cent in 1950-59 to less than 40 per cent in 1960-63), Uruguay (from 12 per cent in 1943-50 to 6.5 per cent in 1961-63), and, to a notable extent,

/in Mexico

in Mexico where, despite the general strengthening of the stock market, the result of the development and efficiency of other machinery has been to reduce the proportion of transactions in industrial shares, in relation to all the operations taking place through the stock exchanges, from about 20 per cent in 1950 to less than 1 per cent in 1962-63.

The above-described trends, taken as a whole, raise some doubt as to the validity of the importance usually attached to the role of the traditional stock market machinery as a means of increasing the flow of funds to the industrial sector. This is a subject that in itself would repay a number of special studies; here comment will be confined to a few general remarks relating to the inconsistency between these trends and the undoubted progress that has been made in industrialization and general economic development in Latin America.

The factors underlying this long-term behaviour probably include the absence of any regulations governing the operation of the stock market, or, where such regulations exist, their failure to adapt to a changing situation. It has been pointed out,[19/] for example, that despite certain subsequent amendments, the organization and operational system of the Rio de Janeiro stock exchange are in essence based on a law adopted in 1895, and to date there is no public institution that can certify the integrity of enterprises whose shares are in the hands of the public, even though all such companies must register their shares on the stock exchange.

However, even more important than the effectiveness of the regulations concerned seem to be the factors relating to the actual structure of Latin American industry, which necessarily gives the regional capital market certain characteristics.

In the first place, most enterprises are so largely family-owned that there is little incentive to place them on the market, except for a proportion sufficiently small to ensure that the family's control is not affected. Hence transactions tend to be mainly in shares of companies that are not family-owned, and in practice this is usually a small proportion.

19/ Roberto Teixeira da Costa, "Bolsa, açoes e o mercado de capitais", in Jornal do Brasil (Revista Economica), 30 January 1965.

/Thus, for

Thus, for example, of the total of 20 industrial enterprises registered on the Lima Stock Exchange, the shares of only 7 were traded in 1963, and of these total transactions, 93 per cent were in the shares of only 4 enterprises. On the Caracas Stock Exchange the shares of 30 industrial enterprises were traded, but 90 per cent of the transactions related to only 5 enterprises. In Chile, out of the 150 enterprises registered, 20 account for 70 per cent of the total transactions in industrial shares. In Colombia, out of 63 enterprises registered, shares are traded for only 48, and of these 6 account for 82 per cent of all transactions and 3 for 71 per cent.

For the same reason, the dividend rate of industrial limited companies is not always closely related to their actual expansion. Then, again, the family basis of ownership makes it easy to distribute profits in practice by means other than the distribution of dividends, in the form of emoluments paid to the Board of Directors and the management, with the result that the price of the shares, linked to the dividend rate rather than to actual total assets on which it is based, has no real meaning, in that they are not regarded essentially as negotiable shares, but rather as a mere reflection of the ownership of the enterprise.

This last point may help to explain another of the more surprising trends in the trading in securities on the Latin American stock exchanges. There has been a long-term decline in the index of share prices in relation to the variations in the level of domestic prices, that is, a reduction in share prices in real terms. These trends are clearly shown in figures XIX and XX, dealing respectively with the total number of shares and the industrial shares alone.

Whatever reservations are called for from the statistical standpoint with respect to the share price indexes, in view of the complexity of this type of measurement, the trends are sufficiently clear to warrant the conclusion that, apart from Venezuela, in most Latin American countries the unit prices of the shares quoted on the stock exchange have been declining in terms of constant prices. The same is true of the industrial shares in particular, although fewer countries have separate information available on these shares. Nor can it be assumed that these trends, instead of reflecting what has happened over the period to the real value

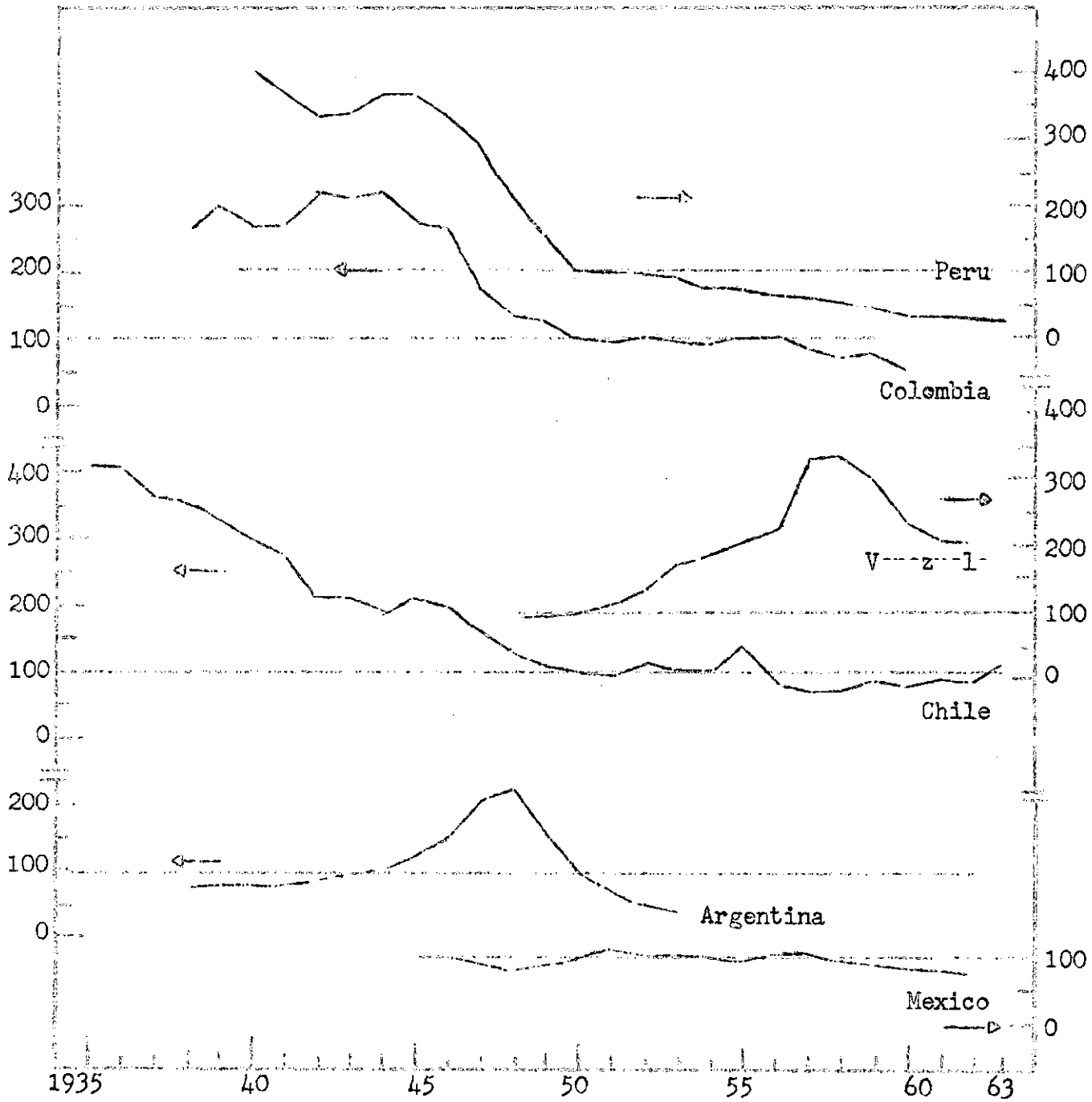
/Figure XIX

Figure XIX

DEFLATED INDEX OF PRICES OF ALL SHARES IN SELECTED LATIN AMERICAN COUNTRIES

(1950=100)

Natural scale



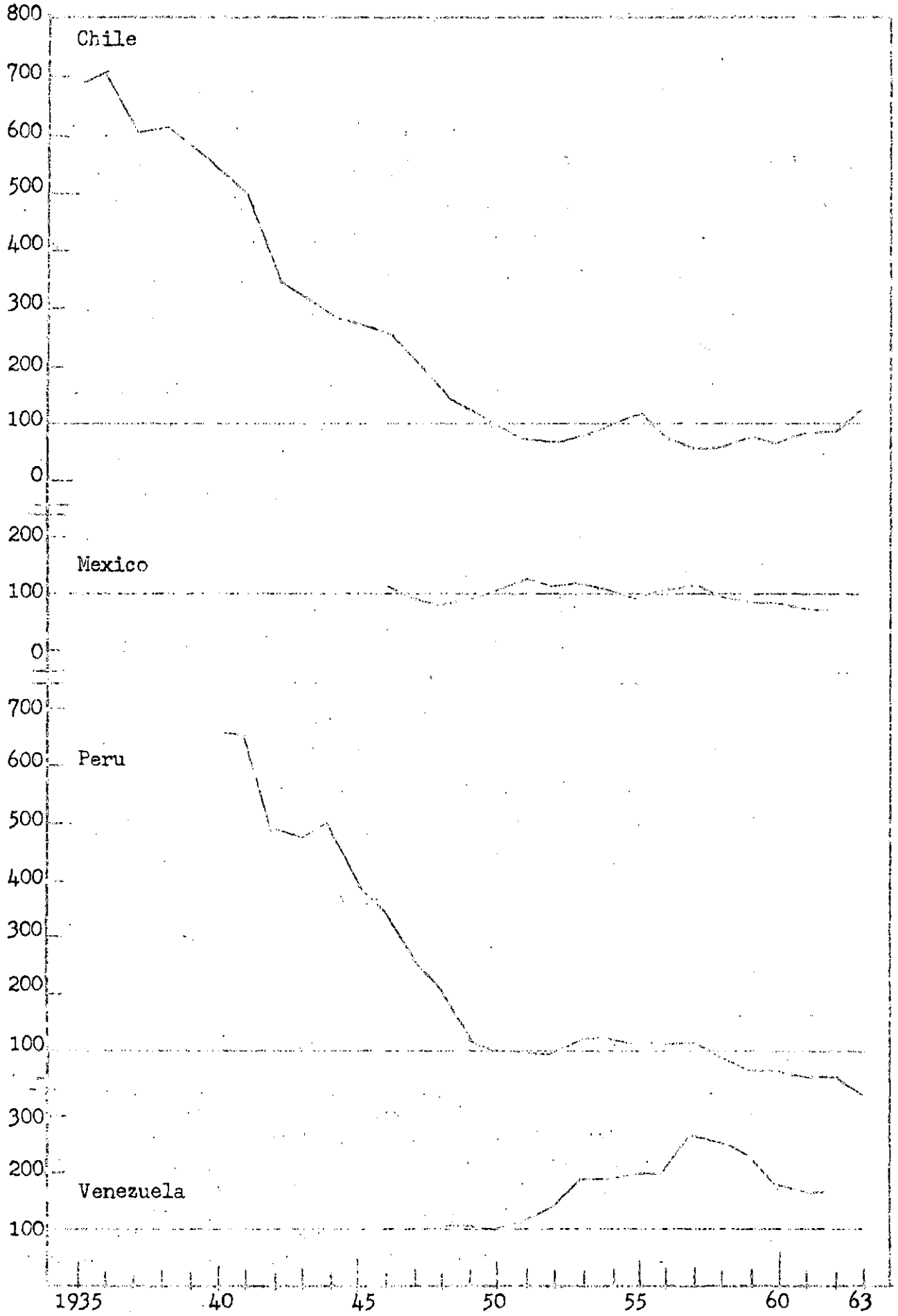
/Figure XX

Figure XX

DEFLATED INDEX OF INDUSTRIAL SHARE PRICES IN SELECTED LATIN AMERICAN COUNTRIES

(1950 = 100)

Natural scale



of the assets of the enterprises behind these shares, are an example of the lack of relation between the company's real assets and the dividends distributed.

Be that as it may, the situation is one that must necessarily discourage the flow of savings into ownership of shares and securities that do not provide a fixed yield, in the absence of any significant measure of participation in the basic decisions taken by the enterprise. From this standpoint the sharing out of profits by channels other than dividend distribution, and limited to a few persons, discourages the small shareholders, who are sometimes unable even to get back the current value of their investment.

In addition there is another basic structural factor, relating to the actual level and type of income distribution in Latin America: the result of the heavy concentration of income is that a very high proportion of the population have little or no savings capacity. Consequently, the opportunity of buying shares is restricted to the very small section with high incomes.

Although there is also some savings potential in certain middle class groups, investment in industrial shares has to compete with other aims and ambitions for a higher standard of living, which often means that a fairly substantial share of income is spent on durable consumer goods. Housing financing is another channel that drains off a considerable share of the savings capacity of these sectors. Moreover changes in economic policy often lead to opportunities, largely of a speculative nature, which offer much greater incentives than those offered by the regular stock market.

Even the purchase of gold and foreign currency was often a very attractive form of investment for those who might have been potential holders of industrial shares.[20/]

20/ This trend has been observed even in a country like Venezuela, where prices and exchange policy are much more stable than in other Latin American countries, and where personal savings have traditionally been channelled into the savings accounts of the commercial banks. Between 1947-50 (the first years of operation of the stock exchange) and 1956-60 stock exchange operations increased tenfold. But in 1960 exchange control was introduced and the bolivar was devalued, with the result that the movement of foreign exchange on the commercial exchange rapidly rose to levels much higher than those for share operations, which fell to a level barely twice that of the first years of operation.

The inevitable results of these factors is that even though in many cases the total number of shareholders is relatively large there is a high degree of concentration of shares in the hands of small groups. In Colombia, for example, it is estimated that 1 per cent of shareholders account for 70 per cent of the total value of shares, whereas 90 per cent of shareholders account for only 10 per cent. Similarly, in Chile it is estimated that 5 per cent of shareholders own 69 per cent of all shares, whereas 50 per cent own only 1.4 per cent of the total.

Hence it is easy to see why most enterprises prefer to place their shares with small groups of people, often members of a family, on a direct basis, and refrain from operating on an established stock exchange that offers no great prospect of obtaining additional funds, and in fact requires a greater promotional effort and a more complex organization. Moreover these conditions encourage enterprises to adopt the type of profit-distribution policy referred to, which further reduces attractions for potential share purchasers.

In recent years better results have been obtained through the introduction of other systems of indirect channelling of savings into the purchase of shares, in the form of savings and loan associations and mutual investment funds. The Crecinco funds are of this type, the first and most substantial having been established in Brazil in 1957, after certain not very successful attempts at underwriting. Later, companies of this type were introduced in other Latin American countries, including Argentina, Brazil, Chile, Colombia, Mexico and Venezuela. These bodies employ more flexible methods of mobilizing savings, but in any case their recent development is not wholly unconnected with the progress and improvement of the stock market as a whole.

Another approach that deserves special attention is that used in Mexico, where the financing of industry through the stock market has been carried out in an indirect form. In the first place, the Nacional Financiera has issued its own shares to obtain funds from the capital market, and then subsequently passed on a large share of these funds to the industrial sector. Secondly, the government and private banking system itself has been converted by the direct intervention of the Bank of Mexico into one of the

/main promotors

main promotors of the stock market, through the increase in its portfolio of holdings of government and private securities, consisting partly of industrial mortgages. Thus it has been possible to some extent to offset the small participation by the saving public in the direct market of industrial shares.

The foregoing comments indicate the need to study in depth the information gathered regarding the operation of the stock market in the Latin American countries, from the standpoint both of the institutional framework and legal provisions in force, and of the structural factors that must necessarily affect the workings of the market. In relation to the structural factors, it would seem necessary also to consider what is the basic role that the market machinery can play in the particular conditions found in the Latin American economies. Thus, for example, in view of the limited possibilites of personal savings because of the level and distribution of income, the most important measure might well be to facilitate the transfer of funds between enterprises, in order to achieve a more rational and effective use of the potential reinvestment of profits. In any case, in recent times such transfers of funds seem to have been effected more successfully, through new methods such as those referred to; the traditional instruments, on the other hand, do not appear to be effective enough in view of the basic importance of the question of reinvestment of profits. Thus there is apparently an institutional gap in financing that needs detailed study, including a full analysis of any developments in the region that might offer promising possibilities, such as those in Mexico.

(c) Loans from foreign entities and international agencies

The points made in earlier sections justify the conclusion that there are broad possibilities of increasing the availability of domestic financial resources for industrial expansion derived from both within and without the enterprises themselves. But even so, the economic policy measures aimed at realizing such opportunities are likely to come up against difficulties that are due partly to the actual levels of per capita income in the region, and partly to the capacity to import that appears essential if domestic funds are to be transformed into machinery and other goods that

have to be bought abroad. In this connexion the obtaining of foreign loans to supplement domestic savings and provide a temporary increase in the capacity to import has become increasingly important in the financing of general economic development in general and of Latin American industry in particular. Consequently it is useful to study certain data relating to the relative importance of foreign borrowing, and the extent to which external funds have been channelled into the industrial sector, as against other sectors.

Use has always been made of external funds to relieve the shortage of working capital, in the form of deferred import payments and short-term commercial credits. The degree to which this had been done has varied widely from country to country, in line with the level of industrialization and the availability of domestic funds. Thus, for example, in Argentina deferred import payments represented 3 per cent of the value of all imports during 1951-63, whereas in 1960-62 they represented 10 per cent of the total (an average of 145 million dollars a year), and commercial short-term credit represented a net deficit. In other Latin American countries deferred import payments represented from 5 to 15 per cent of the total value of imports.

Only in 1950 did external long-term borrowing begin to be of permanent significance, as a result of the lending activities of a number of international financial agencies and foreign banks that had formerly provided credit only sporadically.

The oldest of the foreign agencies to support industrial activities in Latin America is the United States Export-Import Bank (Eximbank), which has been the main source of United States loans for non-military purposes since the Second World War. Up to the end of 1963, the total number of loans authorized for Latin American countries for use in manufacturing amounted to over 900 million dollars, which represented about 26 per cent of all Eximbank loans to the region.

The International Bank for Reconstruction and Development (IBRD) has contributed much less to the financing of Latin American industry, in both absolute and relative terms, since only 3.9 per cent of the loans authorized during 1950-61 were for this purpose. This is due mainly to

the principles governing its activities, since the aim is to avoid granting loans that might compete with the private capital of the member countries. One of its subsidiary agencies, on the other hand, the International Finance Corporation (IFC), set up only a few years ago, concentrates largely on financing industrial projects, and is empowered to invest in share capital and grant loans to private enterprises without government guarantee.

Apart from Eximbank, United States financial co-operation has been administered successively by a number of agencies: the Economic Co-operation Administration, the Mutual Security Agency, the International Co-operation Administration, the Foreign Operations Administration (which administered most of the Public Law 480 funds), and lastly the Agency for International Development. The last-named, in addition to carrying out the activities of its predecessors, absorbed the Development Loan Fund, and is now responsible for co-ordinating the action of all the United States government agencies concerned with the Alliance for Progress. Thus far industrial activities have not been the main object of the work of these bodies, but their contribution in this respect has been appreciable.

The aims of the Inter-American Development Bank (IDB), established more recently, include the financing of specific development projects and the encouragement of private investment. Thus far it has allocated 18 per cent of the loans authorized to industrial projects, although the percentage is considerably higher if account is taken only of the regular funds and the special operations fund.

In recent years other external financial bodies have begun to participate in the financing of Latin American industry. These include such institutions as the German Kreditadstad, the Japanese Export and Import Bank, the French bank pool headed by the Crédit Lyonnais, and the Italian Banca di Crédito per il Lavoro a l'Estero. This list should also include the recently created Atlantic Community Development Group for Latin America (ADELA) which has just begun to operate.

The total amount of the external loans approved by this group of agencies for the financing of industrial activities in Latin America between 1940 and 1963 was about 1,300 million dollars, the proportions

/granted by

granted by each being: Eximbank 71.5 per cent, IDB 11.9 per cent, IBRD and its subsidiary bodies 9.8 per cent, the Mutual Security Programme 5.8 per cent, and other agencies 1 per cent.

The growth of the operations of these bodies is demonstrated by the fact that the annual averages were 6.5 million dollars in 1940-49, 36 million in 1950-54, 73.6 million in 1955-59, and 165.9 million in 1960-63.

In relation only to 1951-60, the total volume of loans for industrial purposes paid by these bodies represented 20 per cent of all long-term loans received by the Latin American countries, and 10 per cent of domestic long-term loans for the industrial sector.[21/]

The proportions differ widely from country to country. In some countries, generally the smaller and less industrialized, where long-term domestic loans are particularly hard to come by, external loans, however small their volume in absolute terms, represent a large proportion of the total credits, even though the tendency has been for external loans to go mainly to the most industrialized Latin American countries, which also have the largest domestic markets and a more ample supply of long-term domestic credit.

Thus, for example, 88.7 per cent of the loans authorized by Eximbank and 89.5 per cent of its actual disbursements have gone to four countries, Argentina, Brazil, Chile and Mexico, while three others, Colombia, Peru and Venezuela, received another 7.6 per cent, leaving only 2.9 per cent for the remaining countries. The distribution of IDB loans between the same three groups of countries was 64.9, 14.7 and 20.4 per cent, and of International Finance Corporation loans 64, 34.6 and 1.4 per cent.

As to distribution within the industrial sector, funds have gone mainly to such highly capital-intensive industries as iron and steel, pulp and paper, chemicals, and cement, especially in the countries that have received the highest share of external loans. Medium-size industry, on the other hand, appears to have received less than 10 per cent of the total, through industrial banks and other similar national agencies.

21/ Attention is drawn to the provisional nature of the figures presented here, which in many cases are based on estimates not supported by well-grounded basic data.

/The allocation

The allocation of loans to given industries has been due mainly to the availability of projects that meet the requirements of the lending agencies. Consequently the possibility of channelling a higher proportion into the smaller-scale industries depends to some extent on the capacity of national planning offices in Latin America to draw up plans for the development of the industrial sector that will permit a more flexible type of operation, and also on the efficiency of the specialized State agencies concerned with the granting of external loans to medium-scale and small industries.

With respect to the form in which foreign loans are granted, one of the most important features for Latin American industrialists is the period of repayment. Thus far, even though, the periods have not been particularly long (rarely over eight or ten years), they are at least much longer than those for loans from domestic sources. Similarly, the interest rates are much lower, normally between 5.5 and 6 per cent, as against the very high rates for long-term domestic loans, or for the constant renewal of short-term or medium-term loans from the national bank. However, this is not always true of suppliers' credits from abroad, which often involve surcharges on the basic prices, as well as the interest charged by the supplier or the insurance agency acting for him, and the commission charged for the bank guarantee in the purchasing country which is always required.

Against the encouraging aspects indicated above, there are often a number of difficulties associated with the use of foreign loans for industrial purposes. These include such problems as the lag between the authorization and disbursement of the loan, and the obligation often attached as condition to the loan, to buy imported goods in the country granting the loan, usually on less favourable terms than could be obtained if the borrower were free to dispose of the funds as he wished.

(d) Direct foreign capital contributions

The same factors that have enhanced the importance of external loans - the inadequacy of domestic savings and the difficulty of converting them into terms of imports of production machinery and equipment - have also made the provision of incentives to direct foreign investment one of the

/primary objectives

primary objectives of financing policy in the Latin American countries. Furthermore, what is involved is the channelling not only of additional funds but also of foreign investment's traditional potentialities as a vehicle for the transmission of technology and the assimilation of more advanced organization and management patterns. These positive contributions must be weighed against the disadvantages that may attach to direct capital investment as compared with external loans, from the standpoint of its long-term cost (since it gives rise to a permanent flow of remittance abroad) and the competition with domestic enterprises to which in many cases it may lead. Thus, it is not only the nature of such investment but its modus operandi that is important: whether it contributes to the development of new undertakings entailing more exigent requirements in respect of capital and technique, or is channelled towards manufactures which would be within the immediate reach of domestic production capacity; whether it really represents higher levels of efficiency and productivity, or adapts itself more or less passively to the general conditions prevailing.

In most cases, the policy pursued by the Latin American countries with respect to foreign investment in the manufacturing sector has differed little from that applied in relation to foreign investment in general, and does not seem to have embodied many selective criteria directing such investment towards those branches of industry which are more highly capital-intensive and more exacting in their technological demands.

Interest in attracting a bigger flow of direct foreign investment has been particularly manifest since the mid-fifties. It has found concrete expression largely through over-all economic policy measures which have also served other ends, as in the case of the reduction or abolition of exchange controls on financial operations and the removal of obstacles to capital movements, as well as in that of internal stabilization efforts. These general measures have been supplemented by a wide variety of special provisions, relating to tax concessions and other incentives, guarantees respecting the remittance of profits and repatriation of capital for investment in specific activities, special systems of accelerated depreciation, etc. Broadly speaking, however,

/no organic

no organic body of regulations exists, and the series of measures adopted seems to have been the outcome not so much of a clearly-defined policy as of unwillingness to offer fewer inducements than other countries competing for foreign capital from the same sources.

Nor are there any important legal restrictions or provisions implying preferential treatment for domestic enterprises. Over-all industrial development legislation and other incentives and privileges are thus, with few exceptions, automatically extended to foreign firms. Moreover, encouragement has been given to the establishment of mixed enterprises in which domestic capital is associated with foreign private capital, the idea being that such a combination offers some advantages over foreign investment proper.

It will be useful, therefore, to present some systematized data on the effects of this policy, both as regards the amount of foreign investment that has been successfully channelled into the industrial sector - in absolute terms and in relation to total direct contributions from abroad - and with respect to the distribution of such investment by countries and its allocation to specific industrial branches and activities. Other special features of the policy's operation will also be touched upon.

Once again, considerable limitations are imposed by the statistical data available. Inter alia, such information is generally confined to United States investments, and does not give the same details on those of other countries. Admittedly, however the United States accounts for the major share of aggregate foreign investment in Latin America.

Over the long term, United States direct capital investment in Latin America does not seem to have grown particularly fast in relation to pre-depression levels or to the part it plays in other areas. According to estimates, by 1929 it had reached a cumulative total of about 7,220 million dollars (at 1959 prices), but after the depression an abrupt decline took place, followed by a relatively slow recovery, until levels similar to that of 1929 were once more attained in 1954-55. In 1962, total direct investment exceeded that 1929 figure by only 12 per cent. This evolution is in contrast with that of United States direct investment in other regions of the world. Starting from similar levels in 1929

/- 7,820 million

- 7,820 million dollars (at 1959 prices) -, which it regained in about 1940, it pursued an uninterrupted upward trend that sharpened after 1955, so that by 1962 its volume was two-and-a-half times greater than in 1929. As a result, the relative importance of the United States' investments in Latin America, which in 1929 had represented nearly half of its foreign investment throughout the world, steadily dwindled from 40 per cent in 1940 and 1950 to 34 per cent in 1955 and under 23 per cent in 1962.

Within this general picture, significant differences are observable in the share corresponding to investment in manufacturing industry. In other regions, the evolution of investment in this sector keeps parallel to that of total investment, so that the proportion it represents continues to hover, with very slight fluctuations, around 40 per cent. This does not apply to Latin America, where the relative importance of investment in manufacturing industry within total United States investment increased from 6.6 per cent in 1929 to 7.6 per cent in 1940, 16.5 per cent in 1950, 20.8 per cent in 1955 and 22.3 per cent in 1962. Thus, despite significant increments, it did not reach levels comparable with those steadily maintained in the rest of the world.

The direct investment placed in Latin America by other countries (in particular, the Federal Republic of Germany, France, Italy, Sweden, the United Kingdom, etc.) has followed different trends, since the two world wars, with their shattering impact on these countries' economies, virtually called a halt to its expansion throughout the period 1915-50. During the second half of the fifties, European investment steadily gained in importance, but even so, by 1962 it did not total as much as one-fifth of the amount corresponding to United States investment. On the other hand, the share of investment in manufacturing industry would seem to have been relatively greater, although the quantitative data available are insufficient to provide exact evidence.[22/]

22/ In Venezuela, for example (excluding the petroleum and mining sectors), at the end of 1964, allocations to industrial activities constitutes about 45 per cent of the total direct investment placed by eight European countries, whereas in the case of United States investment the corresponding proportion was a little under 40 per cent.

The basic data relating to the distribution of United States investment among the Latin American countries are presented in table 40, from which at least two major inferences can be drawn. Firstly, industrial investment is relatively highly concentrated in a limited number of countries; and, secondly, the proportion of the total constituted by direct investment in manufacturing industry varies very considerably from one country to another.

As will be noted, three countries - Argentina, Brazil and Mexico - absorb nearly 80 per cent of all direct United States investment in Latin American industry; and this proportion rises to nearly 90 per cent if Venezuela is included. In the three countries first mentioned, industrial investment accounts for over 50 per cent of their respective direct investment totals. This share is much bigger than in the other countries (39 per cent in Uruguay, where, however, the sums involved are relatively small in absolute terms; 26 per cent in Colombia; 14 per cent in Peru; and less than 10 per cent in all the remaining countries, including some in which industry is at a relatively advanced stage of development - for example, Chile, where the proportion in question is barely 4 per cent).

It is easy to see that a correlation exists between this geographical channelling of investment and the size of the domestic markets concerned, whose effects do not seem to be mitigated by the relative uniformity of the foreign investment policy pursued by almost all the countries of the region, which might have been expected to result in a more balanced distribution of investment resources. One explanation lies in the fact that such investment is directed as a rule towards import substitution activities geared to the domestic market, and only in exceptional instances, as will be seen later, towards the development of manufactures that might ultimately become export lines, in which case the size of the home market would not matter so much.

As regards the distribution of foreign investment by branches of industry, the categories given in the available statistics are usually too broad to be described with relative accuracy as dynamic or slow-growing, or classified with reference to the degrees of technological assimilation and capital-intensity involved in their development. In the particular

/Table 40

Table 40

AMOUNT AND RELATIVE IMPORTANCE OF UNITED STATES DIRECT INVESTMENT IN MANUFACTURING INDUSTRY IN LATIN AMERICA, 1963

Country	Total direct investment a/	Direct investment in industry a/	Proportion of total direct investment represented by investment in industry
	(Millions of dollars)		(percentages)
Argentina	828	454	55
Brazil	1 128	663	59
Chile	768	27	4
Colombia	465	120	26
Mexico	907	503	55
Panama	620	12	2
Peru	448	64	14
Uruguay	51	20	39
Venezuela	2 807	202	7
Other Latin American countries	635	29	5
Total	8 657	2 103 b/	24

Source: United States Department of Commerce, Survey of Current Business, August 1964.

a/ Book values, generally at original depreciated cost, and not necessarily reflecting current replacement values.

b/ The breakdown by country does not add to total in the source (because of rounding).

/case of

case of United States direct investment, its distribution seems to have gradually altered in conformity with the general changes undergone by industry in Latin America. For example, in 1929 investment in "food" was equivalent to more than half of manufacturing investment, while the addition of "chemicals and allied products" and "motor-vehicles and equipment" brings this proportion up to over three-fourths.[23/] Subsequently, the share of "food" progressively declined (to 20.2 per cent in 1950 and 14.4 per cent in 1955); that of "motor-vehicles and equipment" also decreased slightly (13.4 per cent in 1929 and 11.2 per cent in 1955),[24/] whereas there was an increase in the proportions corresponding to "chemicals and allied products" (from 10.4 per cent to 29.8 per cent), "rubber" (to 11.4 per cent), "primary and fabricated metals" (from 1.3 to 3.8 per cent) and "electrical machinery" (from 3.0 to 9.4 per cent). The share of the other branches of industry remained practically constant, at about 17 per cent. The outcome of this process was that by 1955 almost one-third of United States investment in manufacturing was concentrated in "chemicals and allied products", and a somewhat larger proportion in "food", "rubber", and "motor-vehicles and equipment". The industries manufacturing "chemicals and allied products" are located mainly in Mexico and Argentina, those processing "food" in Argentina and Brazil, and those producing "motor-vehicles and equipment" in Mexico, Brazil and Venezuela.

Other data, from national sources, afford a few additional indications of the patterns of direct foreign investment in manufacturing activities in specific countries. In Peru's case, for example, it is estimated that 86 per cent of the total was concentrated in petroleum-refining and the working of non-ferrous metals, while the remaining 14 per cent was distributed

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23/ See United States Department of Commerce, U.S. Investments in the Latin American Economy, Washington, 1957, p. 140, table 39.

24/ New United States investment in the motor-vehicle industry must certainly have increased this proportion since 1955. European investment has also shown a tendency towards concentration in this activity. No data are available, however, that afford more accurate evidence of these changes.

/over a

over a wide range of activities, including food processing (wheat flour and edible fats and oils), textile, footwear and clothing industries, tanneries, manufacture of chemical and pharmaceutical products, the cement industry and the metal-transforming industries. In Argentina, rather more than 40 per cent was channelled into the activities manufacturing or processing medicinal products, food and beverages, textiles, simple electrical appliances, tobacco, rubber, paints and varnishes, perfumery and toilet articles; 10 per cent was attracted to agricultural and forest industries, packing-plants and by products of animal origin; and less than 40 per cent was invested in the metallurgical, machinery and allied industries, industrial chemical products, building materials, glass and plastics.

Taken as a whole, these fragmentary indications suggest the absence of any clearly-defined criteria such as might have guided foreign investment into specific manufacturing activities that were more difficult to develop through the recruitment of domestic resources. Rather it would appear to have been distributed over a complete cross-section of Latin America's industrial structure, joining with domestic enterprise in various fields. The recent development of the motor-vehicle industry, on the other hand, seems to constitute an exception, as in several countries it is primarily in the hands of foreign firms.

These are, of course, broad generalizations, and it must not be forgotten that the situation may differ substantially from one country to another. This is indirectly attested by data on the input of capital per person employed in United States industrial enterprises operating in Latin America, although the figures are somewhat out of date (they relate to the year 1955) and may have been considerably modified in recent periods. According to them, while the average amount of capital investment per worker was about 8,100 dollars, levels approaching or exceeding 12,000 dollars were registered in Brazil, Mexico, Peru and Venezuela, as against 3,800 dollars in Argentina and 5,300 in Chile.

Just as the distribution of foreign direct investment by branches of industry seems on the whole to have followed the pattern prevailing

in domestic industry, no very different policy was pursued with regard to the markets of destination of the corresponding production. It is estimated, for example, that in the case of manufacturing enterprises based on United States capital over 94 per cent of the sales registered in 1955 were effected in the internal markets concerned, this proportion dropping to 91 per cent in 1963. In the course of those eight years, therefore, the share of exports only represented from 6 to 9 per cent of the sales of such enterprises, despite the fact that they included some goods which represent a low level of processing of primary products; whereas exports accounted for about 60 per cent of the United States' aggregate direct investment in non-manufacturing activities.

Some attention should also be devoted to a few data on the percentage relationships between foreign investment and domestic capital. In this connexion, a study by the United States Department of Commerce[25/] reached the conclusion that in 1957 the capital of United States firms -- industrial and non-industrial -- operating in Latin America was distributed as follows: 85 per cent in enterprises with more than 95 per cent of United States ownership; 12 per cent in enterprises in which the corresponding proportion ranged from 50 to 95 per cent; and only 2 per cent in undertakings in which the United States owned less than a half-share. This structure was virtually the same as it had been in 1946; according to estimates, however, the tendency to operate in association with local capital has been growing more marked since 1957, partly, it would seem, on account of the higher proportion of investment allocated to manufacturing industry, where the procedure in question is commoner.

Research on investment in industry carried out in 1957[26/] in 115 industrial corporations, with 411 affiliates in Latin America, reveals

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25/ United States Department of Commerce, U.S. Business Investments in Foreign Countries, Washington, 1960, p. 101, table 13.

26/ See Raymond F. Mikesell (ed.), U.S. Private and Government Investment Abroad, University of Oregon, Eugene, 1962, pp. 80-81, table IV-1.

/that 82 per

that 82 per cent of the latter were "subsidiaries" (i.e., 51 per cent or more of the voting stock was owned by the United States corporation), 4 per cent were "branches" (wholly owned by the corporation) and only 14 per cent were "associated companies" (50 per cent or less owned by the corporation). Similar proportions are recorded for affiliates of the same corporations in other regions of the world. Considerable differences are observable, however, among the various countries. Thus, for example, the proportion of the total number of affiliates represented by associate companies is 23 per cent in Chile and 21 per cent in Argentina, remains very close to the average (14 per cent) in Brazil, Colombia, Mexico and Venezuela, and stands a good deal lower in other countries, including Peru, where it is 5 per cent.

To sum up, the Latin American countries do not seem to have succeeded in attracting an increasing proportion of international movements of private capital towards their respective economies, at least in relation to the United States direct investment channelled into other areas. In contrast, the average share of such investment allocated to manufacturing industry has increased, although with striking differences from one country to another. In this connexion, the relative uniformity of the incentives and terms usually offered to foreign direct investment has not made for wider geographical distribution of investment in industry. On the contrary, such investment is intensively concentrated in those three or four Latin American countries where the domestic market is largest in absolute terms. This state of affairs is linked in turn to the fact that foreign enterprise has directed its activities on much the same lines as domestic industry, giving priority to import substitution activities and making no major effort to develop new manufacturing export lines.

/The distribution

The distribution of investment by branches of industry has also been very similar, with the result that its potential contribution to the expansion of the basic structure of Latin American industry and to the more rapid absorption of technology has not fully materialized. Again, most of the enterprises in which investment has been placed have retained the status of subsidiaries of corporations with their head offices abroad, the real share of associated domestic capital being very modest.

The foregoing observations, of which the principal aim is to evaluate the scope and efficacy of the domestic policy instruments bearing on foreign investment, must not be interpreted as underrating the latter's contribution to Latin America's industrial growth. Some of the trends indicated - for example, the proportion of sales represented by exports, or the degree of association with domestic capital - have become more markedly favourable of late, and at all events their significance in absolute terms is by no means negligible.27/

27/ It is estimated, for example, that foreign companies accounted for about 3.5 per cent of the industrial product in 1955 and nearly 6 per cent in 1963. Moreover, in recent years they contributed approximately 10 per cent of total investment in manufacturing industry in such countries as Colombia and Peru, while in the case of Argentina their share rose from 3 per cent in 1953 to 7 per cent in 1957 and to a peak of 13 per cent in 1959, standing at around 10 per cent in 1960 and 1961.

3. Agencies concerned with the formulation, application and control of industrial policy

The inference to be drawn from all that has been said in the present chapter, and particularly in its first section, is fairly obvious. Broadly speaking, industrial policy in the Latin American countries is deficient in co-ordination and continuity. The lack of continuity would be still more in evidence if, instead of the references to the past that have been rather sporadically made when specific topics have given occasion to do so, a systematic study of the changes of policy recorded during a significant period in any of the countries of the region were to reveal how frequent and far-reaching they have been.

Several factors seem to have been responsible for the want of continuity. As has been pointed out, industrial policy has been, up to a point, a mere by-product of the pursuit of more general objectives, and has therefore tended to alter its course with every change in the circumstances by which these objectives have been determined, often without due consideration of the potential effects of such changes on the specific conditions attending industrial development. For the same reason, the incentives accorded through particular instruments are usually weakened or cancelled out by other provisions or measures whose motivation has nothing to do with industrial development aims. Nor has it always been possible for industrial policy to look sufficiently far ahead. For this the indispensable requisite would be a long-term frame of reference. Only by its means could immediate needs be evaluated in relation to objectives broad enough to evoke, as criteria on which to base decisions, considerations of future expediency and desirability bearing on the very structure of industry and on the essential guidelines it should follow. Hence it is that as a rule the incentives provided have been of an over-all and not very selective type, directed towards the manufacturing sector as a whole, and making little distinction between specific industrial branches or activities.

It is for this reason, too, that in some basic respects what might be considered the determinant of a Latin American industrialization

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"strategy" stem from the cumulative effects of relatively spontaneous trends rather than from rationally matured decisions. The possibilities of combining import substitution efforts with endeavours to promote and diversify exports of manufactured products; the relative importance of looking towards the market for final goods or towards the integrated industrialization of domestic resources; the location of industrial activity within each country and in the region as a whole: the most recommendable form of absorption of technology; all these questions, and as many more, are being settled in practice, it would appear, without the guidance of a clear-cut and continuing industrial policy.

The relative importance of the various instruments has also undergone changes, in the course of time, which create the impression, in some instances, of an attempt to amend or reorientate those formerly preponderant rather than steadily to broaden and improve industrial policy as a whole. The background information outlined in preceding sections suggests that throughout a whole phase, which culminated in the early forties, the encouragement given was chiefly confined to protectionist expedients; thenceforward, the State undertook direct promotional activities, which did not bear their most important fruit until the beginning of the fifties; and subsequently emphasis was laid on indirect incentives provided through over-all development measures. In some countries, the last-named were supplementary to the continuance of an energetic State promotion policy, but in others they seem rather to have superseded it, although there was no reason why the two lines of action should have been imcompatible.

The importance of these aspects of the problem would be more readily grasped if they were illustrated with a classified list of the various public bodies that, in the last analysis, are concerned with the formulation and application of industrial policy in some of the Latin American countries. It would be necessary to begin with those that exert an indirect influence, through over-all economic policy measures: the Ministries of Finance, monetary authorities, boards of foreign trade and similar machinery, and the rest of the instruments relating to monetary, tax, credit, exchange and tariff policies or to import and export controls; the Ministries of Labour and Social Security,

/and other

and other agencies having to do with wage policy; the Ministries of Economic Affairs, or agencies more specifically responsible for price policy; the ad hoc committees or boards empowered to decide on questions of foreign investment, etc.

A second category would include those bodies which share in the work or responsibility of formulating specific aspects of industrial policy. In contrast with the lengthy list in the preceding paragraph, what is likely to be noted here is a shortage of efficacious machinery. More often than not, over-all industrial development measures are nothing but a heap of successive laws and resolutions that can hardly be traced to any over-all criterion. In cases where they have been assembled into a more organic whole, the necessary move has frequently been made by the Industrial Divisions or similar departments of the Ministries of Economic Affairs or of Development, which are responsible for seeing that certain requisites are complied with. Industrial credit policy proper, and measures to promote the installation of new industries, have often been left in the hands of the executing agencies themselves, which are handicapped by the lack of clearly-defined guiding principles. Consequently, the industrial activities that are absorbed or undertaken by the State are usually the product of a mere process of aggregation, and come to constitute veritable watertight compartments; they have no proper lines of policy, no central authority to set up standards of productivity and efficiency, and no appropriate auditing systems. The same factors undermine the effects of State promotion of private enterprises and of the industrial credit supplied by public bodies, which are thus more exposed to the influence of pressure groups.

In the field of application of industrial policy, there is once again a multiplicity of agencies, with the resulting duplication of functions, and the more nebulous are the general guidelines laid down, the more detrimental do these characteristics prove. Except for a few organizations which adopt an integrated approach to the various aspects of development in the areas they specifically cover, a proliferation of local instruments is superimposed, in some instances, on a large number of agencies operating at the national level, and the existing problems are thus aggravated. Lastly, institutions responsible for supervising the results of industrial policy, with a view

/to evaluating

to evaluating its efficacy and making timely suggestions as to the reforms or changes of course that experience seems to advocate, are few and far between, or limited in their terms of reference.

In this institutional framework, private enterprise cannot respond with full vigour to the incentives offered. It is seldom consulted in connexion with the formulation of industrial policy, whose lack of continuity drives it to base its decisions on short-term objectives, rather than on more lasting and far-reaching prospects.

Some measure of institutional dispersion is inevitable, and to a great extent necessary so that different functions can be fulfilled by different specialized agencies. But this does not obviate the need for a central organization to formulate industrial policy at the appropriate level, or for the concurrent availability of suitable co-ordination machinery.

The work involved will be facilitated as Latin America perfects its development planning efforts and overhauls its administrative organization accordingly. Planned industrial development may help to ensure that industrial policy has the requisite cohesion and continuity; to increase the efficacy of promotional activities on the part of the State; and to provide opportunities, through the planning machinery itself, for the private sector to play an active part in the formulation and periodic revision of the policy in question.

Chapter IV

INDUSTRIALIZATION PROSPECTS IN LATIN AMERICA

1. New industrial development requirements

The foregoing analysis of Latin American industry, covering its past history, its main characteristics at the present time, and the industrial policy that has influenced its development, suggests a few general conclusions which, in their turn, are useful indications of what are likely to be important aspects of the sector's future evolution.

In brief, the study of previous growth trends highlights the following points: through the operation of various factors, the Latin American countries - some of them for a long time past - have found themselves faced with particularly exigent industrialization requirements; these requirements are only partly satisfied by the industrial development actually achieved, which in recent periods has been betraying manifest symptoms of weakness, at least in relative terms; at the stage now reached, very considerable differences are to be found among the various countries of the region as regards their industrial growth. Lastly, despite these divergent situations, nearly all of them are passing - more or less at the same time, although for different reasons - through crucial phases of their respective industrialization processes, whose way ahead is beset by formidable obstacles.

The study of the industrial sector's present characteristics, in its turn, helps to define the scale of other basic problems, such as the marked geographical concentration of industry; its high costs and prices; and its structural and institutional disequilibria, deriving from insufficient internal integration, from the superimposition of widely differing types of enterprise and patterns of organization, and, therefore, from great disparities in the levels of productivity attained.

Finally, an attempt to evaluate the industrial policy pursued in the past shows that although it has made valuable contributions, it has lacked cohesion and continuity. These and other weaknesses, in the last analysis, can hardly be remedied otherwise than within the framework of effective industrial planning.

/In more

In more than one respect, projections indicate that the industrialization requirements noted in the past will be intensified in the future, while it is easy to foresee that in order to meet them development patterns different from those previously followed will have to be worked out, as has been shown in earlier chapters. The weaknesses referred to above affect even the dynamic factors that speed up the industrialization process, including import substitution activities, which will no longer be able to play the leading role, and will have to give place to new driving forces, linked rather to the expansion of internal demand. But in addition, the stages through which industrial development has passed - given the special conditions peculiar to each country - have brought it to a point at which it must be recast in new moulds, with particular regard to the requirements stemming from the gradual integration of Latin American industry.

Discussion of the requisites and probable implications attaching to these changes in industrialization patterns must be preceded by somewhat more detailed consideration of the new demands - as well as the new opportunities - with which industrial development in the region as a whole and in each of its individual countries seems to be confronted. It might also be appropriate to add a few remarks of a more general character, relating to the actual direction that should be taken by the industrialization effort in Latin America.

It would be a mistake to interpret the process from the restricted angle of the expansion of production capacity and of output of manufactured goods without viewing it in the broader perspective of the social and cultural change with which it must of necessity go hand in hand. In this context, the industrial process, in the strict sense of the term, is only the means to the end that consists in building an "industrial society", characterized by the features commonly attributed to it: a rational organization of production, both in manufacturing and in the other sectors of the economy, which in turn implies the extensive application of science and technology throughout the whole field of production of goods and services; an equally extensive participation

of the population in consumption, so that the benefits of technical progress reach all social groups; and an "open" social stratification system, supported by modern methods of education capable of forming the necessary talent and equipping the whole population to understand and take part in the industrialization process.

This entails the combined operation of several factors: firstly, social aspirations, in terms of better levels of living for the individual and for the community, equality of opportunities, and social and economic security, including security of tenure in employment; secondly, scientific absorption of technology, and ability to adapt it to the specific conditions of the environment, so that it may provide new stimuli to growth, and, lastly, an economic organization consonant with these aspirations on the part of society and meeting the requirements for the efficacious application of technical advances.

In the light of the typical qualities of an industrial society, some of the limitations of Latin America's industrialization effort up to the present time may be recognized, and this in turn may help to ensure that future endeavours are directed along more satisfactory lines.

For example, some of the data presented in earlier chapters would seem to suggest that, up to a point, industrial development has represented a sort of enclave within the traditional organization, not as sharply-defined and certainly much broader than that sometimes constituted by specific activities based on foreign capital and geared solely to primary exports, but none the less significant for that. In other words, the industrialization process has not been accompanied by sufficiently radical changes in the structure of society or in the economic structure of other sectors, to which, on the contrary, industrial growth patterns have had to be adapted. This is partly because in many instances the industrialization process was set going less by internal factors than by the impact of external events, and the subsequent development of industry, from the economic, cultural and technological standpoints, has been equally dependent upon foreign influence.

/In essence,

In essence, the assimilation of technology has been a passive process, consisting mainly in training in the operation of new production equipment, but not affording sufficient mastery to provide a basis for creative activities that might have been reflected at least in the adaptation of technical progress at the world level to the special conditions of the Latin American environment. Even this passive absorption is concentrated in specific sections of the production system - in the economy as a whole and within the manufacturing sector itself - so that veritable strata of technology have been formed, with strongly-marked differences between them. It would thus be more appropriate to speak of the superimposition than of the assimilation of technology, and of training in the use of techniques transplanted from abroad, rather than of technical know-how. Obviously, there is no question of under-rating the tremendous source of benefit represented for the developing economies by the technical advances achieved through the efforts of more highly developed countries; the matter at issue is the ability to understand them and turn them to account in situations with special characteristics of their own that sometimes include a different set of available resources, whose economically efficient exploitation by virtue of science and technology is another essential long-term development requisite.

Nor has Latin America succeeded - as can be deduced from evidence to which reference has been made in previous chapters, and will be made again later - in buttressing its industrial development by extensive popular participation in consumption. The real markets for several categories of manufactured goods have been constituted by relatively small sectors of the region's population, while other groups, especially in the rural areas, take little or no share in consumption of the goods in question, using only a few essential industrial products. The possibilities opened up by mass production, and the opportunities for rapid expansion, have thus been thrown away. Hence, too, the frequent tendency for import substitution activities to be much more dynamic in character than the growth of domestic demand.

/The persistence

The persistence of archaic patterns of land tenure and use is perhaps the most eloquent testimony to the fact that industrial development has not been accompanied by a simultaneous metamorphosis of the traditional structure of society. To this is linked the aforesaid total or partial exclusion of the rural population from participation in modern patterns of consumption, as well as the failure of technical assimilation to reach a high proportion of the agricultural sector, which thus has no chance of applying new methods of farming that in their turn signify additional markets for expanded manufacturing production.

In short, it must be recognized that in existing conditions there is a marked dephasing between those social aspirations that can be summed up in the desire to establish an industrial society, and the corresponding reforms in the traditional social structure, including provision of the training required if science and technology are to be used as basic instruments of development. These are factors bearing on fundamental aspects of industrialization in Latin America; but to analyse them in detail is beyond the scope of the present study, in which they are merely mentioned by way of acknowledgement that a productive interpretation of the process calls for a broader perspective than is afforded by economic considerations proper, although further allusion to some of them may be made in a more specific context.

It is also worth while to bear them in mind for the purposes of defining what are described throughout the following pages as new "industrialization requirements". The application of this term to the factors of which mention will be made might give the impression that the responsibilities concerned are incumbent solely on the manufacturing sector, when as a matter of fact their discharge depends upon much broader decisions and lines of action. A dephasing of the kind mentioned above cannot go beyond certain limits since the archaic patterns of a few sectors hamper possible changes in others. Thus in default of other basic reforms industry could not be expected to develop at a particularly rapid rate, nor would significant changes be likely to

occur spontaneously in its growth patterns, which in the last analysis are determined by characteristics of the social structure that the industrial sector alone is powerless to alter.

Thus, it is in the context of this interdependence between economic factors and those of a social and cultural nature that a place may be found for the more specific considerations formulated below, in relation to possible determinants of change in the over-all economic framework within which the region's industry has been developing.

(a) The general economic setting for future industrial development

With this last end in view, it may be useful, in the first place, to review the over-all development policy that has been taking shape in Latin America during recent years. An attempt will be made to pick out those of its characteristics which may exert a significant influence on the rate and patterns of industrial growth.

In very general terms, attention may be drawn to a few salient features of this new development policy. The first of these is the decision to organize systematic efforts aimed at ensuring the attainment of minimum growth targets for per capita income, and to use planning as a basic means to that end. Secondly, it is recognized that such a policy must incorporate specific income redistribution objectives, which implies, inter alia, acknowledgement of the need for agrarian reforms. Thirdly, the condition in which such efforts and decisions are undertaken or adopted will be likely to include progressive modifications of the structure of international trade, with the result that developing areas will enjoy opportunities of expanding their trade more rapidly and will see an improvement in the stability of their external income, as well as changes in the composition of their trade that will make for the incorporation of manufactured products into the traditional export flows of the less developed countries. Lastly, essential elements in this new policy are the instruments already created to promote the progressive integration of the Latin American economy, and the conviction that these instruments must be amplified and perfected if the proposed objective is to be more rapidly and efficaciously achieved. Clearly, such a set

/of decisions,

of decisions, as it gradually finds expression in practical action, is destined to exert a powerful influence on over-all development conditions, and therefore to determine industrialization requirements and patterns which may differ considerably from those prevailing in the past.

For example, in the future manufacturing industry will presumably develop in the context of higher over-all economic growth rates than in earlier periods, and will also have to play a leading part in accelerating the upward trend of per capita income. In all likelihood, moreover, industrial development requirements will increase more than porportionally as a result, since at the present stage of Latin America's development, the faster income increases, the higher the elasticity of demand for manufactured goods is liable to become. The analysis of past experience contained in chapter I of the present study led, as will be recalled, to the conclusion that over the long term the ratio between the growth rate of industry and that of other sectors of the economy has not been as high as might have been expected in Latin America, partly, no doubt, on account of the rapid rate of increase of the population and the consequently very modest growth rate of the per capita product. In these circumstances, a considerable proportion of the income increment has to be used for basic subsistence needs, and the diversification of demand is necessarily a slow process, except in those small population groups in whose favour the regressiveness of income distribution has operated. In contrast, not only might a more rapid rate of increase of per capita income be reflected in a proportional expansion of demand for manufactured goods, but also its effects in that direction might be strengthened as the demand in question acquired a higher degree of elasticity.

The discharge of the heavier responsibility which would thus be laid upon industrial development would in its turn be facilitated by the fact that a planned economic and social development policy would provide incentives and guiding principles conducive to the expansion of industry. As has been shown, hitherto industrial policy has not always followed clearly-defined and consistent lines, and the lack of proper co-ordination has often caused piecemeal measures or activities to produce contradictory effects, thus frustrating all endeavours to encourage more rapid and more

organic industrial development. The same shortsightedness with regard to expansion requirements in respect of each sector, within the framework of balanced development, has sometimes created severe competition for the allocation of financial resources, the issue of which has more than once been decided in favour of primarily speculative activities, to the detriment of the manufacturing sector's chances of expanding its production capacity faster. These and other difficulties which were discussed in detail in chapter III of the present study, are at least mitigated with the progress of planning efforts, by means of which it will be easier to evaluate in advance the real magnitude of requirements in respect of industrial development and changes in the structure of industry.

The extent to which considerations of this kind are beginning to have some practical effect on the industrialization process can be assessed from the content of the first over-all development plans formulated by some of the Latin American countries. For example, the aggregate domestic product growth rates postulated in the plans of seven countries of the region, although relating to different periods and time limits, reach about 5 per cent in the case of Paraguay, between 5 and 6 per cent in that of Argentina, Chile, Colombia and Mexico, a little over 6 per cent in Ecuador and nearly 8 per cent in Venezuela. Furthermore, while in these initial plans the emphasis is placed on the need to give priority to social investment and services that have been comparatively neglected in the past, forecasts of the requirements that would derive from a properly balanced development process have led to the postulation of industrial growth rates considerably higher than the over-all rates of increase assumed for the product: about 7 per cent per annum in the plans drawn up by Chile and Mexico, between 7 and 8 per cent in those of Argentina and Ecuador, between 8 and 9 per cent in those of Colombia and Paraguay, and 12 per cent in Venezuela's.

Accordingly, the industrial development implications attaching to the over-all objective of accelerating the growth of per capita income, as reflected in national plans like those mentioned, are plain to be seen. On the other hand, equally explicit proposals have not been formulated with respect to the redistribution of the fruits of development.

/In any

In any case, although plans do not so far reflect, as a rule, very radical decisions in respect to income redistribution, this aspect of the problem will probably come to the fore in the future. Hence it is worth while to consider how far additional and more ambitious redistribution aims would affect the foregoing projections of industrial development rates in the next few years. 1/ To this end, it is enlightening to review the estimates of the differences in the structure of consumption as between different social sector, or between categories of consumers grouped by income steps, which are available for some of the countries of the region, and were presented in chapter II of this study. An attempt will later be made to generalize data of this type in the form of a few hypothetical calculations showing the probable effects of redistribution policy on the volume and composition of demand for consumer manufactures. For the moment, suffice it to recall that the data in question clearly reveal how high a proportion of the family budget in the lower income sectors is represented by necessary expenditure on food, and how tiny are the margins available for the purchase of manufactured goods other than foodstuffs. A considerable proportion of the expenditure of the higher income groups, on the other hand, is devoted to services and luxury goods, and these consumption patterns too are unlikely to generate any very strong incentives to domestic industrial production. Hence it is that income redistribution, linked with over-all income growth, involves a potential increase of demand for manufactured goods which may be reflected in a large-scale expansion of individual country markets. Furthermore, it would have a particularly marked effect on manufactures for mass consumption thus giving a new dynamic impetus to branches of industry whose characteristics in the past have relegated them to the category of "slow-growing industries". Such a development would be of special importance, inasmuch as industries of this kind, which at present register the widest margins of idle capacity, are usually less capital-intensive and afford relatively greater opportunities of absorbing manpower.

1/ For quantitative data on the characteristics of income distribution at present, both in Latin America as a whole and in specific countries of the region, see The economic development of Latin America in the post-war period, op.cit.

/It should

It should also be borne in mind that the remarks formulated in the context of income distribution related only to urban population groups, and that the problem becomes still more serious when rural income is taken into account as well. For in the rural areas is to be found a substantial proportion of the Latin American population which is virtually excluded from consumption of manufactured goods, except for a minimum of clothing and other indispensable items. Although the income of this rural population is determined primarily by the low levels of productivity prevalent in agriculture, it is also largely influenced by an income distribution pattern that is even more regressive than in the urban sectors. With the probable exception of those rural population groups engaged in production for export under land tenure systems in which small and medium-sized holdings predominate, the regressiveness of rural income distribution is in its turn closely linked to institutional factors. Agrarian reform thus emerges as one of the requisites for industrial development, in so far as it represents the possibility of a considerable expansion of domestic markets for consumer manufactures. Furthermore, its potential effects on demand are not confined to industrial consumer goods, but also extend to those intermediate products which constitute agricultural inputs, as well as to agricultural machinery and equipment, of which far more use will be made as new patters of agricultural development are introduced.

A few illustrative data may be cited in this connexion. For example, in several countries of the region the figures for application of fertilizers in 1962-63 were in the neighbourhood of 15 to 20 kilogrammes of plant nutrients per hectare of arable land, as against about 50 kilogrammes in the United States and Italy, 85 in Israel, over 100 in France and 270 in Japan. Consumption of pesticides and other important inputs was also very low. As regards the level of mechanization, the number of tractors per thousand hectares of arable land, in the same period, was about 4 in Argentina, Chile and Colombia, as against 20 in Israel and Italy, 25 in the United States and some 40 in France. 2/

2/ The areas taken into account for the purposes of these estimates represented about 30 million hectares in Argentina, 10 million in Brazil, a little over 5 million in Chile and Colombia, 20 million in Mexico, 21 million in France, 15.5 million in Italy, 185 million in the United States, 6 million in Japan and approximately 400,000 hectares in Israel.

/Thus it

Thus it is easy enough to anticipate how future industrial development rates and patterns may be affected by the gradual reorientation of Latin America's over-all development policy, as regards factors connected with internal demand. In addition, there are others more closely linked to external demand, and relating both to extra-regional and to inter-Latin American trade.

As regards the former, the United Nations Conference on Trade and Development constituted a first step towards the ultimate remodelling of the structure of world trade in such a way as to open up new prospects for the developing countries. Over and above the discussion of questions relating to the removal of obstacles and restrictions that impede the expansion of primary exports, to the stabilization and improvement of primary commodity prices to the establishment of efficacious compensatory financing machinery to offset the deterioration in the terms of trade, and to revision of the principles and scope of international financing co-operation, special attention was devoted at the Conference to the possibilities of remedying the inadequacy of primary exports even under conditions more favourable than those existing at present, through the development of new lines of industrial exports from the developing countries to the industrialized countries' markets. This objective in its turn entails an international effort covering not only facilities for the access of manufactured and semi-manufactured goods to the markets in question, but also co-operation in the task of improving the industrial production capacity of the less developed countries.

The wishes and aims of these latter were mainly concerned with obtaining, on a basis of non-reciprocity, preferential treatment in the industrialized countries for manufactures and semi-manufactures from the developing countries; with the reduction of tariff duties; and with the elimination of quantitative and other non-tariff restrictions. In the proposals emanating from the Conference it was recognized, however, that the less developed countries must take steps to prepare themselves for exporting significant volumes of industrial products, since the advantages in respect of access to world markets that they might secure through the elimination of restrictions or under a preferential system could not

materialize unless they substantially improved their existing production conditions, marketing systems and administrative organization. In more specific terms, attention was drawn to the need for the developing countries to gear their industrialization policies to the reduction of manufacturing costs, so that they would be able to offer their products in the world market at competitive prices. One of the possible means to this end would be the revision of their protectionist policies with a view to more careful selection of the industries eligible for protection, and to the allocation of sufficient resources to those branches of industry which hold out the best export prospects. Trade policy and administrative organization, as was likewise pointed out, would have to be adapted to the new circumstances, and it was recognized that the export effort would call for the parallel adoption of monetary and fiscal policies calculated to provide incentives and facilities for export industries in an atmosphere of stability. 3/

Thus, from this angle too there are new opportunities in prospect which may come to constitute very important determinants of the future rates and patterns of Latin America's industrialization process. No preferential agreements are under discussion as yet, but at least certain basic principles have been laid down and instruments for the prosecution of the task in hand have been established. Furthermore, it can be inferred that however favourable conditions may become for the Latin American countries' increased participation in world trade in manufactured products, major efforts will have to be made to ensure that these new export flows acquire significance from the standpoint of the region's total capacity to import. Clearly, too, such efforts, far from being incompatible with another objective which is considered of basic importance for the development of the region - the economic integration of Latin America - would be facilitated by its attainment. A later section of the present chapter will be devoted to careful consideration of integration from the

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3/ For a detailed account of these and other subjects of discussion, see The United Nations Conference on Trade and Development: analysis of the results and prospects for Latin America (E/CN.12/714).

angle of its implications in respect of the subsequent industrialization process; for the moment, therefore, it will be sufficient to formulate a few general conclusions.

As was noted in earlier chapters, in existing conditions integration tends to reveal itself not merely as an instrument for securing certain immediate benefits that will facilitate the region's development, but as an increasingly imperative necessity, if that development is to take place. The progressive exhaustion of import substitution opportunities within the strictly national economic frontiers plays a major part in determining this need, for the twofold reason that the obstacles originating in the external sector have not been overcome and that substitution has hitherto constituted the mainspring of Latin America's industrial development. Another of the conclusions suggested was that despite the marked disparities in the levels of industrialization attained by the various Latin American countries, the need for effective trade and complementarity agreements is arising in all of them at more or less the same time, although for different reasons: in some, because their import coefficients have sunk to extremely low levels; in others, because the smallness of their domestic markets makes continued industrial growth difficult, even though their import coefficients are still relatively high. Accordingly, the effect of the disparities is to intensify the need for integration instruments that will efficaciously equalize opportunities of obtaining benefits, rather than to make integration a more urgent necessity for some countries and a less immediate objective for others.

The nature of the instruments used is of fundamental importance if due allowance is to be made not only for the existing disparities in the levels of development of the various countries, but also for those other factors which have been pointed out as potentially significant determinants of the future course of industrial development, and which include planning, income redistribution and other structural reforms.

(b) Quantitative assessments of future industrial development requirements

These are, in mainly qualitative terms, some of the possible characteristics of the over-all economic development situation within which the industrialization process will be taking place during the next few years. They represent factors of basic importance, destined to exert a decisive influence on the rates and patterns of industrial growth, and at the same time constitute objectives whose attainment will largely depend upon the manufacturing sector.

It would be very useful if the industrialization requirements that might be generated by the factors in question could also be evaluated in quantitative terms, even if only very roughly. But there are not enough data available for an attempt to formulate relatively accurate estimates. As could be seen in the relevant section of chapter II, even in the preparation of a systematic table of the current volume and composition of supplies of manufactured goods, formidable methodological and statistical stumbling-blocks are encountered. 4/

With regard to projections of future development, the difficulties are still greater, despite the availability of the plans already drawn up by a fair number of Latin American countries. These plans vary widely in character, and even in the amount of detail they include and the periods they cover, and, moreover, are not usually explicit enough as to how far they incorporate and take into account the effects of such important factors as regional integration prospects and possible changes in internal income distribution.

4/ For example, at the purely theoretical level important questions of definition arise, as in the case of valuation criteria. The comparison or aggregation of figures relating to the different countries entails selecting exchange rates to convert data expressed in terms of the corresponding national currencies into terms of common units; and the addition of domestic production values to import values presents yet another problem, inasmuch as gross ex-factory production values - sometimes subject to indirect taxation whose incidence is considerable - have to be the c.i.f. taken in conjunction with values of imported goods.

/Notwithstanding these

Notwithstanding these obstacles, the possibilities of attempting to quantify the most significant orders of magnitude must be explored, even if at a purely conjectural level. By this means it will be possible to analyse industrial development prospects somewhat more thoroughly in the light of the new trends in over-all development policy to which reference has been made.

A useful starting-point may be the rough estimate of the region's total available supply of manufactured goods in 1960 which was presented in chapter II, including the indications given as to sources of supply and the break-down by major categories of manufactures.

As will be recalled, in 1960 the total supply of manufactured products available in sixteen Latin American countries for domestic use (excluding exports) would seem to have amounted to about 51,600 million dollars, of which some 44,500 million represented domestic production and a little over 7,100 million corresponded to imports. This aggregate supply can in turn be broken down as follows: intermediate products, approximately 18,100 million dollars; final consumer goods, about 26,700 million dollars; and capital goods, 6,850 million dollars.

In order to evaluate future supply requirements, a period of reference would have to be selected and certain hypotheses of the probable growth rate of per capita income would have to be postulated. This in turn might give rise to a set of alternative projections, in line with various assumptions as to rates of growth and relating to different years. In view of the purely illustrative character of the estimates to be presented, the analysis should be simplified as far as possible, for example, by relating all projections to the year (not predetermined) in which the total product for Latin America as a whole doubles that registered in 1960. On the assumption of a cumulative annual population growth rate of 3 per cent, this situation would materialize in about sixteen years if the annual rate

/of increase

of increase of the per capita product were 1.5 per cent, in about 13 years if it were 2.5 per cent and in 11 years if it reached 3.5 per cent.[5/]

Thus, the problem may be stated as follows: What forecasts of the rate of development can reasonably be formulated, and what changes in the composition of manufacturing industry would have to accompany the doubling of the total Latin American product? Although a very rough first approximation might be obtained by the application of over-all coefficients deduced from international experience, to which allusion has been made in earlier chapters,[6/] this proceeding seems inadvisable in so far as the conditions peculiar to the region's probable development in the next few years would not be taken into account. Nor would the coefficients in question afford means of estimating possible changes in the structure of the manufacturing sector, an equally fundamental requisite for the reconsideration of industrial policy. Thus, at the risk of over-elaborating calculations which are none the less purely hypothetical, it is worth while to attempt a more detailed presentation, differentiating as far as possible between categories of manufactures or branches of industry.

Since one of the major objectives of the development policy that is being advocated is to secure more rapid growth than in the past, it seems logical to assume that the effort involved will have to be reflected in an increase in investment coefficients, i.e., a higher proportion of the total

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5/ These simplification hypotheses do not in fact completely solve the problem of selecting a given rate of increase of the per capita product as a benchmark, since from the standpoint of the evolution of demand for manufactured goods, it is not a matter of indifference whether the total product is doubled within a relatively short period or in a longer space of time. Whenever an assumption as to the growth rate of income must inevitably be included, even though implicitly, the intermediate hypothesis will be adopted. It may thus be concluded that the projections will relate approximately to the year 1973, since the basic data correspond to 1960.

6/ Various analyses have coincided in deducing that the average elasticity of the industrial product in relation to the total product is about 1.4. Given this ratio for the whole period of the projection - thirteen years - the cumulative annual rate of industrial development would have to average 6.9 per cent if the total product were to be doubled in a period of 13 years.

product than hitherto will be allocated to capital formation. As a result, the growth rates of demand for consumer manufactures and for capital goods will necessarily differ.

Accordingly, as an additional hypothesis, it may be assumed that the coefficient in question will gradually rise from its average level of 17.5 per cent to one 20 per cent higher in the approximate future period to which these projections relate, an assumption which would imply an over-all coefficient of 21 per cent.[7/] Were this to happen, it would mean that the consumption increment that could be achieved through the doubling of the total product would be in the neighbourhood of 90 per cent.[8/] The possible significance of this increase in terms of an expansion of demand for consumer manufactures would in turn depend upon several factors, of which the most strongly operative would be the average elasticity of consumption of manufactured goods in relation to total consumption. Influence would also be exerted by the latter's composition in terms of private and public consumption, which is sure to undergo considerable change in the future as a result of the importance that is being attached to the expansion of public services, especially those of a "social" character. For the purposes of a first approximation, however, this distinction could be shelved, and consumption as a whole could be considered as a homogeneous variable. The same may be said of the possible effects of income redistribution on the average elasticity of demand for consumer manufactures, a question which will be discussed later with special reference to its influence on the composition of that demand by types of product.

7/ This last figure implies the assumption that the product-capital ratio would remain approximately constant at much the same level as at present, while the growth rate of the product would be higher. In reality, the changes in the structure of the economy that would have to accompany such an increase in the product would probably call for a higher average degree of capital intensity, and that would reduce the aggregate product-capital ratio. On the other hand, more efficient utilization of the available capital might counteract and conceivably more than offset such a trend.

8/ On the assumption of a break-even between exports and imports of goods and services. It should be pointed out that in 1960 total figures under these two heads were similar, but if Venezuela is excluded, the excess of imports over exports is equivalent to about 1 per cent of the total domestic product.

/Given these

Given these simplifications, the increase in demand for consumer manufactures would be determined by the above-mentioned total consumption increment and an average elasticity with respect to total consumption which, according to the more detailed hypotheses formulated in subsequent paragraphs, should be approximately 1.2 in future conditions. In other words, the doubling of the total product would be accompanied by an increase of about 110 per cent in supply requirements in respect of consumer manufactures. In absolute terms, this would mean raising the level of demand for industrial consumer goods from the 1960 figure of some 26,700 million dollars to 56,000 million (also at 1960 prices) during the future period under consideration.

In relation to capital goods, an equally rough evaluation could be worked out from the gross investment figures referred to in earlier paragraphs. With the exception of the value added in building and construction activities, which attains fairly high levels in existing conditions in Latin America, virtually all the remaining gross investment corresponds to manufactures, particularly production machinery and equipment and building materials. Many of the existing development plans lay marked emphasis on housing targets, the provision of other public services and the expansion of infrastructure projects (irrigation, highways, etc.), with the resulting tendency for the relative importance of building activities and public works to be enhanced and for the share of industrial products in total gross investment to diminish. It is doubtful, however, whether a general investment allocation strategy of this kind could be of a lasting character, since it will probably not be long before the more rapid development of the sectors of production becomes a decisive factor in the expansion and maintenance of the social services themselves. Hence it may be estimated that for a reasonable length of time the capital-goods/total-investment coefficient will remain much the same as at present. In that event, given the higher total gross investment levels postulated, demand for this type of manufactured goods would increase from the 6,800 million dollars registered in 1960 to 15,700 million, during the period within which the absolute level of the product was doubled.

To the consumer manufactures and capital goods categories must be added that of intermediate products. Rough as the present calculations are, an estimate of the growth of intermediate demand is a much more complex

matter, for two principal reasons. In the first place, the evolution of the demand in question is strongly influenced by the pattern of participation of domestic production and imports in supplies of final consumer manufactures; the larger the share of the former, the greater will be the relative importance of demand for the intermediate manufactures needed for producing such goods. Imports of final manufactured goods, on the other hand, "transfer" the effects of intermediate demand to their country of origin. Secondly, the changes that take place in the structure of the economy itself, and particularly in its level of industrialization, create proportionally increasing supply requirements in respect of intermediate products, because of the greater diversification, specialization and complexity of the production processes to which they give rise. To simplify the problem drastically, judging from the data presented in chapter II on the structural characteristics of economies at widely differing stages of development, it may reasonably be assumed that the existing relation between intermediate and final demand for manufactured goods would increase by 15 per cent.

Accordingly, the total expansion of demand for manufactured goods may be estimated as in table 41, in which the total supply of manufactured goods available for domestic use is shown to increase by 125 per cent by virtue of increments of 146 per cent in intermediate products and 114 per cent in final manufactured goods, the latter increase being in its turn determined by others amounting to 110 per cent and 131 per cent in requirements of consumer goods and capital goods, respectively.

From the standpoint of the domestic production requirements that would derive from expansions of demand on such a scale, two important and closely inter-related factors remain to be considered: exports prospects in respect of manufactured goods, and the extent to which the additional domestic demand could be satisfied by means of imports, i.e., the possibilities for the continuance of the import substitution process. Their significance can be evaluated on the basis of the studies carried out on the possible evolution of the Latin American countries' capacity to import as determined by their traditional exports, and the size of the "gap" that would tend to

/Table 41

Table 41

LATIN AMERICA: ESTIMATES OF INCREASES IN DEMAND FOR MANUFACTURED GOODS, ASSUMING DUPLICATION OF THE DOMESTIC PRODUCT

(Values in millions of dollars at 1960 prices)

Categories of goods	Year 1960	Proyection
Final manufactured goods for domestic use	33 500	71 700
Consumer goods	26 700	56 000
Capital goods	6 800	15 700
Intermediate manufactures	18 100	44 500
Total	51 600	116 200

/appear in

appear in their balances of payments, in default of significant changes in the structure of world trade or of new import substitution efforts either at the national level or at that of the region as a whole.

Among these studies, one of the preparatory documents for the United Nations Conference on Trade and Development relates specifically to prospects in the Latin American economies.9/ According to the projections for 1970 formulated in this study, the region's traditional exports might attain a value of about 11,900 million dollars, which, over against import requirements estimated at approximately 15,200 million dollars and the need to finance other outgoings that might represent a further 1,700 million, foreshadows a potential Latin American trade "gap" on current account equivalent to some 5,000 million dollars per annum. Again, if it is assumed that the share of non-manufactured goods in total imports - currently about 15 per cent - would remain roughly constant, the foregoing projections of the capacity to import would imply that out of the 116,200 million dollars at which future demand for manufactured goods for domestic use is estimated, no less than 106,700 million would have to be covered by the region's own production, plus another 2,750 million dollars of manufactures for export. In other words, in order to supply internal requirements Latin America's industrial output would have to expand - in terms of gross production values - by 138 per cent during the time it would take for the region's total gross domestic product to be doubled. The increase in terms of value added would probably be greater still, in view of the structural changes that would simultaneously take place in the composition of industrial production.

In short, the conclusion is reached that during the next few years, given as benchmark a minimum annual growth rate of 2.5 per cent for per capita income, Latin American industry would have to develop at a cumulative average annual rate of around 7 per cent. This is a much faster tempo than has actually been achieved in Latin America as a whole, at least during the post-war period, but some of the countries of the region have outstripped it. Furthermore, its attainment would mean that Latin America's

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9/ See Latin America and the United Nations Conference on Trade and Development (E/CN.12/693).

industrialization process regained a more dynamic character, reflected in new increases in the industrial product's contribution to the total product.

It will be noted that for the purposes of estimating total supply requirements and the capacity to import that can be generated by traditional exports, it does not matter whether the corresponding proportion of the increase in industrial production is directed towards exports of manufactured goods or towards import substitution. This is no longer true when it comes to projecting expansion requirements in the various branches of industry, or, in other words, forecasting the changes that would be entailed in the composition of manufacturing output, nor does it apply to the evaluation of the feasibility of achieving expansion on such a scale. In default of new import substitution efforts, closing the "gap" referred to above would imply developing a flow of exports of manufactured goods equivalent in value to the 5,000 million dollars per annum of which mention was made, i.e., channelling towards external demand an additional output of about 10 per cent of the total increase in the region's industrial production for its own internal use. Although this amount would still represent a negligible proportion (not more than 1 per cent) of the total market for manufactured goods in the industrialized countries, it would imply spectacular development on the part of those branches of Latin American industry that were specially fitted to compete on international markets. It would also presuppose efforts in the promotional and organizational fields, and even in relation to the installation of many new industries, which would probably far exceed what could in practice be achieved within a reasonable space of time.

On the other hand, if systematic efforts to create a substantial flow of industrial exports to extra-regional markets were shelved altogether, additional import substitution requirements would be sharply intensified. For the region as a whole, such a policy would imply reducing the import coefficient from its present level (about 9 per cent) to just 6 per cent. In so far as the substitution process continues to operate within the frontiers of each individual country, it is easy to foresee the consequences of so marked a decrease. Even if the countries whose import coefficients

/are still

are still relatively high (over 15 per cent, for example) were able to reduce them by one-half without a drastic sacrifice of economic expediency - a doubtful possibility, since this situation is generally found where the population and domestic market are smaller in absolute terms -, in other cases the position reached would hardly be tenable. For instance, Argentina, Brazil and Mexico would have to bring their coefficients down to less than 5 per cent.

On the other hand, if substitution is viewed from the standpoint of the region as a whole, the sacrifices involved would undoubtedly be much less. This implies the efficacious operation of a Latin American common marker, or specific industrial complementarity agreements on a really remarkable scale, whereby the present national import coefficients could be maintained and even increased. How thoroughgoing Latin America's economic integration process would need to be in such conditions is illustrated by the fact that unless simultaneous efforts were made to promote exports of industrial products to other parts of the world, intra-regional trade in manufactured goods would have to amount to over 4,000 million dollars yearly.

Thus, the development of industrial exports and that of import substitution at the regional and national levels are not incompatible objectives, provided that steps are taken to rectify those aspects of industrial policy which in practice have brought them into conflict in the past. Both these things can be done, and in all likelihood must be done simultaneously. But it is difficult to imagine the role which would probably be incumbent on each, especially as to a large extent they depend not merely upon unilateral decisions on Latin America's part, but also upon how far the commitments tentatively envisaged by the more developed countries at the United Nations Conference on Trade and Development are actually assumed and implemented. Despite these difficulties, some long-term basic guidelines are essential as groundwork for the new conceptions of industrial policy - and, in a broader sense, of over-all development policy - to which the countries of the region are gradually facing up.

/Hypothetically, as

Hypothetically, as in the case of the preceding estimates, it may be assumed that in the course of the next twelve or fifteen years exports of manufactured goods to countries outside the region might amount to 25 per cent of total industrial export requirements, that is, to approximately 1,250 million dollars per annum. Thus, total import substitution requirements would represent about 3,750 million dollars per annum, of which 750 million would correspond to primary commodities and 3,000 million to manufactured goods. It may be further assumed, equally hypothetically, that one half of these substitution lines would be produced as the result of efforts solely directed towards each individual Latin American country's domestic market. In these circumstances, regional economic integration agreements would have to be efficacious enough to generate an additional intra-regional trade in manufactured goods equivalent to about 1,500 million dollars yearly.[10/]

The whole of this set of purely speculative hypotheses is summed up in table 42.

Although they are not explicit, these hypothetical projections presuppose considerable changes in the future composition of industrial production which it is also of interest to forecast if industrial policy is to be more precisely defined. They will probably be more far-reaching than might normally be expected in an ordinary industrialization process, as was shown when the historical evolution of Latin America's industrial sector was reviewed. The consolidation of a significant flow of extra-regional exports of manufactured goods, for example, may be reflected in the rapid expansion of industries whose prospects in the light of internal demand increments or import substitution may not be equally promising. On the other hand, the two last-named factors will still be the determinants of structural change in manufacturing activity directed towards the satisfaction of domestic demand, either at the national level or in the

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10/ For the purposes of these hypothetical calculations account was not taken of exports of manufactures appearing as such in current statistics and relating, as a rule, to products in the earliest stages of processing such as roasted coffee, ginned cotton, etc.

/Table 42

Table 42

LATIN AMERICA: HYPOTHETICAL SUPPLY AND DEMAND PROJECTIONS FOR MANUFACTURED GOODS, ASSUMING DUPLICATION OF THE DOMESTIC PRODUCT

(Millions of dollars at 1960 prices)

Total demand	117 450	Total supply	117 450
Domestic demand	116 200	Domestic production	106 100
Consumer goods	56 000		
Capital goods	15 700	Extra-regional imports	11 350
Intermediate products	44 500		
Extra-regional demand	1 250		
(Additional intra-regional trade)	(1 500)	(Additional intra-regional trade)	(1 500)

/framework of

framework of the region's progressive economic integration; in the latter case particularly, the removal of the obstacles deriving from the dimensions of the individual country markets might also facilitate a rechannelling of effort towards a greater measure of vertical integration of industry, as against the "horizontal development" or "development in breadth" which has characterized it in the past.

Moreover, as soon as an attempt is made to differentiate between the growth prospects of the various branches of manufacturing activity, attention is drawn to the other factor already pointed out as one of those with which the new development policy emergent in Latin America is closely concerned: the progressive redistribution of income.

Although it may not have so much effect on the structure of industry in terms of the major categories of consumer manufactures, capital goods and intermediate products, income redistribution, in so far as it materializes, will exert a powerful influence on the internal composition of these categories and particularly on those branches of industry which used to be called "slow-growing". The potential significance of the redistribution effort from this point of view can perhaps be more accurately evaluated with the help of a few more hypothetical calculations.

The section of chapter II that dealt with supply of manufactured goods afforded an opportunity of presenting some of the available data on the composition of consumption in sectors of the Latin American population at different income levels, although as a rule the statistics related only to urban consumers. On the basis of this and other fragmentary information, a broader hypothesis was formulated with respect to the level and composition of private consumption, by income groups, in the year 1960.

It will be useful to cast a rapid glance over the main results of the calculations referred to, in order to facilitate the discussion which will follow below. In the first place, surveys of consumer income and expenditure carried out in several Latin American countries reveal how high a proportion of total consumption is usually absorbed by expenditure on food: 60 per cent in the lower income groups in Argentina, and 23 per cent in the higher income brackets; upper and lower limits of 59 and 32 per cent in workers' households in Chile; corresponding limits of 45 and 36 per cent in the

case of employees' households, and 60 and 40 per cent in that of worker's households, in Colombia, etc. Secondly, these and other piecemeal data were taken in conjunction with the estimates of the available supply of manufactured goods in order to formulate a hypothesis as to the level and structure of consumption, differentiating between three population sectors: a lower stratum, comprising one-half of the population of Latin America, to which 16 per cent of total income and 19 per cent of total consumption would correspond; an intermediate group, including 45 per cent of the population and absorbing 50 per cent of income and 52 per cent of consumption; and an upper stratum formed by 5 per cent of the population and accounting for 34 per cent of income and 29 per cent of consumption.

In accordance with this hypothesis, total per capita consumption in the first stratum would be equivalent to about 126 dollars per annum, of which 94 would be spent on food and barely 17 on manufactured goods other than food products (7 dollars on textiles and clothing and 10 on other current consumer manufactures). In the second group, out of a total per capita consumption amounting to 376 dollars yearly, 183 dollars would be allocated to food and 92 to manufactured goods other than food products (36 to clothing, 45 to other current consumer manufactures and 11 to durable consumer goods). Lastly, annual per capita consumption at the third level would reach the sum of about 2,000 dollars, of which a high proportion would be represented by consumption of manufactured goods other than food products - 820 dollars per annum, as against 280 dollars for processed and non-processed foods, and 900 for services of various kinds. The total amount spent on industrial products could be further broken down as follows: 200 dollars on clothing, 335 on manufactured goods other than food products and 285 on durable consumer goods.

Similar evidence of how small a share in consumption of manufactured goods is within the reach of large sectors of the Latin American population, given the existing levels and distribution of oncome, is afforded by average consumption figures in terms of physical units of some staple industrial products, selected as typical examples of manufactured goods for mass consumption. For instance, to recall some of the data that were also presented, in fuller detail, in chapter II, in the region as a whole apparent

annual per capita consumption of textile fibres of all kinds was shown to average 4.1 kilogrammes, and that of newsprint 3.2 kilogrammes.

Although these are goods for which the income-elasticity of demand is low as a rule, a redistribution of income in favour of the less privileged population sectors would obviously have a very powerful effect, at least during a transitional period, on the expansion of the demand in question. Once again on the basis of fragmentary data relating to the elasticity of demand for specific groups of goods, for purely illustrative purposes a few hypotheses might be formulated as to possible changes in the existing structure of consumption, and as to the absolute levels that might be reached if the domestic product were doubled, due allowance being made for the other assumptions postulated.

The results of these formulations are shown in table 43. The projections shown in the first part of this table merely represent the application of elasticity coefficients (for each income stratum) to each of the main components of consumption, on the assumption that in all three strata total consumption will increase in the same proportion, i.e., that income distribution characteristics will remain unchanged. The second part incorporates, in addition to the similar effects deriving from the varying demand elasticities of the different groups of goods (for the income stratum concerned), the hypothesis of a significant redistribution of income. In view of the purely illustrative character of these hypotheses, it would be pointless to embark upon a detailed analysis of the possible rates and patterms of redistribution in the context of the social, economic and political conditions in which the process might take place; irrespective, therefore, of the question of "realism", it is assumed to be carried so far as to keep absolute per capita consumption levels constant in the higher income groups, while the middle and lower income strata would enjoy equal shares in the total consumption increment, which in practice means that the rise in income in the last-named population group would be much greater in relation to present levels.

/Table 43

Table 43

LATIN AMERICA: HYPOTHETICAL PROYECTION OF COMPOSITION OF CONSUMPTION, BY INCOME GROUPS

(Millions of dollars at 1960 prices)

	Lower income groups	Middle income groups	Higher income groups	Total
A. On the assumption that existing income distribution characteristics remain unchanged				
Total consumption	24 500	66 000	37 500	128 000
Food products	16 000	26 000	4 200	46 200
Non-processed				31 200
Processed				15 000
Manufactured goods other than food products	4 300	19 600	16 000	39 900
Textiles, footwear and clothing	1 800	6 600	3 000	11 400
Other current consumer manufactures	2 500	9 500	5 500	17 500
Durable consumer goods	-	3 500	7 500	11 000
Services	4 200	20 400	17 300	41 900
Total manufactured goods				(54 900)
(a) Food products				(15 000)
(b) Manufactured goods other than food products				(39 900)
B. On the basis of an income redistribution hypothesis				
Total consumption	39 000	61 000	28 000	128 000
Food products	19 500	25 000	3 900	48 400
Non-processed				32 400
Processed				16 000
Manufactured goods other than food products	10 600	17 500	11 500	40 100
Textiles, footwear and clothing	3 900	6 100	2 800	12 800
Other current consumer manufactures	5 700	8 700	4 700	19 600
Durable consumer goods	1 000	2 700	4 000	7 700
Services	8 900	18 500	12 600	39 500
Total manufactured goods				(56 100)
(a) Food products				(16 000)
(b) Manufactured goods other than food products				(40 100)

/As can

As can be inferred from the comparisons presented in table 43, the average elasticity of consumption of manufactured goods in relation to total consumption would not be fundamentally different whether an income redistribution process did or did not take place; in either case, consumption of industrial products would come to represent about one-third of total consumption in the future period considered (as against a little over 27 per cent in 1960), in consequence of the higher average elasticity of demand for manufactured goods as compared with demand for other types of goods and services, and as the result of an element of compensation in the effects of income redistribution. This can be explained as follows: on the one hand, income redistribution would adversely affect the sector whose consumption of manufactured goods represents the highest proportion of its total consumption, while on the other hand it would permit a substantial increase in the lower income groups' consumption of industrial products, which at present stands at minimal levels. The proportion of total consumption in this population stratum represented by manufactures other than food products would expand from 13 per cent in 1960 to about 18 per cent in the period covered by the projections, while absolute levels of total per capita consumption in the same groups would rise from 126 dollars to over 270 dollars per annum.

But although the aggregate levels of consumption of manufactured goods would be much the same on both hypotheses, its composition by types of products would differ greatly according to whether the redistribution process did or did not take place. In the one case, the major emphasis would fall on the expansion of demand for durable consumer goods, whereas in the other the dynamic repercussions of demand would also have a powerful impact on processed foods, textiles, footwear and clothing, and other current consumer manufactures, as shown in the table under discussion.

The primarily mechanical character of these estimates might give the impression that there is actually a choice between subsequent development possibilities connected or unconnected with income redistribution. In all likelihood, however, other considerations would lead to the conclusion that in the conditions at present prevailing at least in several of the Latin American countries, no such choice exists, and that some measure of redistribution, however remote from these purely hypothetical examples, is an essential requisite for future development.

/In short,

In short, all the factors to which allusion has been made are potential determinants not only of aggregate industrial development requirements but also of the structural modifications that would have to be introduced in manufacturing industry. It is no easy matter to translate the foregoing hypotheses into terms of the expansion requirements with which each of the main branches of industry would be faced, especially in respect of the sectoral origin of intermediate products, the fields in which import substitution would be primarily concentrated and the lines of production that might be developed with a view to exporting manufactured goods to other regions.

In this connexion, a hypothesis is presented in table 44, although its bases are even less solid than those on which the previous hypothetical estimates are grounded. The structure of manufacturing production in 1960, in terms of the percentage composition of its gross value, is compared with the corresponding figures that would be shown by this sector in the conditions postulated by the various hypotheses set forth, and indications are given of the growth that would have to be achieved by the major groups of industrial activities.

This rough forecast of possible development requirements in respect of industry as a whole and its main branches could also be expressed, although only in part, in terms of the expansion that may be entailed in certain specific sectors. If some idea could thus be formed of the rates of development that would probably have to be attained, for example, by the iron and steel industry, and by certain important branches of the chemical, metal-transforming and other industries, it would do much to facilitate the adoption of decisions at the national and regional levels - with due regard to the advantages of economies of scale, especialization, and productivity and efficiency in general - as between alternative procedures for their installation or expansion.

The foregoing discussion seems sufficient to illustrate the magnitude and nature of the new demands that will apparently be made on manufacturing industry under the over-all development policy that is gradually taking shape in Latin America. As has already been pointed out, the responsibility of the industrial sector cannot be confined to a passive response to these demands. For example, the acceleration of the growth rate of per capita income is not

/Table 44

Table 44

LATIN AMERICA: GROWTH HYPOTHESIS FOR MAIN BRANCHES OF INDUSTRY a/
LINKED TO THE DUPLICATION OF THE DOMESTIC PRODUCT

Branch of industry	Gross value of production (millions of dollars at 1960 prices)		Percentage composition		Growth (1960=100)
	1960	Projection	1960	Projection	
Food, beverages and tobacco	13 900	22 400	29	21	161
Textiles, footwear and clothing	7 700	16 700	16	16	217
Wood and wood products, including furniture	1 600	3 400	3	3	213
Paper and printed matter	2 250	5 900	5	6	262
Chemicals and petroleum products	6 850	19 670	14	19	287
Non-metallic ores	1 800	3 800	4	3	211
Metallurgical and metal-transforming industries	10 500	28 070	22	27	267
Miscellaneous	3 300	5 600	7	5	170
Totals or averages	47 900	105 550	100	100	220

a/ Excluding exports of industrial products to other regions; including projections of intra-regional trade.

/merely a

merely a "datum" to be taken into account in industrial development projections, but an objective in whose attainmenment industry will have to play a decisive part, particularly in view of the weakening of other factors that formerly constituted important dynamic stimuli. The same applies to the redistribution of income, which is not only important from the standpoint of its effects on the composition of demand for manufactured goods, but also raises the question of how industry's contribution is to be made, through changes in the internal distribution of the income generated in manufacturing activities or through transfers to other sectors by such means as a proggresive modification of the structure of relative prices.

Again, rates and patterns of industrial growth such as those indicated above seem indispensable requisites if industry is also to be able to play a positive role in relation to the other major responsibility incumbent upon development in Latin America: that of offering sufficient opportunities for productive employment to the rapidly increasing labour force. In the course of the approximate period to which the foregoing hypothetical projections relate, the active population in the region as a whole will increase by about 25 million persons, of whom in all probability no fewer than 18 million will go to augment the labour force available in the urban centres. Consequently, a minimum objective - the maintenance of the present share of industrial employment in aggregate urban employment (27.2 per cent) - would mean that the manufacturing sector would have to absorb about 4.9 million additional workers. This would imply a 52-per-cent increase in relation to current levels of employment in industry.

Even if preference were deliberately given - provided that the alternative possibilities were reasonably comparable - to the more labour-intensive production techniques, many of the new lines of development would inevitably comprise activities whose manpower absorption capacity is low. Cases in point would include a number of the industries geared to extra-regional exports or playing an active part in the regional integration process. Moreover, a general weakening of the absorption capacity in question is a characteristic result of an increase in the relative importance of industries manufacturing capital goods and intermediate products, at the expense of those producing mainly non-durable consumer goods.

/It is

It is easy to foresee, in the light of these observations, that the marked tendency registered in the past for artisan employment to be superseded in relative terms, by employment in manufacturing industry proper will still be strongly in evidence in the near future. This might mean that during the next 10 or 15 years the share of factory employment in total industrial employment might reach about 60 per cent, which in turn would imply that of the 4.9 million additional workers joining the industrial labour force, only 1.2 million would go to increase the numbers employed in artisan industry, while employment in manufacturing activities proper would have to expand by 3.7 million, i.e., by 76 per cent in relation to present levels. Given the great differences in productivity between these two forms of industrial employment, it will readily be understood that only a rate of industrial expansion such as that envisaged in the hypothetical projections set forth would suffice to reconcile aggregate manpower absorption requirements with a reasonable improvement in levels of productivity per employed person.

Attention must be drawn to the key role incumbent in this connexion on those branches of industrial activity which are directed mainly towards production of non-durable consumer manufactures, always provided that an income redistribution process took place in Latin America. Unless the growth of these activities becomes more dynamic, industry's share in urban employment will probably continue to decline, with the resultant aggravation of the problems of overt and disguised unemployment in respect of a substantial proportion of the labour force. In the activities in question, together with a more favourable product-capital ratio, relatively wide margins of idle capacity are currently registered, and both these factors should facilitate the financing of industrial expansion as a whole, in so far as a higher proportion of the resources to be mobilized were earmarked for the more capital-intensive lines of production in which investment requirements per employed person are heavier.

Very broadly speaking, these are some of the principal functions which industrial development will apparently have to take upon itself in the coming years. It may be useful to forecast them, even though in extremely hypothetical terms, with a view to promoting the instruments and defining the policies that may most effectively make for their fulfilment.

2. Regional integration as a requisite of future industrial development

In the light of the requirements noted in regard to the probable rate and some of the patterns of Latin America's industrial development in the next few years, and increasing measure of regional economic integration seems desirable, not only as an objective, but also as a basic instrument. If no effective arrangements are concluded in this connexion, the continuance of the industrialization process and its acceleration in consonance with new needs would meet with almost insuperable obstacles. Although the bases for such a conclusion have been outlined previously, it is interesting to single out once again at least two of the essential factors. The first of these concerns the consequences of a further reduction of domestic import coefficients. Such a reduction, to judge from the hypothetical calculations presented, would carry many countries of the region to levels scarcely compatible with the size of their respective markets, with the stage of industrialization reached so far, and even with their particular natural resources. The expansion of new export lines - primarily of manufactured products - to other areas would be an important contribution. However, on the one hand it is contingent upon the decision of the more advanced countries to provide real access to their markets and, on the other hand, it constitutes an aim which is not entirely unrelated to integration, to the extent that the latter is an important requisite if Latin American industry is to be more efficient and better able to compete on world markets.

The second point which might be repeated here is that all the countries of the region, with a few temporary exceptions, have been more or less simultaneously encountering growing obstacles to industrialization which are likely to loom even larger in the future. This means that, in spite of the disparities in their present general industrial and economic development levels, integration is a matter of equal urgency for them all.

/Past events

Past events have shown, however, that the road towards that objective is not free from obstacles either. To take industrial products alone, experienced gained thus far seems to point to at least two basic sources of concern which hinder the adoption of more far-reaching decisions: in the first place, the uncertainty regarding the effect which the establishment in the relatively near future of a real regional common market or other integration scheme of similar scope might have on existing industry; secondly, the uncertainty as to the consequences that might stem from the marked disparities in the industrial development levels of the different countries, and therefore from their varying aptitude to turn to account the advantages deriving from integration. Although the present study cannot go into a systematic analysis of integration problems, it seems useful to review some of the data examined in previous sections which might help to determine the scope of such sources of concern, whose repercussions on future industrial development are of fundamental importance.

The prospects of existing industry within the framework of regional integration would logically depend on the nature of the specific integration schemes likely to be implemented and on the magnitude of the differences between the costs and prices of manufactured products in the various countries.

The latter point has been illustrated, at least in part, in previous chapters. The comparative analyses presented lead to the conclusion, in the first place, that there are marked discrepancies between the different countries in the price structure of manufactured products. Although such discrepancies may be partly attributable to factors other than actual costs (tariffs, indirect taxes, levels of return), they do probably also reflect appreciable differences in costs. Secondly, as might be expected, rates of exchange play a decisive part in the general price levels of manufactures; at the exchange rates in force for foreign trade, there are some countries in which prices are lower as a whole, since at parity exchange rates they would appear at an advantage in certain categories of products and at a disadvantage in others. Lastly, the disparities often seem wide enough to exceed even the existing fairly high transport costs for reciprocal trade.

/These general

These general indications need to be supplemented by other more specific remarks about particular sectors of industry. In the case of steel-making, for example, it has been pointed out that the favourable conditions of several countries of the region would not represent for any one of them the necessary advantages in location to compensate for the transport costs involved, but that in existing enterprises there are other factors - plant size, economies of scale, level of specialization and operational efficiency - which greatly accentuate the disparities in production costs.[11/] Similar examples might be found in connexion with other manufacturing industries.

Under the conditions described above, a broader liberalization of reciprocal trade in manufactured products is apparently a factor that would lead to a major reorganization of existing industry. Such reorganization might take more than one form, and in particular might be channelled in two main directions, always provided that the exchange distortions were duly rectified: towards specialization in each country's industrial output, while those industries appearing at a disadvantage would be sacrified on their growth would be limited, and reciprocal trade in a wide range of manufactures, or towards systematic efforts to improve the efficiency and productivity of those lines which are most vulnerable to competition from industries in other countries of the region.

The two lines of action are embodied - albeit more as an additional policy measure than as alternatives to be decided on - in the oft-formulated definitions of integration aims. Thus, it has been asserted that integration would introduce an element of competition which has been largely lacking in Latin America's industrial development, owing to the high level of protectionism and the intensive concentration of manufacturing enterprises, and would therefore require a drive to improve industrial efficiency, organization and techniques. Attention has also been drawn to the advantages of integration from the standpoint of economies of scale and the possibilities for industrial specialization in the various countries. The former

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11/ See A contribution to economic integration policy in Latin America (E/CN.12/728).

implies that integration would be assigned a role whereby in some degree it replaced other internal policies which might have the same ends, but whose efficacy in that sense would not necessarily have resulted in a larger flow of regional trade; the latter, on the other hand, is clearly aimed at increasing reciprocal trade in manufactures.

Those objectives might, to some extent, be associated with the two categories which are usually referred to as "traditional" and "dynamic" industries. In the first group, which is usually characterized by a relatively small minimum economic size and is virtually untouched by economies of scale, the present cost and price situation would appear to derive from institutional factors rather than from the inherent technical and economic features connected with the limited size of the domestic markets; accordingly, it would suffice for integration to have an indirect influence on them, or a sort of catalytic effect which would help to remove the adverse institutional factors.[12/] In the dynamic

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12/ Admittedly, this is a sweeping generalization and over-simplification, since integration is usually assigned a broader role even in relation to this type of industry. "Lack of specialization substantially increases production costs and prevents the Latin American countries from making the best of their industries' possible advantages in respect of comparative costs, besides depriving them of the benefits that might accrue from trade based on a broader and more rational division of labour ... This is evidenced in the low level of imports of manufactured consumer goods effected by the more highly industrialized of the Latin American countries; for example, registered imports (i.e., excluding contraband) of cotton textiles are practically non-existent, owing to the prohibitively high duties and other restrictions. As a result, the domestic textile industries have indulged in over-diversification and have foregone specialization with the consequent adverse effects on their efficiency and export possibilities; cotton textiles, besides not being imported, are not exported either, except in marginal quantities. In contrast, the industrialized countries, whose textile industry is more highly developed and more efficient, not only export but also import large quantities of cotton textiles. For instance, the aggregate cotton textile exports of the countries members of the Organisation for Economic Co-operation and Development (OECD) represented 19.2 per cent of their output in 1959, and imports 17.2 per cent. In the case of the United Kingdom, the corresponding proportions were 22.8 and 39.2 per cent, respectively". (Santiago Macario, "Protectionism and Industrialization in Latin America". loc. cit., p. 79-80 and footnote 47).

industries, on the other hand, a genuine attempt would be made to promote specialization and trade on a regional scale.

Although there is no reason why the two objectives should conflict, the fact that they are pursued simultaneously is likely to give rise to greater difficulties in attempting to express them in terms of the specific arrangements and schemes chosen for achieving integration. The more they affect existing industry, the greater reluctance there will be to adopt the political decisions required by those arrangements, and the greater pressure will be brought to bear to introduce exemption and saving clauses which might do much to undermine their efficacy, even in those industries which are genuinely important from the standpoint of real trade possibilities.

Be that as it may, the breadth and scope of the effect which industrial integration might have on existing enterprises should not be exaggerated. To go a little more deeply into the question, the document referred to above[13/] suggests a distinction between five types of enterprises which would suffer the consequences of integration under widely differing conditions: (i) inefficient enterprises, but which are immune from competition because they supply a local market or because demand is sporadic; (ii) inefficient enterprises, which, if prodded by competition, would be capable of revising their methods or switching to different products on their own initiative and through their own efforts; (iii) inefficient enterprises which are incapable of reacting to competition themselves, but could be salvaged by means of special technical and financial assistance programmes; (iv) inefficient and insalvageable enterprises, some of which must be tolerated as long as "national security", "industrial stability" or other non-economic considerations persist; (v) inefficient and unsalvageable enterprises which should be replaced.

The conclusion to be drawn from the above considerations is that there might well be few sacrifices to be made in terms of installed enterprises and production capacity; in fact, the broader the proposed action of specific integration mechanisms in relation to concrete

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13/ Contribution to economic integration policy in Latin America, op. cit.

programmes of financial and technical assistance to those enterprises, the fewer the sacrifices.

Under these circumstances, careful attention would probably have to be paid to the possible effects of such programmes from the standpoint of the criteria for allocating future resources, in terms of the proportion to be channelled towards modernizing and improving the competitive position of existing industry compared with that earmarked for broadening the industrial base through the establishment of new industries.

Available sectoral studies show that a good many of the problems concerning the efficiency of existing industry lie in questions of organization and administration, which could be remedied without investing too large a proportion of real funds that could be channelled into other activities. The large-scale replacement of equipment is a different matter and could, moreover, seriously aggravate the already acute employment problems, unless it took place within the context of broader plans which included fresh incentives to industrial growth through the local production of such equipment. This consideration seems to be consistent with the fact that among the "bases for the formulation of a regional industrial development policy", as approved by the Advisory Committee on Industrial Development set up under the Latin American Free-Trade Association (ALALC), there was included a specific provision to the effect that the more intensive rationalization of production should be reconciled with the level of employment reached, as well as with the utilization of capital goods and available technological capacity.

These and other difficulties arising in the study of existing industry point to the usefulness of taking a somewhat broader view of the question. The hypothetical estimates presented earlier in this study provides some criteria in this respect which might serve to illustrate that longer-term view. Thus, for example, it can be inferred from those estimates that within a period of not more than fifteen years the increase in the industrial product would exceed its present level; in other words, a new and larger flow of manufacturing production than that now

representing the whole of existing industry (130 per cent more in terms of value added) would have to be created in less than fifteen years. In certain sectors, this expansion would entail the addition of production capacity on an even greater scale than at present, or the launching of completely new projects, either throughout the region or in specific countries.

Viewed from the angle of what the expansion of Latin American industry is expected to signify within a relatively short time with respect to present production levels, the adverse effects which integration might have on existing industry will no doubt be attenuated, or it will be made more readily adaptable to the new conditions. For this reason, special priority should be attributed to integration instruments and arrangements which will effectively promote the rational development of future additions and progressively shape the new structure of Latin America's industry implied, in the last analysis, by the industrial integration of the region. Those prospects may also help to weaken the opposition and ease the pressures of firmly established interests, and this in turn would facilitate prompter and more far-reaching decisions in connexion with the development of new lines of industry, regardless of the adjustments which existing industry will gradually introduce.

This is what is happening in the two integration schemes now in force. In the case of Central America, where less weight is carried by considerations relating to existing industry because of its less advanced degree of industrial progress, the incentives explicitly contemplate greater advantages for new industries, such being the actual nature of most of the projects regarded as "integration industries". As to ALALC, besides the stress generally laid on the "installation and development of Area industries" - which suggests new industries -, the inclusion of products in the National Schedules, and even more so in the Common Schedule, tends to exclude those for which several of the member countries already have fairly important industries established, while complementarity agreements also seem to be more compatible with the impetus given to new projects.

/Notwithstanding the

Notwithstanding the advantages which a distinction between existing industry and the expansion requirements foreseeable in the near future seems to offer in a study of possibilities for an industrial integration policy, it should be realized that such a distinction is largely arbitrary. An appreciable proportion of the expansion in question would be absorbed by the so-called "traditional" industries, the more so if the efforts towards a more progressive distribution of income materialize, as noted from the hypothetical estimates presented above. But even within the sphere of dynamic industries, and particularly in countries that have made most headway in industrialization, future industrial development would also imply the growth of activities which are already in operation, and perhaps have even achieved a measure of consolidation.

In this respect, subsequent industrial growth cannot be conceived as the mere superimposition of a different pattern from that already in existence, which could therefore be moulded on entirely new bases quite independently of the traditional structure of industry. Even in the case of industrial ventures which might, strictly speaking, be regarded as "new", the level of efficiency attained by them would necessarily be influenced by the whole complex of their relations with the rest of the industrial sector, on which they would rely in some degree for supplies of inputs or other basic services.

Furthermore, whether or not certain lines of industry were classified as "new" would depend on the stage of industrialization reached by the countries concerned. The scope of the term would be far broader in those which had made little progress in that direction. The more industrialized countries might well have no other fields capable of being developed within a reasonable span where these new lines do not already exist at least in embryo form. In this respect, it might be considered that the disparities in the progress thus far achieved by the Central American and ALALC integration schemes are up to a point consistent - among other important factors - with the industrial characteristics of the respective member countries and with the varying opportunities they offer for the development of new lines without jeopardizing existing industry.

/These above

These above considerations also bring into relief the urgent need to increase industrial integration efforts. The longer this is postponed, the larger will be the number of manufacturing activities whose problems will come to swell those already affecting existing industry - even at an incipient stage of development - and, consequently, the fewer the possibilities of strengthening the measures for a rational development of new enterprises proper. The motor vehicle industry is a good example of this. In the course of a few years, Brazil has managed to replace virtually all its imports of motor vehicles through the local manufacture of nearly all their parts and components, and Argentina's production is also large. Although these two Latin American countries have the widest domestic markets, they fall short of what would be required, in absolute terms, to take advantage of the considerable economies of scale which are typical of this industry, particularly if account is taken of the relatively large number of enterprises established. At the same time, steps have been taken to promote the production or assembly of vehicles in other countries of the region, including Mexico, Colombia, Chile, Venezuela and El Salvador - in the latter with an eye to the Central American integrated market. The extension of industrial activities to other countries along the same lines, in none of which full use is made of the advantages of specialization and large-scale production, is noted in several sectors of the chemical and steel industries.

Added to the obstacles of the kind described above is the second type of concern alluded to at the beginning of this section, namely, the uncertainty regarding the consequences that might stem from the marked disparities in the different countries' industrial development levels, in terms of the varying degree to which they are able to turn to account the advantages deriving from integration.

Of course, this is a basic evaluation, without which it is more difficult to adopt what are no doubt the essential policy decisions needed to accelerate the process. It is also a highly complex problem, requiring simultaneous consideration of a great many points, including some for which sufficient data is probably lacking. Needless to say, such an undertaking is beyond the aims and possibilities of the present

study, although a preliminary investigation based on the hypothetical estimates presented above might be warranted. In such a study it would be best to disregard the aforementioned question concerning the possible repercussions of integration on existing industry, and to focus attention on the prospects that might be opened up by future development, while recognizing that not only should integration arrangements avoid harming what already exists but they must also be effective enough to ensure an equitable distribution of the additional benefits they produce.

It should be stressed, above all, that the disparities between the Latin American countries which are relevant in this connexion are not limited to their respective levels of industrialization or to their industrial bases, but extend also to other factors whose impact on industrial development has been shown earlier in this study. They include, in particular, the size of population in absolute terms and the average level of per capita income - that is, the size of the national market concerned -, as well as the level of urbanization and the import coefficient. Of these, urbanization might be considered more important as a factor explaining the past industrial process than as a determinant of subsequent industrialization, since within the framework of planned development policy it is probably no longer an autonomous factor, but a passive answer to the needs arising out of development itself.

Consideration being thus limited to the remaining factors, the best course would be to single out certain typical situations in Latin America in which a relationship exists between the stage of industrialization reached thus far and the population, the average per capita income and the relative importance of the external sector in the countries concerned. Accordingly, consideration could be given to a first group consisting of the most densely populated countries with the highest level of industrialization and a relatively low import coefficient. It would comprise Argentina, Brazil and Mexico, whose annual domestic product would total some 68,000 million dollars, their industrial product about 17,000 million and their imports around 4,300 million dollars. The second group would be composed of Chile, Colombia, Peru, Uruguay and Venezuela, with medium-sized domestic markets, a slightly lower level of industrialization and

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a far higher average import coefficient than the first group, although marked disparities persist between the five countries themselves. The annual figures for their total product, industrial product and imports would be 22,000, 3,400 and a little over 3,200 million dollars annually. A third and last group would consist of Bolivia, Costa Rica, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Nicaragua, Panama and Paraguay, whose combined domestic product would amount to some 6,300 million dollars annually, their industrial product to approximately 700 million and their annual imports to about 940 million. The same grouping could be associated with different structures of the manufacturing industry sector, in terms of the relative share of current manufactured consumer goods, intermediate products, durable consumer goods and capital goods, as typified elsewhere in this study.

As a next step, it would be useful in this respect to take the results of the hypothetical calculations presented earlier as to what effect a 100 per cent increase in the product would have on the capacity to import from other areas and on the consequent requirements of trade in manufactures between countries of the region. It was then estimated that in the face of a potential demand for imports exceeding 15,000 million dollars annually, plus other income of nearly 2,000 million, the traditional trade flows would provide a capacity to import of just over 11,900 million dollars, which would mean a gap in Latin America's foreign trade of the order of 5,000 million dollars annually. Under the hypotheses formulated at the time it was assumed that this potential deficit could be covered by means of additional exports of manufactures to other areas (1,250 million dollars), import substitution in respect of certain primary products (750 million dollars) and import substitution efforts in respect of manufactured products amounting to the equivalent of 3,000 million dollars, half of which would take place within the framework of each domestic market and the other half under regional industrial integration arrangements.

/New hypotheses

New hypotheses could not be added to show how those projections might be classified according to the above-mentioned country groups. To that end it would be necessary to begin with the basic reference relating to the growth of the product. In this respect, however efficient the regional integration instruments may be from the standpoint of the equitable distribution of the benefits deriving from integration, there would still be a great many internal factors which, in the last analysis, would determine different growth rates for the various countries, although the difference might be smaller than in the past. A merely hypothetical assumption, however, would be that those growth rates were the same at least for the groups of countries - in some degree a justifiable simplification if it is borne in mind that each group includes countries which, in the past, have registered very different rates of development -, and that the domestic product, which has been taken as a reference for the calculations, doubled within the same period. Another hypothetical assumption would be that the various groups could increase their traditional exports at the same rate and, actually aided by integration, that their share of exports of manufactured products to other areas, for example, could be in proportion to the respective absolute volumes of their industrial output. The results of these two suppositions would be that of the total gap of 5,000 million dollars annually, about 2,500 million would be absorbed by the first group of countries, 1,900 million by the second and 600 million by the third.

To complete the breakdown of these over-all figures by groups of countries, yet another hypothesis would be necessary concerning the subsequent trends followed by each group's import coefficient or, which amounts to the same thing, by its share in intra-regional trade. If, as in the case of the general hypotheses, it were estimated that in every instance half the new import substitution activities could take place exclusively within the domestic markets, it would be concluded that the requirements in respect of regional trade arising in each group

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would be very much the same for the first two groups of countries [14/] - approximately 650 million dollars annually in each case - and the equivalent of some 200 million dollars annually for the third. In other words, regional trade in manufactures for the first group of countries would represent between 9 and 10 per cent of its total exports to other areas, 15 per cent for the second group, and a slightly higher proportion for the third.

From this set of hypotheses it is inferred that, although it has been fairly systematically assumed that the contribution and effort made by the separate groups of countries are the same in relative terms, there is a wide gap in absolute terms between the first two groups and the third. That is to say, it would be hard to achieve stability in regional trade as a result of transactions relating mainly to trade between countries at very different stages of industrial development. Owing to the disparities in the absolute size of the markets concerned, a substantial proportion of such trade would have to consist of transactions between countries belonging to the same group, or at most between the first two country groups.

Such a conclusion would not help to foresee the varying ability of countries at different stages of industrial development to take part successfully in a regional industrial integration scheme, but in any case it helps to illustrate certain aspects of the problem. Its effects extend also to the definition of the so-called "integration industries", to use the terminology of the Central American schemes. If these are considered to be industries in which the effective turning to account of the economies of scale, at the level of high productivity techniques, easily transcends the size of the individual domestic markets, the range of "integration industries" - as in the case of "new industries" - is far more extensive

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14/ The fact that these figures are so similar is explained by the hypothesis that the proportion of exports of manufactures to other areas absorbed by each group of countries would be in line with its absolute level of manufacturing production. On this assumption, while the proportion accounted for by the first group would amount to some 1,000 million dollars annually, the second group would absorb only 200 million, which would therefore accentuate the need for import substitution and regional trade.

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in the group of less industrialized countries than in others at a more advanced stage of industrialization. This fact is due not so much to the level of industrial development in itself as to the fairly close relationship existing in Latin America between that level and the absolute size of the domestic markets concerned.

Provided that the fundamental trend is to take full advantage of the economies of scale, these considerations are gradually shaping a picture which would be characterized by a lively trade in manufactures within each separate group of countries. In an extreme case like that of the less industrialized countries, this trade could cover a fairly extensive range of manufactures; secondly, there could be an even greater volume of reciprocal trade in absolute terms, it would be concentrated more particularly on specialized or, technically speaking, highly complex products. In addition, there would be a region-wide trade in the products of regional "integration industries" proper, in the broadest sense of the term.

The system of grouping the most homogeneous countries from the standpoint of the stage of industrialization reached is possibly one of the reasons for the great strides made by the Central American integration scheme. The Montevideo Treaty failed to provide for the possibility of sub-regional agreements as part of the over-all ALALC scheme, although it subsequently allowed for it up to a point through fairly liberal exemptions from the most-favoured-nation clause.

The risks entailed in too wide a dispersion of integration efforts would depend, in these circumstances, on the efficiency of the instruments for promoting activities that might be considered integration industries at the regional level. There is no reason why those industries should be limited in number, and even if they were, they could give rise to a considerable volume of trade in absolute terms.

In any case, there would still be the question of how far each country would have equal opportunities to take part in the development of integration industries, either at the level of the relevant group or at

/the regional

the regional level proper. However, a systematic examination of the question is beyond the scope of the present study, which is barely intended to formulate a few general considerations on the subject.

As noted previously in connexion with the prices of specific manufactures in several countries of the region, to broach the problem in terms of comparative monetary costs under prevailing market conditions does not make for a very thorough analysis. Among other things, the results ultimately depend entirely on the exchage rates used to convert the costs expressed in the various national currencies to a common currency unit. Those in force for foreign trade may represent temporary over-valuation or under-valuation, which would not provide a sound basis for any far-reaching decisions. Moreover, the difficulty of accurately determining "parity exhange rates" is only too well known, even if the actual concept were useful to those ends. Hence, the evaluation would have to be expressed in terms of "real costs", which reflect the quantity of material inputs that would have to be used per unit of final product in a given line of production.

Under present conditions, in many manufacturing activities there are marked disparitites in real costs between the various Latin American countries. Such disparities are due, in turn, to at least three types of factors: some, such as scale of operation and the techniques employed, are inherent in the characteristics of industries developed purely at the domestic level in countries differing so widely as to absolute size of market; others reflect permanent or transitory conditions peculiar to each country, such as the availability of natural resources and the level of training and skill of its human resources, including those responsible for promoting and organizing industrial production in a general sense; and others are closely bound up with the actual stage of industrialization thus far reached and with the so-called "external economies". Under conditions of the progressive industrial integration of Latin America, it must be admitted that the first group of factors would cease to be a source of gaps once a regional market was established. The factors relating to the training of manpower and technical personnel fall into the category of

differences that could be remedied fairly quickly provided sufficiently intensive and far-reaching efforts were made to do so. The disparities in the availability and quality of other resources would constitute the basis of what might be called each country's "natural specialization" in certain manufacturing lines, although their effects are limited to those countries in which the costs of obtaining the raw materials are particularly high 15/.

The effects of the third type of factors mentioned - those relating to external economies - on each country's ability genuinely to participate in a regional industrial integration process would still remain to be seen. Past experience shows that their effect seems to be of fundamental importance, since the cumulative advantages implied by external economies are usually referred to as one of the chief explanations for the concentration of industrial development both at the international and domestic level. In Latin America itself, as noted in chapter II, Greater Buenos Aires, the Municipality of São Paulo and the Federal District of Mexico account for more than one-third of the value of the region's total manufacturing output. If that is what happened under strong national protectionism, it is not difficult to imagine that, for want of an effective policy deliberately aimed at preventing it, such a tendency might be even further accentuated in a regional integrated market, thereby strengthening those industrial centres where the external economies are greatest, to the detriment of others at a relatively less advanced stage of development.

This is one of the reasons why an association of countries at widely differing stages of industrialization with a view to participating jointly in an industrial development process could hardly take place within a scheme operating automatically, where decisions regarding the location of industries are entirely dependent upon market conditions.

15/ For the extent to which each of these factors affects specific branches of industry, see Contribution to economic integration policy in Latin America, op.cit.

/Hence, some

Hence, some degree of deliberate participation in the process seems indispensable, implying as it does a greater or less industrial development planning effort which would go beyond the strictly national planning level. A suitable mode of combined action of that kind might be necessary even if the effect of the external economies were not very significant. In fact, the turning to account of the opportunities which a regional market might open up to a country in the case of specific manufactures does not depend solely on its relative advantages, but also on its ability to accumulate sufficient investment resources for its development. Consequently, the deliberate action to assure it of such opportunities would have to be followed by some other form of joint action calculated to facilitate the appropriate financing for countries whose possibilities of earmarking funds for industrial development are weakest.

To the extent that external economies are really an important factor, it might be considered that the re-orienting of industrial development with a view to the balanced participation of the various countries would entail some sacrifice from the point of view of the growth potential of the region as a whole. However, regardless of the fact that this might be purely a temporary "sacrifice", there are at least two other facts to be taken into account in relation to the two main manifestations of such external economies: the combination of services (housing and public services) and utilities (energy and water) which are indispensable for industrial development, and the proximity of industrial establishments whose output is so closely linked that the supplies of some of them constitute basic inputs for the operation of others.

Although there is no reason why the former should normally be financed by the manufacturing sector, being more often the public sector's responsibility, that does not prevent them from representing social costs which must be taken into account in one way or another. Consequently, throughout the accelerated urbanization of Latin America, there have been signs in certain cases that the location of industry

in traditional urban centres no longer represents real external economies in the supply of those services, or will soon cease to do so. Unless those cities are completely remodelled, the lengthening of supply lines for public services allied to housing - including urban transport -, the increasing distance from water and electric energy sources, and other factors, entail increasing rather than decreasing costs in the supply of those services. To put it even more strongly, it might well be less costly to create new urban centres around the location of new industrial centres than to go on establishing industries in the traditional urban centres.

Planned industrial development can at the same time open up possibilities for considerably mitigating the effects of the second type of manifestations of external economies. Since the decisions are not necessarily confined to individual industrial establishments, but can apply to a whole group of them, it would be useful to plan the establishment and development of industrial "complexes", in devising which attention could be paid to the essential features of external economies in so far as reciprocal relations between these activities are concerned.

An interesting illustration of the factors referred to above is to be found in the development plan for Venezuelan Guiana. The aim there is not only to create an industrial nucleus for the immediate utilization of a particularly favourable combination of basic resources, but also to set up in the same location a series of related manufacturing activities which will bring into being an urban centre of significant proportions. The population of Santo Tomé de Guayana increased from barely 4,000 inhabitants in 1950 to 42,000 in 1961, and is expected to be 115,000 inhabitants in 1966 and 400,000 by 1975. Although the location of basic industries was consistent with the resources available, the decision concerning the location of others which might have shifted to the traditional centres is apparently influenced by the

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consideration that, from the standpoint of the economy as a whole, these centres - particularly Caracas - no longer offer significant external economies in relation to the cost of establishing new urban centres.

If such a phenomenon were true of a sizable number of existing industrial centres in Latin America, it would mean that the industrial integration of the region would afford the opportunity for the large-scale relocation of Latin American industry on such lines that a major proportion of its subsequent growth would tend to shift to new sites. This process could greatly enhance the efficiency of the integration industries, if it is taken into account that certain of the traditional centres, in developing along lines directed exclusively towards the domestic market, might be unsuitably situated for the purposes of regional trade.

From another angle, therefore, the need emerges once again for the region's industrial integration efforts to be backed by instruments involving a high level of planning, and not exclusively in connexion with strict trade policy limits. This has been largely the case in the Central American scheme, and the same need has been recognized in the bases for formulating a regional industrial development policy put forward by the relevant advisory commission of ALALC, according to which the location of industry must be effected in line with an over-all programme so that the benefits of integration are equitably distributed, account being taken of the different structures and development levels of the member countries, since the devices and incentives should contemplate not only the elimination of regional trade charges and restrictions, but also "all those carrying some weight in an industrial integration process by sectors". To sum up, the problem seems to be not so much the recognition of that need as the devising of specific devices and instruments to satisfy it.

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3. The new responsibilities of industrial policy

It will be concluded from the foregoing considerations that whatever may be the possibilities in the last analysis, Latin American industry is facing increasing development requirements and deeply significant needs in respect of reorientation and structural changes. Such requirements, in turn, imply new and greater responsibilities in the definition and efficient application of the set of measures and instruments which constitute industrial policy in the broadest sense of the term.

As observed in chapter III, industrial policy at one time considerably influenced the rate and pattern of Latin America's industrialization process, but it also displayed certain shortcomings, and unless they are remedied it can hardly meet its new responsibilities efficiently. If an attempt is made to generalize regarding particular situations which often differ notably between one country and another, and if their characteristics in relation to specific fields are disregarded for the moment, it can be stated that industrial policy has consisted in a number of insufficiently related measures rather than a consistent over-all line of action; that this policy has not been expressed in terms of clear-cut objectives, nor has it been given the necessary continuity to eliminate or mitigate the uncertainty concerning the stability of the conditions it has tended to create; that it has so lacked selective criteria as to have had an indiscriminate effect on the manufacturing sector as a whole, without, however, carrying much weight in the shaping of sectoral structure; and that it has not always seemed to be sufficiently integrated with over-all economic policy to provide a more dynamic impetus to industrialization.

On the other hand, those very characteristics of consistency, continuity and selectivity, combined with its proper integration with general economic policy, appear now as essential requisites of industrial policy in the light of the new objectives pursued. The recent progress made in economic and social development planning is making it easier to meet those requirements, since such planning must provide the general frame of reference to guide decisions on industry in the light of long-term

/prospects, and

prospects, and for properly balanced efforts in this sector and those envisaged for other sectors of the economy. Thus, the plans could constitute an instrument which would presuppose the need to reconcile industrial policy with the broader aspects of economic policy.

Many of the shortcomings noted in past industrial development and subsequently in industrialization policy itself are the virtually inevitable consequence of an unplanned industrial development. Under the circumstances, the distribution of resources between the manufacturing sector and other economic activities, and also among the various branches of industry, was determined mainly by the characteristics of markets whose relative price structures tend to be seriously distorted, and by other factors of an essentially institutional nature. To remedy them will therefore call for a more active industrial policy duly integrated with general planning efforts.

The data on the past evolution of industrialization and the present distinguishing features of industry, the analysis of the experience gained in following industrial policy in the past, and proposals for some of the lines along which industrial development could be approached in the future - subjects which have been referred to throughout the present study - might prove useful in outlining some of the basic points to be borne in mind in ultimately perfecting industrial policy. They could also help in gradually determining possibilities concerning the specific instruments and procedures which could effectively deal with the series of problems which industrial development will apparently entail in the next few years.

To that end, it might be as well, in the first place, to review briefly some of the issues which appear to be essential in giving shape to what might be considered a regional industrialization "strategy". The major objectives of industrial policy could be inferred from such issues and, in the light of those general considerations, the role which specific instruments might play could be examined.

/(a) <u>Definition</u>

(a) Definition of an industrialization strategy for Latin America

Consistency and continuity, two qualities which determine the effectiveness of industrial policy, depend not only upon the existence of suitable mechanisms and skill in using them, but also - and perhaps primarily - on their taking shape within a framework of long-term guidelines as defined by certain fundamental criteria. It is not proposed that industrial policy should be cast in so rigid a mould that it cannot be adapted as flexibly as required to temporary circumstances or short-lived developments, but rather throughout those changes to maintain specific guidelines which presuppose long-range definitions and whose persistence is important, inter alia, in determining that, based on their continuity, decisions of all kinds adopted by public agencies and private enterprise itself will tend to fall into line with them.

The characteristics of past industrial growth and the problems encountered at present make it possible to select certain basic factors which might be considered as defining this strategy. These are closely interrelated guidelines which cannot be expressed in actual quantitative terms, nor are they applicable indiscriminately to each individual country of the region. Thus, they are mentioned here in the form of an enumeration of subjects or questions - whose elucidation is essential for industrial policy - rather than as suggestions of possible answers in each particular case.

The first such factor is concerned with how far industrialization efforts will continue to be directed towards the individual domestic markets, as compared with regional integration and the world market for manufactures. The answer may seem obvious, in that it is important to take advantage of every new opportunity that might arise to accelerate the growth of manufacturing industry. However, the relative significance ascribed to these last two objectives may lead to a vital re-orientation of industrial policy. Although the issues concerned may also entail external decisions which are not strictly dependent upon those adopted at the national level, if such opportunities are to be effectively turned to account the whole industrial base will have to be adjusted - by adapting existing activities and incorporating new ones - with those objectives in

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view. What is more, there are undoubted signs that past industrial policy, which aimed above all at intensifying the incentives to import substitution, in practice created adverse conditions for opening up industry to external and regional markets. This does not necessarily imply criticism of the pattern of industrial policy which existed at a time when conditions were very different from what they are, but merely emphasizes the need to adjust such incentives to new conditions and aims in so far as it is considered that they should begin to form part of the future industrialization strategy.

A second factor, closely linked to the first, could be expressed in terms of how far the tendency towards the "extensive" growth of industry will persist or to what extent a calculated effort will be made to re-orient it towards a greater internal structural integration of the major industries. This subject has been alluded to repeatedly throughout the present study, making it clear that, allied to other factors, those characteristics have been influenced by specific industrial policy provisions. To some extent, the question can be expressed also in terms of how to combine the industrial efforts concerned with the market and resources, a matter of vital importance if the bias is on regional integration aims and exports of manufactures to other markets.

A third consideration of the same nature is the location of industry. The question here is how far a deliberate attempt will be made to modify the noticeable trends towards a marked concentration of Latin American industry which have been followed under a more spontaneous policy. The question may be considered from two separate angles: firstly, how far should industry contribute to the internal integration of the countries' own economies, which are often faced with serious disequilibria in the development of their distinct component areas and disparity between their production and consumption capacity; secondly, how far will the location of industry have to be gradually adapted to conditions of progressive economic integration in Latin America.

/In defining

In defining those general long-term guidelines, it is impossible to avoid making some reference to the increasingly acute problem of manpower absorption. From the particular standpoint of industry, this continues to be a controversial subject. While some are of the opinion that industrial productivity should be stepped up through the introduction of technical advances on the widest possible scale, others support the course of seeking how best to combine the capital and labour factors of production as consistent with their relative supply in the Latin American economies. From the broader angle of the economy as a whole, there is no doubt that this is one of the most serious problems so far encountered in Latin America's development, and one which is increasingly aggravated by different factors, including the needs in respect of the modernization of agriculture and the rationalizing of existing distribution and marketing systems. Under the circumstances, while the problem can hardly be solved through action in any one sector of the economy, neither does it seem possible for any sector to refrain from helping to solve it. It is necessary, therefore, to define a long-term employment policy which, in turn, would necessarily influence the industrialization strategy.

It is the factors outlined above - and others too, since this is not a complete enumeration - which could, in the last analysis, contribute to devising the industrial development strategy apparently required in order to shape a better industrial policy. In the decisions taken in this respect a sufficient degree of similarity may be discerned between the individual countries to permit certain features of the strategy to be applied to Latin America in general, but important discrepancies are also observable between them as a result of particular conditions or objectives.

The point at issue is not so much that the decisions embodied in a strategy formulated along those lines have been absent from the content and pattern of past industrial policy, but rather how far the aims should be marshalled in order of importance and how much stress should be laid on selectivity in deciding on specific incentives.

/(b) Major

(b) Major industrial policy aims

A strategy of this nature would help to define certain basic objectives which, in turn, would be conducive to the more efficient use of specific instruments for shaping industrial policy. Although they may appear fairly obvious as expressed in general terms, it may not be superfluous to dwell in some detail on certain of those objectives with a view to placing them more accurately within the context of those broad definitions of industrialization strategy, and to bear them in mind in the more extensive references to particular measures and provisions contained in the following section.

(i) Financing. If Latin America's future industrialization process is to meet the new development needs, a fundamental requirement will be the mobilizing of enough resources to finance the expansion of industrial production capacity, and the distribution of those resources within the manufacturing sector itself in consonance with the structural changes it would have to undergo.

The greater industrial growth needs anticipated over the next few years can hardly be satisfactorily met on the basis of a financing system such as that existing in the past, as described in the pertinent section of chapter II. To increase the manufacturing growth rate to the levels shown in the hypothetical estimates presented in previous sections - that is, an average for the whole region of not less than 7 per cent annually - would entail a considerably larger gross investment in industry than in recent years, not only in absolute but also in relative terms, whether in relation to the industrial product or the total domestic product. Hence the need to strengthen, in economic policy in general and industrial policy in particular, the additional instruments and measures which will facilitate the relative transfer of resources from other economic sectors to manufacturing industry, or will substantially increase the latter's rate of savings.

Even if the aggregate rate of industrial investment were attained, its effectiveness would also depend on whether the funds were being properly channelled into the different branches of the manufacturing sector, in keeping with the necessarily varying industrial growth rates, which in turn

/would result

would result from the broader decisions embodied in the industrialization strategy. As has been seen, the want of selective criteria is precisely one of the shortcomings of past industrial policy which it is most important to remedy in the face of the new conditions.

The magnitude of investment needs is also conditional upon the efficiency with which production capacity - both existing and evisaged in the next few years - is utilized. The persistent under-utilization of installed capacity - a characteristic feature of Latin America's industry at present - would accentuate those needs, in addition to the inevitable repercussions of incorporating new and more capital-intensive production lines and the continuing process of replacing artisan industry by factory industry as such.

Accordingly, this broad aim of industrial policy should comprise not only the mobilizing and channelling of sufficient new investment resources, but also the efficient use of the resources available.

(ii) Technology. Another basic objective is to expedite the assimilation of new techniques and their adaptation to the conditions prevailing in the particular area concerned. As stated at the beginning of the present chapter, this undertaking entails far more than the mere introduction of new equipment and the necessary training in its operation. It applies not only to industry, but to all sectors of the economy, and to the general structure of society as well. Its importance is all the greater in that more stress is laid on the efforts towards regional integration and exports of manufactures of other markets, which - by overcoming the limitations of the narrow country markets - make it at once easier and more necessary to take the fullest possible advantage of technical progress.

It is not too much to emphasize that, under the new conditions envisaged, the assimilation of technology cannot continue to be restricted to the superimposing of more advanced phases of technical progress on a basically unaltered traditional structure. The persistence of what has been called "technological duality", both within the industry itself and in the whole sector in relation to others, is most likely incompatible

with the new guidelines drawn up in the industrialization strategy for Latin America. Training with a view to turning scientific progress to account in acquiring a fuller knowledge of regional resources and their use, and to adapting production techniques to the conditions prevailing in a particular area, is another increasingly important aim of industrial policy in its broadest sense.

(iii) Costs and prices. Linked to the foregoing, a third basic objective necessarily guiding industrial policy will be the elimination or mitigation of factors determining the high costs and prices of Latin American manufactures. Its raison d'etre is obvious, whatever may be the general industrialization strategy it is wished to pursue. To internal considerations are added those relating to regional integration and, in particular, to an active share of world trade in manufactures, and thus this objective becomes an essential requisite. Here, too, the aim would be not merely to establish new industrial activities capable of producing on a competitive footing, or at least at lower costs than at present, but to improve operating conditions for existing industry as a whole. Failing this, it would be impossible to attain other important goals such as the expansion of domestic markets in conjunction with lower prices for manufactured goods; nor is the fullest possible benefit likely to be derived from the new and more efficient activities if they continue to adhere to the traditional industrial base for the supply of inputs and other services required for their own production processes.

(iv) Income distribution. Lastly, it is important that one of the aims of industrial policy should be to secure the manufacturing sector's contribution to a more progressive distribution of Latin America's income. As has been repeatedly observed, manufacturing industry is bound to benefit from such redistribution, which may mean wider markets and, in many cases, lead to demand for manufactured goods on the part of broad population sectors hitherto unable to afford them. But the industrial sector should also contribute to a better income distribution - another factor to be borne in mind in formulating industrial policy -, not only through the relative movements of income between industry as a whole and other economic sectors, but also through the distribution of industrial income between factors of production in industry itself. In this respect, the information

given throughout the present study emphasizes the characteristically high relative prices of manufactured products, a situation which has changed little over the years. Thus, the tendency has been for the benefits deriving from technical progress in industry to be concentrated in that sector, almost to the exclusion of other sectors of the economy and consumers in general. The same data show that the salaries and wages paid in Latin American industry absorb a far lower proportion of the total value added than in the more developed economies, which suggests the importance, too, of helping to achieve the aim pursued through changes in the distribution of income between the factors of production of industry itself.

The latter goal - from the standpoint either of the transfer of real income or of the internal redistribution of income generated by the manufacturing sector - might in some degree conflict with the need to offer greater incentives to industrial expansion. Therefore, over and above its long-term favourable effects, it should be considered within the context of a broader industrial policy, including other compensatory incentives, so that altogether they will enable the industrial sector to fulfil its responsibilities in the light of Latin America's economic development needs as a whole.

(c) Specific instruments of industrial policy

As noted previously in regard to the principal guidelines which could define an industrialization strategy, the enumeration of aims set out above has been devised purely for illustrative purposes, since it would have to be enlarged and adapted to circumstances in each particular case. It is presented merely as a basis for determining how far the operation of specific instruments of industrial policy can be made more expeditious within the context of certain clearly-defined objectives.

It is impossible to relate each of those objectives to a specific instrument of industrial policy, since some call for a combination of more than one type of action, while a single instrument might be concerned with more than one such objective. For practical purposes, therefore, the following comments relate to fairly specific instruments which, however, are not set out in any special order of priority or importance.

/(i) Taxation.

(i) Taxation. Taxes are an important part of industrial policy, since they can be linked to several of the long-term guidelines and general aims indicated above. For example, they may provide incentives designed to facilitate the channelling of financial resources from other economic sectors into manufacturing industry; help to reinforce the internal sources of funds earmarked for the expansion of enterprises; exercise some influence in increasing the use of available production capacity; help to direct new industrial investment into such sectors or branches of industry as are most likely to meet industrial development needs as a whole; etc.

From the information contained in chapter III, it may be inferred that past tax procedures have only partially fulfilled those functions. Although the effect of taxation on industrial income has, on the whole, been fairly modest compared with the more industrialized economies, industry has not been more favourably treated than the other sectors of the economy. In fact, it can claim less favourable treatment, in terms of actual taxation since tax evasion has usually been more commonly practised in other sectors. On the other hand, in providing for adequate depreciation rates, facilities for the building-up of additional reserves and incentives to reinvestment of profits, taxation has played an active part in mobilizing the firms' own funds for additional investment and the proper maintenance of their production capacity. Even these facets, however, present shortcomings or limitations which might have to be remedied in the face of the new responsibilities of industrial growth. Thus, for example, the effectiveness of depreciation rates is often undermined or annulled by somewhat restrictive systems for the periodical revaluation of assets. Nor, in this connexion, have the systems of accelerated depreciation become sufficiently widespread or streamlined to constitute a real incentive to the fuller use of available capital. In some cases, preferential treatment is accorded in respect of reinvestment of profits on condition that the resulting funds are invested in the enterprise itself; thus, they cannot be channelled into supplementary activities which might be conducive to the integrated growth of the industries concerned, or into other apparently high-priority activities, with the result that surplus capacity is built up instead. Moreover,

/tax incentives

tax incentives to reinvestment are limited by the persistence of indirect procedures for the distribution of profits, which serve to reduce the total amount of officially declared profits that are subject to such provisions. Lastly, a particularly careful evaluation of the result of temporary tax exemptions as a means of stimulating new industrial ventures would seem to be called for, from the standpoint of how far such exemptions are justified, what effect they have on enterprise efficiency and how much discrimination is exercised with respect to other existing industries or enterprises.

(ii) Industrial credit. Besides constituting the major source of external funds for financing the expansion of enterprises, industrial credit can play a vitally important part in guiding industrial activities towards particular goals.

The data reviewed above are grounds for concluding that - with certain important exceptions - the absolute volume of credit available for industry has been very small compared with the magnitude of the industrial product. Although the relationship has gradually become more favourable than in other economic sectors, it should be assessed also in the light of the heavy financial obligations industry has to meet when it grants credit in order to market its products.

Added to the need to increase the total volume of credit earmarked for industry, in view of the aforementioned circumstances, and to accelerate industrial growth, other needs relate to the systems and terms under which such resources are made available. Commercial banking accounts for quite a large proportion of total industrial loans, but because of legal or other restrictions its activities are still confined to short-term credit, part of which must be used in practice for financing long-term operations. This gives rise not only to uncertainty regarding frequent re-negotiation of loans, but also to the high cost of periodically renewing operations which in themselves are relatively costly. Besides the substantive reforms which could be introduced in the traditional operation of the private banking system, it would appear necessary to examine how far influence can be brought to bear through

the monetary authorities to earmark resources for industry in preference to other goals, and even to introduce selective criteria for determining the priority to be granted to different manufacturing activities. These questions are much simpler to deal with in the case of public credit agencies, which are gaining in importance as suppliers of industrial credit under more favourable interest and amortization terms. A step of major importance, allied to fresh efforts to provide these agencies with the necessary resources to operate on a larger scale, would seem to be to strengthen their role as intermediaries in the channelling of future external loans. In this respect, useful experience has been gained from operations of that nature undertaken recently with resources of the Inter-American Development Bank (IDB). This measure, besides guaranteeing the indispensable supplementary means of payment abroad and facilitating longer-term operations, would open up access to international credit for the medium-sized and small enterprises, with the added possibility of obtaining technical assistance in adapting themselves to greater technological requirements.

Lastly, it should be pointed out that the guidelines and general aims referred to imply new short-term financing needs, as in the particular case of credit for facilitating exports of manufactured goods, either with a view to intra-regional trade or to a share in other world markets. Therefore, some of the credit lines that are taking shape - including IDB projects - might be assessed specifically with a view to bringing them up to the required magnitude.

(iii) The securities market. The efficient operation of the securities market could well be a major requirement in the two basic aims considered - that of attaining a sufficiently high level of industry investment and the proper channelling of the resources concerned. As may be inferred from the data contained in earlier chapters, however, its present level of activity is not only very low, relatively speaking, in most countries of the region, but in many cases it represents an appreciable reduction with respect to that registered in earlier years.

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From the standpoint of industrial policy, it is important to recognize in this contraction the structural and institutional factors to be taken into account in orienting future efforts to raise the level of activities. Both types of factors have been examined fairly thoroughly at some time or another, so that only a few of the suggestions emerging from their consideration will be dealt with here. They relate, inter alia, to methods of operation of the mechanisms concerned, including those recently summarized in terms of "the need to exercise the strictest care in selecting negotiable securities in order to inspire confidence on the part of the investor; the need to safeguard minority shareholders by means of legislation designed to protect them from improper practices or price-lowering measures by unscrupulous entrepreneurs; and, in short, the need to overcome the distrust, indifference or reserve of the public...". 16/

From another standpoint, steps should be taken to evaluate the effectiveness of other existing devices for channelling private savings, which might indirectly help to strengthen the securities market. While recognizing the present and potential contribution of this source of savings, its basic limitation deriving from the low average per capita income and the regressive nature of income distribution in most Latin American countries has been pointed out in earlier sections of this report. These considerations show that it might be wise to pay more attention to the efficient handling of securities market mechanisms as instruments for facilitating the mobilizing and proper channelling of the potential savings of the enterprises rather than as a means of attracting personal savings. The functions of such instruments under

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16/ Statement by Mr. Carlos Rafael Silva, Vice-President of the Central Bank of Venezuela, at the eighth operative meeting of the Centre for Latin American Monetary Studies (CEMLA), see CEMLA, "Posible constitución de un pool de reservas entre países latinoamericanos", Suplemento al Boletín Quincenal, No. 12 (Mexico, D.F., December 1964), p. 375.

existing conditions in Latin America and the experience gained by certain institutions - in particular, Nacional Financiera, S.A. Mexico - would require careful investigation and study before being defined in more concrete terms.

Moreover, Latin America's integration prospects present the matter in a new light, and no doubt it will gradually have to be considered at a regional level as well. This will come about, for instance, as and when the conclusion is reached - as happened in Central America and is beginning to happen in connexion with specific projects in other countries as well - that the impetus to specific integration industries must be combined with multi-national investment. Certain possibilities in this respect were suggested at the eighth meeting of the Centre for Latin American Monetary Studies (CEMLA), whose aim was to study the capital market with a view to economic integration.

(iv) Direct foreign investment. Direct foreign investment and greater incentives to channelling it into Latin American industry under the conditions afforded by an integrated regional market are ever-present considerations in the majority of the proposals put forward concerning the most effective instruments for expediting regional integration, and have been approached from two standpoints: the benefits deriving from its contribution, in terms of larger industrial investment resources and faster technological progress, and the possible disadvantages it might bring in the form of competition against the installation or expansion of Latin American enterprises proper. These sources of concern usually culminate in the need to standardize the provisions governing foreign capital in force in the various countries of the region, both as regards channelling it along more appropriate lines and avoiding competition between the countries themselves in attracting larger external resources by offering additional, particularly advantageous incentives.

Therefore, this aspect of industrial policy must be adapted to the new conditions. In so doing, it might be as well to take into account, too, some of the pertinent considerations noted in chapter III, particularly the tendency to distribute such investment over a wide

range of manufacturing activities - including some which are not highly capital-intensive and whose technical needs are limited -, instead of directing it into industries where its contribution might be more significant because of the amount of resources and high level of technical progress involved. A further desirable step might be to evaluate the fund of experience gradually accumulated concerning the association of foreign and domestic capital, and the various disparities deriving from the functioning of mixed enterprises as compared with those operating mainly or exclusively with foreign capital.

(v) Protectionist mechanisms. Protectionism is one of the aspects of industrial policy calling for careful revision in the light of the new industrialization aims and guidelines. The question is linked to several of the essential factors indicated above.

In the first place, the position of manufactured products as regards efficiency, productivity and relative prices in each of the Latin American countries is closely bound up with the virtual absence of competition in which the region's industry in general has developed. The protectionist policy imposed by the external sector's limitations and by the import substitution needs deriving therefrom has completely sheltered it from foreign competition. Other internal factors have been added: in many cases, domestic markets are small and thus the operation of only a limited number of plants, is justified which in practice conduces to monopolistic situations or cartels; in other cases, the existence of a larger number of small enterprises results in high costs and prices, and advantage is taken of this by a few large concerns with higher productivity levels which, though potentially capable of operating on a competitive footing, are in fact favoured by a more or less open distribution of the market.

This is, perhaps, one of the hardest and most difficult problems that industrial policy will have to face in the next few years, since situations such as these cannot persist in the light of the new requirements entailed by regional trade and exports of manufactures to international markets, and other needs associated with internal economic development.

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Although, under the circumstances outlined in the section concerned regional integration could offer, in part, the element of competition which is largely lacking today, it seems likely that, over and above the requisite adjustments in the integration devices proper, steps would have to be taken at the same time to rationalize the protectionist mechanisms.

In practice, the protective measures often come to constitute an incentive so strong as to overshadow or nullify other industrial policy stimuli which are consistent with more selective criteria. The very aim of reorienting industrial growth with a view to a more integrated structure of industry would be jeopardized if such characteristics of the protectionist policy were to persist. The same thing would happen as regards reconciling the need for import substitution with the efforts to encourage a significant flow of industrial exports.

Hence, there are a number of factors militating in favour of a review of past protectionist procedures as a requisite for a more adequate orientation of future industrial policy, over and above those aimed at remedying the internal shortcomings of the tariff mechanisms alluded to previously.

(vi) Promotion of industrial exports. Whether or not Latin America is to share in the world markets for certain manufactures will depend on the effectiveness of its over-all industrial policy rather than on specific measures or instruments. There are, however, some facets which might demand new forms of action not sufficiently covered by past industrial policy aims.

One is the promotion of sales of manufactures on external markets. The commitments and preferences that will finally be obtained from the industrialized countries - with both market and centrally-planned economies - permitting access to their markets for industrial products from the developing areas are contingent upon negotiations at the appropriate policy level and primarily through the agencies to be established as a result of the United Nations Conference on Trade and Development. But whatever progress is achieved at that level, if Latin America is not to waste its opportunities, not only must it have

industries capable of competing on world markets and of meeting requirements as to quality standards and norms, but it must also possess a thorough knowledge of external markets and apply effective measures for promoting trade in manufactures. Moreover, the absolute magnitudes that could be reached for particular transactions, which would be of far greater relative importance in the exporting country than in the industrialized country of destination, might prove beyond the possibilities of a particular enterprise and make it necessary, therefore, to pool the production of several establishments, which would also call for the establishment of appropriate organizations to undertake the task. In many cases, both the action in regard to external markets and the internal organizational measures with a view to exports would have to be channelled through specialized public bodies which would form an integral part of the set of mechanisms for promoting industry.

This may be a very important requirement in the case of exports of manufactures to countries with centrally planned economies, whose operations tend to be based on long-term agreements which are difficult to negotiate except through government agencies. This applies to certain agreements of this nature concluded by India, in which a State agency acted as intermediary, arranging that local private enterprises should pool their production in order to complete the volume of exports laid down in the agreements.

As stated previously, the prospects of creating an appreciable flow of industrial exports also entail new financing needs over and above the resources required to install or expand industries capable of exporting manufactures, including the financing of the trade transactions themselves. The question has already arisen in relation to intra-regional trade, which has shown this to be a decisive factor capable of nullifying the effects of other advantages which could have placed matters on a clearly competitive footing.

(vii) Price and marketing policy. As noted above, a revised protectionist policy and the advances made towards regional integration could have a marked effect on the relative prices of Latin American

manufactures, in terms not only of improved efficiency, with the consequent reduction in real production costs, but also of the limitations they impose on the maintenance of excessive margins between costs and prices at the producer level, favoured in many cases by the absence of sufficiently competitive conditions. However, this does not preclude tackling the problem through other instruments of industrial policy as well.

In this respect, it should be stressed that, although the deliberate aim of bringing about less favourable terms of trade for industrial products might discourage industrial development, the resulting expansion of the demand for manufactures would probably more than offset its temporary effects. This is a particular facet of the broader aim referred to in relation to the manufacturing sector's contribution to a redistribution of industrial income, transferring through the medium of relative prices a proportion of the benefits deriving from technical progress in industry, while at the same time creating the necessary conditions for producing on a larger scale for a market which that very policy would cause automatically to expand.

The foregoing considerations lead to the controversial subject of price control, whose use as an instrument of economic policy is dependent upon decisions at the national level in which other factors are also at stake. Suffice it to recognize, in this respect, that wherever recourse has been had to price control, primarily for the purpose of combating inflation, the main concern has been for products with direct incidence in the cost of living. In the case of many manufactures, either less importance has been attached to control, or it has proved less effective.

The problem, moreover, does not rest solely on prices at the producer level, but also on the inefficient distribution and marketing machinery, upon which the industrial policy hitherto pursued has had little or no effect.

(viii) Public instruments for promoting industry. Certain of the specific instruments referred to above - in particular in connexion with credit and the promotion of exports - entail direct action by

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public bodies, which is thus added to the indirect incentives deriving from other general industrial policy provisions and measures. In the past, other forms of government promotion have had important repercussions, and they will also face heavier responsibility in connexion with the need to accelerate and re-orient the industrialization process.

The promotion of State-owned enterprises - whether they retain that status or are transferred to the private sector once established - and the activities of other public bodies responsible for promoting new industrial projects have proved particularly efficacious in developing production lines, which could hardly have emerged so quickly had they been left entirely to the initiative of Latin American private capital. Hence, those direct promotional activities - the patterns and some examples of which are reviewed in chapter III - constitute an essential part of industrial policy.

Besides this type of activities, which are confided to public enterprises, there are others no less important, some of which, although exercising only an indirect influence on industrial development, should be dwelt on briefly here.

One such indirect role is played by public infrastructural investment and its effect on the location of industry. Years ago, it was easy to discern in the location trends of industry a sort of inertia which, under spontaneous conditions of growth, makes for the continued concentration of manufacturing expansion in centres that have already achieved considerable progress. If those trends are to be corrected, either because of internal growth factors or with a view to regional integration or foreign trade, an active industrial policy will deliberately have to embrace that aim. In many cases, the measures adopted do not seem to have been very effective, particularly when based on unco-ordinated incentives established independently in different areas, which were promptly brought into balance and thereby lost their essentially discriminatory character. Such incentives are even less effective when efforts are made to promote new industries in places lacking the indispensable infrastructure, and where it would therefore be necessary to establish basic services, such as transport, water, energy, and

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others providing the minimum requirements for the existence of an urban centre. The same thing would happen in the promotion of industrial complexes, which call for careful planning of the group of integrated industries concerned. This, therefore, is one of the most powerful instruments for shaping the new physiognomy of Latin American industry discussed above.

Another obviously important factor of industrial development is the training of manpower and technical personnel. Considered from a somewhat restricted standpoint, it should be noted that the possibility of improving the existing low levels of productivity and efficiency of much of Latin America's industry is to a certain extent dependent upon the availability of skilled personnel. Hitherto, even decisions concerning technical matters have often been drastically influenced by the shortage of skilled manpower. In point of fact, even though from a social or performance standpoint it might suit an enterprise to select a labour-intensive system, the shortage of properly trained personnel might well compel it to adopt techniques involving a higher level of automation, thereby sacrificing at once capital resources, employment opportunities and economy in the production process proper. Neither has the under-utilization of certain industrial production capacity been entirely unrelated to that shortage, which could be a serious obstacle to the establishment of additional working shifts. An equally important factor is the availability of enough senior personnel, both technical and skilled in the rational organization and management of enterprises, a question which, as noted previously, has a decisive influence on the productivity of Latin American industry.

Interesting - though perhaps not sufficiently extensive - experience has been accumulated in regard to several of these questions in the Latin American countries. However, in guiding these efforts in future it might be wise to bear in mind the desirability of dealing with the problem from a broader angle, embracing some of the aims outlined earlier (particularly in the section on industrial employment in chapter II). Briefly, it is a matter of carefully ascertaining how far training in

specific production activities should be combined with efforts in the province of general education designed to raise the capacity for absorbing the working population and to facilitate the latter's adaptation to different technical requirements, which can be an important factor if it is taken into account that, besides differing widely, these requirements are constantly changing. To increase the average years of schooling might thus be essential if a really well-trained labour force is to be available for industry. As in other respects, the necessary action seems to involve considerably more than the addition of a few efficient mechanisms, and extends to the transformation of traditional instruments and their adaptation to the new conditions. In this particular case the whole educational system would have to be expanded and revised, as an essential requisite for gradually achieving the aforementioned target of establishing an industrial community, in the broadest sense of the term.

The same consideration might apply to the responsibility borne by the appropriate public agencies for carrying out technological research. In addition to the scope of such research over the long-term, in the light of the above aspirations, stress should be laid on certain particularly urgent points. For example, it seems necessary to intensify research on such production techniques as are best suited to the region's relative supplies of resources. If Latin America fails to use its initiative in introducing innovations and devising techniques especially adapted to conditions in the region, the choice will tend to lie strictly between the more advanced and other fairly obsolete techniques which might be brought in from the industrialized countries, even though in many cases there is no reason why either type should be particularly suited to the peculiar conditions reigning in the area.

Systematic research on natural resources and the best ways of industrializing them are also very important subjects. This assertion is borne out by the fact that such resources will probably give birth to many of the projects for developing industries with a view to exporting manufactures to other areas.

As Latin America forges ahead in these respects, it will be able, as an important part of its promotional activities, gradually to intensify the technical advisory assistance provided to private enterprises. Viewed within the context of over-all industrial policy, technical assistance, besides its intrinsic importance, is one of the instruments which could help to match, in existing industry, the incentives that are now being offered primarily to new industries. It should therefore be an essential part of a policy aimed not only at accelerating the installation of new production capacity, but also at reducing the magnitude of "technological duality", today a feature of Latin America's manufacturing sector, by improving the efficiency and productivity of its traditional activities.

Purely for illustrative purposes, attention might be drawn, among other things, to the importance of the State's intensifying its advisory assistance to industries in connexion with production processes and trade marks.

As noted previously, for want of widespread internal efforts of this kind, agreements and contracts in respect of licenses, the use of trade marks and technical assistance from foreign concerns, whose incidence in the production costs of Latin American enterprises is by no means negligible, have become common practice. There are instances in which this type of agreement is fully warranted because of the complex nature of the production processes involved, and represents a useful way of transmitting foreign technical progress; in other instances, it amounts to little more than authorization to use certain trade marks, associated with quite simple processes; and again there are cases in which the licence is accompanied by export restrictions on the products in question, a yet more serious point since they might come to conflict with regional integration needs and with the growth of industrial exports in general.

The establishment of industrial norms, the definition and control of technical specifications and the provision of advisory services, laboratories, and other material facilities to aid the work of private enterprises might constitute another important sphere of action for the appropriate public agencies.

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Even in the field of preparation and evaluation of industrial projects a more intensive and systematic effort would seem to be required on the part of public agencies. The inadequacy of such projects is often alluded to as one of the main obstacles to industrial planning and the fuller and more timely use of the new sources of external financing which are being opened up for manufacturing industry in the region. Moreover, it is difficult, and in any case costly, to contract the services of foreign firms of experts, especially when the projects are neither very large in scope nor technically complex.

Various local agencies have gradually accumulated a valuable fund of experience in some of these questions, which might serve as a basis for the more intensive and widespread efforts that seem to be required if future industrialization needs are to be met. Moreover, those efforts could no doubt be greatly facilitated if undertaken on a regional scale, as has been happening to some extent in Central America. Not only would this result in greater efficiency and saving, but such efforts could be more easily oriented if the region's industrial integration prospects were taken explicitly into account.

Needless to say, it is not claimed that the enumeration of incomplete facets presented in this section amounts to so much as an outline of a specific industrial policy programme. At most it might be described as a research programme on the subject. The intention has been merely to bring into focus some of the findings derived from the analysis contained in earlier chapters, which it might be useful to bear in mind, among others things in specifically formulating an industrial policy. Be that as it may, such an undertaking is becoming increasingly urgent in the face of the new needs entailed by the acceleration and changing pattern of industrialization in Latin America. When the time comes to draw up such a policy, the disparities and peculiar conditions of each country will be brought to light, often vitiate any attempt to generalize for Latin America as a whole, although important common factors may undoubtedly persist. Another basic fact which will emerge is that, if the policy is to be effective, it must consist of a set of properly co-ordinated guidelines, measures and instruments, in the definition and

application of which the enterprises themselves would be offered the chance to participate actively. Thus, all the incomplete aspects of industrial policy would be integral parts of a single planned industrial development policy.

That the above requirement has not so far been satisfactorily met is plain from a study of the place in the whole Latin American institutional structure occupied by the administrative units charged with responsibility for industrial policy in its various forms, and their scant contact with enterprises. The fact that industrial policy plays a secondary role with respect to other goals, coupled with its lack of continuity, is at least partly attributable to that gap in the institutional structure in relation to a sector which is expected to play a strategic part in economic and social development as a whole.