In this paper the author examines problems of economic integration in Latin America in the nineteen-seventies. He examines first the policies of industrialization followed by the major Latin American countries during the postwar period, and the economic effects of these policies. Next, consideration is given to the gains integration can bring to the Latin American area in the form of improved resource allocation, economies of scale, and technological change. Finally, an attempt is made to evaluate a policy of regional integration in the framework of overall trade policy. In particular, it is suggested that regional integration and general trade liberalization should be pursued in a complementary fashion and the application of policy measures that can ensure the full exploitation of their potential benefits.

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The purpose of this paper is to evaluate alternative trade policies Latin American countries may apply during the seventies. I will consider first the policies of industrialization followed during the postwar period and the effects of these policies on exports and economic growth in the major countries of the area. This will be followed by a discussion of the prospective benefits of regional integration. Finally, an answer will be sought to the question if regional integration and trade liberalization are competitive or complementary policies for the nations of Latin America.

I Industrialization in Latin America

Industrialization Policies in the Postwar Period

Until the nineteen-thirties, the national economies of the Latin American countries were based largely on the exportation of food and raw materials in exchange for manufactured goods. While industries producing relatively simple consumer goods were established, this was done in response to profit opportunities provided not so much by tariff protection as by the "natural protection" created by the distance of the domestic markets of these countries from the industrial nations.

* The author is Professor of Political Economy at the Johns Hopkins University. This paper was written as part of a consultant arrangement with the World Bank. It should not be deemed, however, to express the Bank's views.
With national incomes in the United States and other industrial countries rising more-or-less steadily, and with concomitant increases taking place in their imports of foods and raw materials, incomes in Latin America rose also. The transmission of economic growth through imports came to a sudden halt, however, with the onset of the Great Depression. In the period 1929-32, the dollar prices of primary products fell by one-half and, with export volume also declining, the dollar value of Latin American exports decreased by nearly two-thirds. The increased burden of servicing foreign debt denominated in terms of foreign exchange and the cessation of the inflow of capital, too, reduced the import capacity of the Latin American countries, thereby contributing to a substantial fall in incomes.

The decline in the profitability of primary exports and the danger of future economic dislocations emanating from the United States provided incentives to the Latin American countries to reduce their dependence on foreign trade. This resolve was strengthened during the Second World War when manufactured goods became scarce on the world market, and was stimulated after the War by the desire for self-sufficiency and economic independence. Further contributing factors were agricultural protectionism in the industrial countries which, together with the assumed slow growth of their demands for primary commodities, gave rise to pessimistic forecasts regarding the prospects for traditional Latin American exports.

Economic doctrine favoring industrialization evolved in response to the situation as it was perceived in the immediate postwar years. Thus, Ragnar Nurkse argued that less developed countries should expand their manufacturing industries as to strengthen the weakened stimulus to their economic growth em-

nating from imports by the industrial nations. But while Nurkse called for industrial expansion behind low tariffs without jeopardizing the growth of primary exports, Raul Prebisch suggested replacing manufactured imports by domestic production without being concerned about the possible adverse effects of this policy on primary exports. Indeed, in Prebisch's view, the retardation of the growth of these exports would benefit Latin American countries through improvements in their terms of trade. At the same time, he postulated that industrial protection in the developed nations, together with the cost advantages of their domestic producers, would stand in the way of manufactured exports from Latin America.

Prebisch's ideas had a profound influence on the policies adopted by the major Latin American countries after the Second World War. The policies followed in countries such as Argentina, Brazil, and Chile aimed at stimulating manufacturing industries through protection, first in the form of quantitative restrictions and later tariffs. The measures applied favored manufacturing for domestic use as against exporting manufactures while the high prices of industrial inputs, as well as the overvaluation of the exchange rate associated with protection, penalized primary exports and discriminated against primary activities in general. Following a brief examination of these policies, I will consider their effects on foreign trade and on economic growth in the three countries. Comparisons will also be made with Mexico where manufacturing received less protection and there was less discrimination against primary production and exports.

Protection and Import Substitution

Investigations of the structure of protection in Argentina, Brazil, and Chile show high protection of manufacturing industries and considerable variability in effective rates of protection from one industry to another. High levels of protection provided powerful inducement to import substitution while discouraging the exportation of manufactured goods. The high variability of effective rates in turn reflects the fact that the system of protection in these countries is the historical result of actions taken at different times in response to the then-existing situation and the pressures exerted by special interest groups. It further appears that, in setting tariffs on the products of a particular industry, governments gave little attention to the resulting impact on other industries.

This situation shows the absence of a systematic policy of protection as well as a lack of adequate consideration of the cost of protection for the national economy. As Raul Prebisch has noted in evaluating the Latin American experience with import substitution, "the criterion by which the choice was determined was based not on considerations of economic expediency but on immediate feasibility, whatever the cost of production." In turn, Santiago Macario speaks of a policy of "import substitution at any cost".


The cost of protection was potentially not very large at the early stage of import substitution which entails replacing the imports of nondurable consumer goods and their inputs by domestic production. Industries producing such commodities are the prime candidates for import substitution since they employ chiefly unskilled and semi-skilled labor, do not require the application of sophisticated technology, and need few inputs from ancillary industries. Nor does the limited size of national markets constitute an important handicap for the development of these industries since the efficient scale of operations is relatively low and costs are not substantially higher in smaller plants.

But potential improvements in industries producing nondurable consumer goods and their inputs may not be realized if domestic markets continue to be isolated from imports through high tariffs as was the case in Argentina, Brazil, and Chile. Although there are cases when domestic competition led to improvements in production methods, the sheltering of these industries was generally conducive to a "live and let live" attitude and provided little incentive for product improvement and technical change. With continuing protection assured to them, the high costs observed in many of the firms may then be considered the result rather than the cause of protection.

At any rate, in the absence of exports, the expansion of industries producing nondurable consumer goods and their inputs necessarily slows down after all imports had been replaced since domestic production cannot continue to grow faster than home demand. In turn, increasing difficulties are encountered in import substitution in other intermediate products, capital goods, and durable consumer goods. These commodities have higher technological and skill requirements, require the availability of materials, parts, and components from other industries, and also need large-scale production for efficient operations.
Many intermediate products and durable goods require large-scale production for efficient operations, with costs rising substantially at lower output levels. And, even when the size of a country's domestic market permits the manufacture of a final product on an efficient scale, this will often not be possible in the production of its parts, components, and accessories. The size of the market further limits the extent of product specialization in individual firms which can also bring considerable gains.

Apart from the disadvantages of small-scale production, increasing costs are incurred as continuing import substitution leads to the establishment of capital-intensive industries. In turn, tax incentives to new investment and unrealistically low, often even negative, real interest rates favored the use of capital-intensive techniques in individual industries and, together with high levels of protection, made production at low levels of capacity utilization profitable.

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Policies and Performance

Industrial protection in Argentina, Brazil, and Chile provided a stimulus to the growth of their manufacturing industries. A variety of new industries were created and several large industrial complexes were established in these countries. Also, industrial expansion increased the availability of skilled workers, technicians, and entrepreneurs, thereby contributing to the modernization of the economic structure.

Continuing import substitution, however, eventually encountered difficulties in these countries because of the increasing cost of replacing the imports of commodities that are capital-intensive and require large-scale production for

1/ All data have been taken from U.N. statistical sources.
efficient operations. A slowdown in the growth of manufacturing first occurred in Chile whose domestic market is smaller than that of the other two countries. Argentina, too, experienced relatively slow growth in manufacturing since the early fifties by which time the first stage of import substitution had been completed. Import substitution could proceed faster in Brazil that has a larger domestic market but ultimately Brazil, too, encountered market limitations in a variety of industries and experienced a slowdown in the growth of manufacturing (Table 1).

In turn, manufacturing expansion continued at rapid rates in Mexico where the level of protection was lower and realistic exchange rates provided inducements to the exports of manufactured goods. These exports came to account for 5 percent of manufacturing output and 25 percent of total exports in Mexico while the relevant proportions in the other three countries did not exceed 3 and 10 percent, respectively (Table 2).

The policies followed further influenced primary production and exports. Industrial protection adversely affects the farmer by raising the cost of the commodities he buys while reducing his prices through the low exchange rates associated with protection. With adverse changes in relative prices providing disincentives to the expansion of agricultural output, food production per head increased at a slow rate in Argentina, Brazil, and Chile while the pressure of demand led to increased imports and/or the shrinkage in the export surplus.

\[\text{1/ During the sixties, effective rates of protection of manufacturing industries averaged about 26 percent in Mexico as compared to 113 percent in Brazil and 182 percent in Chile (Bela Balassa, The Structure of Protection in Developing Countries, Ch. 3); the figure for Argentina is likely to be of similar magnitude to that for Brazil.}\]
Table 1

ECONOMIC GROWTH IN SELECTED LATIN AMERICAN COUNTRIES

<table>
<thead>
<tr>
<th></th>
<th>Argentina</th>
<th>Brazil</th>
<th>Chile</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average annual rate of growth of value added</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Agriculture</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1950-60</td>
<td>2.3</td>
<td>4.7</td>
<td>1.2</td>
<td>5.4</td>
</tr>
<tr>
<td>1950-69</td>
<td>2.0</td>
<td>4.2</td>
<td>2.5</td>
<td>4.0</td>
</tr>
<tr>
<td>1950-69</td>
<td>2.1</td>
<td>4.5</td>
<td>1.8</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950-60</td>
<td>4.7</td>
<td>8.8</td>
<td>3.3</td>
<td>8.0</td>
</tr>
<tr>
<td>1950-69</td>
<td>4.5</td>
<td>5.9</td>
<td>2.5</td>
<td>4.0</td>
</tr>
<tr>
<td>1950-69</td>
<td>4.6</td>
<td>7.5</td>
<td>1.8</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>GDP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950-60</td>
<td>3.4</td>
<td>5.8</td>
<td>3.7</td>
<td>5.8</td>
</tr>
<tr>
<td>1950-69</td>
<td>3.4</td>
<td>4.3</td>
<td>4.5</td>
<td>7.1</td>
</tr>
<tr>
<td>1950-69</td>
<td>3.4</td>
<td>5.1</td>
<td>4.0</td>
<td>6.4</td>
</tr>
<tr>
<td><strong>Per capita GDP</strong></td>
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</tr>
<tr>
<td>1950-60</td>
<td>1.6</td>
<td>2.8</td>
<td>1.2</td>
<td>2.8</td>
</tr>
<tr>
<td>1950-69</td>
<td>1.6</td>
<td>1.3</td>
<td>2.3</td>
<td>3.6</td>
</tr>
<tr>
<td>1950-69</td>
<td>1.6</td>
<td>2.1</td>
<td>1.7</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Population</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1950-60</td>
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<td>3.0</td>
<td>2.3</td>
<td>2.9</td>
</tr>
<tr>
<td>1950-69</td>
<td>1.5</td>
<td>3.0</td>
<td>2.2</td>
<td>2.4</td>
</tr>
<tr>
<td>1950-69</td>
<td>1.8</td>
<td>3.0</td>
<td>2.2</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Note: For Brazil the terminal year is 1968.

Source: National and international statistics.
### Table 2

**EXPORTS IN SELECTED LATIN AMERICAN COUNTRIES**

<table>
<thead>
<tr>
<th></th>
<th>Argentina</th>
<th>Brazil</th>
<th>Chile</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average annual rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of growth of exports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950-60</td>
<td>0.1</td>
<td>-0.9</td>
<td>5.3</td>
<td>4.0</td>
</tr>
<tr>
<td>1950-59</td>
<td>3.6</td>
<td>4.2</td>
<td>8.4</td>
<td>5.5</td>
</tr>
<tr>
<td>1950-69</td>
<td>1.7</td>
<td>0.6</td>
<td>6.8</td>
<td>4.7</td>
</tr>
<tr>
<td>Manufactures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950-60</td>
<td>-7.6</td>
<td>15.6</td>
<td>11.1</td>
<td>12.2</td>
</tr>
<tr>
<td>1950-59</td>
<td>17.3</td>
<td>19.1</td>
<td>10.7</td>
<td>19.9</td>
</tr>
<tr>
<td>1950-69</td>
<td>3.5</td>
<td>16.3</td>
<td>10.9</td>
<td>15.8</td>
</tr>
<tr>
<td>All commodities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950-60</td>
<td>-0.5</td>
<td>-0.6</td>
<td>5.6</td>
<td>5.0</td>
</tr>
<tr>
<td>1950-59</td>
<td>4.6</td>
<td>5.1</td>
<td>8.5</td>
<td>7.2</td>
</tr>
<tr>
<td>1950-69</td>
<td>1.9</td>
<td>1.1</td>
<td>7.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Manufactured exports as a percentage of

|                        |           |        |       |        |
| output - 1969          | 2         | 1      | 3     | 5      |
| total exports - 1969   | 10        | 9      | 6     | 25     |

**Note:** For Brazil and Chile the terminal year is 1968 instead of 1969.

**Source:** National and international trade statistics.
Nor did the retardation of the growth of agricultural exports improve the terms of trade of countries applying high protection in manufacturing industries. Rather, the result was a decline in the export share of these countries in the world market. Such a decline is observed in Argentina (wheat, meat, and oilseeds), in Brazil (coffee and cocoa) as well as in Chile (copper). At the same time, overvalued exchange rates discouraged the development of new exports.

These considerations explain the slow growth of primary exports in Argentina and Brazil. In Chile, rapid increases in world demand for copper and the ensuing rise in copper prices boosted export earnings; for most other primary products Chile's experience duplicated that of Argentina and Brazil. By contrast, realistic exchange rates provided inducements to the expansion of primary exports in Mexico, leading to increases in market shares of traditional exports and to the development of new exports.

The slow growth of exports was not compensated by savings in the import bill in countries pursuing policies of import substitution. While the replacement of the imports of final goods by domestic production entailed a gross import saving, it also necessitated larger imports of materials, machinery, and equipment. This, together with the increase in food imports by some of the countries, meant that the decline in the share of imports in the gross domestic product was less than anticipated. In fact, in Argentina and Chile, after initial decreases, the share of imports in GDP increased again.

The retardation of export growth, together with the less-than-expected reductions in imports, contributed to a slowdown in the growth of the national economies of Argentina, Brazil, and Chile. The high capital requirements of new industries had similar effects by raising the incremental capital-output ratio. By contrast, the relatively rapid expansion of exports and lesser emphasis on
high-cost import substitution contributed to the rapid growth of national income in Mexico.

The increasing difficulties experienced by countries at higher stages of import substitution have recently led some governments to reconsider their economic policies. In Argentina in 1967 the extent of discrimination against primary production and exports was reduced and the protection of manufactured industries moderated through a simultaneous devaluation and a lowering of tariffs. Moreover, manufactured goods receive export subsidies and such subsidies are also provided in Brazil.

Efforts made to reform the structure of protection, however, have gone only part of the way and further progress is made difficult by the resistance of vested interests that also blocked the progress of the Latin American Free Trade Area. Yet integration in Latin America promises considerable gains to the member countries.

II. Prospective Benefits of Regional Integration

Effects on Existing Industries

In most discussions on Latin American integration, the potential benefits of establishing new industries have been at the center of attention. In turn, it has been claimed that little could be gained from removing trade barriers on the products of existing industries, and that any gains would be more than offset by the political and economic costs of dislocations pursuant to the liberalization of trade.

Various considerations explain the emphasis on the development of new branches of manufacturing and the apparent neglect of the gains to be obtained in existing industries. First of all, many regard integration in Latin America as a means of pursuing the policy of import substitution on a regional scale.

1/ This section draws on my "Integration and Resource Allocation in Latin America", ibid.
This point was forcefully made by Raul Prebisch:

"The stage of easy substitution is past. It was relatively simple to substitute domestic production for imports of individual items of current consumption and of some durable consumer and capital goods, and there is little margin left for substitution in this field in most of Latin America. We are now moving into the stage of import substitution in respect of intermediate goods or durable consumer or capital goods, which, besides being difficult to manufacture, require markets much larger than those of the individual Latin American countries".  

Second, it has been suggested that the welfare loss due to existing trade restrictions is relatively small in Latin America, in part because the manufacturing sector is small, and in part because the cost of protection per unit of output is of little consequence. This proposition received support from calculations by Arnold Harberger, according to which the cost of protection in a country like Chile would not exceed 2.5 percent of national income.

Finally, concern has been expressed about the political and economic cost of dislocation in existing industries in a regional union. Thus, in voicing opposition to reductions in tariffs on products of established industries in a Latin American union, it has been claimed that "having painfully and with great efforts succeeded in establishing a small amount of industry", Latin American countries may not "contemplate with equanimity the opening up of their mar-


The Scope for New Industries

The first question then concerns the scope for new industries in Latin America. While the possibilities for new industries are considerable in the smaller Latin American countries, this is not the case in the larger countries, and especially in Argentina and Brazil. The latter produce practically all consumer goods, durables as well as nondurables, most intermediates, and a wide assortment of machinery. Their import statistics show that apart from machine tools and electronics, these countries produce for much of their needs.

It appears then that if regional integration in Latin America were to encompass Argentina and Brazil, the number of new industries will be small. Correspondingly, the benefits of integration restricted to such industries will be limited. In fact, in the countries in question, the opportunities for gains from integration lie not so much in establishing new industries as in greater specialization which involves increasing the share of exports and imports in manufacturing and reducing the number of products manufactured.

These possibilities, and the limited scope of establishing new industries, are apparent if we consider the ratio of exports and imports to value added in manufacturing. These ratios are 1.5 and 7.2 percent in Argentina and 1.4 and 11.6 percent in Brazil as compared to 50 to 100 percent in the Netherlands, Norway and in Sweden which participate in the international division of labor in manufacturing. It should be added that differences in the ratios between the two groups of countries cannot be explained by differences in market size since as we will see below, the three European countries have domestic markets for manufactured goods comparable in size to those of Argentina and Brazil.

The Cost of Protection

The next question concerns the magnitude of the cost of protection and hence the potential benefits from trade liberalization. Harberger's cited estimate was based on the assumptions that all industries would continue and existing firms would not make improvements in productivity following the elimination of tariffs. In the paper referred to above I made alternative calculations on the assumption that some industries will disappear under free trade and, more recently, I have estimated the cost of protection assuming that in the remaining industries foreign competition would provide incentives for improvements in productivity so as to make them competitive in the world market. Such improvements would indeed be necessary in order to permit domestic firms to survive under competitive conditions.

Making calculations from effective rates of protection, with account taken of the terms-of-trade effects and the excess cost of exports under free trade, I have estimated the cost of protection as a proportion of the gross domestic product at 6.2 percent in Chile and 9.5 percent in Brazil. While similar calculations have not been made for Argentina, on the basis of information on protection levels, we can assume that a cost of similar magnitude would show for this country also.

The results are hardly surprising if we consider that the three countries devote a considerable amount of resources to the manufacturing sector and this sector is highly protected. Thus, in 1965, manufacturing accounted for 34 percent of the gross domestic factor incomes in Argentina and about 25 percent in Brazil and in Chile as compared to 31 percent in the Netherlands.

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1/ The Structure of Protection in Developing Countries, Ch.IV, Table 4.1 -- Estimates refer to 1961 in Chile and 1966 in Brazil.
23 percent in Italy, and 27 percent in Norway. However, while correctly indicating the proportion of domestic resources devoted to manufacturing, the figures for the Latin American countries overestimate the contribution of this sector to the gross domestic product since value added in manufacturing is expressed in terms of domestic prices inflated by protection.

Those considerations lead me to the question of measuring the size of domestic markets in the major Latin American countries. It is often assumed that the gross domestic product or even population provides an appropriate measure for this purpose. But if market size is to indicate the possibilities open to producers for exploiting economies of scale and the extent of potential competition, we should exclude agriculture and the service sector from our purview and limit our consideration to the domestic consumption of manufactured goods. Furthermore, the data have to be expressed in world market prices since domestic prices are raised by protection. The relevant estimates for 1967 are $8 billion in Argentina, $10 billion in Brazil, and $2 billion in Chile as compared to $17 billion in the Netherlands, $14 billion in Sweden, and $6 billion in Norway.

It appears then that in the major Latin American countries the extent of domestic markets is limited even in comparison with the smaller European countries. At the same time, cognizant of the advantages of large markets, the latter countries have long been the strongest proponents of integration. One may add that under modern conditions even a country as large as Great

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1/ United Nations, Yearbook of National Accounts Statistics -- The Brazilian figure is an estimate based on Ch. VI of The Structure of Protection in Developing Countries.

2/ Bela Balassa, The Structure of Protection in Developing Countries, Ch. II and the sources cited therein.
Britain expects to derive economic advantages from regional integration. Apart from improvements in resource allocation, such gains are the result of economies of scale obtainable in a wider market and of the effects of integration on competition and technical change.

**Economics of Scale**

Economies of scale can be obtained through the construction of larger plants to produce a single product (economies of scale in the traditional sense), through reducing product variety in individual plants (horizontal specialization), and through the manufacturing of parts, components, and accessories of a given product in separate establishments (vertical specialization). I will briefly discuss these forms of economies of scale in the following.

As noted above, economies of scale in single-product firms are of relatively little importance in industries producing nondurable consumer goods. Thus, if the best available techniques are used, in the production of textiles and shoes costs per unit of output may decline only by 10 percent as output doubles. However, this type of economies of scale is of great importance in many other major industries and small-scale operations in these industries impose considerable costs on Latin American countries.

In particular, while the production of steel ingots in a plant with an annual capacity of 500,000 tons involves costs 18 percent higher, and in a plant with 250,000 tons capacity 33 percent higher, than in a plant producing 1 million tons a year, none of the Latin American countries have plants of optimum size and national steel production exceeds one million tons in Argentina, Brazil, and Mexico only. In turn, compared to optimum size mills of 200 tons a day capacity, the cost of producing pulp and paper increases by one-fourth in mills producing 100 tons a day and by two-thirds in mills producing 50 tons; yet,

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most mills have a daily output of 50 tons or less in Latin America. Nor are the possibilities for economies of scale exploited in the chemical industry, petroleum refining, and electric power where investment costs as well as operating costs per unit have been shown to decline by 0.2-0.3 percent for a one percent increase in output.

A study by the Brookings Institution has attempted to measure the possible effects of regional integration in six Latin American industries. The study shows potential cost savings of 15-20 percent for methanol and formaldehyde, pulp and paper, and leather, and savings of 10-15 percent for nitrogenous fertilizers, tractors, and powdered milk and cheese, in the event that production were to be undertaken in an integrated Latin America rather than in the individual countries. In most cases, production costs would decline below import prices in the event of integration.

Comparisons of unit costs in domestic and foreign plants of American firms, reported in a National Industrial Conference Board Study, provide further evidence of economies of scale. According to the study, costs in foreign operations are on the average 29 percent higher than in the United States whenever the foreign plant's output is less than 5 percent of that of the U.S. plant; the ratio of foreign to domestic costs falls to 106 in the case of output ratios of 5 to 10 percent; it is 98 in the case of output ratios of 10 to

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50 percent; and 85 of the foreign plant produces more than one-half of the U.S. factory's output. The data combine information on Western Europe and developing countries, largely in Latin America; with plants in the latter being generally smaller than in the former, the potential cost reductions from large-scale operations in a regional union are also greater.

Horizontal specialization through reducing product variety in individual plants results in further scale economies. In large countries multiproduct plants can specialize in a narrower range of products and hence have longer production runs. The lengthening of production runs, in turn, permits improvements in manufacturing efficiency through "learning by doing"; reduces the expenses associated with resulting machines and reorganizing work; and allows for the use of specialized machinery. Often cited examples are textiles, clothing, footwear, automobiles, machine tools, and shipbuilding.

Evidence of horizontal specialization is provided for the textiles, clothing, and footwear industries in Norway where imports accounted respectively for 51, 25, and 17 percent of domestic production in 1965 while Norwegian firms exported a variety of specialty items. By contrast, in Argentina, Brazil, and Chile, the proportion of imports in these industries did not exceed 1 percent and exports were practically nonexistent. The results are explained by the fact that in countries with high levels of protection and bias against exporting, horizontal specialization is hampered by the incentive system. Home pro-


2/ Norwegian input-output statistics.
duction serves only domestic outlets and, in the absence of imports, firms tend to produce many varieties of a particular product in conformity with the pattern of domestic demand.

The lack of horizontal specialization involves excess costs for plants in Latin American countries which could be reduced in the event of regional integration as this would permit increased interchange of differentiated commodities and would thus entail reductions of product variety in individual firms. In industries producing durable consumer goods, machinery, and transport equipment, further gains can be derived from vertical specialization through the separation, in individual plants, of various activities leading to the production of a given commodity.

Even when the final product may be produced on a large scale in a developing country, efficient-scale operations will hardly be possible in the manufacturing of parts, components, and accessories, so that the "backward integration" of the production process involves considerable costs. It was shown, for example, that in 1967 the excess cost of domestic car production in Brazil rose from 6 to 71 percent as one moved from assembly to the domestic production of 90 percent of the value of the automobile. Yet Brazil has required automobile manufacturers to raise the domestic content of an automobile to 90 percent. Legal requirements on the minimum proportion of nationally fabricated components have also been progressively increased in Chile: from 27 percent in 1964 to 32 percent in 1965 and again to 45 percent in 1966.


Regional integration promises particularly important benefits in the automobile industry in Latin America, in part through reduction in the number of producers and models, and in part through the interchange of parts, components, and accessories. Such an interchange has permitted considerable cost reductions in Western Europe. In this connection, it is of interest to note that Norway with five times as many passenger cars as Chile does not produce automobiles; rather, it participates in the international division of the production process by manufacturing car parts, components, and accessories for assembly abroad.

Competition and Technological Change

The effects of protection on competition and technical change, noted briefly in Part I, deserve further discussion. In Latin American countries with high levels of protection, the limitations of domestic markets have led to the establishment of monopoly positions in some industries and there is rarely effective competition in others, because the high profits assured by continuing protection are conducive to a "live and let live" attitude.

High profits then absorb part of the difference between domestic and foreign prices. In national firms, these profits represent a redistribution of incomes from domestic consumers to producers. In turn, protection involves an additional cost to the national economy if the firms are foreign-owned since profits are now transferred abroad. Foreign investment in highly protected industries, then, may conceivably bring a loss rather than a gain to a developing country.

High profits assured by protection will tend to have further adverse effects, irrespective of whether firms are owned by the country's nationals or by foreigners. These effects relate to the firm's motivation in the "hot-house" atmosphere of sheltered domestic markets. In such a situation, firms
tend to follow a policy of low turnover and high profit rates and have little incentive for product improvement and technical change. In fact, in highly protected industries, product quality has often deteriorated and firms have been reluctant to assume the risk associated with the introduction of new products, production methods, and innovating activity in general. At the same time, by maintaining prices at high levels, the lack of competition limits the expansion of domestic markets.

Regional integration would expose domestic firms to competition in Latin America and would provide inducements for technological change and product improvements. An example of this process is provided by the experience of Italy in the Common Market. While Italy was industrially the least developed among the EEC countries, entry into the Common Market has led to the modernization of its industrial structure and rapid increases in productivity and living standards.

Dislocations Resulting from Economic Integration

I come now to the question if regional integration in Latin America would create the danger of substantial dislocations in individual industries. In this connection, the experiences of the European Common Market and the Central American Common Market are of interest.

Prior to the establishment of the European Common Market the possible adverse consequences of economic integration in particular branches of the manufacturing sector received much attention, especially in France and Italy. It was feared that the elimination of tariffs on intra-area trade would lead to the disappearance of some national industries and the process of adjustment would create difficulties in others.
These fears have not been realized. There are no examples of declining manufacturing industries in any of the member countries, nor have they experienced a wave of bankruptcies. Rather, the number of bankruptcies has fallen since the Common Market's establishment, there is little evidence of frictional unemployment, and the industries of the member countries enjoyed rapid expansion.

The results are explained if we consider the pattern of adjustment in the EEC countries. This took the form of intra-industry rather than inter-industry specialization. Intra-industry specialization occurred through increased exchange of consumer goods and through specialization in narrower ranges of machinery and intermediate products in the individual firms; the former does not require adjustment in the structure of production while in the case of the latter changes in product composition can be accomplished relatively easily.

The question arises, however, if these conclusions are applicable to a union of developing countries. In this connection, the experience of the Central American Common Market is of interest. The creation of CACM led to a rapid expansion of trade among the member countries, with the annual rate of increase averaging 22 percent in the period 1953-61 and 32 percent in 1961-68. The increase took place largely in manufactured goods whose share in the total had reached 86 percent by 1968. At the same time, the expansion of trade in manufactures in the region entailed chiefly intra-industry rather than inter-industry specialization. This is especially apparent in the textile and shoe industries which are characterized by an increased exchange of products permitting the uti-

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1/ For a detailed discussion, see my "Tariff Reductions and Trade in Manufactures among the Industrial Countries", American Economic Review, June 1966, pp.466-73.
lization of economies of scale without adverse effects on national indus-
tries.

As the major Latin American countries are in-between the EEC and the
CEC countries in terms of their industrial development, it can be expected
that the experience of the two groups will have applicability in a Latin
American union also. It is a different question, however, that the integra-
tion of countries at different levels of development may bring considerable
dislocations. I will return to this question in Part III.

III A Policy for Regional Integration in Latin America

Regional Integration or Trade Liberalization?

In recent discussions on possible policy choices, the question has been
raised if changes in trade policies are a substitute for regional economic in-
tegration. In some of the larger countries of Latin America, the view has been
expressed that general measures of trade liberalization might suffice to accele-
rate economic growth and regional integration could possibly hinder rather than
help this process. It is claimed that this would be the case, in part because
regional integration will lead to the purchase of commodities from partner coun-
tries at prices exceeding those on the world market and in part because it en-
tails undertaking obligations that interfere with the freedom of individual coun-
tries to determine their own policies.

I will argue in the following that if appropriate policies are followed
regional integration is complementary rather than competitive with trade libe-
ralization. I will first discuss the need for parallel moves in overall trade

1/ On intra-industry specialization in Central America, see L.N. Willmore,
"Free Trade in Manufactures Among Developing Countries: The Central Am-
erican Experience", Economic Development and Cultural Change (forth-
coming).
liberalization and regional integration and will then consider the policy measures that need to be applied to exploit the potential benefits of integration and to avoid a conflict between overall trade liberalization and regional integration.

It follows from the discussion on policies and performance in Latin America in Part I and I have elaborated in more detail in a recent paper, that in countries which have so far followed a policy of import substitution, improvements in growth performance in general, and in the structure of manufacturing industries in particular, would necessitate "opening" the economy. This would involve reducing the level of protection, equalizing rates of protection among manufacturing industries with temporary exceptions made on infant industry grounds, and providing similar treatment to import substitution and exports of manufactures.

Whereas under such a scheme trade barriers would be maintained albeit at reduced levels, regional integration would entail eliminating such barriers on trade among member countries. There are various benefits obtainable through regional integration in addition to those the general measures of trade liberalization provide. First of all, integration involves granting mutual concessions rather than unilateral reductions in trade barriers so that the export industries of the participating countries will have access to a wider market. Furthermore, risk and uncertainty in intraregional trade is reduced by removing the danger that partner countries would impose restrictions on imports or increase subsidies to exports. The policing of dumping, too, may be easier in an integrated area and regional arrangements may extend to non-tariff barriers which have assumed considerable importance in international trade.

Also, in a union encompassing countries at similar levels of industrial development, there is less risk of major dislocations which may occur in trade among countries at different stages of development. Thus, Argentina will be more willing to liberalize trade with Brazil than with the United States or India. Common interests and a greater knowledge of economic conditions among neighbouring countries also encourage integration in a geographical area. Finally, a regional union can serve as a learning ground for exporting manufactured goods by Latin American countries and prepare firms to face the world market.

As long as regional integration is undertaken pari passu with overall trade liberalization, the described benefits of integration will not be contravened by the adverse effects of establishing a high-cost area. But the objective of exploiting the benefits of regional integration will require appropriate action in regard to economic policies. In the following, I will examine the policy conditions of this outcome. The discussion will be limited to trade policies; notwithstanding their importance, space does not permit me to extend the discussion to questions such as the coordination of domestic investment in particular sectors and policies on foreign investment.

Policy Coordination in an Integrated Area

There is first the question of differences in the structure of protection among countries participating in an integration scheme. This question received much attention in the late fifties in discussions concerning the proposed all-European Free Trade Area. It was claimed that in a free trade area the pursuance of independent commercial policies by member countries vis-à-vis outsiders will lead to trade deflection by benefiting the further transformation of commodities imported from outside the area in countries where such commodities bear lower tariffs.

The question has been satisfactorily resolved in the European Free Trade Association, encompassing Austria, Denmark, Finland, Norway, Portugal, Sweden,
Switzerland, and the United Kingdom, where origin rules have been established on commodities traded among the member countries. A product is regarded as originating within EFTA, and hence receives duty-free treatment, if value added in the participating countries exceeds 50 percent of the final price or, in a few cases, if a specified process of transformation takes place in one of the member countries.

The success of EFTA with the origin rule, however, does not mean that it would also be applicable to a Latin American union. This is because tariff differences are much larger in Latin America than among the EFTA countries. Large differences in tariffs on inputs and outputs, in turn, may lead to specialization corresponding to differences in external tariffs rather than to comparative advantage. Assume, for example, that an imported intermediate product accounts for one-third of the final price, while the relevant tariff rates are 5 and 2 percent in EFTA and 100 and 40 percent in Latin American countries. While relative differences are the same in the two cases, the country with the lower tariff would have a 1 percent cost advantage in the first case and 20 percent in the second. Yet differences of such magnitude are by no means uncommon in Latin America.

Moreover, in the presence of differences in tariff levels, the preferences accorded to partner countries will depend on the level of external tariffs. This is because differences in the combination of exchange rates and tariffs will affect the competitive position of individual countries in a Latin American union that involves abolishing tariffs on intra-area trade without necessarily affecting the exchange rate. The effects of these differences can be shown by an example.

1/ It can be assumed that in view of the rather small share of intra-area trade in Latin America, the expansion of this trade may not appreciably affect the exchange rate.
Assume that country A applies the basic exchange rate to traditional primary products which do not face an infinitely elastic world demand; it provides a 10 percent tariff and export subsidy to nontraditional primary products; and it accords a 32 percent tariff and export subsidy to manufactured goods. In turn, in country B the basic exchange rate applies to nontraditional primary commodities; there is a 9 percent export tax on traditional exports; and a 20 percent tariff and export subsidy is granted to manufactured goods. It is easy to see that the relative incentives provided to the three sectors are equivalent in the two countries. However, if tariffs are eliminated on intra-area trade without any other change in the system of protection, exporters of nontraditional primary products and manufacturers will be put at a disadvantage in country A as compared to country B. The conclusion is strengthened if both tariffs and export subsidies are eliminated in trade among the member countries.

Such differences in the system of protection in fact exist between Argentina and Brazil as well as between Venezuela and Colombia, except that export subsidies are not provided at the same rate as tariffs. Correspondingly, there is disincentive to regional integration for the former country in both cases. The equitable distribution of the benefits of integration and, moreover, the decision to participate in such a scheme thus depends on the harmonization of the system of protection in the partner countries. To avoid also the trade deflection referred to above, the establishment of a common customs tariff on imports from non-member countries would be necessary, accompanied by common rules on export taxes and subsidies.

I have assumed so far that exchange rates are set so as to ensure that balance-of-payments equilibrium is continuously maintained. However, in Latin America there often is an inflation-devaluation cycle, with inflation proceeding continuously and devaluation undertaken in discrete steps. Such a
policy creates uncertainty in international trade. On the one hand, exporters cannot foresee changes in the domestic equivalent of foreign exchange receipts; on the other, countries face the prospect of a sudden inflow of goods from a country which has just undertaken a substantial devaluation.

The maintenance of an inflation-devaluation cycle thus provides disincentives to exports as well as to regional integration. To avoid these adverse consequences, it would be necessary for the participating countries to adopt a policy of changing the exchange rate pari passu with inflation so as to maintain the real exchange rate -- the ratio of an index of nominal exchange rates to the domestic price index -- constant. This is in fact done in Brazil and Colombia but the practice would need to be extended and codified in a Latin American union.

I come finally to the question of intercountry differences in the level of industrial development within an integrated area. Establishing an investment bank for the area would be of some help in reducing such differences. Experience indicates, however, that this needs to be complemented by other measures. Of primary importance would be applying a tariff-subsidy scheme on trade in manufactured goods by member countries at lower levels of industrialization.

A transfer tax has in fact been instituted in East Africa but without an export subsidy. In the EEC also, less developed member countries have the right to maintain, and even to impose, tariffs for a prolonged period. In EFTA, Portugal will eliminate tariffs on intra-area trade by 1980 while other member countries have done so by 1968. In the case of Latin America also it would be appropriate to allow the lesser developed countries to maintain
barriers on intra-area trade in manufactures over a longer period and to apply subsidies to such exports.

These measures would provide additional incentives to the manufacturing industries of the lesser developed countries in the area vis-à-vis both their partner countries and the rest of the world. They can be rationalised on infant industry grounds and would have to be reduced and eventually eliminated according to an agreed time table.

Conclusion

It may be concluded that regional integration would bring benefits to Latin American countries over and above those obtainable through overall trade liberalization. At the same time, the liberalization of trade with the rest of the world would enhance these benefits by lessening the possibilities for maintaining and establishing high cost industries in the participating countries. In turn, regional integration may be conducive to overall trade liberalization through its "learning effects".

The full exploitation of the benefits of regional integration, however, requires the coordination of trade policies, including exchange rate policy, among the member countries. Such coordination may in fact be considered a precondition of integration as this is now discouraged by reason of the dangers of trade deflection and large sudden changes in trade flows, differences in the policy mix, and possible adverse effects for lesser developed countries. To the extent that the coordination of trade policies leads to improvements in these policies, it will also contribute to overall trade liberalisation. And, while the freedom of the participating countries to follow independent policies will be reduced, this may be a small price to pay for the potential benefits of policy coordination in an integrated area.