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The trade and domestic savings gaps and structural unemployment in Latin America

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THE TRADE AND DOMESTIC SAVINGS GAPS AND STRUCTURAL UNEMPLOYMENT IN LATIN AMERICA

FOREWORD

The present report was prepared in collaboration with the Latin American Institute for Economic and Social Planning. Its purpose, is limited to determining the magnitude of the foreign trade and domestic savings gaps corresponding to given growth targets for the next decade, and to establishing the extent of the structural under-employment and unemployment now existing in different sectors of the Latin American economy.

As regards the trade and savings gaps, a condensed account is given here of the findings of the individual country studies carried out, which are now well on the way to completion. An analysis is made of the region as a whole, with a special accent on the more significant countries. The relevant tables contain data on past trends, and projections, for each country.

Chapter I is divided into two parts. In the first, an examination is made of Latin America's economic evolution from 1950 to 1966, in terms of the growth rate, the investment trend, exports and imports, and external financing. The intention is not to make a complete analysis of the economy of the countries in the region, but to study the trends of the main macro-economic variables of interest for the projections. Although the behaviour of these variables was related to the prevailing policies in those countries, these policies are not discussed in this paper.

In the second part, comments are made on the results of the projections as regards the size of the trade and domestic savings gaps corresponding to particular growth targets in each country. The economic policy changes needed to close the gaps and bring those targets within reach are not taken into account. Instead the projections are based on the assumption that behaviour of the main macro-economic variables involved will agree with the forecasts made from an examination of the situation

/now and

now and in the last few years. The aim is to explore the effects of an increase in the growth rate of the product on the external bottleneck and shortage of savings which are holding back the economic development of nearly every country in the region.

Chapter II supplies preliminary estimates on the proportions of the economically active population now partly or totally unemployed. The problem is examined in the context of the principal sectors of economic activity. For illustrative purposes, preliminary estimates are also given of the growth rate needed to solve the problem of structural unemployment or at least to keep it from increasing any further in absolute terms in the future. It should be clearly understood that these estimates are only of a general and indicative nature.

The analysis of past trends and the data used as a basis for the econometric functions employed in the projections refer to 1950-66. In 1967 and 1968 some of the variables followed trends that departed from those of past years (see the "Economic Survey of Latin America, 1968"). These variations do not, however, alter the fundamental conclusions of the analysis, which attempts to assess long-term prospects.

/Chapter I

Chapter I

THE TRADE AND DOMESTIC SAVINGS GAPS IN THE NINETEEN-SEVENTIES

A. ECONOMIC TRENDS IN 1950-66

1. The growth rate

Since 1950 the growth rate of the Latin American economies has been slow and erratic. In 1950-66 the total gross domestic product increased by 4.9 per cent annually and the per capita product by 2 per cent (see table 1).

In this general picture, some countries stand out as being above the average, namely, Brazil, Costa Rica, Mexico, Nicaragua, Panama, Peru and Venezuela, while others had a particularly sluggish rate of growth: Argentina, Bolivia, Paraguay and Uruguay. From 1960 onwards, the rate tended to rise in some mining countries and to slacken off in Brazil, the Dominican Republic, Uruguay and Venezuela. It should also be noted that the growth rate of the Central American countries has been rising ever since the establishment of the Common Market. In 1968 there was a general improvement in the rate, which was over 5 per cent for the region as a whole.

Very marked differences can be seen between sectors. Although, it is normal for the different sectors in the developing countries to grow at a variety of rates, in Latin America the net result of the differences was often stagnation, because of the relative backwardness of key sectors. For instance, in many cases agriculture was so slow-growing that it acted as a brake on the over-all growth of the economy. The sectors which supply power and transport, although apparently developing rapidly, were often a handicap to the economy because they constituted bottlenecks that slowed down the rate of industrial growth (see table 2).

/Table 1

Table 1

LATIN AMERICA: GROWTH RATES OF THE TOTAL AND PER CAPITA GROSS DOMESTIC PRODUCTS, BY COUNTRIES, 1950-66

(Average annual rates)

Country	Total gross domestic product			Per capita gross product		
	1950-1960	1960-1966	1950-1966	1950-1960	1960-1966	1950-1966
Argentina	3.1	2.9	3.0	1.1	1.4	1.2
Bolivia	0.4	5.1	2.1	-1.7	2.8	0.0
Brazil	5.8	4.3	5.2	2.7	1.4	2.2
Central America						
Costa Rica	6.0 a/	6.1	6.1 b/	1.9 a/	2.6	2.2 b/
El Salvador	3.7 a/	6.4	4.9 b/	0.8 a/	2.7	1.7 b/
Guatemala	3.8	6.4	4.8	0.7	3.3	1.7
Honduras	3.6	4.7	4.0	0.6	1.3	0.8
Nicaragua	5.2	7.4	6.0	2.2	3.9	2.8
Chile	3.6	5.3	4.2	1.2	2.8	1.8
Colombia	4.6	4.6	4.6	1.4	1.3	1.4
Dominican Republic	5.7	2.7	4.6	2.1	-0.8	0.9
Ecuador	5.0	4.4	4.8	1.9	1.0	1.6
Mexico	6.1	6.2	6.2	3.0	2.7	2.8
Panama	4.9	8.4	6.2	2.0	5.2	3.2
Paraguay	2.7	3.4	3.0	0.0	0.1	0.0
Peru	5.1	6.1	5.5	2.7	3.0	2.8
Uruguay	2.3	0.8	1.7	0.8	-0.5	0.3
Venezuela	7.6	4.7	6.5	3.6	1.4	2.8
Total	5.1	4.6	4.9	2.2	1.7	2.0

Source: ECLA, on the basis of official statistics.

a/ 1953-60.

b/ 1953-66.

/Table 2

Table 2

LATIN AMERICA: GROWTH RATES OF THE MAJOR SECTORS, BY COUNTRIES, 1950-66

(Average annual rates)

Country	Sectors				
	Agriculture	Mining and quarrying	Manufacturing	Other	Total
Argentina	2.1	9.8	3.7	2.7	3.0
Bolivia	1.3	0.4	3.9	3.7	2.1
Brazil	4.2	11.2	7.0	4.4	4.9
Central America					
Costa Rica a/	3.3	7.1	4.7	7.6	6.0
El Salvador a/	3.9	-6.2	7.4	5.1	5.0
Guatemala	3.7	6.8	6.2	4.7	4.6
Honduras	3.1	5.2	7.2	4.4	3.9
Nicaragua	3.3	3.3	7.8	7.8	6.0
Chile	2.1	3.1	4.0	4.8	4.2
Colombia	3.0	4.5	6.1	5.2	4.6
Dominican Republic	3.4	16.2	5.6	3.4	4.6
Ecuador	3.5	3.6	5.7	5.0	4.6
Mexico	4.1	4.9	7.7	6.3	6.2
Panama	4.0	7.5	9.5	6.7	6.2
Paraguay	2.4	5.8	2.4	3.2	2.7
Peru	3.0	6.7	7.4	5.5	5.4
Uruguay	1.2	-	2.4 b/	1.4	1.7
Venezuela	5.9	5.8	8.5	6.1	6.3
Total	3.4	5.3	5.5	4.5	4.6

Source: ECLA, on the basis of official statistics.

a/ 1953-66.

b/ Including mining and quarrying.

/The variability

The variability of the sectoral growth rates altered the relative importance of the different sectors in the total gross domestic product to quite a considerable extent. The change in the share of manufacturing was particularly notable, since it expanded from 22.3 to 27.5 per cent of the total gross domestic product for the region between 1950 and 1966. The share of agriculture, on the other hand, dwindled in a large number of countries (see table 3).

The degree of industrialization varies a good deal from one country to another. At one end of the scale, there are the countries where, thanks to import substitution, industry is producing most of the consumer goods absorbed by the national market and a large proportion of the intermediate and capital goods. At the other end are the countries at a very early stage of industrial development, usually those with a small market, and here market size, added to other factors, seems to have been a formidable obstacle to the progress of import substitution.

The over-all annual growth rate for the agricultural sector was 3.4 per cent, that is, barely 0.5 per cent in per capita terms in 1950-66 (see table 2). At the beginning of the nineteen fifties, access to world markets, which had been distorted by the Second World War, began to be more normal. During the following period, however, national policy was directed primarily to giving full support to industry, to the relative neglect of agriculture.

Here too the situation of each country varied, as did that of the individual areas within each country. There were also marked disparities between agriculture for export, agriculture for the home market and subsistence agriculture. However, certain general features are often found to be associated with a backward agricultural sector.

/Table 3

Table 3

LATIN AMERICA: CONTRIBUTION OF THE MAJOR SECTORS TO THE GROSS DOMESTIC PRODUCT AT FACTOR COST, 1950 AND 1966

(Percentages)

Country	Sectors									
	Agriculture		Mining and quarrying		Manufacturing		Others		Total	
	1950	1966	1950	1966	1950	1966	1950	1966	1950	1966
Argentina	19.1	16.6	0.5	1.5	34.5	38.2	45.9	43.7	100.0	100.0
Bolivia	30.8	26.8	15.3	11.5	15.5	20.3	38.4	41.4	100.0	100.0
Brazil	30.9	27.5	0.2	0.6	18.6	25.6	50.3	46.3	100.0	100.0
Central America										
Costa Rica	42.7 a/	30.5	-	-	10.2	13.5	47.1	56.0	100.0	100.0
El Salvador	34.7 a/	30.4	0.3	0.1	12.1	16.3	52.9	53.2	100.0	100.0
Guatemala	34.3	30.1	0.2	0.1	10.4	13.4	55.1	56.4	100.0	100.0
Honduras	57.7	50.5	1.3	1.6	6.6	10.9	34.4	37.0	100.0	100.0
Nicaragua	46.5	31.1	2.9	2.0	9.1	12.0	41.5	54.7	100.0	100.0
Chile	14.0	10.0	5.3	12.4	20.0	30.2	60.7	47.4	100.0	100.0
Colombia	40.5	31.9	3.7	3.7	13.9	22.1	41.5	42.3	100.0	100.0
Dominican Republic	32.9	27.0	0.2	1.2	10.4	12.5	56.5	59.3	100.0	100.0
Ecuador	39.6	33.8	2.2	1.9	18.4	21.8	39.8	42.5	100.0	100.0
Mexico	21.6	15.9	6.3	5.2	23.1	29.0	49.0	49.9	100.0	100.0
Panama	30.8	21.9	0.3	0.3	13.2	21.8	55.7	56.0	100.0	100.0
Paraguay	40.3	38.4	0.1	0.2	21.0	20.0	38.6	41.4	100.0	100.0
Peru	27.2	18.7	4.6	5.6	18.7	25.2	49.5	50.5	100.0	100.0
Uruguay	23.6	21.8	-	-	22.0	24.4	54.4	53.8	100.0	100.0
Venezuela	8.1	7.5	26.0	23.9	12.4	17.2	53.5	51.4	100.0	100.0
Total	24.7	20.5	4.3	4.4	22.3	27.5	48.7	47.6	100.0	100.0

Source: ECLA, on the basis of official statistics.

a/ 1953.

/The sector's

The sector's lack of vigour obviously affected the external sector, as witnessed by the low growth rate of exports from the temperate-zone countries and the increasing demand for imported foodstuffs which tightened the external bottleneck in some of the mining countries. The sector's lack of growth power also partly explains its inability to retain productive labour and the latter's to the towns. This is closely connected with the structural unemployment in agriculture, which leads to an increasing distortion of the role that should be played by the services sectors in the economy as a whole. Apart from these adverse effects on the external bottleneck and unemployment, which are described here not merely because of their intrinsic importance but because they are the specific subjects of this paper, the effect produced by the want of a supply of food at reasonable prices on the inflationary process in many of the Latin American countries has also been pointed out on other occasions.

The system of land tenure and farming has also been a major stumbling-block to the introduction of more modern and rational methods of cultivation. Some of the Latin American countries are tackling the problem by means of land reform programmes, but these have not been enough to produce a radical change in the situation. In many cases price policy was unfavourable to agriculture. The systems of protection and the establishment of overvalued exchange rates were often used as means of redistributing income, especially in the countries that export agricultural commodities, and were aimed more at promoting industrialization than at supporting a satisfactory agricultural development. Technological inputs and capital goods for agriculture also are usually priced relatively high in comparison with agricultural output. This situation, coupled with the traditional reluctance of farmers to make innovations, and the want of sufficient incentives to devise and make use of technologies that are adapted to the conditions prevailing in each area, partly explain the lack of technology and capital formation in agriculture and are largely responsible for the backward state of this sector.

During this period of development, manufacturing was the dynamic sector par excellence for many of the Latin American countries, and especially the larger ones. Between 1950 and 1966 its average annual rate of growth was 5.5 per cent. The process of import substitution,

/which had

which had begun before 1950, took root and became quite wide-spread. In the majority of countries, allowing for the inevitable differences between them, and in the large and medium-sized countries above all, the domestic production of a wide range of final and intermediate goods made a great leap forward. Quality improved as well, and the cost of a number of products was reduced.

As industrialization is based almost entirely on import substitution unmatched by a similar increase in the share of manufactures in exports, it has become increasingly clear that it was reaching the saturation point in the last few years. This does not discount the industrialization possibilities and requirements that still exist, in the most advanced, the intermediate and the less advanced countries alike.

The horizontal type of industrial development which ensued covered a wide variety of goods which were produced under heavy tariff protection usually for limited markets. As a result, the plants set up were generally small in size and unable to make full use of their capacity. This raised costs and reduced the industries' competitive power abroad.

Attention should also be drawn to the sequence of import substitution. Subject to the reservations appropriate to every generalization, it may be argued that import-saving industrialization began with durable and non-durable consumer goods, and did not launch into the production of basic intermediate goods until it had reached a more advanced stage. Finally, it was only at the end of the nineteen-fifties that domestic production of capital goods acquired some magnitude and then only in the more developed countries.

Towards the end of the period under consideration, owing to the pattern of industrial development, with the more dynamic sectors being highly capital-intensive, manufacturing industry could not absorb more than a relatively small proportion of labour despite the progress it was making, and has thus failed to take a sufficiently active part in providing employment for the surplus labour from the agricultural sector (see chapter II). Wages in industry were usually much higher than in agriculture, and this, among other social factors, encouraged migration to the towns. The signs of this migration are the concentration of structural unemployment in urban areas, the absorption of manpower into services, and the growth of the marginal population.

2. Investment trends

Gross investment averaged 17.2 per cent of the product during 1950-66, and at no time exceeded 18.6 per cent (see table 4).

The possibility of translating this investment into a higher rate of growth for the gross product was limited by a number of factors. One of these was the under-utilization of production capacity, owing to bottlenecks - in the external sector in particular - and the small size of the markets. The results was that the plants set up were often much larger than they need have been at the time.

Secondly, a weighty proportion of investment was earmarked for infrastructure works, which give low returns in terms direct and immediate contributions to the product. One example is the energy supply, which normally calls for heavy investment. Moreover, investment in many of these works takes a long time to mature, as in certain industries, notably steelmaking. From 1961 onwards, special importance was also laid on social investment with more indirect or less marked effects on production (public health, housing, urban installations and education were given priority).

Thirdly, as domestic production of capital goods was deferred to the closing stage of import substitution, these goods were not available locally in a large enough quantity to cover demand, while imports were often limited by problems in the external sector. The outcome was a defective investment structure, in which the proportion earmarked for equipment was often inadequate.

In the fourth place, the relative prices of equipment were and still are high in comparison with world market prices for other goods. If investment were valued at international prices it would be lower than the estimates used in this paper. The gross investment coefficient with respect to the product would be about 12.4 per cent in 1960, instead of 17.6 per cent according to the structure of domestic prices. Although the higher of the two gives an idea of the effort made by the region in a particular year, it is the lower that represents the real possibilities of transforming investment into further contributions to the product.

/Table 4

Table 4

LATIN AMERICA: GROSS FIXED INVESTMENT AS A PERCENTAGE OF THE GROSS DOMESTIC PRODUCT, a/ 1950-66

Year	Gross fixed investment coefficient
1950	15.7
1951	18.3
1952	18.6
1953	18.1
1954	18.3
1955	17.6
1956	18.3
1957	18.1
1958	17.2
1959	16.7
1960	17.6
1961	17.6
1962	16.6
1963	16.1
1964	16.4
1965	15.7
1966	16.4

Source: ECLA, on the basis of official statistics.

a/ Calculated on the basis of dollars at 1960 prices. Official exchange rates for imports were used.

These facts are important for assessing the future possibilities of increasing the product in relation to the gross investment required. If it is assumed that no major changes will take place in these basic conditions, the trend of the capital output ratio should be the same as in the past. This is the assumption that has been adopted for the projections, except in the cases of Argentina and Uruguay (see annex A).

In 1965-66 public investment was 29.9 per cent of total regional investment (see table 5). The public sector may actually have played a bigger part than would appear from these figures, since, in addition to the strategic importance of certain kinds of public investment, the Government occasionally transfers one of its capital investments to the private sector, or invests through the medium of State enterprises which are often classified in national accounts as outside the public sector proper.

As regards modes of investment financing, it should be noted that consumption followed a more stable trend than domestic saving, which was more profoundly affected by the variations in the level of economic activity. Moreover, savings were scanty during that period in comparison with development financing requirements. External financing thus had a fairly important part to play at that time. However, as a result of the large amount of funds obtained from foreign sources, a certain proportion of domestic savings had to be set aside towards the end of the period to settle continuing debts. Consequently, not all the savings available could be devoted to the expansion of production capacity (see table 6).

/Table 5

Table 5

LATIN AMERICA: PERCENTAGE SHARES OF PUBLIC AND PRIVATE INVESTMENT IN GROSS FIXED INVESTMENT, BY COUNTRIES a/

Country	Public investment				Private investment			
	1950-1954	1955-1959	1960-1964	1965-1966	1950-1954	1955-1959	1960-1964	1965-1966
Argentina	19.5	14.8	15.1	11.6	80.5	85.2	84.9	88.4
Bolivia	19.5	51.5	52.6	35.8	80.5	48.5	47.4	64.2
Brazil	27.6	30.5	31.2	43.5	72.4	69.5	68.8	56.5
Central America								
Costa Rica	19.6	20.5	24.0	25.7	80.4	79.5	76.0	74.3
El Salvador	18.6	18.0	21.7	23.6	81.4	82.0	78.3	76.4
Guatemala	33.8	36.4	21.9	17.8	66.2	63.6	78.1	82.2
Honduras	17.1	19.7	20.6	14.6	82.9	80.3	79.4	85.4
Nicaragua	20.4	31.4	27.5	18.2	79.6	68.6	72.5	81.8
Chile	...	...	41.7	40.6	...	...	58.3	59.4
Colombia	15.3	18.4	17.4	19.2	84.7	81.6	82.6	80.8
Dominican Republic	42.1	43.1	31.6	33.6	57.9	56.9	68.4	66.4
Ecuador	33.0	39.0	42.9	38.5	67.0	61.0	57.1	61.5
Mexico	42.3	35.9	46.5	44.2	57.7	64.1	53.5	55.8
Panama	24.3	21.6	23.5	17.7	75.7	78.4	76.5	82.3
Paraguay	11.9	23.5	19.2	20.9	88.1	76.5	80.8	79.1
Peru	18.1	18.2	14.8	21.0	81.9	81.8	85.2	79.0
Uruguay	...	22.0	23.9	33.0	...	78.0	76.1	67.0
Venezuela	25.6	37.4	34.2	24.4	74.4	62.6	65.8	75.6
Total (excluding Chile and Uruguay)	26.0	28.3	28.7	29.9	74.0	71.7	71.3	70.1

Source: ECLA, on the basis of official statistics.

a/ In various countries, investment by State enterprises, even when financed by budget appropriations, is not regarded as part of public investment.

/Table 6

Table 6

LATIN AMERICA: PERCENTAGE SHARES OF DOMESTIC SAVINGS AND NET EXTERNAL FINANCING IN TOTAL GROSS INVESTMENT, BY COUNTRIES

Country	Domestic savings				Net external financing			
	1950-1954	1955-1960	1960-1964	1965-1966	1950-1954	1955-1959	1960-1964	1965-1966
Argentina	97.7	90.1	94.0	110.2	2.3	9.9	6.0	-10.2
Bolivia	82.9	49.8	45.7	66.2	17.1	50.2	54.3	33.8
Brazil	88.7	91.5	91.6	102.1	11.3	8.5	8.4	-2.1
Central America	102.5	82.8	81.4	71.1	-2.5	17.2	18.6	28.9
Costa Rica	97.7	77.9	74.7	49.9	2.3	22.1	25.3	50.1
El Salvador	118.2	103.0	85.0	78.7	-18.2	-3.0	15.0	21.3
Guatemala	106.2	72.3	79.5	85.1	-6.2	27.7	20.5	14.9
Honduras	92.5	84.1	89.7	80.4	7.5	15.9	10.3	19.6
Nicaragua	93.4	88.1	81.3	52.9	6.6	11.9	18.7	47.1
Chile	95.6	91.9	73.8	94.6	4.4	8.1	26.2	5.4
Colombia	94.7	101.4	85.0	84.9	0.3	-1.4	15.0	15.1
Dominican Republic	89.5	93.3	88.1	59.6	10.5	6.7	11.9	40.4
Ecuador	106.0	88.0	86.4	85.8	-6.0	12.0	13.6	14.2
Mexico	86.7	89.8	86.2	86.6	13.3	10.2	13.8	13.4
Panama	55.6	50.7	65.6	69.0	44.4	49.3	34.4	31.0
Paraguay	103.8	79.7	81.7	83.0	-3.8	20.3	18.3	17.0
Peru	93.2	75.9	93.2	89.6	6.8	24.7	6.8	10.4
Uruguay	97.2	81.0	81.3	133.4	2.8	19.0	18.7	33.4
Venezuela	100.8	89.3	125.5	98.9	-0.8	10.7	-25.5	1.1
Total	94.2	89.7	92.6	95.7	5.8	10.3	7.4	4.3

Source: ECLA, on the basis of official statistics.

/3. Exports

3. Exports

It is evident from an analysis of export trends and future prospects that there was a lack of dynamic force in export trade.

The export quantum in 1950-66 grew at an average annual rate of 4.2 per cent (see table 7). During the same period the terms of trade declined, and the resulting loss reduced the net growth rate of the purchasing power of exports (in terms of imports) to only 2.7 per cent yearly. This is quite low, since it was barely on a par with the annual population increase and left no margin for obtaining export earnings to meet the foreign exchange requirements that derived from the growth of the per capita product. It is also fairly low in comparison with world figures. The slow annual growth of Latin America's purchasing power is partly due to the fact that the tempo of world trade is much more sluggish in the goods the region exports than in those it imports. In addition, Latin America's share of the total world supply of the type of products it exports has decreased. Venezuelan petroleum, Brazilian and Colombian coffee and temperate-zone grains are cases in point.

Countries such as Mexico and Peru, whose export trade was more dynamic, should be distinguished from those with a low rate and small absolute volume of exports over the period in question (temperate-zone and coffee-growing countries and some metal exporters).

The purchasing power of the coffee countries' exports grew rapidly between 1950 and 1954, but then fell off considerably with the drop in coffee prices; petroleum had a fairly favourable growth rate up to 1958, but underwent a decline about the time the Suez conflict was settled, while the mining countries experienced an improvement in the nineteen-sixties. Peru was particularly fortunate in achieving a high growth rate for the purchasing power of its exports, first through fishmeal and then through copper, but the almost wholly primary structure of its export trade remained unchanged, and in the last few years, its prospects have been limited by certain general factors which are well known. The Central American countries have seen their growth rate speed up with the formation of the Common Market, as the result of intra-area trade.

/Table 7

Table 7

LATIN AMERICA: GROWTH RATES OF THE VOLUME AND PURCHASING POWER OF EXPORTS, BY COUNTRIES

(Average annual rates)

Country	Volume			Purchasing power		
	1950-1960	1960-1966	1950-1966	1950-1960	1960-1966	1950-1966
Argentina	1.2	5.8	2.9	-0.2	6.3	2.2
Bolivia	-3.3	7.9	0.8	-1.6	14.5	4.2
Brazil	3.0	3.8	3.3	-0.5	0.5	-0.1
Central America	4.7	10.1	6.7	4.1	11.0	6.7
Costa Rica	5.3	6.0	5.6	4.2	7.0	5.3
El Salvador	4.4	8.3	5.8	5.9	8.5	6.9
Guatemala	5.1	12.7	7.9	2.6	12.0	6.1
Honduras	2.1	11.5	5.5	2.3	12.9	6.2
Nicaragua	6.5	11.6	8.4	6.4	15.4	9.7
Chile	2.0	5.2	3.2	3.1	9.2	5.4
Colombia	4.4	1.7	3.4	1.6	1.4	1.5
Dominican Republic	7.5	-3.8	3.1	3.1	0.5	2.2
Ecuador	7.1	5.2	6.0	4.4	4.5	4.4
Mexico	4.1	5.5	4.6	1.7	8.1	4.0
Panama	4.8	10.5	6.9	3.8	11.7	6.7
Paraguay	2.1	3.9	2.8	-0.7	6.1	1.8
Peru	9.6	3.8	7.4	7.0	7.8	7.3
Uruguay	-3.2	7.0	0.1	-4.6	4.8	-1.2
Venezuela	7.4	2.2	5.4	4.3	-2.0	1.8
Total	4.2	4.3	4.2	1.9	4.1	2.7

Source: ECLA, on the basis of official statistics.

/As regards

As regards the structure of exports, primary commodities still account for more than three-quarters of the total for Latin America and for most of the countries under consideration, except Mexico. Moreover, sixteen items or groups made up of a handful of products, such as petroleum and its derivatives and fisheries products, are decisive in export trade. If each country is considered separately, the number of commodities is even smaller (see table 8).

The proportion of exports of manufactures is still small. The larger countries of the region have shown a tendency to export this kind of product in the last few years, but their export trade remains essentially primary in structure. An outstanding case is that of the Central American countries, which, despite the fairly low level of industrial development from which they began, have been exporting manufactures to one another through their Common Market. Although this trade is carried on within the limits of the region itself, valuable experience has been obtained, especially as they have made proportionately more progress in that way than other Latin American countries at a more advanced stage of industrialization.

In so far as the geographical destination of exports is concerned, Latin America's markets have become rather more diversified since the Second World War. Fewer goods are being sold to the United States and more to Western Europe and the centrally planned economies. The region has been losing ground in the United States and Canadian markets (see table 9).

The increase of sales to Western European countries did little to improve the trend of Latin American exports, since those countries tend to protect their own primary production and to extend the use of synthetic raw materials. Those same countries have also stepped up their imports from Africa and Asia, so that even though they have regained their position as importers of Latin America's export products, this does not necessarily mean that the Latin American countries have recovered their pre-war share of certain imports into Western Europe.

/Table 8

Table 8

LATIN AMERICA: PERCENTAGE STRUCTURE OF EXPORTS, BY COUNTRIES, 1965

Country	Coffee	Sugar	Cotton	Cocoa	Bananas	Vegetable fibres	Meat	Wheat	Maize	Wool	Wood	Copper	Tin	Iron ore	Petroleum and petroleum products	Fisheries products	Other	Total
Tropical-zone products																		
Brazil	44.3	3.6	6.1	2.6	0.4	1.7	2.9	-	1.7	1.0	4.0	-	-	6.5	-	0.1a/	25.1	100.0
Colombia	64.6	1.5	1.5	-	3.7	-	0.2	-	-	-	0.6	-	-	-	17.8	-	10.1	100.0
Costa Rica	41.7	4.2	0.9	2.0	25.3	-	3.0	-	-	-	0.2	-	-	-	-	-	22.7	100.0
Dominican Republic	17.0	50.3	0.3	5.7	2.7	-	-	-	0.2	-	0.1	-	-	-	-	-	23.7	100.0
Ecuador b/ c/	21.5	4.1	...	10.7	53.8d/	...	...	...	...	...	...	...	...	...	...	...	9.9	100.0
El Salvador	50.6	1.3	20.0	-	-	0.1	0.1	-	-	-	-	-	-	-	1.9	-	26.0	100.0
Guatemala b/	49.1	2.2	18.1	0.1	1.9d/	...	2.4e/	...	-	...	0.7f/	...	...	...	...	...	25.5	100.0
Haiti g/	54.8	7.5	...	...	...	6.1h/	...	...	...	...	...	...	...	...	...	...	31.6	100.0
Honduras	17.6	0.1	4.9	-	42.2	-	2.6	-	4.5	-	8.0	-	-	-	-	0.1	20.0	100.0
Nicaragua	18.4	4.0	46.4	0.1	0.5	-	4.7	-	0.1	-	1.4	4.3	-	-	-	-	20.1	100.0
Panama b/	0.9	2.8	...	0.3	51.6	...	...	...	...	...	...	...	...	...	30.8	...	13.6	100.0
Temperate-zone products																		
Argentina	-	0.8	0.1	-	-	-	21.7	25.0	10.3	7.8	-	-	-	-	0.6	0.1	33.6	100.0
Paraguay	4.7	0.1	-	-	0.3	8.4	29.3	-	0.4	0.3	11.0	-	-	-	-	0.3	45.2	100.0
Uruguay	-	-	0.2	-	-	-	30.8	2.4	-	47.9	-	-	-	-	-	0.3	18.4	100.0
Mineral products																		
Bolivia i/	0.9	0.3	-	-	-	-	0.1	-	-	0.2	0.1	0.6	59.0	-	0.6	-	38.2	100.0
Chile	-	-	0.1	-	-	-	0.1	-	-	0.8	0.5	69.8	-	11.4	-	1.3	16.0	100.0
Fuels																		
Venezuela	0.5	-	-	0.3	-	-	-	-	-	-	-	-	-	5.1	92.5	-	1.6	100.0
Other																		
Mexico	5.7	6.8	13.6	0.3	-	0.8	1.7	3.6	6.7	-	-	1.0	-	-	2.7	0.3	56.8	100.0
Peru	4.4	5.6	13.1	-	-	-	-	-	-	1.4	-	18.6	-	7.1	1.4	24.1	24.3	100.0
Total Latin America j/	15.1	2.8	4.9	0.8	2.5	0.4	4.8	4.1	2.6	2.4	0.9	6.1	0.8	3.5	24.2	1.7	22.4	100.0

Source: ECLA, on the basis of official foreign trade statistics.

a/ Including meat meal.
b/ Yearbook of International Trade Statistics (1966).
c/ Based on export permits.
d/ Bananas only.
e/ Beef.
f/ SITC division 24 with modifications, wood, board and cork.
g/ International Financial Statistics.
h/ Sisal.
i/ C.i.f. figures for exports of ores.
j/ Not including Cuba.

/Table 9

Table 9

LATIN AMERICA: GEOGRAPHICAL DESTINATION OF EXPORTS

Destination	1950	1960	1965	1966
	Millions of dollars			
Latin America	634	680	1 080	1 175
North America (United States and Canada)	2 996	3 745	3 820	4 160
Western Europe	1 937	2 765	3 690	3 870
Japan	206	240	480	570
Countries with centrally planned economies a/	154	265	730	700
Mainland China	13	41	205	185
Developing countries (exclouding Latin America)	646	854	1 055	1 000
Total exports from Latin America	6 586	8 590	11 060	11 660
	Percentage of total exports			
Latin America	9.6	7.9	9.8	10.1
North America (United States and Canada)	45.5	43.6	34.5	35.7
Western Europe	29.4	32.2	33.4	33.2
Japan	3.1	2.8	4.3	4.9
Countries with centrally planned economies a/	2.4	3.1	6.6	6.0
Mainland China	0.2	0.5	1.9	1.6
Developing countries (exclouding Latin America)	9.8	9.9	9.5	8.5

Source: United Nations, "World trade by commodity classes and regions", time series 1955-61 (mimeographed, internal circulation only), and Monthly Bulletin of Statistics, March 1968.

a/ Albania, Bulgaria, Czechoslovakia, Eastern Germany, Hungary, Poland, Romania and the USSR.

/Exports to

Exports to the centrally planned economies increased more rapidly than intra-Latin American trade itself and have come close to it in absolute value in the last few years. In volume, however, they are still too small to have a decisive influence on the over-all trend.

Trade among the Latin American countries is still very limited and has been slow to grow. Despite the impulse given to it by the establishment of the Latin American Free Trade Association (LAFTA) and the Central American Common Market (CACM), its proportion of the total has remained much the same.

For the majority of primary commodities, and agricultural products in particular, there is little likelihood that the trend will improve much in future. Within this general picture, however, prospects for a few commodities seem to be fairly encouraging, namely, meat, certain metals, and new agricultural products. For some, however, the future is likely to be bleaker than in the past ten years or so, bananas, coffee, grains and oilseeds (except animal fodder), wool, fishmeal and petroleum.

The upward trend taken in recent years by exports of manufactures from the more developed countries of the region may well continue, and if development policies are consolidated the share of these products in total exports are likely to expand.

To judge from the progress made by the integration movement, intra-area trade is likely to grow more rapidly than the total, particularly in Central America. In LAFTA, stagnation has set in after the first burst of intense growth. Unless greater efforts are made to achieve integration, there is no hope that intra-area trade will remove the external sector bottlenecks to any appreciable extent.

The projections have not allowed for the possible effects of integration on import substitution in non-LAFTA goods, since they have been made essentially as an extrapolation of trends in the last few years and of existing conditions.

/4. Imports

4. Imports

The growth rate of imports, which averaged 3.6 per cent in 1950-66, was slightly higher than that of the purchasing power of exports but lower than that of the gross domestic product (see table 10).

The import substitution process has been intensive enough to reduce the import coefficient, which had already dropped considerably before 1950, from 13.9 to 10.4 per cent to the product, between 1950 and 1965 (see table 11). The decline was fairly generalized, and highly persistent in nearly all the Latin American countries.

The eventual coefficient was relatively low in comparison with its level in the rest of the world, and indicates that, in spite of the process of integration in Latin America, all that has been achieved is a limited amount of intra-area trade, except in the countries that are members of the Central American Common Market. The regional averages cover widely different national import coefficients, which ranged in 1965 from 4.5 per cent for Brazil to 33.9 per cent for Panama.

It has been pointed out that the tempo of import substitution differed for consumer, intermediate and capital goods. In 1965 the proportion of final consumer goods imported was barely 2.8 per cent of total consumption, and capital goods imports constituted 20.8 per cent of investment. This proportion is even higher if construction activities are subtracted from investment, since by their very nature, they need relatively few imported inputs (see table 12). As import substitution had already made considerable headway in consumer and some intermediate goods before 1950, the biggest reduction in the import coefficient undoubtedly took place in capital goods.

Substitution in capital goods acquired great momentum from the middle of the nineteen-fifties onwards in the larger countries. It mainly involved the simpler items, so Latin America is still fairly heavily dependent on foreign sources for the more complex types of capital goods.

/Table 10

Table 10

LATIN AMERICA: GROWTH RATE OF IMPORTS, BY COUNTRIES

(Percentages)

Country	Imports		
	1950-60	1960-66	1950-66
Argentina	2.0	-0.3	1.1
Bolivia	3.2	10.0	5.7
Brazil	3.3	-4.4	0.3
Central America	7.7	10.5	8.7
Costa Rica	8.6	8.0	8.4
El Salvador	10.5	8.4	9.7
Guatemala	4.5	8.6	6.0
Honduras	7.4	12.1	9.1
Nicaragua	9.5	17.6	12.5
Chile	6.6	4.0	5.7
Colombia	3.0	4.8	3.7
Dominican Republic	3.7	12.7	7.0
Ecuador	8.3	4.4	6.8
Mexico	4.2	6.2	4.9
Panama	6.6	10.4	8.0
Paraguay	5.0	4.5	4.8
Peru	7.8	12.3	9.5
Uruguay	0.5	-5.1	-1.7
Venezuela	3.5	0.3	2.3
Total	3.9	3.1	3.6

Source: ECLA, on the basis of official statistics.

/Table 11

Table 11

LATIN AMERICA: IMPORTS OF GOODS AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT, BY COUNTRIES a/

Country	1950	1955	1960	1965
Argentina	12.6	10.6	10.6	9.1
Bolivia	14.7	18.9	19.0	20.8
Brazil	11.3	8.4	8.3	4.5
Central America	16.3	19.9	19.5	21.5
Costa Rica	21.7	27.7	26.1	27.7
El Salvador	21.8	18.8	21.1	21.1
Guatemala	12.1	14.8	13.3	14.5
Honduras	15.7	19.6	18.9	27.3
Nicaragua	15.2	26.8	27.4	29.4
Chile	10.8	10.9	12.6	11.6
Colombia	17.5	20.7	13.6	11.9
Dominican Republic	15.1	23.3	13.6	15.5
Ecuador	9.1	14.3	12.6	14.5
Mexico	11.7	10.6	9.1	9.1
Panama	28.8	27.6	30.5	33.9
Paraguay	12.0	15.3	15.9	15.5
Peru	19.0	22.7	20.2	27.3
Uruguay	15.9	13.8	13.9	8.7
Venezuela	22.7	21.2	14.9	12.5
Latin America	13.9	13.2	11.7	10.4

Source: ECLA, on the basis of official statistics.

a/ On the basis of figures in dollars at 1966 prices. Official exchange rates for imports were used.

/Imports of

Imports of these goods usually mirrored the variations in the capacity to import, particularly in countries which imported few consumer goods and therefore had no means of compensating for many of the variations. When, in 1963, Brazil had to pay off part of its external debt and was therefore compelled to cut down on imports, capital goods were the items most heavily slashed. In 1961-62, Argentina imported capital goods on a fairly large scale by means of new foreign loans, and when its exports later expanded considerably, much of the additional export income had to be used to pay part of its debts, and it was unable to step up its imports of capital goods to any great extent. When the import coefficient is low from the outset, and imports consist in the main of intermediate and capital goods, as in the more developed countries of the region, variations in the capacity to import must be met either by reducing imports of intermediate goods so as to lower the economic growth rate immediately with the consequent effect on employment, or by making capital goods bear the brunt of the impact. The second course is usually chosen, despite the repercussions on the rate of capital formation and development in the long run.

Mention should also be made of Venezuela, where imports of equipment for its export industry (petroleum) constituted a large proportion of its imports of capital goods and total purchases.

A process which begins by producing consumer goods in order to create domestic demand for intermediate and capital goods and thus prepares the ground for eventually manufacturing these locally, evidently has its own logic. On the other hand, it must be realized that many of these intermediate and capital goods, which are vital for the normal evolution of the process of growth, will often be produced in such backward conditions that considerable bottlenecks will be formed and hamper economic development in general. In this respect, too, the countries differ substantially from one another. In many cases major basic industrial ventures were launched, in the nineteen-forties and nineteen-fifties, such as the Volta Redonda steel mill in Brazil, the steel industry established by CORFO in Chile and many basic lines of production set up in Mexico with strong government support.

/The sequences

The sequences followed by the import substitution process was instrumental in shaping the structure of imports. Consumer goods came to account for very little, that is, 21.3 per cent (see table 13). Moreover, many of the final consumer goods still imported are of an essential nature, or are purchased abroad as a counterpart to the exports accepted by those same countries. They also constitute a large proportion of the trade among the Latin American countries themselves.

Imports of intermediate goods, on the other hand, increased their share to 48.6 per cent of total imports. The progress achieved in the substitution of consumer goods also increased demand for consumer goods in absolute terms. Consumption, which had been discouraged in many cases before the import substitution process began, was encouraged as domestic production developed. Demand rose sharply and led to an increase in the need for imported intermediate goods. Particularly with consumer and capital goods produced by the metal-transforming industries, manufacture often began with the sample assembly of components and gradually progressed until in some cases extremely high percentages of direct domestic production were attained.

The relative reduction of imports and the change in their composition had appreciable effects on the balance of payments. In the more advanced countries of the region it seems that a low import coefficient, with imports comprising mainly essential intermediate and capital goods, meant that these countries' external vulnerability did not necessarily decrease as a result of import substitution, but that it changed in character once the first stage of the process had been completed. The countries are now vulnerable, not because they are dependent on an appreciable volume of supplies from abroad, but because of the strategic nature of their imports.

Import coefficients declined to varying degrees in the different countries. Argentina, Brazil and Mexico, which had already attained import coefficients of less than 10 per cent, have made considerable progress in import substitution. Consequently, in recent years the decline of the import coefficient has been arrested and it is now tending to stabilize or even to increase. Moreover, it is apparent from official pronouncements and the coefficients implicit in the development plans formulated in recent years that the intention is to increase the import coefficient.

/Table 12

Table 12

LATIN AMERICA: IMPORTS OF SELECTED GOODS AS A PERCENTAGE OF SIGNIFICANT DOMESTIC VARIABLES a/

	1950	1955	1960	1965
Imported consumer goods as a percentage of total consumption	3.2	3.1	2.8	2.8
Imported intermediate goods as a percentage of gross domestic product at market prices b/	5.5	5.5	5.0	5.1
Imported capital goods as a percentage of gross fixed investment	36.3	29.0	24.8	20.8

Source: ECLA, on the basis of official statistics.

a/ On the basis of figures in dollars at 1960 prices. For the macroeconomic variables, official exchange rates for exports were used. Cuba, Haiti and Paraguay are not included.

b/ Including fuels.

Table 13

LATIN AMERICA: PERCENTAGE COMPOSITION OF TOTAL IMPORTS, BY TYPES OF GOODS

	1950	1955	1960	1965
Consumer goods	20.5	19.6	19.9	21.3
Raw materials and intermediate products	39.6	41.8	42.8	48.6
Capital goods	39.9	38.6	37.3	30.1
Total imports of goods	100.0	100.0	100.0	100.0

Source: ECLA, on the basis of official statistics.

/In the

In the countries whose effective markets are of intermediate size, looked at in regional terms, import substitution has usually retained more of its original dynamism and the import coefficient is higher, some 11.6 per cent in Chile and 27.3 per cent in Peru. However, as in the larger countries, in these countries too the import coefficient has a tendency to remain stationary, although at higher levels, which might be an indication that import substitution is limited there because of the smaller size of the markets.

Venezuela is a significant example. In the early nineteen-fifties it was still in the very early stages of import substitution and was still importing a large volume of consumer goods. During the period under study it made a good deal of progress because of a fairly deliberate and energetic policy of import-saving industrialization.

Table 12 shows the reciprocal trade of the Central American countries. The impact of integration was so great that the total imports of these countries grew, despite the fact that the coefficient of imports from the rest of the world (deducting intra-area trade), expressed as a share of the product, decreased. The economies of these countries were fairly open at the beginning of the nineteen-fifties and followed two opposing but complementary trends: one was towards expansion within the limited context of the area market, and the other was to continue a relatively intensive process of import-saving substituting for imports from outside the area.

In countries in which there was a more pronounced rise in the purchasing power of exports as a result of the emergence of new products (Peru, Ecuador), or of considerable, albeit temporary, increases in export prices (copper in Chile, tin in Bolivia), imports did not contract proportionally, and they increased more rapidly than in other countries. This, however, did not always result in a corresponding increase in the stock of capital or impetus to development. Imports of intermediate and capital goods grew more than imports of consumer goods because of the process of imports substitution in these countries, although in some cases a large part of the increase in the purchasing power of exports was used for increased imports of consumer goods.

/The fact

The fact that the import coefficient is not declining does not mean that import saving has not been on a very large scale in certain economic sectors. Demand for imported goods tends to grow more rapidly than the gross domestic product and this offsets import saving in the sectors in which it is an important factor. For, as the gross domestic product increases, the demand for final consumer goods increases in different proportions, depending on the sector producing the goods concerned. Generally speaking, the demand for manufactures with a high import coefficient, either directly or indirectly, tends to rise more rapidly. Hence, if the import coefficient of each and every sector of the economy remained constant, the coefficient for total imports would increase. Moreover, if in a given period total imports maintain a constant ratio to the product, it would mean that there has been import substitution on a fairly large scale in some sectors which is offsetting the trend of demand.

Turning to future prospects for imports, it may be said that, since import substitution has made reasonable progress to date, it cannot be anticipated that it will lead in the immediate future to a reduction in the relative need for imports on quite the same scale. Import restraint, on the other hand, is already quite considerable and was initiated during periods of critical shortages of foreign exchange, chiefly with respect to capital goods. This means that if, in the future, it is wished to increase the growth rate of the product, it will not be possible to limit imports of capital goods to quite the same extent, for this would lower rather than raise the growth rate. Curtailing imports, either through substitution or through restraint, cannot be relied upon as much in the future as it has in the past to prevent recurrent deficits on the commercial balance. The tendency of the import coefficient to stabilize or increase in the larger countries of the region noted earlier is very significant in this respect.

5. External financing

During the period considered, imports grew at a faster pace than the purchasing power of exports, despite import substitution.[1/] As a result of the relatively sluggish growth of exports and the need for imports from abroad to promote development, there was a trend from the mid-nineteen-fifties onwards towards a trading deficit which, in Latin America as a whole, totalled an annual average of 207 million dollars at current prices over the period 1950-66 and represented approximately 2.9 per cent of the value of exports over the period. Throughout the fifties, capital inflows grew substantially, and this enabled Latin America to operate with an adverse trade balance. Over the period 1950-59, the deficit was an average of 177.5 million annually, some 2.8 per cent of the value of exports (see table 14).

Gross capital inflows grew even more rapidly, particularly from 1955-59 onwards, since they were needed to cover not only the trading deficit but also their own servicing costs (see table 15).

The large volume of the accumulated debt, with its accompanying high level of servicing, meant that during the nineteen-sixties some countries had to pursue a policy of loan repayment or at least of loan restraint. As a result, several countries tended to have trading surpluses so that they could make repayments to reduce their obligations. Consequently, increases in exports did not always lead to a corresponding increase in imports.

It is worth noting that the share of direct investment in total gross capital inflows declined throughout the period, falling from approximately 40 per cent in 1950 to some 15 per cent in 1966.

1/ This analysis excludes Venezuela, whose development was very unusual because of the volume of petroleum investment. If the figures for Venezuela were added in, they would distort the conclusions, which are generally valid for the majority of countries in the region.

/Table 14

Table 14

LATIN AMERICA: [a/] COMMERCIAL BALANCE, ANNUAL AVERAGES BY PERIOD

(Millions of dollars)

Period	Exports of goods and services (1)	Imports of goods and services (2)	Commercial balance (2-1) (3)
Latin America (excluding Venezuela)			
1950-1954	6 013.0	6 043.0	30.0
1955-1959	6 570.1	6 895.0	324.9
1960-1964	7 659.6	8 181.8	522.2
1965-1966	9 960.0	9 526.2	-433.2
Latin America (including Venezuela)			
1950-1954	7 485.5	7 041.3	-444.2
1955-1959	9 008.7	8 770.3	-238.4
1960-1964	10 210.0	9 662.2	-547.8
1965-1966	12 446.5	11 265.7	-1 180.8

Source: ECLA, on the basis of data in IMF, Balance of Payments Yearbook, vols. 8-19.

a/ Excluding Cuba and Haiti.

/Table 15

Table 15

LATIN AMERICA:[a/] GROSS INFLOW OF FOREIGN COMPENSATORY AND NON-COMPENSATORY FUNDS, AND OUTFLOWS IN RESPECT OF AMORTIZATION AND OTHER PAYMENTS AND REMITTANCES OF INTEREST AND PROFITS; ANNUAL AVERAGES BY PERIOD

(Millions of dollars)

Period	Gross inflow of foreign compensatory and non-compensatory funds								Amortization payments and other outflows of foreign compensatory and non-compensatory capital	Balance (8-9)	Remittances of interest and profits	Net inflow of foreign capital to finance imports (10-11)
	Direct investment	Medium- and long-term non-compensatory loans	Medium- and long-term compensatory loans	Short-term non-compensatory liabilities	IMF contingency loans	Other liabilities of the monetary authorities	Official transfer payments	Total				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Latin America (excluding Venezuela)												
1950-1954	254.1	216.3	224.3	93.1	39.1	165.6	21.4	1 013.9	474.2	539.7	437.4	102.3
1955-1959	484.7	740.3	257.1	167.3	76.2	124.4	90.5	1 940.5	904.5	1 036.0	525.3	510.7
1960-1964	450.3	1 632.2	583.4	359.8	174.4	72.9	134.4	3 407.4	1 609.4	1 798.0	836.9	961.1
1965-1966	518.3	1 840.3	583.8	392.0	157.4	21.0	178.8	3 691.6	2 446.7	1 244.9	1 253.6	-8.7
Latin America (including Venezuela)												
1950-1954	344.0	217.8	224.3	102.4	39.1	168.0	21.5	1 117.1	494.8	622.3	879.2	-256.9
1955-1959	804.1	899.9	277.0	203.3	76.2	126.1	90.6	2 477.2	1 068.0	1 409.2	1 223.5	185.7
1960-1964	450.3	1 670.3	699.7	382.5	174.4	73.1	136.0	3 586.3	1 947.3	1 639.1	1 456.8	181.9
1965-1966	557.3	1 949.8	583.8	421.0	157.4	37.0	182.8	3 889.1	2 506.7	1 382.4	1 981.6	-599.2

Source: ECLA, on the basis of data in IMF, Balance of Payments Yearbook, vols. 8-19.

a/ Excluding Cuba and Haiti.

One indicator which reveals the extent to which many countries had to import more than they exported - as a result of de facto situations which were not part of a long-term planning trend - is the fact that throughout the period compensatory loans accounted for a large share of Latin America's gross capital inflows . This meant that countries were frequently unable to finance the volume of imports that they needed and had to seek financing from commercial banks and monetary authorities. The relatively short repayment periods and high interest rates of commercial loans meant that payments in respect of short-term loans in many cases caused severe strains on the balance of payments of some countries in the region.

During the nineteen-sixties the situation tended to improve because of refinancing - which extended repayment periods and consolidated and re-organized debts - and also through international machinery - chiefly connected with the Alliance for Progress - which endeavoured to programme capital inflows in a clearer and more definite manner so as to meet the longer term needs of development programmes.

Refinancing of loans, however, could not prevent the volume of debt servicing from increasing each year, in many cases to very high levels.

All this, added to the large inflow of capital in the nineteen-fifties, meant that amortization payments and the payment of interest on foreign capital grew considerably, both in absolute value and as a proportion of exports. Table 16 shows that average annual amortization payments rose from 474.2 million dollars during the period 1950-54 to 2,455.7 million in 1965-66. Over the same period annual remittances of interest and dividends were 437.4 and 1,253.6 million dollars respectively. This meant that the total amount paid each year to service foreign capital grew from 911.6 million dollars in 1950-54 to 3,700.3 million in 1965-66. This was much greater than the growth in the value exports, which rose from 6,013 million dollars in 1950-54 to 9,960 million in 1965-66.

The result was that the total amount paid to service foreign capital represented approximately 37.2 per cent of the value of exports in 1966, as opposed to 15.2 per cent in 1950-54.

These average figures for Latin America do not reveal all the seriousness of the problem since in some countries the ratio of total servicing in respect of amortization, interest and profits to the value of exports was well above 40 per cent and in Brazil, for example, it was close to 50 per cent.

/Table 16

Table 16

LATIN AMERICA: [a/] FOREIGN CAPITAL SERVICING AS A PROPORTION OF TOTAL EXPORTS, ANNUAL AVERAGES BY PERIODS

(Millions of dollars)

Period	Foreign capital servicing			Exports of goods and services	Co-efficient of foreign capital servicing (percentage of exports) (3)/(4)
	Amortization payments and other outflows foreign compensatory and non-compensatory capital (1)	Remittances of interest and profits (2)	Total (3)	(4)	(5)
Latin America (excluding Venezuela)					
1950-54	474.2	437.4	911.6	6 013.0	15.2
1955-59	904.5	525.3	1 429.8	6 570.1	21.8
1960-64	1 609.4	836.9	2 446.3	7 659.6	31.9
1965-66	2 446.7	1 253.6	3 700.3	9 960.0	37.2
Latin America (including Venezuela)					
1950-54	494.8	879.2	1 374.0	7 426.5	18.4
1955-59	1 068.0	1 223.5	2 291.5	9 008.7	25.4
1960-64	1 947.3	1 456.8	3 404.1	10 211.0	33.3
1965-66	2 506.7	1 981.6	4 488.3	12 446.5	36.1

Source: ECLA, on the basis of data in IMF, Balance of Payments Yearbook, vols. 8-19.

a/ Excluding Cuba and Haiti.

/B. PROJECTIONS

B. PROJECTIONS FOR 1975 AND 1980

1. Growth targets for the product and assumptions used in the projections

(a) Growth targets for the product

In the projections, three growth targets were assumed for the aggregate gross domestic product of the Latin American countries, both as a group and individually. The targets adopted apply to the nineteen-seventies, assuming that in the remainder of the present decade the rate of growth will be much the same as hitherto.

The three annual rates adopted were 6, 6.5 and 7 per cent. The present section analyses the effects of a growth target of 6 per cent for the aggregate gross domestic product, i.e., an annual per capita growth rate of 3 per cent. The per capita rate is not the same for all countries in the region since it depends in each case on population increase. The effects of growth rates of 6.5 and 7 per cent will be examined in later sections.

(b) Export trends

In order to determine the growth rates to be assumed for exports, each country was examined, and a separate analysis was made of both past trends and future prospects for each major traditional export in terms of volume and prices, also bearing in mind, at a slightly higher level of aggregation, the growth possibilities of non-traditional exports. This was the basis on which the hypothesis for the purchasing power of exports, was worked out, taking account of the effects of both volume and prices.

In this basic hypothesis, it is assumed that, in line with recent trends, the rate of growth of exports of manufactures will be quite high in some of the more advanced countries of the region. However, it is assumed also, that there will be no massive change in exports of manufactures such as would completely change the size of the manufacturing sectors' share in total exports.

/Table 17

Table 17 shows the assumed growth rates for the purchasing power of exports by country. The basic hypothesis for the growth of the purchasing power of exports was designated hypothesis B. According to this hypothesis, the purchasing power of exports would grow by 3.6 per cent annually between 1966 and 1975, by 3.9 per cent between 1975 and 1980, and by an average of 3.7 per cent between 1966 and 1980. The individual studies on which the export growth rates adopted in this hypothesis were based are included in other documents which are nearing completion.

Under this basic hypothesis, it was assumed that the measures being taken by five countries of the region that have been endeavouring to design and implement more ambitious policies to foster the growth of exports - policies which have already been or are about to be implemented - will achieve the results anticipated. These measures include the plans to expand production and exports of copper in Chile, of manufactures in Brazil and Mexico, and of tin and petroleum in Bolivia. In the case of Costa Rica, which became a full member of the Central American Common Market more recently than the other member countries, it was assumed that a major part of the effects of its membership would make themselves felt over the next few years.

It was also considered advisable, however to make allowances for the possibility that these policies might not fully achieve their objectives. An additional hypothesis was developed for these five countries, which is shown in table 17 as hypothesis A, in which the growth rates assumed in hypothesis B for the five countries were replaced by the growth rates of the volume of exports over the past decade (1955/57 to 1965/67), while for the remaining Latin American countries the rates used in the basic hypothesis (B) were maintained. This led to the formulation of a new hypothesis, in which the average annual rates of growth of the purchasing power of exports in Latin America as a whole would be 2.9 and 3.2 per cent over the periods 1966-75 and 1966-80 respectively, which are somewhat lower than those assumed in the basic hypothesis.

A comparison of basic hypothesis (B) and variant (hypothesis A) with past trends in the growth of purchasing power of exports shows that the rate of growth assumed in the basic hypothesis is slightly higher than during the period 1955/57 to 1965/67, while a slightly lower rate is assumed in hypothesis A.

/Table 17

Table 17

LATIN AMERICA: HYPOTHESES FOR THE FUTURE GROWTH OF THE PURCHASING POWER OF EXPORTS

(Percentages)

	Export trends over the period 1955/57 to 1965/67		Hypotheses for projections of the purchasing power of exports								
			A			B			C		
	Volume	Purchasing power	1966-1975	1975-1980	1966-1980	1966-1975	1975-1980	1966-1980	1966-1975	1975-1980	1966-1980
Argentina	4.8	5.7	2.9	3.8	3.3	2.9	3.8	3.3	3.5	3.8	3.6
Bolivia	4.6a/	7.3a/	3.4	4.5	3.9	5.9	3.3	4.6	6.4	5.3	6.0
Brazil	3.3b/	0.1b/	3.3	3.3	3.3	4.0	4.0	4.0	5.0	5.0	5.0
Central America											
Costa Rica	5.8c/	4.0c/	5.0	5.7	5.3	7.4	4.3	6.3	7.7	4.9	6.7
El Salvador	7.8c/	5.2c/	3.6	3.5	3.6	3.6	3.5	3.6	4.4	4.1	4.3
Guatemala	8.4d/	6.0d/	4.9	4.7	4.8	4.9	4.7	4.8	5.6	6.0	5.7
Honduras	4.3d/	4.6d/	1.7	4.2	2.5	1.7	4.2	2.5	2.0	5.1	3.1
Nicaragua	9.9d/	9.5d/	5.1	5.5	5.2	5.1	5.5	5.2	5.5	6.3	5.8
Chile	4.7	6.4	1.2	4.9	2.5	4.1	3.9	4.0	7.8	5.2	6.8
Colombia	2.8	0.5	3.7	3.7	3.7	3.7	3.7	3.7	5.2	3.3	4.5
Dominican Republic	4.2d/	2.1d/	3.2	3.5	3.3	3.2	3.5	3.3	3.6	4.5	3.9
Ecuador	5.2	3.9	4.2	3.5	3.9	4.2	3.5	3.9	5.6	4.7	4.9
Mexico	3.9	4.1	3.2	2.9	3.1	4.9	4.6	4.8	6.4	5.3	5.5
Panama	9.0	8.6	5.5	5.6	5.5	5.5	5.6	5.5	6.4	6.6	6.5
Paraguay	6.3	3.8	4.5	4.6	4.6	4.5	4.6	4.6	6.4	7.1	6.7
Peru	7.2	8.8	0.8	5.9	2.5	0.8	5.9	2.5	4.1	4.3	4.2
Uruguay	2.8	-3.9	3.1	3.0	3.1	3.1	3.0	3.1	3.6	4.0	3.8
Venezuela	4.6b/	-0.2b/	2.4	3.0	2.6	2.4	3.0	2.6	3.1	4.1	3.4
Total	4.6	3.3	2.9	3.7	3.2	3.6	3.9	3.7	4.8	4.7	4.7

a/ Period: 1957/59 to 1965/67.

b/ Period: 1954/56 to 1964/66.

c/ Period: 1953/55 to 1964/66.

d/ Period: 1950/52 to 1964/66.

/(c) Import

(c) Import trends

Generally speaking, it was assumed that the relationship between imports and the growth of the product and of gross fixed investment, would remain the same as during the period 1950 to 1966.[2]

It was assumed, therefore, that the import substitution process of past years would continue at similar levels in the future. As noted above, import substitution has fallen off somewhat, in some countries in the region in recent years, and if the trend continues it might mean that import coefficients, instead of steadily declining, would tend to become stabilized or at least to decline more slowly. If that were to happen, the volume of imports in the years analysed might be higher than projected. It is also clear that, since the import coefficient for investment is greater than for intermediate and capital goods owing to a similar lack of progress in substitution of imports of imported capital goods, the structure of demand changes and investment becomes relatively more important when a higher growth rate is assumed for the gross domestic product. Hence, even with no change in anticipated trends in the import coefficients for each type of goods, the result would be a relative rise in imports, because of the change in the structure of demand.

(d) Savings and investment trends

The projections assume that in the future the ratio of savings to gross national income will remain the same as during the period 1950-66. In working with the functions used in the projections, some importance was given to the marginal propensity to save.[3]

Generally speaking, for many Latin American countries the figures for the marginal propensity to save deriving from these functions are higher than the figures for the average propensity to save. Using these functions therefore involves the assumption that as income rises the proportion of domestic savings will also rise.[4]

2/ The functions used for each country and estimates of their corresponding parameters are shown in annex A.

3/ The functions used for each country and their corresponding parameters are shown in annex A.

4/ There are, of course, some exceptions to this generalization in which marginal propensity to save is lower than average propensity to save. These are shown in annex A.

/It was

It was assumed that, as has been the case hitherto, capacity to generate increases in the product will continue to be closely linked to the level of gross fixed investment. This relationship is expressed by the capital-output ratio, which for purposes of the projections was determined for each of the countries on the basis of movements in the relationship between the product and gross fixed investment over the period 1950-66. The values obtained for the capital-output ratio were affected by the past under-utilization of productive capacity. The coefficient of utilization of installed capacity could be improved if certain policies and measures, whose effects were not taken into account in these projections, are adopted. However, in the specific cases of Argentina and Uruguay, where the capital-output ratio has been too low in the past, it was assumed that the ratio would rise as compared with the period 1950-66.

2. Results of the projections taking a growth target of 6 per cent for the gross domestic product

Using the hypotheses outlined in the preceding section, the potential trade and savings gaps or surpluses corresponding to an annual growth target of 6 per cent for the product during the nineteen-seventies can be determined.

(a) The potential trade gap

If estimates are made of exports based on the basic hypothesis (B) and the variant, hypothesis A, and of imports based on the criteria outlined above, and a comparison is made of their respective volumes in 1975 and 1980, it is possible to determine the potential deficit or surplus on the commercial balance that will occur if these assumptions are borne out by events. The deficit has sometimes been termed the "trade gap", which can be defined as the difference between the value of imports and the purchasing power of exports in a given year.

Taking each country in the region individually, it was found that most countries would probably have a trade gap in 1975 and 1980, while a few would have surpluses on their commercial balances. It may be assumed that the export surpluses over import requirements of the latter will not be transferred to the former, but will be used to achieve higher growth rates, to accumulate reserves, or to promote more liberal import policies. Hence, the present section divides countries into two groups: those expected to have

/a trade

a trade gap in the period covered by the projections and those expected to have a trading surplus. The following paragraphs refer to the first of these groups.

The projected trade gaps are given in table 18. The table shows that, using basic assumption B for exports and taking a target annual growth rate of 6 per cent for the product, fifteen countries would have a trade gap totalling 1,629 million dollars in value in 1975, while in 1980 sixteen countries would have a trade gap of 2,886 million dollars. This would represent 14.1 and 19.3 per cent respectively of projected exports for these years. It means that achieving a 6 per cent growth rate for the product will depend on the possibility of closing the trade gap, which as can be seen, is not only extremely large but increases progressively over time. In other words, the problem of the trade gap will become worse in the future.

If hypothesis A is used for exports, instead of hypothesis B, for the five countries that have been applying expert promotion policies, sixteen countries in 1975 and seventeen countries in 1980 would have a trade gap of a total value of 2,410 and 4,130 million dollars respectively (see table 19). This would represent 16.9 and 23.3 per cent respectively of exports. Under hypothesis A the problem is clearly more serious than under the basic hypothesis.

This analysis of the trade gap disregards the effects of servicing foreign capital and the external debt in Latin America. Since the current external debt is very large, the cost of servicing it is very high compared with the value of exports. This means that, given the size of the existing debt, even if there were no new inflows of foreign capital - and obviously inflows will be needed to cover the trade gap - it would be necessary to allow for the amounts needed to cover servicing at its current level. In order to illustrate the combined influence of the two factors, a hypothesis was worked out in which it was assumed that the trade gap and foreign capital servicing would be covered by fresh inflows of foreign capital and that these inflows would be on the same terms repayment periods, interest rates, etc. as have prevailed in recent years. On this basis an estimate was made of the total amount payable in respect of profits and interest in 1975 and 1980. A separate estimate was made of the potential amount of amortization payable in respect of the external debt in those years, using the same hypothesis.

/Table 18

Table 18

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS ON CURRENT ACCOUNT BY GROUPS OF COUNTRIES, 1975 AND 1980

Annual growth target of 6 per cent for the gross domestic product in the nineteen-seventies utilizing basic assumption B for exports

(Millions of dollars at 1966 prices)

	Potential balance-of-payments deficit or surplus, 1975				Potential balance-of-payments deficit or surplus, 1980			
	Number of countries	Potential commercial balance	Potential net remittances of interest and profits	Total	Number of countries	Potencial commercial balance	Potential net remittances of interest and profits	Total
Sub-total: Countries with potential deficit in their commercial balance	15	1 629.1	2 205.4	3 834.5	16	2 865.8	3 771.2	6 637.0
Sub-total: Countries with potential surplus on their commercial balance	3	-909.3	1 556.0	646.7	2	-799.2	1 958.9	1 159.7
Total	18	719.8	3 761.4	4 481.2	18	2 066.6	5 730.1	7 796.7

/Table 19

Table 19

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS ON CURRENT ACCOUNT BY GROUPS OF COUNTRIES, 1975 AND 1980

Annual growth target of 6 per cent for the gross domestic product in the nineteen-seventies utilizing assumption A for exports

(Millions of dollars at 1966 prices)

	Potential balance-of-payments deficit or surplus, 1975				Potential balance-of-payments deficit or surplus, 1980			
	Number of countries	Potential commercial balance	Potential net remittances of interest and profits	Total	Number of countries	Potential commercial balance	Potential net remittances of interest and profits	Total
Sub-total: Countries with potential deficit in commercial balance	16	2 409.6	3 125.4	5 535.0	17	4 130.1	5 412.0	9 542.1
Sub-total: Countries with potential surplus in commercial balance	2	-739.1	917.9	178.8	1	-672.7	1 116.4	443.7
Total	18	1 670.5	4 043.3	5 713.8	18	3 457.4	6 528.4	9 985.8

The results of this hypothesis, coupled with hypothesis B for exports and a growth rate for the product of 6 per cent, were as follows: in 1975, countries with a trade gap would have to pay a total of 2,205 million dollars in respect of profits and interest. This would represent 19 per cent, or, if added to the trade gap, a total of 33.1 per cent of the value of exports. In this case the incidence of payments in respect of interest and profits is substantially greater than that of the trade gap. This is in line with what has happened in recent years in many Latin American countries, in which, owing to the accumulation of the external debt and the relatively unfavourable terms on which loans have been granted, the incidence of external debt servicing has been so great that it could be offset only by a surplus on the commercial balance.

The corresponding amount payable in 1980 in respect of profits and interest by countries with a trade gap, utilizing the same hypotheses would total 3,771 million dollars, or 25.5 per cent of the value of exports. Compared with 1975, the total has increased not only in absolute terms but also as a proportion of the value of exports, thus showing that the problem becomes more serious with great rapidity over time.

With regard to the countries which in 1975 and 1980 are expected to have a surplus in their commercial balance, the amounts they would have to pay in respect of interest and profits are so great that, despite their favourable commercial balance, they would have a balance-of-payments deficit.[5/] Even if these countries received no new capital inflows they would tend to have a balance-of-payments deficit owing to the amount they would have to pay to service existing capital.

Using the same hypotheses, amortization payments in respect of the external debt for the countries with a trade gap would be 1,323 million dollars in 1975 and 2,360 million in 1980. This is in addition to payments of interest and profits and the potential trade gap.

5/ A balance-of-payments deficit, in the accepted definition, comprises the deficit in the commercial balance plus the value of remittances of profits and interest.

/Besides considering

Besides considering the situation for the countries with a trade gap as a group, it may be useful to consider that each country's trade gap would be in order to appreciate the scope of the problem in the region as a whole. Using hypothesis B, nine countries in the region would have a trade gap in 1980 equal to or exceeding 20 per cent of the value of their exports, while two countries would have a surplus. This means that this is a serious problem in nearly every country of the region (see table 20).

In 1980, the potential balance-of-payments deficit on current account in eleven countries would be equal to or exceed one-third of the value of exports, and in all countries except one it would be above 10 per cent (see table 21).

(b) The potential savings gap

Assuming that the growth rate of the product is 6 per cent and that domestic savings evolve in the manner indicated earlier, in 1975 investment requirements would outstrip domestic savings in sixteen countries of the region, with a gap of some 5,647 million dollars. In 1980 the same number of countries would have a savings gap, which would then amount to 7,247 million dollars. These amounts would represent 23 and 22 per cent respectively of the total gross investment required in each of these years (see table 22).

Looking at countries individually, it was found that in 1980 twelve countries would have a savings gap equal to or exceeding 20 per cent of the value of their gross investment (see table 23).

This structural savings gap can be tackled either by increasing domestic savings or by reducing the need for investment through more intensive use of installed capacity, or by bringing in additional external savings to make up the difference. The role of capital inflows in closing the gap should be looked at in terms of the sectors in which investment is required and in terms of the type of goods in which investment can be made (whether or not they can be produced domestically). It may be useful, for purposes of illustration, to note that, if it is assumed that the potential savings gap would be closed with additional inflows of foreign capital, the volume that these inflows would have to attain in 1975 and 1980 would be greater than that of the inflows required to close the trade gap. In 1975, they would even be larger than the balance-of-payments deficit on current account.

/Table 20

Table 20

LATIN AMERICA: POTENTIAL COMMERCIAL BALANCE AS A PROPORTION OF EXPORTS OF GOODS AND SERVICES, UTILIZING HYPOTHESIS B FOR EXPORTS

Commercial balance as a proportion of exports of goods and services (percentages)	Number of countries			
	Annual growth target of 6 per cent for the gross domestic product		Annual growth target of 6.5 per cent for the gross domestic product	
	1975	1980	1975	1980
Countries with a surplus	3	2	2	1
Countries with a deficit	15	16	16	17
0.0 to 9.9	8	4	5	2
10.0 to 19.9	1	3	3	4
20.0 to 29.9	2	3	2	3
30.0 to 39.9	2	2	2	2
40.0 to 49.9	2	1	4	1
50.0 and over	-	3	-	5

Table 21

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS ON CURRENT ACCOUNT AS A PROPORTION OF EXPORTS OF GOODS AND SERVICES, UTILIZING HYPOTHESIS B FOR EXPORTS

Commercial balance as a proportion of exports of goods and services (percentages)	Number of countries			
	Annual growth target of 6 per cent for the gross domestic product		Annual growth target of 6.5 per cent for the gross domestic product	
	1975	1980	1975	1980
Countries with a surplus	1	-	-	-
Countries with a deficit	17	18	18	18
0.0 to 9.9	4	1	1	-
10.0 to 19.9	3	4	5	3
20.0 to 29.9	3	2	3	3
30.0 to 39.9	2	3	2	1
40.0 to 49.9	-	3	1	2
50.0 to 59.9	4	-	4	2
60.0 to 69.9	1	-	1	2
70.0 and over	-	5	1	5

/Table 22

Table 22

LATIN AMERICA: POTENTIAL DOMESTIC SAVINGS DEFICIT OR SURPLUS BY GROUPS OF COUNTRIES, 1975 AND 1980

Annual growth target of 6 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis B for exports

	1975		1980	
	Number of countries	Millions of dollars at 1966 prices	Number of Countries	Millions of dollars at 1966 prices
Subtotal: Countries with a deficit	16	5 646.6	16	7 247.3
Subtotal: Countries with a surplus	2	-100.1	2	-242.9
Total	18	5 546.5	18	7 004.4

Table 23

LATIN AMERICA: POTENTIAL DOMESTIC SAVINGS DEFICIT OR SURPLUS AS A PROPORTION OF TOTAL GROSS INVESTMENT, 1975 AND 1980

Percentages	Number of countries			
	Annual growth target of 6 per cent for the gross domestic product		Annual growth target of 6.5 per cent for the gross domestic product	
	1975	1980	1975	1980
Countries with a surplus	2	2	1	1
Countries with a deficit	16	16	17	17
0 to 9.9	2	3	1	1
10 to 19.9	3	1	2	3
20 to 29.9	3	4	4	3
30 to 39.9	6	3	3	3
40 to 49.9	1	4	5	4
50 and over	1	1	2	3

/Whether the

Whether the unfavourable trends in the economy of the region, as reflected in these calculations of the potential trade and savings gaps, can be overcome depends on a number of factors. In the case of the trade gap, it will not be easy for some countries to make more rapid progress in planned import substitution if they operate exclusively on the basis of individual domestic markets. Export expansion, on the other hand, would seem to be a priority target for virtually all countries in the region. Curbing imports of non-essential goods will only help to alleviate the situation over the short term. With regard to the savings gap, it is obvious that virtually all the countries of the region must increase their domestic savings if they are to achieve a higher rate of growth; the extent to which they must be increased will depend to some extent on what policies are adopted, inter alia, to make use of idle capacity and to improve the capital-output ratio. It seems clear, moreover, that a substantial improvement in the pace of growth at the kind of rates projected in the present document would require, especially at the initial stages, an increase in the volume of external financial assistance on terms very different from those that have prevailed in Latin America during the nineteen-sixties.

An examination of the nature and scope of the policies that should be adopted in Latin America relating to the economic growth factors dealt with in these projections is outside the limited scope of the present document. The problem has to be viewed as a whole in terms of all aspects of development policy. It also seems obvious that the general views expressed above should be viewed in the context of the individual circumstances of each country.

3. Effects of higher growth rates

In the preceding section, consideration was given to the potential trade and savings gaps resulting from an annual growth target of 6 per cent in the nineteen-seventies. It was concluded that the external bottleneck and the savings gap would reach very considerable proportions. This section examines what happens to these gaps as the target growth rate climbs.

/Two possibilities

Two possibilities will be considered. First, the trade and savings gaps corresponding to an annual growth rate of 6.5 per cent will be determined, and then the gaps corresponding to a rate of 7 per cent; in the latter case it is assumed that the trend of exports will be more favourable and make rates of this kind feasible.

Lastly, for purposes of illustration, an examination will be made of the effect of annual growth targets of 6 and 6.5 per cent on the assumption that the trend of exports will correspond to these rates.

(a) Effect of an annual growth target of 6.5 per cent for the gross domestic product

It was assumed that the basic growth rate of exports, the trends of imports, savings and investment, and their capacity to generate increases in the product, would be the same as for the previous hypothesis of a 6 per cent growth target. The effects of an annual growth rate of 6.5 per cent for the gross domestic product under these conditions in the nineteen-seventies are examined below.

It was found that in 1975 fifteen countries would have a trade gap of a total value of 2,640 million dollars, while seventeen would have a gap of a total value of 4,722 million in 1980: these figures would represent 22.2 per cent and 24.3 per cent respectively of the value of exports (see table 24).

Comparing these figures with those for a 6 per cent growth rate - under which the trade gap would be 14.1 per cent of exports in 1975 and 19.3 per cent in 1980 - it was found that a change of only one half of one per cent in the growth rate substantially increased import requirements, which, if exports rose at the same pace, would considerably increase the trade gap, even in relative terms. In other words, while the difficulties in the way of achieving a 6 per cent growth rate are considerable, they become much more serious very rapidly if the target rate is increased.

It should also be pointed out that, even if there were no new inflows of foreign capital, the amounts payable in the future in respect of capital, added to the trade gap, would attain proportions that would make the real magnitude of the problem even greater.

/Table 24

Table 24

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS ON CURRENT ACCOUNT BY GROUPS OF COUNTRIES, 1975 AND 1980

Annual growth target of 6.5 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis B for exports

(Millions of dollars at 1966 prices)

	1975				1980			
	Number of countries	Potential commercial balance	Potential net remittances of interest and profits	Total	Number of countries	Potential commercial balance	Potential net remittances of interest and profits	Total
Sub-total: Countries with potential deficit on the commercial balance	15	2 640.2	2 480.7	5 122.9	17	4 721.6	5 504.6	10 226.2
Sub-total: Countries with potential surplus on the commercial balance	3	-677.7	1 583.3	905.6	1	-487.4	1 154.6	667.2
Total	18	1 962.5	4 064.0	6 026.5	18	4 234.2	6 659.2	10 899.4

/It is

It is also noticeable that, assuming a 6.5 per cent growth rate, eleven countries would have trade gaps in 1980 equal to or exceeding 20 per cent of the value of their exports (see table 20).

Using the same hypotheses, seventeen countries would have a savings gap of a total value of 8,180 million dollars in 1975 and 10,956 million in 1980 (see table 25). These figures would represent 24.7 and 24.1 per cent respectively of gross investment, compared with 23 and 22 per cent for a 6 per cent growth rate, showing that a very much greater effort is needed to move from a 6 per cent to a 6.5 per cent growth rate.

(b) Effect of an annual growth target of 7 per cent for the gross domestic product

As seen in the preceding section, as the growth rate for the product rises the trade and savings gaps widen very rapidly. It would therefore be entirely beyond the capacity of the Latin American countries to achieve an annual growth rate of 7 per cent unless certain radical changes occur. Hence, to analyse the potential trade and savings gaps applying 7 per cent growth rate, it was assumed that the trend of exports would be more favourable than under hypothesis B although still within feasible limits. This, in turn, implies that energetic export promotion policies would be adopted with some likelihood of success, in terms of both domestic supply and the probable absorptive capacity of international markets.

The exports of each country were analysed on the basis of these assumptions, which yielded the annual growth rates for the periods to 1975 and to 1980 shown in table 17 on the basis of hypothesis C. Separate analyses were made for each of the traditional exports of each country, and also for non-traditional exports, with special emphasis on manufactures.

The other variables (imports, savings, investment and capacity to generate increases in the product) were maintained at the same levels as in the 6 per cent hypothesis.

Given all this, an annual growth rate of 7 per cent would mean a trade gap in fifteen countries totalling 2,983 million dollars in 1975 and in sixteen countries totalling 5,193 million in 1980. These figures would represent 23 and 31.8 per cent respectively of the value of exports. Despite the assumption that exports will improve, here too serious problems arise in attaining a growth target of this magnitude (see table 26).

/Table 25

Table 25

LATIN AMERICA: POTENTIAL DOMESTIC SAVINGS DEFICIT OR SURPLUS BY GROUPS OF COUNTRIES, 1975 AND 1980

Annual growth target of 6.5 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis B for exports

	1975		1980	
	Number of countries	Millions of dollars at 1966 prices	Number of countries	Millions of dollars at 1966 prices
Sub-total: Countries with a deficit	17	8 180.0	17	10 955.8
Sub-total: Countries with a surplus	1	-10.5	1	31.2
Total	18	8 169.5	18	10 984.6

/Table 26

Table 26

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS ON CURRENT ACCOUNT BY GROUPS OF COUNTRIES, 1975 AND 1980

Annual growth target of 7 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis C for exports

(Millions of dollars at 1966 prices)

	1975				1980			
	Number of countries	Potential commercial balance	Potential net remittances of interest and profits	Total	Number of countries	Potential commercial balance	Potential net remittances of interest and profits	Total
Sub-total: Countries with potential deficit on the commercial balance	15	2 982.8	2 604.4	5 587.2	16	5 192.5	4 992.0	10 184.5
Sub-total: Countries with potential surplus on the commercial balance	3	-642.6	1 575.8	933.2	2	-353.7	2 056.8	1 709.1
Total	18	2 340.2	4 180.2	6 520.4	18	4 838.8	7 048.8	11 887.6

/Using the

Using the same assumptions, there would be a savings gap of a total value of 10,868 million dollars in eighteen countries in 1975, and of 15,030 million in seventeen countries in 1980, representing 27.1 and 29.1 per cent respectively of the value of gross investment (see table 27). From the standpoint of savings too, very substantial problems would have to be solved for this growth rate to be feasible. Moreover, the assumed higher growth rate of exports does not change the situation a great deal, and a growth target of 7 per cent would require significant changes in the behaviour of a number of the variables involved.

(c) Effect of a higher growth rate for exports

In order to consider the effect on the size of the trade gaps of a higher growth rate for exports, two hypotheses were developed according to which the annual growth rates of the product would be 6 and 6.5 per cent in the nineteen-seventies, and the purchasing power of exports would grow at the higher rate assumed in hypothesis C.

In the first case - a growth rate for the product of 6 per cent - nine countries would have a trade gap in 1975 of a total value of 707 million dollars. It should be recalled that under hypothesis B for exports, using the same target growth rate, fifteen countries would have a trade gap in 1975 of a total value of 1,629 million dollars. In other words, if exports grow at a faster rate - although still within feasible limits - the situation is appreciably improved.

Assuming a 6 per cent annual growth rate for the product and using hypothesis C for exports, eleven countries would have a trade gap in 1980 of a total value of 1,591 million dollars.

Assuming an annual growth rate of 6.5 per cent for the product, and using the high assumption C for exports, fifteen countries would have a trade gap of a total value of 1,630 million dollars in 1975, and sixteen would have a trade gap of a total value of 2,916 million in 1980 (see tables 28 and 29).

/Table 27

Table 27

LATIN AMERICA: POTENTIAL DOMESTIC SAVINGS DEFICIT OR SURPLUS BY GROUPS OF COUNTRIES, 1975 AND 1980

Annual growth target of 7 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis C for exports

	1975		1980	
	Number of countries	Millions of dollars at 1966 prices	Number of countries	Millions of dollars at 1966 prices
Sub-total: Countries with a deficit	18	10 867.9	17	15 030.3
Sub-total: Countries with a surplus	-	-	1	-14.7
Total	18	10 867.9	18	15 015.6

/Table 28

Table 28

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS ON CURRENT ACCOUNT BY GROUPS OF COUNTRIES, 1975 AND 1980

Annual growth target of 6 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis C for exports

(Millions of dollars at 1966 prices)

	1975				1980			
	Number of countries	Potential commercial balance	Potential net remittances of interest and profits	Total	Number of countries	Potential commercial balance	Potential net remittances of interest and profits	Total
Sub-total: Countries with a potential deficit on the commercial balance	9	706.6	876.3	1 582.9	11	1 590.6	2 024.6	3 615.2
Sub-total: Countries with a potential surplus on the commercial balance	9	-1 253.5	2 660.6	1 407.1	7	-1 752.8	2 884.2	1 131.4
Total	18	-546.9	3 536.9	2 990.0	18	-162.2	4 908.8	4 746.6

/Table 29

Table 29

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS ON CURRENT ACCOUNT BY GROUPS OF COUNTRIES, 1975 AND 1980

Annual growth target of 6.5 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis C for exports

(Millions of dollars at 1966 prices)

	1975				1980			
	Number of countries	Potential commercial balance	Potential net remittances of interest and profits	Total	Number of countries	Potential commercial balance	Potential net remittances of interest and profits	Total
Sub-total: Countries with a potential deficit on the commercial balance	15	1 630.0	2 237.6	3 867.6	16	2 914.4	3 782.1	6 696.5
Sub-total: Countries with a potential surplus on the commercial balance	3	-932.8	1 598.4	665.6	2	-907.7	2 040.5	1 132.8
Total	18	687.2	3 836.0	4 533.2	18	2 006.7	5 882.6	7 829.3

/APPENDIX

APPENDIX

The statistics which served as a basis for chapter I are presented here by countries.

Table A

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS AND DOMESTIC SAVINGS DEFICIT OR SURPLUS, BY COUNTRY, 1975

Annual growth target of 6 per cent for the gross domestic product in the nineteen-seventies utilizing the basic hypothesis (B) for exports

(Millions of dollars at 1966 prices)

Country	Percentage annual growth rate			Potential balance-payments deficit or surplus on current account			
	Period	Export	Imports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total	Domestic savings deficit or surplus
Argentina	1966-75	3.6	7.7	235.0	293.4	528.4	758.8
Bolivia	1967-75	7.9	3.2	1.1	27.1	28.2	85.8
Brazil	1966-75	4.0	5.9	186.3	712.8	899.1	1 188.0
Central America							
Costa Rica	1966-75	6.7	5.7	53.1	27.0	80.1	73.7
El Salvador	1966-75	3.9	5.5	119.3	34.7	154.0	77.5
Guatemala	1966.75	5.1	7.0	84.0	36.2	120.2	19.2
Honduras	1966-75	4.7	3.8	-23.6	13.8	-9.8	54.3
Nicaragua	1966-75	5.5	2.9	6.1	17.4	23.5	37.6
Chile	1967-75	8.0	5.4	39.2	318.7	357.9	532.6
Colombia	1967-75	3.4	7.5	276.9	218.3	495.2	689.6
Dominican Republic	1966-75	3.2	3.4	78.8	44.7	123.5	184.0
Ecuador	1967-75	4.3	4.6	27.3	40.6	67.9	131.0
Mexico	1966-75	5.7	4.3	-170.2	638.1	467.9	-76.8
Panama	1967-75	5.6	6.6	34.4	51.2	85.6	-23.3
Paraguay	1967-75	5.5	6.0	42.3	13.6	55.9	78.0
Peru	1966-75	3.3	4.4	432.3	349.4	781.7	110.3
Uruguay	1967-75	3.4	7.0	13.0	20.3	33.3	263.8
Venezuela	1966-75	2.7	3.4	-715.5	904.1	188.6	1 362.4

a/ Imports of goods and services, less purchasing power of exports of goods and services.
b/ Including net private transfer payments.

/Table B

Table B

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS AND DOMESTIC SAVINGS DEFICIT OR SURPLUS, BY COUNTRY, 1980

Annual growth target of 6 per cent for the gross domestic product in the nineteen-seventies utilizing Hypothesis B for exports

(Millions of dollars at 1966 prices)

Country	Percentage annual growth rate			Potential balance-payments deficit or surplus on current account			Domestic savings deficit or surplus
	Period	Export	Imports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total	
Argentina	1975-1980	3.8	5.2	482.9	516.7	999.6	709.7
Bolivia	1975-1980	4.5	5.0	-26.5	40.0	66.5	112.2
Brazil	1975-1980	4.0	3.0	68.8	988.8	1 057.6	1 524.4
Central America							
Costa Rica	1975-1980	4.3	6.2	104.5	47.5	152.0	90.4
El Salvador	1975-1980	3.5	6.4	214.8	81.7	296.5	111.6
Guatemala	1975-1980	4.9	6.2	150.8	63.7	214.5	17.7
Honduras	1975-1980	4.0	6.5	4.3	14.2	18.5	72.1
Nicaragua	1975-1980	5.2	5.9	11.7	24.7	36.4	48.1
Chile	1975-1980	3.6	6.5	278.4	514.8	793.2	642.4
Colombia	1975-1980	3.4	6.0	500.7	408.7	909.4	861.6
Dominican Republic	1975-1980	3.5	5.4	126.8	80.3	207.1	249.4
Ecuador	1976-1980	3.9	5.9	79.1	71.7	150.8	182.9
Mexico	1975-1980	5.7	5.1	-126.5	842.5	716.0	-196.4
Panama	1975-1980	5.6	7.3	-66.9	83.9	149.9	-46.5
Paraguay	1975-1980	5.5	6.7	70.5	32.9	103.4	121.0
Peru	1975-1980	5.9	6.2	604.8	766.4	1 371.2	104.0
Uruguay	1975-1980	3.0	6.0	-75.2	35.2	110.4	370.0
Venezuela	1975-1980	3.0	4.1	-672.7	1 116.4	443.7	2 136.0

a/ Imports of goods and services, less purchasing power of exports of goods and services.

b/ Including net private transfer payments.

/Table C

Table C

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS, BY COUNTRY, 1975

Annual growth target of 6 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis A for exports

(Millions of dollars at 1966 prices)

Country	Percentage annual growth rate			Potential balance-of-payments deficit or surplus on current account		
	Period	Exports	Imports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total
Argentina	1966-1975	3.6	7.7	235.0	293.4	528.4
Bolivia	1967-1975	4.6	2.9	46.5	38.3	84.8
Brazil	1966-1975	3.3	5.9	343.7	735.5	1 079.2
Central America						
Costa Rica	1966-1975	5.8	5.7	72.8	34.7	107.5
El Salvador	1966-1975	3.9	5.5	119.3	34.7	154.0
Guatemala	1966-1975	5.1	7.0	84.0	36.2	120.2
Honduras	1966-1975	4.7	3.8	-23.6	13.8	-9.8
Nicaragua	1966-1975	5.5	2.9	6.1	17.4	23.5
Chile	1967-1975	4.7	5.4	353.7	456.0	809.7
Colombia	1967-1975	3.4	7.5	276.4	218.3	494.7
Dominican Republic	1966-1975	3.2	3.4	78.8	44.7	123.5
Ecuador	1967-1975	4.3	4.6	27.3	40.6	67.9
Mexico	1966-1975	3.9	4.2	244.0	741.1	985.1
Panama	1967-1975	5.6	7.8	34.4	51.2	85.6
Paraguay	1967-1975	5.5	6.0	42.3	13.6	55.9
Peru	1966-1975	3.3	4.4	432.3	349.4	781.7
Uruguay	1967-1975	3.1	7.0	13.0	20.3	33.3
Venezuela	1966-1975	2.7	3.4	-715.5	904.1	188.6

a/ Imports of goods and services, less purchasing power of exports of goods and services.
b/ Including net private transfer payments.

/Table D

Table D

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS, BY COUNTRY, 1980

Annual growth target of 6 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis A for exports

(Millions of dollars at 1966 prices)

Country	Period	Percentage annual growth rate		Potential balance-payments deficit or surplus on current account		
		Exports	Imports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total
Argentina	1975-1980	3.8	5.2	482.9	516.7	999.6
Bolivia	1975-1980	4.6	5.3	69.6	68.8	138.4
Brazil	1975-1980	3.3	3.0	361.3	1 081.8	1 443.1
Central America						
Costa Rica	1975-1980	5.8	6.2	105.5	59.4	164.9
El Salvador	1975-1980	3.5	6.4	214.8	81.7	296.5
Guatemala	1975-1980	4.9	6.2	150.8	63.7	214.5
Honduras	1975-1980	4.0	6.5	4.3	14.2	18.5
Nicaragua	1975-1980	5.2	5.9	11.7	24.7	36.4
Chile	1975-1980	4.7	6.5	596.3	837.2	1 433.5
Colombia	1975-1980	3.4	6.0	500.7	408.7	909.4
Dominican Republic	1975-1980	3.5	5.4	126.8	80.3	207.1
Ecuador	1975-1980	3.9	5.9	79.1	71.7	150.8
Mexico	1975-1980	3.9	5.1	672.0	1 200.5	1 872.5
Panama	1975-1980	5.6	7.3	66.0	83.0	149.0
Paraguay	1975-1980	5.5	6.7	70.5	32.9	103.4
Peru	1975-1980	5.9	6.2	604.8	766.4	1 371.2
Uruguay	1975-1980	3.0	6.0	13.0	20.3	33.3
Venezuela	1975-1980	3.0	4.1	-672.7	1 116.4	443.7

a/ Imports of goods ans services, less purchasing power of exports of good and services.
b/ Including net private transfer payments.

/Table E

Table E

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS AND DOMESTIC SAVINGS DEFICIT OR SURPLUS, BY COUNTRY, 1975

Annual growth target of 6.5 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis B for exports

(Millions of dollars at 1966 prices)

Country	Percentage annual growth rate			Potential balance-of-payments deficit or surplus on current account			Domestic savings deficit or surplus
	Period	Exports	Imports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total	
Argentina	1966-1975	3.6	8.7	463.3	359.0	822.3	1 254.9
Bolivia	1966-1975	7.4	3.2	6.3	27.7	34.0	104.8
Brazil	1966-1975	4.0	7.6	616.2	837.7	1 453.9	1 706.1
Central America							
Costa Rica	1966-1975	6.7	6.2	68.0	29.1	97.1	93.1
El Salvador	1966-1975	3.9	5.9	136.6	37.2	173.8	101.1
Guatemala	1966-1975	5.1	8.2	135.5	46.5	182.0	52.5
Honduras	1966-1975	4.7	4.4	-12.7	13.8	1.1	71.4
Nicaragua	1966-1975	5.5	3.4	17.5	19.4	36.9	48.5
Chile	1967-1975	8.0	5.8	76.9	323.6	400.5	710.8
Colombia	1966-1975	3.4	7.8	305.4	221.3	526.7	847.4
Dominican Republic	1966-1975	3.2	3.8	88.9	46.1	135.0	223.6
Ecuador	1967-1975	4.3	5.1	39.4	43.0	82.4	165.0
México	1966-1975	5.7	4.7	-71.5	659.9	588.4	311.0
Panama	1966-1975	5.6	6.9	46.4	52.5	98.9	-10.5
Paraguay	1967-1975	5.5	6.4	46.6	14.2	60.8	107.1
Peru	1966-1975	5.9	5.5	572.2	402.3	974.5	244.6
Uruguay	1967-1975	3.1	7.3	21.0	21.1	42.1	329.5
Venezuela	1966-1975	2.7	4.0	-593.5	909.6	316.1	1 808.6

a/ Imports of goods and services, less purchasing power of exports of goods and services.

b/ Including net private transfer payments.

/Table F

Table F

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS AND DOMESTIC SAVINGS DEFICIT OR SURPLUS, BY COUNTRY, 1980

Annual growth target of 6.5 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis B for exports

(Millions of dollars at 1966 prices)

Country	Percentage annual growth rate			Potential balance-of-payments deficit or surplus on current account			Domestic savings deficit or surplus
	Period	Exports	Imports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total	
Argentina	1975-1980	3.8	5.7	864.4	706.0	1 570.4	1 414.6
Bolivia	1975-1980	4.5	5.5	40.4	43.2	83.6	140.6
Brazil	1975-1980	4.0	3.8	703.1	1 311.2	2 014.3	2 282.4
Central America							
Costa Rica	1975-1980	4.3	6.7	135.9	54.4	190.3	118.7
El Salvador	1975-1980	3.5	6.9	252.8	90.9	343.7	147.5
Guatemala	1975-1980	4.9	6.7	236.5	89.2	325.7	63.7
Honduras	1975-1980	4.0	7.0	27.3	17.0	44.3	97.6
Nicaragua	1975-1980	5.2	5.2	38.8	31.3	70.1	70.1
Chile	1975-1980	3.6	7.0	380.6	545.4	926.0	902.2
Colombia	1975-1980	3.4	6.5	577.8	427.6	1 005.4	1 095.0
Dominican Republic	1975-1980	3.5	5.9	149.1	85.5	234.6	309.2
Ecuador	1975-1980	3.9	6.4	105.6	81.0	186.6	234.9
Mexico	1975-1980	5.7	5.5	90.8	926.7	1 017.5	338.3
Panama	1975-1980	5.6	6.9	98.7	91.9	190.6	-31.2
Paraguay	1975-1980	5.5	7.3	81.4	35.4	116.8	147.7
Peru	1975-1980	5.9	6.7	841.6	928.1	1 769.7	298.8
Uruguay	1975-1980	3.0	6.5	96.8	39.8	136.6	474.7
Venezuela	1975-1980	3.0	4.4	-487.4	-1 154.6	667.2	2 819.3

a/ Imports of goods and services, less purchasing power of exports of goods and services.

b/ Including net private transfer payments.

/Table G

Table G

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS AND DOMESTIC SAVINGS DEFICIT OR SURPLUS, BY COUNTRY, 1975

Annual growth target of 7 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis C for exports

(Millions of dollars at 1966 prices)

Country	Percentage annual growth rate			Potential balance-of-payments deficit or surplus on current account			Domestic savings deficit or surplus
	Period	Exports	Imports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total	
Argentina	1966-1975	4.1	9.7	583.2	386.0	969.2	1 776.8
Bolivia	1967-1975	7.9	3.7	7.1	30.5	37.6	121.3
Brazil	1966-1975	5.0	9.1	831.2	914.9	1 746.1	2 257.3
Central America							
Costa Rica	1966-1975	7.0	6.7	75.6	30.7	106.3	112.8
El Salvador	1967-1975	4.9	6.4	119.1	33.5	152.6	100.5
Guatemala	1966-1975	5.7	9.4	169.6	55.6	225.2	88.7
Honduras	1966-1975	5.1	4.6	-16.4	13.8	-2.6	71.7
Nicaragua	1966-1975	5.7	3.9	22.5	20.8	43.3	64.0
Chile	1967-1975	8.7	6.1	44.9	324.1	374.0	897.9
Colombia	1967-1975	5.1	8.1	206.9	181.7	388.5	1 012.2
Dominican Republic	1966-1975	4.2	4.3	93.0	46.8	139.8	264.8
Ecuador	1967-1975	5.2	5.7	36.0	44.1	80.1	201.5
Mexico	1966-1975	6.4	5.1	-159.7	636.9	477.2	725.7
Panama	1967-1975	6.6	7.3	23.4	47.1	70.5	2.9
Paraguay	1967-1975	7.7	6.7	34.0	12.1	46.1	124.5
Peru	1966-1975	6.6	6.7	718.2	456.3	1 174.5	386.4
Uruguay	1967-1975	3.7	7.6	13.2	20.2	33.4	384.6
Venezuela	1966-1975	3.3	5.1	-466.5	925.1	458.6	2 274.3

a/ Imports of goods and services, less purchasing power of exports of goods and services.

b/ Including net private transfer payments.

/Table H

Table H

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS AND DOMESTIC SAVINGS DEFICIT OR SURPLUS, BY COUNTRY, 1980

Annual growth target of 7 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis C for exports

(Millions of dollars at 1966 prices)

Country	Percentage annual growth rate			Potential balance-of-payments deficit or surplus on current account			Domestic savings deficit or surplus
	Period	Exports	Imports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total	
Argentina	1975-1980	4.3	6.2	1 076.2	796.9	1 873.1	2 187.8
Bolivia	1975-1980	6.6	6.0	20.0	44.9	64.9	165.8
Brazil	1975-1980	5.0	4.4	936.1	1.482.6	2 418.7	3 120.4
Central America							
Costa Rica	1975-1980	5.0	7.2	148.4	58.4	206.8	149.0
El Salvador	1975-1980	4.0	6.3	221.6	80.7	302.3	146.7
Guatemala	1975-1980	6.1	7.2	274.2	105.9	380.1	115.2
Honduras	1975-1980	4.9	6.9	7.6	15.0	22.6	98.0
Nicaragua	1975-1980	6.1	6.9	42.3	34.2	76.5	93.5
Chile	1975-1980	5.2	7.5	274.7	524.3	799.0	1 191.6
Colombia	1975-1980	3.1	7.0	658.3	447.0	1 105.3	1 348.3
Dominican Republic	1975-1980	4.2	6.4	153.9	87.6	241.5	375.2
Ecuador	1975-1980	5.2	6.8	92.0	80.1	172.1	292.9
Mexico	1975-1980	6.4	6.0	-67.3	850.3	783.0	938.0
Panama	1975-1980	6.6	7.3	54.5	74.8	129.4	-14.7
Paraguay	1975-1980	8.0	7.8	54.1	27.8	81.9	176.0
Peru	1975-1980	4.3	7.1	1 097.1	1 096.1	2 193.2	512.8
Uruguay	1975-1980	4.0	7.0	81.4	35.7	117.1	556.3
Venezuela	1975-1980	4.2	5.6	-286.4	1 206.5	920.1	3 560.8

a/ Imports of goods and services, less purchasing power of exports of goods and services.

b/ Including net private transfer payments.

/Table I

Table I

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS, BY COUNTRY, 1975

Annual growth target of 6 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis C for exports

(Millions of dollars at 1966 prices)

Country	Percentage annual growth rate			Potential balance-of-payments deficit or surplus on current account		
	Period	Exports	Imports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total
Argentina	1966-1975	4.1	7.7	116.5	254.8	371.3
Bolivia	1967-1975	7.9	3.2	-3.6	29.4	25.8
Brazil	1966-1975	5.0	5.9	-53.6	662.3	608.7
Central America						
Costa Rica	1966-1975	7.0	5.7	45.2	26.5	71.7
El Salvador	1967-1975	4.9	5.6	101.8	31.1	132.9
Guatemala	1966-1975	5.7	7.0	63.0	34.9	97.9
Honduras	1966-1975	5.1	4.0	-27.4	13.9	-13.5
Nicaragua	1966-1975	5.7	3.4	-0.8	16.8	16.0
Chile	1967-1975	8.7	5.4	-26.3	314.5	288.2
Colombia	1967-1975	5.1	7.5	149.3	175.5	324.8
Dominican Republic	1966-1975	4.2	3.5	72.5	44.0	116.5
Ecuador	1967-1975	5.2	4.7	11.2	39.1	50.3
Mexico	1966-1975	6.4	4.4	-361.7	592.7	231.0
Panama	1967-1975	6.6	6.6	-1.0	44.5	43.5
Paraguay	1967-1975	7.7	6.0	25.9	11.3	37.2
Peru	1966-1975	6.7	4.4	121.2	259.1	380.3
Uruguay	1967-1975	3.7	7.0	-2.9	18.7	15.8
Venezuela	1966-1975	3.3	4.0	-776.2	967.8	191.6

a/ Imports of goods and services, less purchasing power of exports of goods and services.

b/ Including net private transfer payments.

/Table J

Table J

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS, BY COUNTRY, 1980

Annual growth target of 6 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis C for exports

(Millions of dollars at 1966 prices)

Country	Percentage annual growth rate			Potential balance-of-payments deficit or surplus on current account		
	Period	Exports	Imports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total
Argentina	1975-1980	4.3	5.2	283.0	412.2	695.2
Bolivia	1975-1980	6.6	5.1	-8.9	38.3	29.4
Brazil	1975-1980	5.0	3.0	-396.7	822.6	425.9
Central America						
Costa Rica	1975-1980	5.0	6.2	83.7	44.2	127.9
El Salvador	1975-1980	4.0	4.0	183.5	71.5	255.0
Guatemala	1975-1980	6.1	6.2	92.9	56.7	149.6
Honduras	1975-1980	4.9	6.4	-15.5	13.3	-2.2
Nicaragua	1975-1980	6.1	5.9	-7.2	20.7	13.5
Chile	1975-1980	5.2	6.5	65.7	463.2	528.9
Colombia	1975-1980	3.1	6.0	366.5	308.7	675.2
Dominican Republic	1975-1980	4.2	5.5	108.1	77.0	185.1
Ecuador	1975-1980	5.2	5.8	36.9	61.0	97.9
Mexico	1975-1980	6.4	5.1	-517.5	677.6	160.1
Panama	1975-1980	6.6	6.5	-12.2	58.5	46.3
Paraguay	1975-1980	8.0	6.7	32.9	23.1	56.0
Peru	1975-1980	4.3	6.6	300.2	480.5	780.7
Uruguay	1975-1980	4.0	6.0	37.2	26.5	63.7
Venezuela	1975-1980	4.2	5.2	-794.8	1 253.2	458.4

a/ Imports of goods and services, less purchasing power of exports of goods and services.

b/ Including net private transfer payments.

/Table K

Table K

LATIN AMERICA: POTENCIAL BALANCE-OF-PAYMENTS AND DOMESTIC SAVINGS DEFICIT OR SURPLUS, BY COUNTRY, 1975

Annual growth target of 6.5 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis C for exports

(Millions of dollars at 1966 prices)

Country	Percentage annual growth rate			Potential balance-of-payments deficit or surplus on current account			Domestic savings deficit or surplus
	Period	Exports	Imports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total	
Argentina	1966-1975	4.1	8.7	344.8	320.5	665.3	1 253.9
Bolivia	1967-1975	7.9	3.5	1.7	30.0	31.7	101.1
Brazil	1966-1975	5.0	7.6	376.4	787.2	1 163.6	1 709.3
Central America							
Costa Rica	1966-1975	7.0	6.2	60.1	28.6	88.7	91.9
El Salvador	1967-1975	4.9	6.4	119.1	33.5	152.6	100.6
Guatemala	1966-1975	5.7	8.2	114.7	45.1	159.8	52.4
Honduras	1966-1975	5.1	4.6	-16.4	13.9	-2.5	71.7
Nicaragua	1966-1975	5.7	3.4	10.7	18.7	29.4	48.0
Chile	1967-1975	8.7	5.8	11.4	309.3	330.7	713.0
Colombia	1967-1975	5.1	7.8	177.8	178.6	356.4	848.3
Dominican Republic	1966-1975	4.2	3.8	82.5	45.5	128.0	223.6
Eduador	1967-1975	5.2	5.2	23.4	41.6	65.0	165.1
Mexico	1966-1975	6.4	4.8	-262.3	614.6	352.3	308.4
Panama	1967-1975	5.6	6.9	11.0	45.8	56.8	-10.9
Paraguay	1967-1975	7.7	6.4	30.2	11.8	42.0	107.1
Peru	1966-1975	6.7	5.6	261.1	312.0	573.1	236.6
Uruguay	1967-1975	3.7	7.3	5.1	19.4	24.5	316.5
Venezuela	1966-1975	3.3	4.5	-654.1	969.9	315.8	1 723.5

a/ Imports of goods and services, less purchasing power of exports of goods and services.
b/ Including net private transfer payments.

/Table K

Table 1

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT OR SURPLUS, BY COUNTRY, 1980

Annual growth target of 6.5 per cent for the gross domestic product in the nineteen-seventies utilizing hypothesis C for exports

(Millions of dollars at 1966 prices)

Country	Percentage annual growth rate			Potential balance-of-payments deficit or surplus on current account		
	Period	Imports	Exports	Potential commercial balance a/	Potential net remittances of interest and profits b/	Total
Argentina	1975-1980	4.3	5.7	664.5	601.4	1 265.9
Bolivia	1975-1980	6.6	5.5	5.2	41.5	46.7
Brazil	1975-1980	5.0	3.8	237.8	1 145.0	1 382.8
Central America						
Costa Rica	1975-1980	5.0	6.7	114.0	52.2	166.2
El Salvador	1975-1980	4.0	6.3	221.6	80.7	302.3
Guatemala	1975-1980	6.1	6.7	181.0	80.1	261.1
Honduras	1975-1980	4.9	6.9	7.7	15.0	22.7
Nicaragua	1975-1980	6.1	6.4	16.5	27.3	43.8
Chile	1975-1980	5.2	7.9	268.0	393.4	661.4
Colombia	1975-1980	3.1	6.5	443.6	327.6	771.2
Dominican Republic	1975-1980	4.2	5.9	130.5	82.2	212.7
Ecuador	1975-1980	5.2	6.3	63.7	70.4	134.1
Mexico	1975-1980	6.4	5.5	-298.8	762.5	463.7
Panama	1975-1980	6.6	6.9	20.8	66.6	87.4
Paraguay	1975-1980	8.0	7.2	43.8	25.6	69.4
Peru	1975-1980	4.3	6.6	536.9	642.1	1 179.0
Uruguay	1975-1980	4.0	6.5	58.8	31.0	89.8
Venezuela	1975-1980	4.2	5.4	-608.9	1 278.0	669.1

a/ Imports of goods and services, less purchasing power of exports of goods and services.

b/ Including net private transfer payments.

Chapter II

STRUCTURAL UNEMPLOYMENT

1. Introduction

The precise definition, measurement and analysis of structural unemployment presents some difficulties. Quite apart from the shortage of information, other difficulties arise from the fact that the definition of an under-employed person varies according to the stage of economic and social development, institutional structure and existing social values of each country.

In spite of these drawbacks and with the sole aim of demonstrating the magnitude of the problem, an attempt has been made to evaluate under-employment in Latin America in 1960. Under-employed persons represent slightly over 40 per cent of the economically active labour force. Such under-employment does not take the form of complete inactivity; most of these persons do some kind of part-time work. If the proportion of under-employment of all these persons is used as a basis for determining the total unemployment equivalent existing in that group, it will be shown that 27.4 per cent of Latin America's active population - about 18 million persons - was completely unemployed in 1960 (see table 30).

These figures include both the openly unemployed and persons in some kind of employment which the productivity of which is so low that it is really wholly or partially disguised unemployment. In spite of this low productivity, the persons employed sometimes receive quite high incomes and are even covered by regular social security and welfare systems. For example, in some cases where in which too much manpower has been absorbed in services, the low productivity or complete unproductiveness of a certain proportion of this labour does not prevent the persons concerned from receiving a fairly substantial regular income. In other cases, such as those of street vendors, shoe-shine boys, etc., under-employment or unemployment is more obvious; their productivity is very low and the activity in which they are engaged is a way of obtaining an income which, although it hardly covers their minimum requirements, enables them to survive.

/Table 30

Table 30

LATIN AMERICA: ESTIMATED UNEMPLOYMENT EQUIVALENT, 1960

Sector	Economically active population (percentages)	Unemployment equivalent as a percentage of the active population in each sector	Unemployment in each sector as a percentage of:	
			The active population in all sectors	Unemployment in all sectors
Agriculture, forestry, hunting and fishing	47.7	27.7	13.2	49.6
Mining	1.0	19,6	0.2	0.8
Manufacturing	14.1	15.6	2.2	8.3
Construction	4.0	6.8	0.3	1.1
Basic services	5.0	11.0	0.6	1.9
Commerce and finance	9.1	31.2	2.8	10.5
Other services	15.6	32.8	5.1	19.2
Miscellaneous activities	3.5	67.0	3.5	8.6
Total	100.0		26.7	100.0

/The category

The category of under-employed therefore includes persons who are openly unemployed, those who are compelled to work part-time or less than the nominal work period, and those who are employed in an economic unit operating at exceptionally low productivity levels (which are defined according to the present stage of development of each Latin American country).

It is highly instructive to note the evolution of employment by sectors of activity and to determine how far those sectors can continue to absorb employment as they did in the past, or, as their absorption capacity becomes saturated, how far disguised unemployment may shift to other areas of the economy or become open unemployment (see table 31).

In 1925 manufacturing industry contributed about 11 per cent of the total gross domestic product and absorbed some 14 per cent of total employment. At that time, the bulk of industrial employment (75 per cent) was absorbed by artisan-typed activities. By 1960 industry still accounted for 14 per cent of the total economically active population, but its share of the product had risen to 22 per cent. The intensive industrialization reflected in the marked increase in the proportion of the total product contributed by manufacturing did not do so much as might have been expected to create new employment. Two factors are associated with this trend: the expansion of factory industry in relation to artisan-type activities (accompanied by a rise in manpower productivity, which in turn boosted the manufacturing product without a corresponding increase in industrial employment), and, presumably, the fact that industrial growth was largely accounted for by sectors which employed relatively little manpower.

The share of agriculture in total employment has clearly diminished. In 1960 it absorbed only 47 per cent of the active population compared with 60 per cent in 1925. This was due to the sluggish rate of agricultural development, the introduction of labour-saving agricultural machinery, and the process of urbanization, which was governed by social as well as economic factors.

/Table 31

Table 31

LATIN AMERICA: EMPLOYMENT BY SECTOR OF ACTIVITY

Year	Primary	Manufacturing industry			Contraction and services	Total
		Factory	Artisan-type	Total		
			Millions of persons			
1925	19.3	1.3	3.0	4.3	8.4	32.0
1950	28.9	...	...	7.7	16.3	52.9
1960	33.1	5.1	4.7	9.8	23.9	66.8
			Index: 1925 = 100			
1925	100.0	100.0	100.0	100.0	100.0	100.0
1950	149.7	...	...	179.1	194.0	165.3
1960	171.5	392.3	156.6	227.9	345.2	208.8
			Percentage structure			
1925	59.9	4.1	9.5	13.6	26.4	100.0
1950	54.6	...	...	14.5	30.9	100.0
1960	47.1	7.5	6.8	14.3	38.5	100.0

Source: ECLA, the Latin American Demographic Centre (CELADE) and the Latin American Institute for Economic and Social Planning (ILPES).

/The population

The population which migrated from the country to the towns and could not be absorbed by manufacturing was gradually incorporated in the services sector for the most part. Thus services, which employed 26 per cent of the economically active population in 1925, came to absorb 39 per cent in 1960. The inability of the goods producing sectors to absorb this labour seems to have distorted the pattern of the employment in the services sector, in which the manpower employed increased disproportionately.

Both in the country and in industry, it is basically in the small establishments that unemployment still exists.

It may therefore be concluded that unless agricultural production increases more rapidly and the growth rate of manufacturing is raised considerably or the composition of growth by manufacturing sectors is radically changed in favour of those using more labour-intensive techniques, the chances that disguised unemployment will not become open unemployment will depend on the ability of the services sector to maintain a superabundant supply of manpower.

2. Unemployment by economic sectors

As shown in table 30, the largest group of unemployed is found in agriculture and services, and to a lesser extent in industry.

Agricultural unemployment amounts to 27.7 per cent of the economically active rural population and it represents about 49.6 per cent of the unemployment equivalent in the economy as a whole; this is therefore the root of the problem. In the agricultural sector most of these groups are to be found on smallholdings with too little land.

The procedure used to arrive at these estimates was to assume that disguised unemployment is found on sub-family holdings which, according to the FAO study 1/ on which these estimates are based, are precisely those with too little land to provide remunerative employment all the

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1/ Arthur L. Domike and Solon Barraclough, "Evolution and reform of agrarian structure in Latin America", Training and Research Institute for Agrarian Reform (Instituto de Capacitación e Investigación en Reforma Agraria - ICIRA), Santiago, Chile, 1966.

year round for a family with a work capacity of two man-years at the prevailing technological level in each country. On these sub-family holdings, the equivalent of disguised unemployment is considered to represent the number of persons belonging to the economically active labour force apparently employed in agriculture, over and above the manpower required to generate the product actually obtained in the sector, according to the levels of output per unit of manpower prevailing on family units in the country concerned. Therefore, in defining the unemployment equivalent, account is taken of the level of productivity and development in each country; the standard of comparison used is therefore considered fairly realistic.

Manufacturing shows an unemployment equivalent of about 15.6 per cent of the economically active population in the sector; it is found in artisan-type units, defined as those providing employment for fewer than five persons, including cottage industries.

Table 32 shows that the traditional sector still accounts for the bulk of employment in Latin America. It also absorbs 70 per cent of the artisan-type workers, as may be seen from table 33. The dynamic sectors, although they have increased their contribution to the creation of employment, hold out no solution to Latin America's employment problem because of their use of capital-intensive techniques.

It should be noted that the growth of the traditional industries would not be so sluggish if they were not affected by a lack of demand. This is explained, inter alia, by the fact that a large proportion of the population is excluded from the market or has little access to it both because they are under-employed and because of the pattern of income distribution. Another factor contributing to this situation is the lack of capacity to export.

The sector comprising commerce, finance and "other services" has an under-employment rate of about 32 per cent. It is particularly difficult to calculate this under-employment rate because of the number of jobs involved and the absence of any clearly-defined concept of productivity in services. These sectors have gradually absorbed a substantial proportion of the new entrants into the labour market.

/Table 32

Table 32

LATIN AMERICA: INDUSTRIAL EMPLOYMENT, 1950 AND 1960

(Percentages)

Industry	Employment structure	
	1950	1960
Traditional [a]	64.8	59.6
Intermediate goods [b]	10.8	12.9
Metal products [c]	17.8	21.2
Not classified [d]	6.6	6.3
Total	100.0	100.0

a/ Including food, beverages, tobacco, textiles, made-up textile goods, leather, wood and furniture.

b/ Including paper, pulp, rubber, petroleum and coal derivatives, and non-metallic minerals.

c/ Including basic metallurgy and the metal-transforming industry.

d/ Including printing, publishing and miscellaneous industries.

Table 33

LATIN AMERICA: INDUSTRIAL EMPLOYMENT, 1960

(Percentages)

Industry	Distribution of artisan-type employment by sectors	Structure of total employment in each sector		
		Factory industry	Artisan-type industry	Total
Traditional	69.9	44.0	56.0	100.0
Intermediate goods	6.2	78.0	23.0	100.0
Metal products	16.4	63.0	37.0	100.0
Not classified	7.5	43.0	57.0	100.0
Total	100.0	52.2	47.8	100.0

/A comparison

A comparison of the situation prevailing in different countries shows that the less developed the country, the greater the unemployment equivalent in agriculture. The situation in industry is somewhat similar, although not so well defined. As regards the other sectors, it is impossible to compare groups of countries because the results are affected by the way in which the calculation has been made (see table 34).

The countries are classified according to their present stage of development. The employment situation sometimes differs greatly from country to country within a single group.

3. Growth rate necessary to solve the unemployment problem

An important problem emerging from the foregoing analysis is how to determine the rate at which the Latin American product would have to grow in order to absorb the total existing unemployment equivalent after a certain time, and also to employ in entirely productive activities the new active manpower resulting from population growth.

It is calculated that, to achieve this, the Latin American product must grow by not less than 8 per cent annually from 1970 to 1980 inclusive if the unemployment equivalent for 1960 is to be absorbed by the end of that period. With this growth rate for the product, the demand for manpower would increase by 5.5 per cent. If the growth of the product were 6.2 per cent annually throughout the nineteen-seventies, the absolute level of unemployment would be much the same in 1980 as it is now; that is, the total increment in the active labour force would be absorbed in productive activities, but the original volume of unemployment - in absolute although not in relative terms - would not diminish, the demand for manpower would grow at a rate of about 4 per cent.

This is a purely illustrative and very preliminary estimate, based on the following assumptions. First, it is assumed that the ratios of the growth of each of the major economic sectors to the total gross domestic product, in terms of elasticity coefficients, will remain the same. This in turn may imply that the import-substitution character of the development model - involving the more dynamic growth of a certain group of economic sectors, such as the metallurgical, metal-transforming and chemical industries, and the more sluggish growth of agriculture, food production, textiles and other sectors - will be maintained.

/Table 34

Table 34

LATIN AMERICA: UNEMPLOYMENT BY GROUPS OF COUNTRIES, 1960

(Percentages)

Sector	Economically active population in the countries in group a/				Unemployment equivalent in the countries in group a/			
	I	II	III	Total	I	II	III	Total
Agriculture, forestry, hunting and fishing	47.1	41.4	61.1	47.7	19.3	40.0	46.3	27.7
Manufacturing	14.4	15.0	10.8	14.1	13.2	14.0	35.9	15.6
Other sectors	38.5	43.6	28.1	38.2	27.6	35.9	44.9	31.3
Total	100.0	100.0	100.0	100.0	21.6	34.3	44.8	27.4

a/ I: Argentina, Brazil and Mexico; II: Chile, Colombia, Peru, Uruguay and Venezuela; III: Bolivia, Central America, the Dominican Republic, Ecuador, Haiti, Panama and Paraguay.

/The second

The second assumption is that the rate at which the product per person employed in each of the major economic sectors has grown since 1950 will remain about the same up to 1980.

Thirdly, the proportion of women in the labour force is assumed to remain unchanged throughout the period. To the extent that industrial development may induce more women to work outside the home, the growth rate of the gross domestic product would have to be higher than those postulated previously if unemployment is to follow the course indicated above.

/Annex A

Annex A

LONG-TERM PROJECTIONS MODEL

A general model has been prepared in an attempt to reproduce the relations existing in the period 1950-66 between the over-all external sector and capital formation variables and the economic development variables in the Latin American countries.

In this model, the gross domestic product is treated as an endogenous variable. The past rate of growth is assumed to have been determined, among other things, by the evolution of the external sector and of capital formation. For the purposes of the projections which are the subject of this study, the product must be treated as an exogenous variable, so that annual growth targets can be established, and the effect of those targets on the potential balance-of-payments and domestic savings gaps analysed. To that effect, the above model is divided into two: the import model, designed to analyse the potential trade gap, and the savings model, designed to analyse the potential savings gap.

1. The general model

The model makes it possible to examine the main factors determining the process of growth: (a) production; (b) saving and investment; (c) foreign trade requirements; and (d) external financing. It consists basically of twenty-six relations, which can be divided into two groups. The first includes the production, domestic saving and import functions, and the accounting identities or definitions which give national income, consumption, changes in stocks, and investment, the latter deriving from the definition of total investment, which is the same as total savings, and of external saving.

The remaining relations make up the second group and include the description of the trend followed by the external debt.

With regard to the operation of the model, its dynamic structure is described below in a simplified diagram of its basic causal relations (see figure I). Cumulative gross fixed investment is an explanatory variable of the production function. Domestic saving is expressed as a function of national income, and imports as a function of the product and gross fixed investment. The effect of the external sector on the evolution of the parameters is explicitly introduced into these relationships.

/Figure I

Figure I
CAUSAL RELATIONS OF THE MODEL

/Experts are

Exports are projected as an exogenous variable, in accordance with the particular conditions in each country. With this model it is possible to study the effect of the deterioration in the terms of trade, which is of considerable importance in the development of the Latin American economies.

(a) Variables of the model

The variables treated as endogenous or interdependent are:

P = gross domestic product

Y = gross national income

C = total consumption

I = gross fixed investment

I_T = total gross investment

H = changes in stocks

A = total saving

A_i = domestic saving

A_x = external saving

M = total imports of goods and services

B = potential trade gap or balance

R_u = remittances of profits

R_x = net factor income from rest of world

R_{id} = interest payments on total external debt (outstanding and new)

R_{idn} = interest payments on the new external debt

$R_{idn,\ k}$ = interest payments on the new debt, classified by interest rates and repayment and grace periods ($k = 1,2, \ldots, m$)

Am_d = amortization of the external debt

Am_{dn} = amortization of the new external debt.

$Am_{dn,\ k}$ = amortization of the new external debt, classified by interest rates, etc.

$A_{n,\ k\ (t)}$ = aliquot part of the new external debt contracted in year t, classified by interest rates, etc. ($k = 1,2, \ldots, m$)

$D_{n\ (t)}$ = new external debt contracted in year t.

$D_{n,\ k}(t)$ = new external debt contracted in year t, classified by interest rates, etc.

/D^e_p =

$D^e_{p'}$ = depreciation and amortization of foreign capital

FB = gross external financing

I^e = gross inflow of foreign capital

K^e = gross foreign capital

The variables considered to be exogenous or pre-determined are:

E = exports

G = terms-of-trade gains

T_{xf} = net private transfer payments or donations

Am_{da} = amortization of the outstanding external debt

R_{ida} = interest payments on the outstanding external debt

π = terms of trade realtionship

The constants established in the model are as follows:

r = coefficients reflecting policy on forms of financing

λ_k = coefficient of share of type-k debt in the new external debt ($k = 1,2, \ldots, m$)

P_k = grace period for type-k debt

n_k = repayment period for type-k debt

(b) Relations of the model

[1] $P(t) = \alpha_1 + \beta_1 \sum_{h=o}^{t-1} I(h) + u_1(t)$

[2] $M(t) = \alpha_2 + \beta_2 P(t) + u_2(t)$

or:

$$M(t) = \alpha_a + \left[\beta_2 + \gamma_2 \Omega(t)\right] P(t) + \left[\delta_2 + \xi_2 \Omega(t)\right] \left[P(t) - I(t)\right] + \left[\eta_2 + \eta_2 \Omega(t)\right] I(t) + u_2(t) \qquad \Omega(t) = \frac{\pi(t)\, E(t)}{\pi(t-1)\, E(t-1)}$$

[3] $A_i(t) = \alpha_3 + \beta_3 Y(t) + u_3(t)$

or:

$$A_i(t) = \alpha_3 + \left[\beta_3 + \gamma_3 \Omega(t)\right] Y(t) + u_3(t)$$

[4] $H(t) = \beta_4 P(t) + u_4(t)$

[5] $B(t) = M(t) - \left[E(t) + G(t)\right]$

/(6) P(t)

[6] $P(t) = C(t) + I(t) + H(t) + E(t) - M(t)$

[7] $Y(t) = P(t) + R_x(t) + G(t)$

[8] $C(t) = Y(t) + T_{xf}(t) - A_i(t)$

[9] $A_x(t) = M(t) - \pi(t)\, E(t) - R_x(t) - T_{xf}(t)$

[10] $I_T(t) = I(t) + H(t)$

[11] $A(t) = A_i(t) + A_x(t)$

[12] $R_u(t) = \beta_5 K^e(t-1)$

[13] $Am_d(t) = Am_{da}(t) + Am_{dn}(t)$

[14] $FB(t) = A_x(t) + Am_d(t) + D^e_p(t)$

[15] $D^e_p(t) = \beta_6 K^e(t-1)$

[16] $D_n(t) = r\left\{FB(t) - D^e_p(t)\right\}$

[17] $I^e(t) = (1-r)\left\{FB(t) - D^e_p(t)\right\} + D^e_p(t)$

[18] $K^e(t) = K^e(o) + \sum_{1}^{t} I^e(h) - \sum_{o}^{t} D^e_p(h)$

[19] $D_{n,k}(t) = \alpha_k D_n(t)$ for $k = 1, 2, \ldots, m$ and $\sum_{k}^{m} \alpha_k = 1;\ \alpha_k \geq 0$

[20] $A_{n,k}(t) = D_{n,k}(t)/n_k$ for $k = 1, 2, \ldots, m$

[21] $R_{id}(t) = R_{ida}(t) + R_{idn}(t)$

[22] $R_x(t) = R_u(t) + R_{id}(t)$

[23] $R_{idn} = \sum_{k=1}^{m} R_{idn,k}(t)$

/[24] $R_{idn,k} =$

[24]

$$R_{idn,\,k}(t) = \text{for } k = 1, 2, \ldots m \begin{cases} i_k \sum_{j=1}^{t-1} D_{n\,k}(j) & \text{if } 1 < t < p_k + 1 \\ i_k \left\{ \sum_{j=1}^{t-1} D_{n,\,k}(j) - \sum_{j=1}^{t-p_k-1} (t-p_k-j)\, A_{n,\,k}(j) \right\} & \text{if } 1 + p_k < t \leq p_k + n_k + 1 \\ i_k \left\{ \sum_{j=1-\lfloor p_k + n_k \rfloor}^{t-1} D_{n,\,k}(j) - \right. & \\ \left. - \sum_{j=1-\lfloor p_k + n_k \rfloor}^{t-p_k-1} (t-p_k-j)\, A_{n,\,k}(j) \right\} & \text{if } t > p_k + n_k + 1 \end{cases}$$

[25] $$Am_{dn}(t) = \sum_{k=1}^{m} Am_{dn,\,k}(t)$$

[26]

$$Am_{dn,\,k}(t) = \text{for } k = 1, 2, \ldots, m \begin{cases} \sum_{j=1}^{t-p_k} A_{n,\,k}(j) & \text{if } p_k < t < p_k + n_k \\ \sum_{j=t-\lfloor p_k + n_k - 1 \rfloor}^{t-p_k} A_{n,\,k}(j) & \text{if } t \geq p_k + n_k \end{cases}$$

/(c) General

(c) General comments on the model

The model is complete, since it has as many endogenous or interdependent variables as there are equations. Of these equations, the production, import and domestic saving functions, and possibly changes in stocks, are considered to be stochastic. The random disturbance is represented by u(t).

In the first version of the model, an attempt has been made as far as possible to use the same explanatory variables in all the equations, in order to facilitate comparisons and obtain over-all regional figures, in some cases even at the expense of the statistical significance of the estimates.

In a first analytical stage of the model several types of production functions have been examined and adjusted. In addition to that providing a constant value for the marginal product-capital coefficient, others have been obtained which express the variation of this coefficient over time. In particular, an attempt has been made to express the determining effect of exports on the utilization of installed capacity up to the previous year, introducing a product-capital coefficient that fluctuates with the rate of exports.

Different import and saving functions have also been tried out. As regards the import function, the effect of the increase in exports on the import coefficients was introduced to indicate that any import substitution that was effected would not be undertaken in an inflexible manner, but in such a way as to ensure that some advantage was taken of the development possibilities afforded by the greater capacity to import. In the domestic saving function, tha variability of the marginal propensity to save in relation to income would indicate the effect of an increase in the purchasing power of exports as reflected in greater expenditure on capital goods and equipment.

On the basis of the aggregate model described above, it is a simple matter to obtain sectoral models, replacing the total import functions, for example, by import functions for groups of products (durable and non-durable consumer goods, capital goods, raw materials and intermediate goods), insurance and freight, and tourism and "other services". In this

/application, of

application, of the model to Latin America, the above division has been made - and in addition a division between the product and other relations - only in the case of Venezuela, in view of the predominance of the petroleum sector in that country.

With regard to external financing, the identities presented in the model are sufficiently explicit. In factor income from the rest of the world, a distinction is made between remittances of profits and interest payments on the outstanding and new external debt. In applying the model to the different countries, explicit assumptions are made concerning the classification of the new debt according to interest rates, and repayment and grace periods, and concerning depreciation and amortization of foreign capital. The possibility of establishing different assumptions regarding external financing by modifying the constants makes it easy to consider alternatives without changing the basic structure of the model.

In equation [12], the coefficient β_5, which gives the remittances of net profits as a function of foreign capital, is obtained from considerations based on the characteristics of each country. With regard to changes in stocks, it would be preferable to express them as a function of the increase in the product if more refined data were available. For the purposes of projections, similar results are arrived at in simpler fashion by expressing the changes in stocks as a function of the product. The remaining relations are definitions or identities.

2. The projection models

For purposes of the projections designed to analyse the potential trade and savings gaps, the gross domestic product must be given growth rates that correspond to the targets whose effects are to be analysed. The result is that the above model is over-determined. If it is to remain consistent, some of its relations must be eliminated. Thus, the above model can be divided into two complete models. The first, after the domestic saving equation is eliminated would be the import or foreign trade model. The second, after the import equation is eliminated, would be the saving-investment model. Each of these models gives a different group of projections for the endogenous variables.

/The potential

The potential trade deficit or surplus is defined as follows:

[27] $B(t) = M(t) - [E(t) + G(t)] = M(t) - \Pi'(t) E(t)$

The potential balance-of-payments deficit or surplus would be:

[28] $A_x(t) = M(t) - [E(t) + G(t)] - R_x(t) - T_{xf}(t)$

In other words, net external factor income and private transfer payments or donations are also computed in this case.

The potential savings deficit or surplus is equal to:

[29] $A_x(t) = I_T(t) - A_i(t)$

This also represents external saving or net external financing; from this expression imports can be obtained through equation [28] as follows:

$M(t) = A_x(t) + [E(t) + G(t)] + R_x(t) + T_{xf}(t)$, since exports, net external factor income and private transfer payments are assumed to be pre-determined. Therefore, the import equation is replaced by an implicit or residual relation.

In the import model, projected external saving $A_x(t)$ is obtained directly from [28]; and from this and [29] it is possible to obtain domestic saving: $A_i(t) = I_T(t) - A_x(t)$, which is no longer defined by an equation but by an implicit or residual relation.

Clearly, the growth assumptions for exports barely influence the projected potential trade gap based on the import model.

The saving and import models operate as economic policy models, when a growth target is established for the gross domestic product; it is important to take into account the effects of each rate on the actual structure of the model. If the import function is of the following type:

[30] $M(t) = a_2 + b_2 P(t) + c_2 [P(t) - I(t)]$

and the product is given growth rate r_p the result will be:

$r_p = \frac{I(t)}{P(t)} b_1$, and therefore:

[31] $M(t) = a_2 + \left[b_2 + c_2 - c_2 \frac{r_p}{b_1}\right] P(t)$

/Thus the

Thus the marginal propensity varies in relation to r_p, diminishing or increasing according to the sign of the coefficient c_2.

It is interesting to note that if identity [28] is written utilizing the import model and substituting the expression [31] for imports, the result is:

$$[32] \quad A_x(t) = a_2 - \left[\pi(t)\, E(t) + R_x(t) + T_{xf}(t)\right] + \left[b_2 + c_2 - c_2 \frac{r_p}{b_1}\right] P(t)$$

and, similarly, utilizing [29], [3], [4], [7] and [10], in the saving-investment model:

$$[33] \quad A_x(t) = -a_3 - b_3\left[R_x(t) + G(t)\right] + \left[-b_3 + b_4 \frac{r_p(t)}{b_1}\right] P(t)$$

Now, if the growth rate of the product is derived from [32] and [33], the result is as follows:

Import model:

$$[34] \quad r_p(t) = \frac{b_1 (b_2 + c_2)}{c_2} + \frac{a_2 b_1}{c_2 P(t)} - \frac{\left[R_x(t) + T_{xf}(t)\right] b_1}{c_2 P(t)} - \frac{b_1 \pi(t) E(t)}{c_2 P(t)} - \frac{b_1}{c_2} \cdot \frac{A_x(t)}{P(t)}$$

Saving-investment model:

$$[35] \quad r_p(t) = b_1 (b_3 - b_4) + \frac{a_3 b_1}{P(t)} + \frac{b_1 b_3 \left[R_x(t) + G(t)\right]}{P(t)} + b_1 \frac{A_x(t)}{P(t)}$$

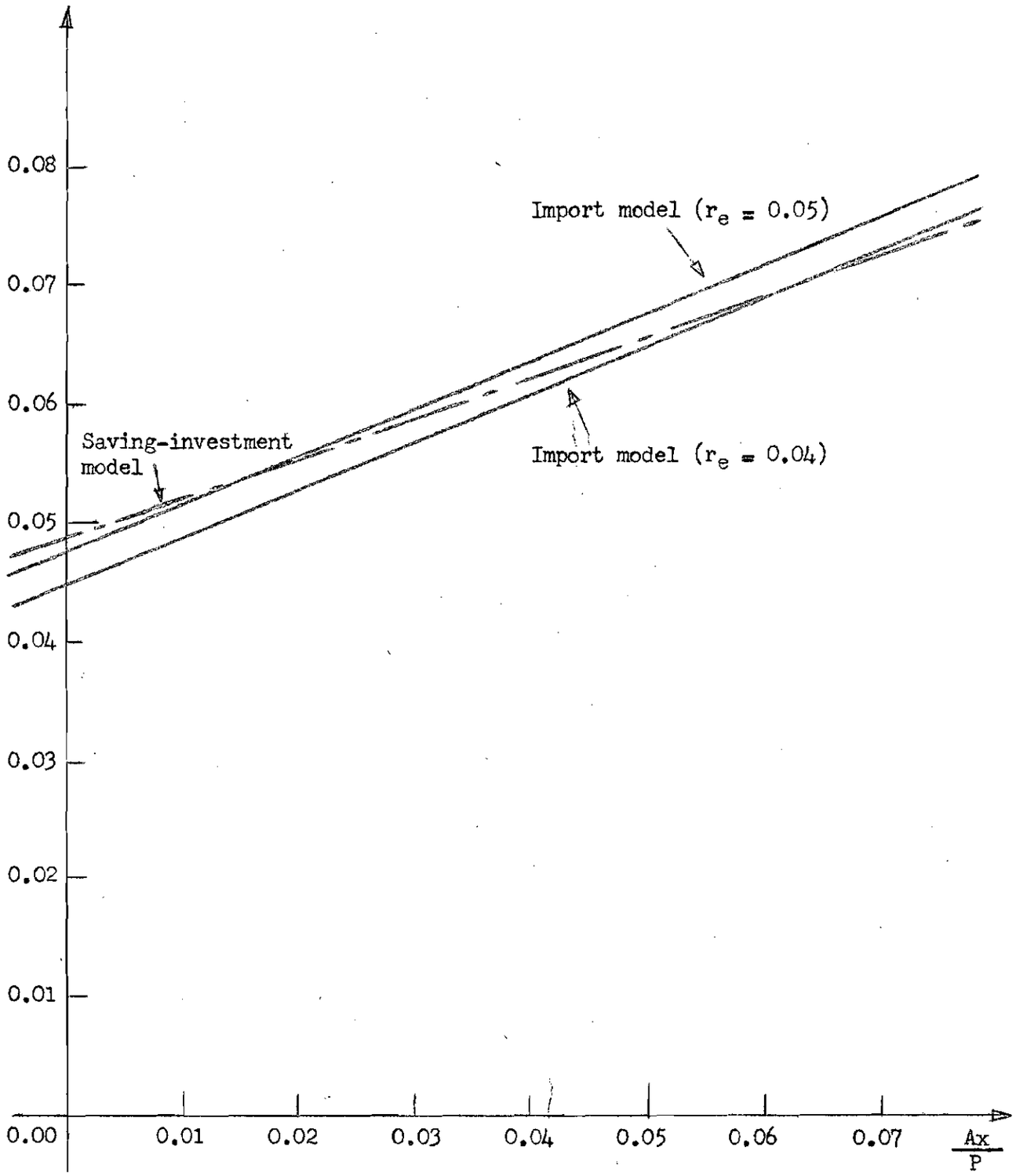
Accordingly, the growth rate of the gross domestic product can be expressed as a function of the exogenous variables, the pre-determined variables, and the relative balance-of-payments or the ratio of external saving to the gross domestic product in year t.

Figure II shows equation [34] for two export-values and equation [35]. This illustrates a special case, since the values of the parameters of [34] and [35] are variables for each year and depend on the values of $P(t)$, $E(t)$, $R_x(t)$, $T_{xf}(t)$ and $\pi(t)$.

/Figure II

Figure II

RELATIONSHIP BETWEEN THE GROWTH OF THE GROSS DOMESTIC PRODUCT AND THE EXTERNAL SAVING COEFFICIENT



Note : r_e = Annual growth rate of exports.

/3. Experience

3. Experience in adapting the model to the different countries

The production function most widely utilized is that which expresses the gross domestic product for each year on the basis of cumulative fixed investment up to the previous year. The adjustment of this relationship on the basis of time series gives high values for the coefficient of determination. This result is influenced by the effect of relating two variables increasing over time, such as the gross domestic product and cumulative investment. This relationship may, however, be useful in obtaining projections. Moreover, in some countries like Colombia and Peru, the residuals of the estimated production function give significant values for the Durbin-Watson coefficient. The residuals may be self-correlating as a result of cyclical movements or curves in the trend. In the first case, the long-term projections may not be affected, but the second introduces an additional element of unreliability into the projections.

The import functions are, in general, acceptable. Some countries have taken the gross domestic product as the only explanatory variable. In other countries, better results were achieved with the composite variable obtained by multiplying the gross domestic product by the relationship between the purchasing power of exports in years t and t-1. Thus, an improvement or deterioration in purchasing power would modify the propensity to import. This type of variable was used, for example, in Bolivia, Ecuador and Mexico. In other countries, such as Brazil and Peru, gross fixed investment and the gross domestic product less gross fixed investment were taken as explanatory variables. As stated above in connexion with the operation of the model with pre-established growth rates for the product, the introduction of investment as an explanatory variable is equivalent to modifying the propensity to import in relation to the established rate. In other words, a different structure of the import function is obtained for each growth rate of the product. Sometimes, as in Brazil, the relation improves considerably with the introduction of dummy variables.

/As regards

As regards the domestic saving function, the estimates are also generally acceptable. In some countries like Argentina and Ecuador, average savings are higher than incremental savings or the marginal propensity to save, because the intercept with the savings axis is positive. This may result from a convex curve for domestic saving in relation to income, so that, even if the intercept with the savings axis is negative, after the proper adjustment in the segment for the past period considered, the result will be a linear function which it would be inadmissible to "extrapolate backwards".

In exceptional cases where the relations were not acceptable, the expression adopted was based on the average coefficient for the last few years.

The relations that express changes in stocks do not call for special attention, in view of the quality of the data available and their small influence on the projections. They are obtained through an appraisal based on observation of the time series in the last few years. As stated previously, for a more refined study of the trend followed by changes in stocks, more reliable basic data would have to be available, and it would be necessary to relate this variable to the increase in the product, and to try out other possible expressions, since in many countries they depend on the high degree of storage of agricultural commodities, stocks of animals, etc.

Tables A-1, A-2 and A-3 present the estimated equations for the production, import and saving functions, which, together with the identities, definitions and non-stochastic relations, have served as a basis for the projections resulting from the establishment of growth rates for the gross domestic product in the import and saving models.

/Table A-1

Table A-1

PRODUCTION FUNCTION

Country	Left-hand side variable	Explanatory variable b/		Coefficient of determination R^2	Durbin-Watson ratio d	Number of observations n
		1	$\sum_{h=o}^{t-1} Y(h)$			
Argentina a/	P (t)	503.0	0.232	-	-	17
Bolivia	P (t)	3 176.9 (23.1)	0.285 (0.006)	0.997	1 823	9
Brazil	P (t)	13 743.4	(0.004)	0.991	0.560	17
Central America						
Costa Rica	P (t)	1 678.6 (40.4)	0.345 (0.011)	0.987	1.600	14
El Salvador	P (t)	1 012.5 (38.4)	0.397 (0.016)	0.977	0.886	14
Guatemala	P (t)	656.1 (20.8)	0.442 (0.027)	0.970	0.500	17
Honduras	P (t)	537.3 (13.3)	0.322 (0.016)	0.966	1.462	17
Nicaragua	P (t)	1 626.9 (54.7)	0.352 (0.017)	0.968	1.744	17
Chile	P (t)	14 270.8 (115.1)	0.293 (0.010)	0.994	2.542	7
Colombia	P (t)	14 546.9 (2 338.7)	0.237 (0.059)	0.991	0.611	17
Dominican Republic	P (t)	517.0 (22.0)	0.278 (0.023)	0.912	1.937	17
Ecuador	P (t)	9 279.3 (129.6)	0.361 (0.009)	0.992	1.097	17
Mexico	P (t)	87 423.8 (1 293.4)	0.417 (0.007)	0.996	1.268	17
Panama	P (t)	234.1 (3.9)	0.458 (0.007)	0.996	1.144	17
Paraguay	P (t)	26 226.5 (270.2)	0.208 (0.008)	0.989	1.775	17
Peru	P (t)	44 016.8 (901.4)	0.258 (0.008)	0.989	0.668	15
Uruguay a/	P (t)	23 778.0	0.235	-	-	14
Venezuela	P_{np} (t)	10 090.8 (259.2)	0.251 (0.008)	0.988	0.825	15

a/ Modified equations. The explanatory notes are given in the country studies.
b/ The explanatory variable is investment in the non-petroleum sector.

/Table A-2

Table A-2

IMPORT FUNCTION

Country	Left-hand side variable	Explanatory variable							Coefficient of determination R^2	Durbin-Watson ratio d	Number of observations n
		1	P (t)	$\frac{\pi(t)E(t)}{\pi(t-1)E(t-1)}P(t)$	I (t)	$P(t)-I(t)\frac{\pi(t)E(t)}{\pi(t-1)E(t-1)} \times [P(t)-I(t)]$		x [a/]			
Argentina	M (t)	33.5 (17.2)	-	-	0.368 (0.097)	0.010 (0.035)	-	-	0.727	1.241	17
Bolivia	M (t)	158.4 (228.0)	-	0.218 (0.051)	-	-	-	-	0.694	1.604	10
Brazil	M (t)	2 600.1 (372.6)	-	-	0.722 (0.159)	-0.104 (0.025)	-	802.7 (257.5)	0.781	1.491	17
Central America											
Costa Rica	M (t)	-83.3 (78.5)	0.308 (0.028)	-	-	-	-	-	0.911	1.171	14
El Salvador	M (t)	-98.1 (57.5)	-	0.290 (0.035)	-	-	-	-	0.843	1.201	14
Guatemala	M (t)	-17.1 (10.9)	-	-	0.947 (0.109)	-	0.053 (0.012)	-	0.950	1.147	17
Honduras b/	M (t)	-36.0	-	0.267	-	-	-	-	-	-	17
Nicaragua b/	M (t)	74.6	-	0.295	-	-	-	-	-	-	17
Chile b/	M (t)	-446.0	0.170	-	-	-	-	-	-	-	8
Colombia b/	M (t)	-	0.180	-	-	-	-	-	-	-	18
Dominican Republic	M (t)	30.7 (40.8)	-	0.151 (0.015)	-	-	-	-	0.833	0.910	17
Ecuador	M (t)	166.4 (294.7)	-	0.156 (0.020)	-	-	-	-	0.807	1.734	17
Mexico	M (t)	6 553.9 (1 363.4)	-	0.080 (0.008)	-	-	-	-	0.865	1.162	17
Panama	M (t)	-24.4 (3.9)	0.407 (0.009)	-	-	-	-	-	0.993	1.511	18

/Table A-2 (concluded)

Table A-2 (concluded)

Country	Left-hand side variable	Explanatory variable: 1	P (t)	$\frac{\Pi(t)E(t)}{\Pi(t-1)E(t-1)}P(t)$	I(t)	P(t)-I(t)	$\frac{\Pi(t)E(t)}{\Pi(t-1)E(t-1)} \times [P(t)-I(t)]$	X a/	Coefficient of determination R^2	Durbin-Watson ratio d	Number of observations n
Paraguay	M (t)	-2 226.2 (882.6)	0.263 (0.026)	-	-	-	-	-	0.868	1.533	18
Peru	M (t)	-1 097.0 (936.4)	-	-	0.843 (0.190)	-	0.040 (0.022)	-	0.957	1.028	17
Uruguay	M (t)	-	0.134 (0.007)	-	-	-	-	-	0.408	1.037	17
Venezuela c/	-	-	-	-	-	-	-	-	-	-	-

Note: Under the estimate of each parameter the standar error appears in brackets.

a/ Dummy variable.
b/ Modified equation. The explanatory notes are given in the country studies.
c/ See A.2 bis.

A.2 bis VENEZUELA

Import functions

$$M_{sf}(t) = \underset{(0.002)}{0.144}\ M_b(t) \qquad R^2 = 0.919;\ d = 1.118;\ n = 16$$

$$M_{to}(t) = \underset{(137.4)}{-360.8} + \underset{(0.094)}{0.440}\ I_p(t) + \underset{(0.005)}{0.030}\ Y(t) + \underset{(75.2)}{232.9}\ X \qquad R^2 = 0.917;\ d = 2.436;\ n = 16$$

$$M_p = \underset{(1\,138.6)}{-4\,079.4} + \underset{(0.119)}{0.285}\ I_p(t) + \underset{(1\,585.7)}{5\,514.0}\ \frac{\Pi(t-1)\ E(t-1)}{\Pi(t-1)\ E(t-1) + 2\,800} + \underset{(128,2)}{644,9}\ X_1 \qquad R^2 = 0.896;\ d = 1.649;\ n = 16$$

$$M_{c,\,np} = \underset{(1\,375.7)}{-1\,304.0} + \underset{(0.021)}{0.002}\ Y(t) + \underset{(2\,182.2)}{3\,512.0}\ \frac{\Pi(t-1)\ E(t-1)}{\Pi(t-1)\ E(t-1) + 2\,700} + \underset{(163.4)}{165.2}\ X_1 \qquad R^2 = 0.693;\ d = 1.708;\ n = 16$$

$$M_{mp,\,np}(t) = \underset{(656.0)}{-1\,394.8} + \underset{(0.008)}{0.022}\ P_{np}(t) + \underset{(1\,027.8)}{2\,338.0}\ \frac{\Pi(t-1)\ E(t-1)}{\Pi(t-1)\ E(t-1) + 2\,600} \qquad R^2 = 0.834;\ d = 2.381;\ n = 16$$

$$M_{I,\,np}(t) = \underset{(1\,788.7)}{-9\,837.0} - \underset{(0.031)}{0.080}\ P_{np}(t) + \underset{(0.123)}{0.241}\ I_{np}(t) + \underset{(2\,613.0)}{15\,191.0}\ \frac{\Pi(t-1)\ E(t-1)}{\Pi(t-1)\ E(t-1) + 2\,700} + \underset{(265.4)}{607.3}\ X \qquad R^2 = 0.856;\ d = 1.683;\ n = 16$$

/SYMBOLS

SYMBOLS

M_{sf} = expenditure on insurance and freight

M_{to} = expenditure on tourism and other imports of other services

M_{b} = import of goods

$M_{c,\ np}$ = import of consumer goods

$M_{mp,\ np}$ = import of raw materials and intermediate products

$M_{I,\ np}$ = import of capital goods

The subindex refers to "petroleum" sector.

The subindex np refers to "non-petroleum" sector.

X = dummy variable

/Table A-3