

## Capital goods

### Size of markets, sectoral structure and demand prospects in Latin America

*Jorge Beckel\* and  
Salvador Lluch\*\**

During the past thirty years, the manufacture of capital goods has undergone considerable quantitative and qualitative development in Latin America. This progress, which is especially notable in the larger countries of the region, has largely been the result of an import-substitution effort made through various government stimuli which have raised the technological level of the industry and given the economies greater independence with respect to the fluctuations in the world export commodities market.

Despite the overall progress achieved, the regional trade in capital goods is fairly limited, since half of the total purchases come from outside. This fact is worth pointing out at times such as the present when, except in Mexico, the machinery and equipment plants, boiler shops and related industries have been showing a drastic drop in their levels of activity and amount of orders.

Moreover, there are many cases of displacement of national production by imports, along with clear indications of serious setbacks and losses in the industrial and technological fields which may be difficult to make good. CEPAL, which from its inception has devoted much attention to the Latin American industrialization process, has been observing with concern this difficult state of affairs, which contrasts with the enormous regional needs for capital goods.

\*Economic Affairs Officer, CEPAL/UNIDO Joint Industrial Development Division.

\*\*Co-ordinator of the Capital Goods Project, CEPAL/UNIDO Joint Industrial Development Division.

## I

### Capital goods and the advance of industry

During the 1970s, industry in Latin America experienced fairly vigorous growth: manufacturing activity generally grew at higher rates than the economy as a whole, and the rate of increase was also relatively high in comparison with that of the industrialized countries.<sup>1</sup> These tendencies, and the equally positive results in the field of manufactured exports, show that industrial activity is making strides in the region.

This picture, however, is somewhat darkened by the disturbing world economic situation, since there are some phenomena which could have very negative repercussions on the economic and social development of the countries of the region,<sup>2</sup> especially the energy crisis and the acceleration of world inflation.

The energy crisis obviously affects countries differently according to whether or not they produce oil. Since most of the region belongs to the second group, it is affected by this problem in overall terms; moreover, many countries must make efforts to readjust, which may mean a deceleration of economic growth, an increase in external debt or, most probably, a combination of both effects.

World inflation, of which the increase in oil prices is only one cause, also affects Latin America, not only stimulating its domestic inflation but also making it more difficult to acquire supplies of imported goods: a situation aggravated by the world recession which has an impact on the level and price of the region's exports. Despite the unfavourable world economic situation, the regional economy as a whole has behaved better than might have been expected, largely due to the strong growth of reciprocal trade. But although in this reciprocal trade there is a greater share of manufac-

<sup>1</sup>CEPAL, *Análisis y perspectivas del desarrollo industrial latinoamericano* (ST/CEPAL/CONF.69/62).

<sup>2</sup>CEPAL, *The economic and social development and external economic relations of Latin America* (E/CEPAL/1061).

tures, this is still low in quantitative terms, and its significance decreases if it is analysed in qualitative terms. Moreover, as indicated above and as shown by various CEPAL studies, and even though there are definite differences among the various countries, the industrial structure of the region is clearly asymmetrical because of the insufficient development of the more complex manufactures, such as most capital goods. The development of basic engineering also appears insufficient as regards the production of the more complex metal manufactures and machinery or electrical products, or products of substantive importance in large-scale projects.<sup>3</sup>

As already noted, this situation varies considerably in the different countries, since the larger ones have managed to establish a substantial capacity for the manufacture of equipment, but at all events the regional deficiency in basic engineering affects all the countries of the region to a significant extent.

These observations, and others not expressly considered here, reveal the need to make a detailed study on the origin and establishment of capital goods production in Latin America. It is necessary to know the capacities and deficiencies of this sector and to assess how far it has been adapted to the needs of the region: this is, of course, the purpose of CEPAL's activities in this field. It is a complex task which, beginning with exploratory studies several years ago, is now reaching a stage of materialization and concerting of efforts which will help to attack and eliminate the obstacles to the development of a productive sector of singular importance for the progress of the region.<sup>4</sup>

It should be noted that even though the production of equipment is concentrated in the

three largest countries, the subject is also of interest for those which have a smaller market. The latter can act in two main ways: arranging for domestic industry to participate in the construction of large projects located in their territory, or encouraging it to produce specialized equipment required by the primary sectors of the country. Regarding the first of these courses of action, the preliminary studies already done by the project show, for example, that the majority of the member countries of the Central American Common Market already have sufficient productive capacity to carry out the implementation of certain parts of projects which are of technical interest, such as feeder pipelines for hydroelectric plants, floodgates for these plants, pressure vessels for other installations and, of course, simple structures and support and inspection systems.

It is interesting to note that the execution of these activities not only involves an increase in the technological resources of the country and the level of training of its labour force, but also, in the majority of cases, offers clear economic advantages principally due to considerable savings in transport. Moreover, many parts of certain large projects not only involve high transport costs but also intensive use of labour, which contributes to the attractiveness of domestic production.

Naturally, the execution of such activities requires a very serious analysis of the project and of the requirements which its various components involve, and this analysis calls for an engineering capacity which obviously is acquired over time. This would appear to be a very interesting field for co-operation among those Latin American firms which have reached different levels of progress.

<sup>3</sup>This subject, which cannot be omitted here, deserves a specific and in-depth analysis for two main reasons: firstly, the inadequacy of basic engineering creates a dependency which inhibits real trade competition; secondly, it is a very difficult situation to correct, and concerted, long-range efforts would be required in various fields in order to do so.

<sup>4</sup>It should be noted that in the accomplishment of this

work the support of UNDP and UNIDO within the United Nations System were of major importance, as were the collaboration of other regional bodies, such as CIER and OLADE, the help of enterprises of the region such as PETROBRAS and ELETROBRAS, and the very generous help given by the Government of Spain through the Ibero-American Institute of Co-operation.

## II

## Evolution of demand during the past decade and size markets in the Latin American countries

During the 1970s the demand for capital goods evolved differently in the various Latin American countries. For the purposes of this study the situation was initially examined in eight countries: Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, Peru and Venezuela. The group thus includes the three countries with the relatively largest markets and the

countries of the Andean subregion; as can be seen, it also includes both exporters and importers of oil, and even one country (Colombia) which changed from an exporter to an importer of crude oil during the period in question.

Table 1 shows the evolution in these countries of two indicators of the demand for capital goods from 1971 to 1978; also shown are invest-

Table 1

### EVOLUTION OF TWO INDICATORS OF DEMAND FOR CAPITAL GOODS IN 8 LATIN AMERICAN COUNTRIES IN THE PERIOD 1970-1978

(1970=100)

	1971	1972	1973	1974	1975	1976	1977	1978
<i>A. Investment in machinery and equipment<sup>a</sup></i>								
Argentina	111	113	152	181	102	121	153	116
Bolivia	104	124	145	182	234	258	268	247
Brazil	120	143	191	235	242	238	235	253
Colombia	109	99	94	121	126	156	193	213
Ecuador	147	158	180	250	388	322	482	446
Mexico	95	107	131	152	171	161	128	162
Peru	108	108	161	217	235	178	135	96
Venezuela	116	136	156	158	210	274	382	368
<i>Total</i>	<i>111</i>	<i>125</i>	<i>161</i>	<i>193</i>	<i>193</i>	<i>197</i>	<i>204</i>	<i>211</i>
<i>B. Imports of capital goods<sup>b</sup></i>								
Argentina	112	117	102	104	103	92	170	160
Bolivia	93	114	147	191	239	237	252	302
Brazil	133	179	232	267	303	253	197	209
Colombia	88	86	82	93	94	108	105	182
Ecuador	119	124	139	218	330	311	484	510
Mexico	89	110	138	158	199	192	157	203
Peru	95	97	154	242	271	226	166	155
Venezuela	115	144	150	178	267	315	394	424
<i>Total</i>	<i>109</i>	<i>132</i>	<i>155</i>	<i>182</i>	<i>222</i>	<i>213</i>	<i>215</i>	<i>242</i>

Source: Prepared by the CEPAL/UNIDO/UNDP Capital Goods Project (RLA/77/015) on the basis of information from the Statistics and Quantitative Analysis Division.

<sup>a</sup>Based on constant 1970 prices. An estimate of the value of investments at 1980 prices is given in annex I.

<sup>b</sup>On the basis of the CIF value and in current dollars for each year. For the conversion to constant prices the wholesale price index of capital goods in the United States market was used. The value of imports at current prices for each year is given in annex II.

ment in machinery and equipment and the value of capital goods imports.<sup>5</sup> As may be seen, there are two fairly clear-cut categories. One is made up of countries where the indicators of demand show an upward trend over the entire period; Bolivia, Ecuador, Colombia and Venezuela belong to this group. The other is characterized by a growth in demand during the first five years of the period but by stagnation in the second; the three large countries and Peru belong to this second category. The table shows that the fact that a country is or is not an oil exporter, or is self-sufficient, does not explain in itself the different behaviour of demand for equipment. Moreover, the demand in Latin America as a whole reflects the evolution characteristic of this second group, due to its importance in the region.<sup>6</sup>

The amount of demand for capital goods in the various countries is related in the first place with the size of their national economies, although, as well as size, the differences in the proportion of the gross domestic product which each country devotes to capital formation, as well as its structure, are also determining factors in these differences.

The importance of each country as an import market is largely determined by the development of the supply of capital goods produced domestically. Table 2, which shows the geographical structure of investment in machinery and equipment as well as capital goods imports in Latin America in recent years, illustrates this.

It may also be seen that the investment in machinery and equipment by the small and medium-sized countries, taken as a whole, represents 27% of the total for all 19 countries considered: i.e., it is comparable in relative terms to that of each of the three largest countries in the region. Moreover, the small and medium-sized countries together absorb approximately half of Latin American imports of

capital goods. This represents, for example, a figure almost three times Brazil's imports under this heading. In brief, the capital goods market in the small and medium-sized countries is substantial and represents an interesting basis for possible productive activities in these countries or for regional co-operation efforts which go beyond what the largest countries can do among themselves.

Table 2

LATIN AMERICA: GEOGRAPHIC STRUCTURE OF INVESTMENT IN MACHINERY AND EQUIPMENT AND OF IMPORTS OF CAPITAL GOODS (19 COUNTRIES)<sup>a</sup>

(Percentages)

Country	Investment in machinery and equipment, 1976 <sup>b</sup>	Imports of capital goods, 1979 <sup>c</sup>
Argentina	10.8	10.2
Bolivia	0.6 <sup>d</sup>	1.5
Brazil	46.3 <sup>d</sup>	16.2
Colombia	4.1	5.5
Costa Rica	0.8 <sup>d</sup>	1.3
Chile	1.8	5.1
Ecuador	0.8	4.2
El Salvador	0.6 <sup>d</sup>	0.9
Guatemala	1.1	1.8
Haiti	0.1 <sup>d</sup>	0.1
Honduras	0.4 <sup>d</sup>	0.9
Mexico	16.0	25.3
Nicaragua	0.3	0.2
Panama	0.6	1.0
Paraguay	0.6	0.8
Peru	3.1	3.5
Dominican Republic	0.9	1.0
Uruguay	0.6	1.2
Venezuela	10.5 <sup>d</sup>	19.3
<i>Total</i>	<i>100.0</i>	<i>100.0</i>

Source: Prepared by the CEPAL/UNIDO/UNDP Capital Goods Project on the basis of information from the CEPAL Statistics and Quantitative Analysis Division (see annexes III and IV).

<sup>a</sup>Based on the "Clasificación por Uso y Destino Económico" (CUODE).

<sup>b</sup>Based on user prices in 1970 dollars; amounts in national currency were converted to dollars at the countries' import exchange rate.

<sup>c</sup>Based on CIF prices in 1979 dollars.

<sup>d</sup>Estimate based on average of investment in machinery and equipment in total gross fixed investment, 1970-1975 (see document E/CEPAL/1021).

<sup>5</sup>These goods are defined in keeping with the "Clasificación Uniforme por Origen y Destino Económico" (CUODE).

<sup>6</sup>After 1978, there was a sharp change in the trend in Mexico. This was so significant that it must be pointed out even though it obviously does not affect the situation of the period in question.

The above, however, should be analysed with some caution, since preliminary estimates indicate that the three biggest countries account for 90% of the current production of capital goods, and four medium-sized countries

produce most of the remaining 10%. It is apparent that the domestic market has thus far been a determining factor in the development of capital goods production in Latin America.<sup>7</sup>

### III

## The sectoral structure of investment in machinery and equipment in Latin America

Only partial data are available on the annual investment by the various sectors of activity in the region. Because this is an important aspect of the capital goods market, an attempt has been made to estimate the investment in machinery and equipment in some economic sectors, and for this purpose an analysis was made of the available information on imports and production of specific types of goods between 1970 and 1978. In the case of the manufacturing industries and the electricity sector, the estimates of investment refer to the increase in installed capacity and, in some cases, the figures were adjusted to take into account the renewal of obsolete installations, while in the case of the transport sectors, only transport equipment was considered (i.e., the infrastructure was not included). The results of the estimates are given in table 3.

As may be seen, the sectors identified represent approximately 70% of the investment in machinery and equipment during the past decade; the remainder corresponds to activities not separately identified: mainly forestry and fishing, part of manufacturing activity, telecommunications, transport infrastructure, services and government. If we examine the table by major activity sectors, we can see that the agricultural sector represents approximately 8% of the demand for capital goods; mining, extraction of oil, electricity and civil construction 16%; manufacturing as a whole 25%, and the transport sector 22%.

A look at the investment in machinery and equipment by activity sectors shows that the automotive transport sector, with 16%, represents the greatest segment of demand for capi-

Table 3  
LATIN AMERICA:<sup>a</sup> SECTORAL STRUCTURE  
ON INVESTMENT IN MACHINERY  
AND EQUIPMENT IN THE 1970s

Activity sectors	Average annual investment (Millions of U.S. dollars at 1980 prices)	Percentage share
Agriculture	3 200	8
Mining and civil construction	1 500	4
Extraction of oil and natural gas	1 300	3
Electricity	3 500	9
Manufacturing:		
Paper and pulp	400	1
Basic chemicals	2 200	5.5
Refineries	1 000	2.5
Iron and steel	2 200	5.5
Metal manufactures and machinery	3 400	8.5
Transport:		
Rail	300 <sup>b</sup>	1
Automotive	6 300	16
Maritime	1 200	3
Air	900	2
Other activities	12 600	31
<i>Total</i>	<i>40 000</i>	<i>100.0</i>

Source: CEPAL/UNIDO/UNDP Capital Goods Project.

<sup>a</sup>Based on information from Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, Peru and Venezuela.

<sup>b</sup>INTAL, *La industria ferroviaria latinoamericana: Análisis de integración sectorial*, April 1980.

<sup>7</sup>This situation was analysed in detail by J. Ayza, G. Fichet and N. González in *América Latina: Integración económica y sustitución de importaciones*, Mexico City, Fondo de Cultura Económica, 1975.

tal goods; this sector basically consists of buses, trucks and utility vehicles incorporated into the countries' fleet of commercial vehicles during the period in question. Thus, this figure represents not only the demand of the automotive transport sector in the strict sense, but also that of the other economic sectors. At another level of demand, we find agriculture; the generation, transmission and distribution of electricity; iron and steel; and the metal manufactures and machinery industry, with a 7% to 9% share each. According to estimates, these sectors, combined with automotive transport, account for about half the total investment in machinery and equipment during the decade. In third place are basic chemicals and mining and construction, with a share of between 4% and 6%. The other activities have a lower level of demand.

It would of course have been desirable to make a sector-by-sector analysis of the development of investment in machinery and equipment during the decade, but this was only possible in exceptional cases, and even then with certain reservations. In the oil sector an acceleration in investments in machinery and equipment could be expected, due to the intensification of activity in the exploration and development of new deposits. If it is assumed that the total gross investment (capital outlay) of the sector is an approximate indicator of the evolution of the demand for oil-related equipment, then between 1970 and 1978 this demand appears to have trebled or quadrupled in real terms, whereas total investment in machinery and equipment of the eight countries merely doubled.

The picture gained of the sectoral structure

of demand makes it possible to analyse another aspect of the capital goods market which is significant when we contemplate possible joint actions to strengthen ties among Latin American enterprises and boost the regional bargaining capacity *vis-à-vis* the traditional suppliers. Thus, it is observed that approximately half of the demand analysed originates in sectors where the number of potential users or buyers is small. This is particularly so in the case of mining, oil extraction, electrical energy, petrochemicals, refineries, iron and steel, paper and pulp, railroads and the sea and air transport industries. In addition to the concentration of demand in a few enterprises, projects in these sectors also usually involve very large amounts of money, and moreover they include a very wide range of equipment of various levels of complexity, size and weight. If certain additional conditions were created, then the participation of the domestic industry would be possible, even in the case of the small and medium-sized countries of the region. The other sectors within the range of activities analysed, such as agriculture, civil construction, metal manufactures and machinery and automotive transport, represent approximately the other half of the requirements for capital goods. The demand of these sectors is distributed over a larger number of users and, unlike the previous case, mass-produced equipment predominates. These structural differences in the capital goods market undoubtedly have a significant impact on the forms of technological development, marketing and financing of the equipment. This would require a specific, in-depth analysis which is outside the objectives proposed by the studies in progress.

## IV

## Prospects for the growth of demand

The Latin American countries are seeking to maintain rapid economic growth and substantial levels of investment. To that end, they now have a significantly more diversified productive base than in the past, with broader systems of education and significantly greater management, entrepreneurial and technical capacity. Faced with the slow growth of the world economy the region is thus favoured with a certain degree of autonomy or defence capacity.<sup>8</sup> The continued expansion of the volume of Latin American exports in recent years and the achievement of rates of economic growth, investment and gross savings which are frequently higher than those of the industrialized countries are some eloquent indicators of this new situation. However, there are some items of uncertainty which, although they largely originate outside the region, are of such a nature that they have serious and almost unforeseeable repercussions on investment and thus on demand for capital goods. Some of the most notable of these factors are the trends in world oil prices and the availability of medium-and long-term external financing. Until now it has been possible to channel resources to the Latin American countries which show a deficit primarily through the commercial banks, but the indebtedness of some of these nations has shown very disturbing levels and trends. Faced with an unfavourable balance of payments, the majority of these countries, including some of the larger ones, have redoubled their efforts to increase exports, especially of manufactures. The success of these measures will also largely depend on the ability of the industrialized countries, as the principal buyers of Latin American goods, to neutralize the pressures in favour of protectionism exerted by the sectors affected by increasing imports under the present unfavourable conditions of recession or

slow economic growth. One alternative could be to increase trade among the Latin American countries themselves, as well as between them and developing countries in other regions.

These circumstances and factors could obviously be interpreted in different ways in terms of their effects on investment in machinery and equipment as an indicator of the demand for capital goods.

In order to provide a tentative frame of reference, a statistical correlation exercise was carried out on the basis of the available data from 20 Latin American countries and 11 industrialized countries for the period 1950-1976.<sup>9</sup> Economic growth and per capita income were thereby identified as significant independent variables; an average of the data for the 17-year period was used in order to eliminate from the projections annual variations in investment due to short-term cyclical phenomena.

In the past thirty years, the gross domestic product of Latin America has grown at an average annual rate of nearly 6%.<sup>10</sup> A reasonable hypothesis with regard to the 1980s would be to assume that this rate will not change. This would reflect the assumption, on the one hand, that the majority of Latin American countries are currently in a favourable domestic position to accelerate their economic growth, while taking into account, on the other hand, the inhibiting effects of the present world economic instability and its probable persistence for several years, in addition to the extent of the adjustments required in the Latin American economies. The estimated regional growth trend would not imply that this rate would be the same for all countries, but rather that it would represent an average situation. Given the differences in resource availability in the energy sector, it would be reasonable to expect an acceleration in economic growth in some coun-

<sup>8</sup>"The Latin American economy in 1980. CEPAL's preliminary balance", in *Notas sobre la economía y el desarrollo de América Latina*, No. 333, January 1981, prepared by the Information Services of CEPAL.

<sup>9</sup>Larry Wilmore, "Proyecciones de la demanda de bienes de capital", preliminary draft, CEPAL/UNIDO Joint Industrial Development Division, October 1979.

<sup>10</sup>CEPAL Economic Projections Centre.

tries and, on the other hand, a decrease in others, at least during an adjustment period.

If the economic activity of Latin America were to expand uniformly throughout the decade at a 6% annual rate, the above correlation would mean that investment in machinery and equipment would grow at a rate of 7%. Taking into account the 19 Latin American countries which represent approximately 90% of the gross domestic product of Latin America and the Caribbean, investment in machinery and equipment—including transport equipment—would amount to US\$ 120 000 million in 1990.<sup>11</sup> Finally, if economic growth were slower at the beginning of the 1980s, but later became faster than the assumed annual 6% rate, investment in machinery and equipment by the end of the decade would even be somewhat higher than the above-mentioned figure.

At all events, these figures show that the Latin American capacity for purchasing machinery and equipment, even in worldwide terms, is definitely significant. The maintenance and possible expansion of this capacity could help compensate to some extent for the recessionary trends in international trade and the economy. This relative importance is especially notable in some sectors, an important example of which is that of equipment for the generation of hydroelectricity. The regional reserves of hydropower resources, the number and production capacity of the projects already studied, and the insufficient level of overall electricity supply suggest that this will be a broader and more promising field of co-operation.

An analysis of the projects for hydroelectric plants planned up to the year 2000 in the member countries of the Latin American Integration Association (ALADI) and the countries of the Central American Isthmus shows a demand for more than 700 hydraulic turbines over a period of 20 years, or 35 units on average per year.

This figure mainly includes demand for equipment by plants with a generation capacity higher than 100 MW; there is also a high proportion of units of more than 50 MW.

Although a strict comparison cannot be made because of the different plant capacities, it is illustrative to mention that in Itaipú, one of the largest hydroelectric projects in the world, 18 turbines are being installed.

Hydraulic turbines are complex pieces of machinery. Even so, a number of industrial enterprises in the region have the capacity to construct them nearly entirely. The considerable Latin American demand for hydroelectric plant, however, is directed only to a small extent towards the region itself. If this situation were to change, not only could the industrial installed capacity be more fully used, but also the financial arrangements necessary to establish laboratories where small-scale models are tested could be made, thus completing the support basis needed to achieve eventual full basic engineering capacity.

Another interesting specific case would be that of the demand for equipment for cement plants. In a recently completed study it was estimated that Latin America, excluding the Caribbean region, needs in the course of the next ten years to buy approximately 140 rotary kilns, in addition to mills, crushers and other special cement plant equipment. It has been estimated that these equipment requirements are equivalent to an ex-works value of US\$ 7 000 million.

Moreover, due to the slow growth of cement consumption in the United States and Western Europe, Latin America accounts for approximately one-third of the world demand for new cement plants, excluding the industrialized countries of the socialist bloc. The concentration of such a high proportion of world demand under a specific equipment heading, which also occurs in the above-mentioned case of hydraulic turbines, could represent substantial international bargaining potential if handled jointly.

Finally, it is worth pointing out that the effort to acquire the capacity to design and construct production equipment, i.e., to create the region's actual working tools, also implies reaching a higher level of autonomous decision-making, for making the right choice of what and how much to produce is only possible for those who have the knowledge of how to do so.

<sup>11</sup>Calculated in 1980 dollars.

## Annex I

INVESTMENT IN MACHINERY AND EQUIPMENT BY 8 LATIN AMERICAN COUNTRIES,  
1970-1978(In millions of 1980 dollars at user prices)<sup>a</sup>

	1970	1971	1972	1973	1974	1975	1976	1977	1978	Total 1970-78
Argentina	4 336	4 831	4 904	6 581	7 844	4 402	5 265	6 626	5 045	49 834
Brazil	9 798	11 789	14 004	18 723	22 990	23 719	23 296	23 017	24 762	172 098
Mexico	5 730	5 434	6 123	7 496	8 721	9 815	9 207	7 347	9 270	69 143
Colombia	1 132	1 236	1 118	1 060	1 375	1 424	1 762	2 187	2 414	13 708
Peru	942	1 017	1 017	1 515	2 044	2 216	1 673	1 276	902	12 602
Venezuela	2 114	2 453	2 875	3 290	3 341	4 432	5 795	8 075	7 783	40 158
Bolivia	148	154	184	214	270	346	382	396	366	2 460
Ecuador	190	280	301	342	475	738	612	916	847	4 701
<i>Total</i>	<i>24 390</i>	<i>27 194</i>	<i>30 526</i>	<i>39 221</i>	<i>47 060</i>	<i>47 092</i>	<i>47 992</i>	<i>49 840</i>	<i>51 389</i>	<i>364 704</i>

Source: National Accounts of the countries and International Monetary Fund, *International Financial Statistics*.<sup>a</sup>It is estimated that, at producer prices, the investment figures would be 25% lower. The amounts in national currency of the countries were converted at the import exchange rate.

## Annex II

## IMPORTS OF CAPITAL GOODS BY 8 LATIN AMERICAN COUNTRIES, 1970-1978

(In millions of dollars CIF at current prices)<sup>a</sup>

	1970	1971	1972	1973	1974	1975	1976	1977	1978
Argentina	484.3	565.8	604.4	547.0	634.6	726.7	686.1	1 359.0	1 384.4
Brazil	956.9	1 331.9	1 827.6	2 449.7	3 214.8	4 205.0	3 750.6	3 099.2	3 569.3
Mexico	980.1	913.4	1 156.6	1 498.2	1 957.2	2 827.4	2 909.4	2 536.6	3 543.0
Colombia	370.1	340.4	341.4	335.5	432.5	503.9	617.9	638.1	1 203.2
Peru	211.2	208.6	217.9	359.6	646.4	831.0	737.8	577.3	582.6
Venezuela	671.1	806.4	1 033.0	1 109.0	1 504.7	2 602.7	3 276.6	4 358.6	5 070.1
Bolivia	57.4	55.7	70.1	93.4	138.5	199.1	210.2	238.5	309.0
Ecuador	90.9	112.7	120.7	139.4	250.3	435.4	438.3	724.5	826.9
<i>Total</i>	<i>3 822.0</i>	<i>4 335.9</i>	<i>5 371.7</i>	<i>6 531.8</i>	<i>8 779.0</i>	<i>12 331.2</i>	<i>12 626.9</i>	<i>13 531.8</i>	<i>16 488.5</i>

Source: CEPAL, Statistics and Quantitative Analysis Division.

<sup>a</sup>Current prices in each year.

## Annex III

LATIN AMERICA: INVESTMENT IN  
MACHINERY AND EQUIPMENT BY  
COUNTRIES, 1976<sup>a</sup>*(In millions of dollars at 1970 prices)*

Argentina	2 614.5
Bolivia	144.1 <sup>b</sup>
Brazil	11 238.7 <sup>b</sup>
Colombia	1 003.7
Costa Rica	183.7 <sup>b</sup>
Chile	427.2
Ecuador	206.0
El Salvador	142.6 <sup>b</sup>
Guatemala	271.9
Haiti	30.6 <sup>b</sup>
Honduras	87.7 <sup>b</sup>
Mexico	3 881.0
Nicaragua	84.6
Panama	151.5
Paraguay	136.0
Peru	765.0
Dominican Republic	216.4
Uruguay	150.8
Venezuela	2 547.4 <sup>b</sup>
<b>Total</b>	<b>24 283.4</b>

Source: CEPAL, Statistics and Quantitative Analysis Division, based on the National Accounts of the countries.

<sup>a</sup>At 1970 user prices. The amounts in national currency of the countries were converted at the import exchange rate.

<sup>b</sup>Estimated on the basis of the average share of 1970-1975, total gross fixed investment represented by investment in machinery and equipment. (See document E/CEPAL/1021.)

## Annex IV

LATIN AMERICA: IMPORTS OF CAPITAL  
GOODS BY COUNTRIES, 1979<sup>a</sup>*(In millions of dollars CIF)*

Argentina	2 405.5
Bolivia	341.4
Brazil	3 802.5
Colombia	1 286.2
Costa Rica	305.0
Chile	1 197.9
Ecuador	982.2
El Salvador	215.0
Guatemala	414.2
Haiti	33.1
Honduras	223.0
Mexico	5 925.2
Nicaragua	53.6
Panama	240.6
Paraguay	178.7
Peru	824.0
Dominican Republic	227.4
Uruguay	273.6
Venezuela	4 531.2
<b>Total</b>	<b>23 460.3</b>

Source: CEPAL, Statistics and Quantitative Analysis Division.

<sup>a</sup>Based on the "Clasificación por Uso o Destino Económico" (CUODE).