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## INTRODUCTION

The present report was prepared in collaboration with the Latin American Institute for Economic and Social Planning (ILPES). Its purpose is to present and analyse projections of the main macroeconomic variables relating to the external sector and the saving-investment process in the Latin American countries during the 1970s.

The idea is to provide a frame of reference that will help to identify some of the essential points that must be borne in mind in economic and social development policy, with special reference to the implications of current situations and trends and, hence, some of the main problems that development policy has to tackle.

A condensed account is given here of the findings of individual country studies. By way of additional information, separate monographs <sup>\*/</sup> are being presented containing a detailed study of a number of countries.

The present document is divided into three chapters. In the first, Latin America's evolution from 1950 to 1969 is examined with a view to formulating criteria that will provide realistic assumptions and hypotheses to be used in the analysis of major trends. This part also describes the assumptions used in making the projections, presents the projections themselves and presents briefly a few conclusions on the development problems and potential of the Latin American countries in terms of the external sector and the saving-investment process. Chapter III discusses the basis and interpretation of the models used in the projections, and presents the numerical values of the estimated parameters for the econometric functions corresponding to each country.

The analysis of past trends and the data used as a basis for the econometric functions used in the projections refer to the period 1950-1969. In recent years some of the variables have followed trends that departed considerably from those of past years. The modifications are in many cases the result of substantial changes in development policy or the performance

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<sup>\*/</sup> Spanish only.

of exports, particularly exports of manufactures. There have also been important developments at the regional and subregional levels, in particular the entry into force of the Cartagena Agreement, which substantially modifies the integration possibilities of five countries in the region.

These recent developments, however, have not led to big enough changes in the trends of the corresponding variables to change the functions or parameters that can be statistically determined on the basis of past trends.

The effect of these changes may be to modify the future trends of the variables and in some cases may appreciably improve the development prospects of the countries of the region.

The projections given in the present document, in which these changes have not been incorporated, serve to show what is likely to happen if there is no change in the situation that has prevailed in Latin America until recently; hence, they provide a useful yardstick for evaluating, inter alia, the effects of these recent developments that may in fact rouse the region from its inertia.

Reference must be made to an earlier ECLA document which can be considered a forerunner of the present study, namely "The trade and domestic savings gaps and structural unemployment in Latin America".<sup>1/</sup> The present study incorporates some new hypotheses, for example relating to growth targets rising in stages from the current level. There are also sizable differences in the basic statistical series, several of which were substantially rectified by countries, and this led to changes in the relations of the model. A number of explanatory variables have been introduced which are more satisfactory from the standpoint of economic interpretation and statistically. The analysis of financing has been reformulated to include the short-term debt among the assumptions, in addition to the medium- and long-term debt.

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<sup>1/</sup> Document E/CN.12/831, submitted to the Commission at its thirteenth session (Lima, Peru, 14-23 April 1969).

The problems of the external bottleneck and the savings gap and possible ways of dealing with them have been given a great deal of attention in recent work by ECLA and ILPES, noteworthy in this respect being the study in Part One of the Economic Survey, 1969, entitled "Basic aspects of Latin American development strategy". This study discusses the essential aspects of the objectives and approach of development strategy at the national, regional and international levels, and looks at the way in which the economic growth rate of many countries in the region could have been higher, even given prevailing circumstances, had the external bottleneck not existed.

A quantitative examination of some of the possible policy approaches to eliminating the external bottleneck and the savings gap was undertaken in the report prepared by the Director-General of ILPES, Raúl Prebisch, entitled Change and development: Latin America's great task. These policy approaches are examined in greater detail in a joint study by ECLA and ILPES which makes explicit use of economic projections to define the problems of and examine possible solutions for the external bottleneck and the savings gap.

It is obvious that it is urgently necessary to continue exploring the implications of different assumptions in order to ensure that the decisions taken will help to attain the objectives set for the present decade, and, most important, to provide a fund of technical data that countries can use in determining their own targets and policies, in accordance with the International Development Strategy for the Second United Nations Development Decade.

It is hoped that the projections presented in this document will serve these purposes and will also have the effect of encouraging further and more detailed country studies, given the magnitude of the development effort that has to be made in the next few years.

## Chapter I

### ECONOMIC DEVELOPMENT IN THE PERIOD 1950-1969

#### 1. The pace of development

Over the past two decades, the gross domestic product of the Latin American countries grew in a somewhat irregular fashion. The aggregate and per capita product of the region as a whole grew at average annual rates of 5.2 per cent and 2.3 per cent respectively between 1950 and 1966-1968. Although these rates came close to the targets set at the beginning of the 1960s, they were clearly not rapid enough to provide an adequate response to the problems of labour redundancy, income distribution, and a hand-to-mouth existence for big segments of the population. The countries that made the greatest contribution to the over-all growth were Brazil, Costa Rica, Mexico, Nicaragua, Panama, Peru and Venezuela, with annual per capita growth rates of around 3 per cent. At the other end of the scale were Argentina, Bolivia, Honduras, Paraguay and Uruguay, with annual per capita growth rates of 1.2 per cent or less over the same period (see table 1).

During the 1960s, a number of countries substantially improved their growth rates - for example, the Central American countries, following the establishment of the Central American Common Market, and Bolivia and Chile as a result of favourable conditions for their exports, mainly mining products. In contrast, the growth rate slackened off in Brazil (although in 1969, it was soaring again), Colombia, Dominican Republic, Ecuador, Uruguay and Venezuela. The net result of all these movements was that the annual growth rate of the per capita product fell from an average of 2.5 per cent between 1950 and 1960-1962 to 1.8 per cent between 1960-1962 and 1966-1968, although there was an upswing to 3 per cent in 1969 as compared with 1966-1968.

/Table 1



Table 1

LATIN AMERICA: GROWTH RATE OF THE AGGREGATE AND PER CAPITA GROSS  
DOMESTIC PRODUCT, BY COUNTRIES

(Average annual growth rates) <sup>a/</sup>

Country	Aggregate gross domestic product			Per capita gross domestic product		
	1950 1960-62	1960-62 1966-68	1950 1966-68	1950 1960-62	1960-62 1966-68	1950 1966-68
Argentina	3.2	2.9	3.1	1.2	1.4	1.2
Bolivia	0.7	5.7	2.4	-1.4	3.3	0.3
Brazil	7.0	4.2	6.0	3.9	1.3	3.0
Costa Rica	6.9	7.0	7.0	3.0	3.1	3.0
El Salvador	4.6	6.1	5.1	1.8	2.9	2.2
Guatemala	3.8	5.4	4.4	0.9	2.3	1.4
Honduras	3.7	5.6	4.4	0.8	2.1	1.2
Nicaragua	5.4	7.5	6.2	2.5	4.4	3.2
Colombia	4.7	4.7	4.7	1.5	1.3	1.4
Chile	3.7	4.8	4.0	1.3	2.2	1.6
Ecuador	4.8	4.7	4.7	1.7	1.3	1.5
Mexico	5.7	7.5	6.4	2.6	3.9	3.0
Panama	5.3	7.8	6.2	2.3	4.4	3.0
Paraguay	2.9	4.3	3.4	0.2	0.9	0.5
Peru	5.6	5.7	5.7	3.1	2.6	2.9
Dominican Republic	5.4	3.0	4.5	2.1	-0.3	1.3
Uruguay	2.0	0.2	1.4	0.6	-1.2	-
Venezuela	7.3	4.8	6.4	3.4	1.4	2.7
Latin America <sup>b/</sup>	5.4	4.8	5.2	2.5	1.8	2.3
Latin America <sup>c/</sup>	5.2	4.8	5.1	2.4	1.8	2.2

Source: ECLA, on the basis of official statistics.

<sup>a/</sup> At 1960 market prices.

<sup>b/</sup> Excluding Cuba and Haiti.

<sup>c/</sup> Excluding Cuba, Haiti and Venezuela.

/There were

There were very marked differences in the growth rates of the various sectors of economic activity. Although this is frequently the case in developing countries, in Latin America a number of key sectors were largely responsible for the bottlenecks that slowed down economic growth, namely, agriculture and the energy and transport sectors. The gross product of the agricultural sector in most of the countries of the region increased at a slower or only slightly higher pace than the population. If the comparatively better agricultural performance of countries having a large weight in the totals, such as Brazil, Mexico and Venezuela, were to be discounted, the annual over-all figure of 3.5 per cent recorded for the period between 1950-1952 and 1966-1968 might well be nil or a negative value if expressed in per capita terms (see table 2). The relatively high rates of growth of the transport and energy sectors are accounted for by the fact that they started from very low levels; in practice, they were frequently responsible for bottlenecks, particularly to industrial development.

The growth of the manufacturing sector is an outstanding feature of the growth of the various sectors. Its annual rate of growth was substantially higher than the over-all average and it raised its share in the total from 19.6 per cent in 1950-1952 to 23.3 per cent in 1966-1968, while as a result of its lack of dynamism the agricultural sector's share fell from 22.8 to 18.3 over the same period (see appendix, table A).

It is a well-known fact that there are substantial differences between the Latin American countries as regards levels of industrialization; while the larger countries have gradually managed to produce most of the consumer goods they require for domestic use and a substantial proportion of intermediate and capital goods, the countries with relatively small markets, which also suffer from a technological lag that has prevented them from competing for foreign markets, have not yet managed to achieve an adequate level of import substitution even in respect of goods which are relatively simple to manufacture.

/Table 2

Table 2

LATIN AMERICA: GROWTH RATES OF THE MAJOR SECTORS, BY COUNTRIES, BETWEEN 1950-1952 AND 1966-1968

(Annual average growth rates) a/

Country	Agriculture	Mining and quarrying	Manufacturing	Construction	Electricity, gas and water	Transport and communications	Commerce and finance	Other services	Total
Argentina	2.3	9.6	4.3	1.8	8.2	2.6	3.1	2.2	3.2
Bolivia	1.1	0.1	2.7	6.4	4.4	3.9	2.4	3.4	2.3
Brazil	4.4	13.0	7.6	3.0	7.5	7.1	5.3	6.0	5.9
Costa Rica	4.4	b/	8.3	7.7	9.6	9.7	7.6	8.2	7.0
El Salvador	3.3	4.6	7.7	7.5	12.9	6.4	6.8	4.7	5.4
Guatemala	3.5	0.5	6.1	1.9	10.1	6.9	5.0	3.8	4.6
Honduras	3.3	5.7	6.4	3.3	15.8	5.9	5.4	3.5	4.3
Nicaragua	4.2	2.8	8.6	11.7	16.9	9.0	6.1	5.9	6.0
Colombia	3.2	4.0	6.2	6.7	9.9	5.9	5.4	4.9	4.7
Chile	3.0	3.6	5.6	3.9	7.3	7.3	4.4	3.4	4.3
Ecuador	3.4	5.0	5.2	8.3	10.8	2.8	5.7	5.5	4.7
Mexico	4.5	6.2	7.3	6.9	11.9	6.3	6.3	6.3	6.3
Panama	4.6	7.1	10.0	8.8	10.4	8.9	7.4	5.4	6.5
Paraguay	2.5	19.9	3.4	8.3	10.0	3.8	3.5	4.2	3.4
Peru	3.3	7.1	7.8	3.4	7.3	5.7	5.7	4.9	5.4
Dominican Republic	3.1	17.6	4.4	4.2	16.1	6.8	4.2	4.1	4.1
Uruguay	0.4	b/	2.3	-0.7	5.7	0.6	0.5	1.8	1.2
Venezuela	5.5	5.3	8.8	2.8	16.1	4.6	7.1	4.8	6.1
<u>Total</u>	<u>3.5</u>	<u>5.6</u>	<u>6.3</u>	<u>4.3</u>	<u>9.0</u>	<u>5.2</u>	<u>5.1</u>	<u>4.9</u>	<u>5.0</u>

Source: ECLA, on the basis of official statistics.

a/ At factor cost at 1960 prices.

b/ Included under manufacturing.

/The slow

The slow growth of the agricultural sector meant not only shortages in the supply of raw materials and foodstuffs for the domestic market and an acceleration of the inflationary spiral, but also lost opportunities for expanding exports, especially of temperate-zone products. It also had a marked impact on employment, for agriculture's inability to retain productive labour had the effect of stepping up the rate migration to the cities, where these new additions to the urban labour force were absorbed - in so far as possible - largely in low-productivity services because industry, despite its rapid growth, could not provide employment for them all, especially in view of the fact that the economically active population was rapidly growing. Hence, overt unemployment and labour redundancy have reached proportions that, even though they cannot be precisely measured, raise problems that can only be solved by means of a determined policy to change the employment structure and to raise the growth rate of production well above its past levels. In this connexion, it is worth remembering that, as noted in a recent report,<sup>2/</sup> the mere correction of the occupational structure of the labour force would have highly important consequences. Suffice it to reflect that the attainment of this objective, by means of a more rapid rate of capital formation and the fulfilment of other requirements, would mean that the annual growth rate of the aggregate product would rise to 7 per cent by the end of the current decade, instead of the 5.2 per cent recorded in the past two decades. Even so, much more than a decade would be needed to correct matters completely. But the effect would be to raise the annual average growth rate of the per capita product from 2.5 to 4 per cent, having regard to population increase.

Noteworthy efforts have been made to correct the distortions in the economic and social system caused by the lack of dynamism of the agricultural sector. Some countries in the region have tackled the problem by starting agrarian reform programmes, which, despite some significant progress, have generally had little impact. Protectionist tariffs and the establishment of over-valued exchange rates have in many cases been mechanisms that have

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<sup>2/</sup> See Raúl Prebisch, Change and development: Latin America's great task, a report submitted to the Inter-American Development Bank (Washington, D.C., 1970).

redistributed income in order to strengthen the industrial sector rather than step up the growth rate of agriculture. The relative prices of the inputs and capital goods used in agriculture have generally been unfavourable, since for the most part they have absorbed the high costs generated by the initial stages of import substitution. If account is also taken of the traditional resistance to change of the average farmer in the region, and the little done by the State to introduce technological innovations suited to development conditions, it is fairly clear why agriculture is behindhand as regards technological progress and capital formation, and this in turn has been the root causes of its lack of dynamism.

Manufacturing, too, which in most countries has obviously been the mainspring of growth, was also faced with problems that hampered its potential for growth.

Protectionism was one of the key components of the policy which led to the great progress achieved so far in industrialization. But it is clear that it is now necessary to revise this policy thoroughly in order to make it more selective and to ensure that the level of protection makes it possible to continue the process of industrial development without running to uneconomic extremes. Some thought should be given also to the changes that need to be made in this policy to bring it into line with the agreements on economic integration. Considerable progress is being made in defining the principles governing integration and the flow of trade under integration agreements.

The size of markets, which is a factor that is closely associated with protectionist policy, although varying in each case, is an appreciable brake on development in all the countries of the region. In the relatively more developed countries, the size of the market constitutes a limitation of scale that is particularly important with respect to intermediate and capital goods. In the smaller countries, industrial production is hampered even as regards expanding the production of consumer durables and non-durables.

/The fact

The fact that broad social strata are excluded from the market for manufactured goods because of their negligible purchasing power is an important factor behind the slow rate of growth in many branches of manufacturing. This, combined with generally low income levels and often small populations, leads to the underutilization of installed capacity, which is also caused by the bottlenecks which affect the supply of certain key inputs. Under-utilization of equipment, moreover, boosts production costs and hence affects the capacity to export on a competitive basis.

Account must also be taken of certain institutional and organizational factors, associated with the behaviour of both management and labour, in exploring the possibilities of making more intensive use of productive capacity by mobilizing the domestic supply of resources.

All these problems have prompted active efforts to reformulate industrial development policy in order to impart new impetus to industrial growth and begin a new phase that will profit from all the substantial progress that has been made so far. The efforts to promote integration among Latin American countries, an outstanding recent example of which is the efforts being made by the countries signatory to the Cartagena Agreement, form part of the reformulation exercise. There has also been progress in recent years in the export of manufactures which, in addition to opening up new markets, has brought appreciable changes in policies and attitudes regarding production in many sectors. Factors that must be given due weight in this reformulation are the mobilization of domestic resources, policies to ensure more active and productive use of labour and more intensive utilization of productive capacity, and a redistribution of income that will provide access to the market for the broad strata of the population which at present are outside it.

## 2. Investment performance and financing

The average percentage of the gross domestic product used for investment - including changes in stocks - was 19.1 per cent between 1950 and 1969.<sup>3/</sup> During this period the product grew at an annual rate of 5.3 per cent, and investment at a rate of 5.8 per cent.

Nevertheless, if investment is evaluated on the basis of world prices, - in those areas where comparison is possible - the average investment coefficient in relation to the product is markedly lower. Estimates made in 1960 indicated that, under some conditions, the fixed investment coefficient in that year might be as low as 13 per cent, instead of the 17.6 per cent calculated on the basis of domestic prices. The estimates were only rough approximations and they should be re-examined in the light of more statistical and technical information. Nevertheless, they illustrate the enormous differences in the relative prices of capital and consumer goods on the domestic markets of the Latin American countries and of the United States (see table 3).

The possibility of translating this investment into an increase in the growth rate of the product was thwarted by a number of factors. The first of these was underutilization of productive capacity owing to a series of structural and institutional distortions that caused serious bottlenecks, particularly those relating to the external sector and market size.

Secondly, a high proportion of investment was devoted to infrastructural works, which have a low yield in terms of increases in the product; this is the case, for example, of the energy and transport sectors which, like fairly complex industries such as the steel industry, require a large amount of investment and a relatively long lead time. Moreover, in the early 1960s strong social pressures increased the demand for community goods and services and meant that a sizable proportion of investment was channelled towards public health, housing, education and urban facilities, all sectors where investment is imperative but where the effect on productivity is not equally proportional and immediate.

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<sup>3/</sup> Calculated on the basis of dollars at 1960 prices using average exchange rates for imports.

Table 3

LATIN AMERICA<sup>a/</sup> TOTAL GROSS INVESTMENT AS A PROPORTION OF  
THE GROSS DOMESTIC PRODUCT <sup>b/</sup>  
(Percentages)

Period	Total gross investment coefficient
1950	17.9
1951-53	20.2
1954-56	19.5
1957-59	19.2
1960-62	18.8
1963-65	18.3
1966-68	18.6
1969	19.6
1950-69	19.1

Source: ECLA, on the basis of official statistics.

a/ Excluding Cuba and Haiti.

b/ In dollars at 1960 prices, converted at the exchange rate for imports.

/This is



This is not to say, however, that this investment has not had a direct effect on production during the period under consideration; the basic point is that, because of the time-lags involved and the low initial level, in general its contribution to production has been comparatively less than that of investment in directly productive activities.

Shortfalls in the supply of capital goods must also be taken into account. The external bottleneck very much hampered the capacity to import capital goods, while domestic production was limited because of the technological requirements of capital goods, market size and the phasing of industrialization itself in such a way as to leave the production of such goods to the final stage.

Furthermore, the region as a whole has not performed satisfactorily as regards the accumulation of domestic resources. In principle, it may be said that given the relatively low level of per capita income, it is difficult to hold down the growth of consumption - which in any case increased per capita at an annual rate of only 2 per cent during the period 1950-1969 - and thus further increase investment resources.

Even within these limitations, however, it is important to examine the possibility of turning potential investment resources into real investment. The consumption level of some segments of the top-income groups is not only high in terms of per capita volume and its composition of goods and services, it is also very high in comparison with current levels of national income and the total volume of investment. The public sector, which has played an important role especially as regards investment in the infrastructure and its financing, has found its savings potential limited because it has had to satisfy a number of social needs that increased its consumption expenditure (see table 4 and table B in the appendix).

Lastly, the gross fixed investment coefficient of the Latin American countries has remained practically unchanged, and has even tended to decline during some periods. External factors such as the external price ratio, transfers of income for investment purposes, and foreign borrowing have, of course, had a great deal to do with these ups and downs (see again table 4).

Table 4

LATIN AMERICA:<sup>a/</sup> FINANCING OF TOTAL GROSS INVESTMENT

(Percentages of the gross domestic product) b/

Period	Gross national saving	Net external financing c/	Total saving (equal to gross investment)
1950	18.73	-0.86	17.87
1951-53	18.81	1.37	20.18
1954-56	18.68	0.85	19.53
1957-59	17.12	2.05	19.17
1960-62	17.25	1.56	18.80
1963-65	17.75	0.50	18.25
1966-68	17.06	1.53	18.59
1969	17.86	1.71	19.68
1950-69	17.83	1.22	19.05

Source: ECLA, on the basis of official statistics.

a/ Excluding Cuba and Haiti.

b/ In dollars at 1960 prices, converted at the exchange rate for imports.

c/ Balance-of-payments surplus or deficit on current account, i.e. the difference between payments for imports plus transfers of profits and interest payments, on the one hand, and earnings from exports, on the other. It is not the same as "aggregate net external contribution" in table 5.

/The total

The total inflow of foreign capital has come to make a significant contribution to the financing of capital formation and, in particular to meeting import requirements for the group of countries excluding Venezuela. Table 5 indicates that in the period 1960-1964 the net figure for such financing represented 11.47 per cent of imports. The table also shows, however, that after growing rapidly in the three preceding five-year periods, the proportion of such financing in relation to imports fell sharply in 1965-1969, one of the reasons being the high level of servicing resulting from the cumulative indebtedness of earlier years, and the other the relatively greater increase in imports of goods and services.

This demonstrates the well-known fact that the great use made of external financing to solve balance-of-payments difficulties increasingly limited the potential of such financing. At present, although the gross inflow of external capital is still at a high level, the level of indebtedness, and hence transfers of profits and servicing payments, are also rising and moving towards the point at which they will cancel out the net inflow.

As noted in a recent report,<sup>4/</sup> this trend can be considered normal in the sense that a country cannot continue borrowing from abroad indefinitely. Adequate domestic investment resources must be a primary objective. Accordingly, as a given country gradually approaches this goal, a time will come when the net inflow of foreign capital, after attaining a maximum, begins to diminish. Meanwhile, the amount represented by payments of interest and profits naturally continues to increase. And in the course of the process, these service payments first come to equal the net inflow of new capital and later to exceed it; thus a net outflow of funds takes place. However, with the passage of time and as the economy of the country becomes stronger both internally and externally, it is possible to reduce its aggregate foreign debt and the amount of foreign investment.

The problem in Latin America is that the moment when net inflows of foreign capital are cancelled out by servicing and become a net outflow has occurred too soon. External financing, has become a net outflow before

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<sup>4/</sup> Raúl Prebisch, op. cit.

savings and exports have been able to grow sufficiently to cope with the situation without affecting economic growth. Hence in recent years many Latin American countries have had to use some of their scarce foreign exchange to make up for the excess of servicing and profit payments over gross inflows, thus achieving surpluses on their trade balances which left little margin for expanding imports of goods essential for development.

Table 5 also shows that the situation is even less satisfactory if account is taken of Venezuela, owing the large weight in the total of remittances of profits corresponding to petroleum investment.

### 3. Exports

The analysis of the evolution and structure of exports both at the level and for the region as a whole shows a clear picture of sluggish growth.

The average annual growth rate of exports was 4.6 per cent during the period between 1951-1953 and 1966-1968, and 6.1 per cent between 1966-1968 and 1969, while in the same periods, purchasing power grew by 3.1 and 6.4 per cent a year, respectively (see table 6). In other words, despite the notable upswing in recent years, the purchasing power of exports reached an average annual per capita growth rate of barely 1.5 per cent in the period 1950-1969. Taking the period from 1951-1953 to 1966-1968 only, it can be seen that the growth in purchasing power was only just enough to cover the population increase. In any event, it is clear that the slow growth of exports, which was also influenced by unfavourable terms of trade, was too little to satisfy the foreign exchange needs deriving from a reasonable increase in the per capita product. This situation is linked with the fact that most of the goods exported by the region are characterized by a low income and demand price elasticity, to which should be added the repercussions of the technological progress of the developed regions on the structure of world supply, since these regions have replaced imports from Latin America by their own goods and have placed large surpluses on the external market.<sup>5/</sup> Furthermore,

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<sup>5/</sup> According to estimates based on data contained in United Nations Monthly Bulletin of Statistics, Latin America's share of world exports fell from 11.9 per cent in 1950 to 5.5 per cent in 1969.

Table 5

**LATIN AMERICA: AGGREGATE NET EXTERNAL CONTRIBUTION TO THE FINANCING  
OF IMPORTS OF GOODS AND SERVICES**

	Loans <u>a/</u>		Direct foreign investment <u>b/</u>		Net official transfers		Aggregate net inflow <u>c/</u>		Imports of goods and services (annual average in millions of dollars)	
	(1)		(2)		(3)		(4)		(5)	
	A	B	A	B	A	B	A	B	A	B
1950-54	2.96	3.32	-6.90	-1.57	0.30	0.35	-3.64	1.70	7 039.0	6 040.6
1955-59	4.19	4.60	-3.05	1.57	0.97	1.24	-2.11	7.40	8 770.5	6 895.2
1960-64	8.39	10.88	-8.01	-0.92	1.27	1.51	1.65	11.47	9 664.0	8 182.0
1965-69	4.22	4.25	-7.92	-3.52	0.99	1.19	-2.71	1.92	12 738.7	10 833.9
1950-69	4.94	5.76	-6.47	-1.21	0.88	1.07	-0.65	5.62	9 553.1	7 987.9

Source: ECLA, on the basis of International Monetary Fund, Balance of Payments Yearbook, vols. 8-20.

a/ Short-, medium- and long-term loans minus (-) amortization and interest.

b/ Direct foreign investment minus (-) depreciation and profits.

c/ Equals (1)+(2)+(3).

A: Latin America excluding Cuba and Haiti.

B: Latin America excluding Cuba, Haiti and Venezuela.

Table 6

## LATIN AMERICA: GROWTH RATE AND PURCHASING POWER OF EXPORTS, BY COUNTRY

(Average annual growth rates in percentages)

Country	Volume of exports				Purchasing power of exports			
	1951-1953 1960-1962	1960-1962 1966-1968	1951-1953 1966-1968	1966-1968 1969	1951-1953 1960-1962	1960-1962 1966-1968	1951-1953 1966-1968	1966-1968 1969
Argentina	4.5	3.5	4.2	4.1	3.8	4.7	4.1	3.6
Bolivia	-2.4	8.2	1.7	2.8	-1.6	15.4	4.9	5.1
Brazil	2.7	5.2	3.7	13.3	-0.4	4.2	1.5	14.0
Costa Rica	5.4	9.8	7.2	10.6	2.6	9.3	5.3	10.3
El Salvador	6.8	9.1	7.7	0.0	2.6	8.6	5.3	-2.0
Guatemala	7.1	12.9	5.4	7.5	2.8	10.4	5.8	7.8
Honduras	2.3	11.1	5.7	3.3	0.4	13.5	5.5	2.0
Nicaragua	7.3	11.7	9.0	1.8	2.8	13.3	6.8	-0.4
Colombia	2.8	3.6	3.1	9.8	0.2	3.0	1.3	7.4
Chile	3.0	4.8	3.7	4.1	3.0	9.3	5.5	12.0
Ecuador	6.9	5.8	6.5	-4.7	4.0	5.4	4.5	-4.5
Mexico	4.8	4.9	4.8	7.4	3.1	4.3	3.6	6.6
Panama	6.2	10.4	7.9	11.9	5.5	11.0	7.7	12.3
Paraguay	4.1	3.9	4.0	9.4	2.8	5.0	1.3	8.8
Peru	9.7	3.0	7.0	3.2	8.0	8.8	7.4	4.6
Dominican Republic	4.5	2.8	1.6	9.9	3.0	1.9	1.7	11.8
Uruguay	-0.4	3.1	1.0	4.2	-1.7	3.0	0.1	3.8
Venezuela	6.4	2.9	5.0	2.3	3.8	-2.9	1.1	0.3
<u>Total</u>	<u>4.7</u>	<u>4.5</u>	<u>4.6</u>	<u>6.1</u>	<u>2.6</u>	<u>3.9</u>	<u>3.1</u>	<u>6.4</u>

Source: ECLA, on the basis of official statistics.

a/ On the basis of 1960 prices.

/in some

in some cases, the exports of other less developed regions are growing at a relatively faster rate, so that Latin America's position as an exporter has declined considerably. Cases in point are petroleum exports from Venezuela, coffee from Brazil and Colombia and cereals from the temperate-zone countries.

Exports and the purchasing power of exports by country have followed widely varying trends in Latin America, so that it is necessary to distinguish between specific cases. In the period from 1951-1953 to 1960-1962, for instance, trends differed widely in the biggest exporting countries. Thus, while the growth rate of exports from Argentina, Mexico, Venezuela and Peru was well above the regional rate of 4.7 per cent, it was barely 2.8 per cent for Brazil, Colombia and Chile. Since the above-mentioned countries account for slightly more than 80 per cent of the region's exports, trends in the other countries did not substantially alter the performance of Latin America as a whole, although the Central American countries (excluding Honduras), Panama and Ecuador achieved higher-than-average growth rates. The notable upswing in exports from Peru, thanks to exceptionally favourable trends in sales of fish meal, to begin with, and later, of copper, and the flourishing growth of petroleum exports from Venezuela towards the end of the 1950s, coinciding with the end of the Suez conflict, contrast with the sluggishness of exports from Brazil and Colombia, whose coffee exports - which account for a large proportion of their total exports - were seriously affected by the fall in coffee prices from about 1955 onwards.

In the period between 1960-1962 and 1966-1968, there was a marked recovery of exports from Brazil, Chile, Bolivia, Panama and, in particular, from the Central American countries, whose intra-area trade was intensified with the creation of the Central American Common Market. At the same time, there was a drop in the growth rate of exports from Argentina and, in particular, from Peru and Venezuela; as a result, the average annual growth rate for the region was only 4.5 per cent. It should be pointed out, however, that as a result of the improved terms of trade the purchasing power of exports, compared with the previous period, rose from an annual average of 2.6 per cent to 3.9 per cent. In other words, while the negative terms of trade in the period from 1951-1953 to 1960-1962 caused the volume of exports to fall by 2.1 per cent a year, the drop was only 0.6 per cent in the period 1960-1962. This improvement was largely due to the exceptionally high prices paid for copper from Chile and Peru, Bolivian tin and various products from Argentina.

/With some

With some exceptions, there was a sharp upswing in exports between 1966-1968 and 1969, and although the growth of purchasing power outstripped the growth of exports in only six countries, exports and the purchasing power of exports for the region as a whole grew at an annual rate of 6.1 and 6.4 per cent, respectively. In this connexion, special mention should be made of the cases of Chile, Panama and the Dominican Republic, whose purchasing power grew by around 12 per cent, and Costa Rica with 10.3 per cent, and especially of Brazil where it grew by 14 per cent.

It is interesting to note that, while there have been sharp fluctuations in the trends of typical Latin American exports in the last two decades, especially at the country level, the volume of exports for the region as a whole grew slowly but surely and had a marked influence on the evolution of the product, as is shown in table 7.

As regards the structure of exports, although significant progress has been made, primary products continue to be predominant. While food, raw materials and fuel accounted for 91 per cent of total exports in 1955, that proportion had declined to 83.2 per cent in 1968. The remaining exports were chemicals, machinery and other manufactures, including processed non-ferrous metals (see table 8). It should also be mentioned that coffee, petroleum and petroleum products alone accounted for slightly more than 35 per cent of the region's exports goods, and the addition of about fifteen other individual products would bring the proportion up to at least 75 per cent of the total. In other words, apart from being made up of primary products, there is very little variety in the exports.

Table 7

LATIN AMERICA: ANNUAL GROWTH RATE OF THE GROSS DOMESTIC  
PRODUCT AND OF EXPORTS OF GOODS AND SERVICES

(Percentages) <sup>a/</sup>

	1951-53/ 1960-62	1960-62/ 1966-68	1951-53/ 1966-68	1966-68/ 1969
Gross domestic product	5.5	4.8	5.2	6.0
Exports of goods and services	4.7	4.5	4.6	6.1

Source: ECLA, on the basis of official data.

<sup>a/</sup> On the basis of 1960 dollar prices, converted at the exchange rate for imports.

/Table 8



Table 8

LATIN AMERICA: TRADE BY REGION AND BY SITC<sup>a</sup> SECTIONS OF COMMODITIES

(Millions of dollars)

		Total		Food (0 and 1)		Crude materials (2 and 4)		Fuels (3)		Chemicals (5)		Machinery (7)		Other manufac- tured goods (6 and 8)	
		1955	1968	1955	1968	1955	1968	1955	1968	1955	1968	1955	1968	1955	1968
World	Exports	7 970	12 190	3 760	5 190	1 540	2 130	1 950	2 820	85	235	12	160	660	1 640
	Imports	7 060	12 120	890	1 350	550	710	640	730	620	1 490	2 220	4 960	1 900	2 690
	Balance	910	70	2 870	3 840	990	1 420	1 260	2 090	-535	-1 255	2 208	4 800	-1 240	-1 050
Developed market economies	Exports	6 170	9 030	3 230	4 010	1 300	1 710	970	1 810	65	110	5	74	600	1 310
	Imports	5 760	9 380	510	730	280	380	155	165	600	1 320	2 180	4 510	1 730	2 090
	Balance	500	-350	2 720	3 280	1 020	1 330	815		-535	-1 210	-2 175	-4 436	-1 130	-780
United States	Exports	3 510	3 970	1 920	1 950	500	400	650	910	35	62	3	50	395	530
	Imports	3 300	4 660	345	445	145	255	145	150	365	620	1 320	2 210	790	860
	Balance	210	-690	1 575	1 505	355	225	505	760	-330	-558	-1 317	-2 160	-445	-330
Canada	Exports	120	425	63	50	4	17	36	345	2	2	-	1	5	6
	Imports	165	370	49	62	13	37	-	-	20	13	29	155	52	105
	Balance	-45	55	14	-12	-9	-20	36	345	-18	-11	-29	-154	-47	-99
Western Europe	Exports	2 290	3 940	1 190	1 880	610	840	235	500	25	39	2	15	245	670
	Imports	2 000	3 690	132	205	135	76	9	16	210	645	800	1 830	750	870
	Balance	290	250	1 058	1 675	505	764	226	484	-185	-606	798	-1 815	-505	-200
EEC	Exports	1 240	2 370	620	1 180	375	540	105	185	14	24	2	10	140	430
	Imports	1 210	2 230	43	79	28	34	5	10	125	460	510	1 110	460	500
	Balance	30	140	577	1 101	347	506	100	175	-111	-436	-498	-1 100	-320	-130
EFTA	Exports	870	1 140	460	400	185	260	115	250	9	11	-	4	100	210
	Imports	670	1 150	52	79	38	26	3	5	78	170	245	590	240	260
	Balance	200	-10	408	321	147	234	112	245	-69	-159	-245	-586	-140	-50
Japan	Exports	230	660	54	120	170	375	-	54	3	6	-	8	1	95
	Imports	180	600	2	2	1	10	1	1	5	30	33	310	140	250
	Balance	50	60	52	118	169	365	1	53	-2	-24	-33	-302	-139	-155
Eastern Europe and USSR	Exports	175	630	90	495	79	140	-	-	6	8	-	-	-	6
	Imports	140	880	3	150	10	63	23	89	6	50	34	355	50	170
	Balance	35	-230	87	345	69	77	-23	-89	-	-42	-34	-355	-50	-164
Developing market economies	Exports	1 620	2 420	455	590	155	285	940	1 330	14	105	6	87	65	325
	Imports	1 250	1 780	375	445	265	255	460	470	15	115	6	92	125	390
	Balance	370	640	60	145	-110	30	480	920	-1	-10	-	-5	-60	-65
Latin America		760	1 380	360	425	145	210	175	230	14	105	5	83	63	315

Source: United Nations, Monthly Bulletin of Statistics (March 1970).

Exports of manufactures are in fact less than would appear from table 8. In fact, if division 68 of the SITC (included under the heading of "Other manufactures" in table 8), which refers to non-ferrous metals in the form of bars is excluded, the proportion of manufactures in the total exports of the region was only 7.5 per cent in 1968. Obviously, within this context, there is a diversity of situations at the country level. Among the biggest exporters of manufactures are Mexico and Argentina, with 18.3 and 12 per cent, respectively. The Central American countries have also made great strides since the establishment of the Common Market; exports of manufactures by this subregion was an average of 18.5 per cent of total exports. The latter case calls for some comment: although most of the exports went to countries in the subregion itself, and many of the manufactures are not very sophisticated, there is no doubt that the trend is significant, especially considering that, despite the low level of industrialization, proportionately greater progress was made by the countries of the subregion than in other, more industrialized, countries of Latin America.

As regards the geographical destination of exports, there has been a greater diversification of markets since the end of the Second World War. The proportion of exports to the United States in the total fell from 44 per cent in 1955 to 32.6 per cent in 1968, while exports to Western Europe rose from 28.7 to 32.3 per cent of the total in the same period. Similarly - although their share is still small - the proportion of exports to Japan and Eastern Europe rose from 2.9 to 5.4 per cent and from 2.2 to 5.3 per cent, respectively. On the other hand, the proportion of exports to the developing countries remained unchanged at 20 per cent (see again table 8).

The increase in exports to Western Europe helped to offset the fall in the share of the United States market but did not substantially improve Latin America's export trends, since the growth rate of exports to the European countries was kept down by protectionist policies introduced by the latter to promote development of their own output of raw materials, both natural and man-made, and to step up trade with African and Asian countries.

/On the

On the other hand, intra-regional trade grew at a fairly rapid rate, largely under the impetus of the establishment of the Latin American Free Trade Association and the Central American Common Market; but since such trade was very small to start with, it did not carry much weight on the total. Intra-regional exports compared with total exports were 9.5 per cent in 1955 and 11.3 per cent in 1968.

As regards future export prospects, it may be said that, given the structure and geographical destination of Latin American external trade, great efforts would be required to speed up the growth of exports. Prospects for raw materials, especially agricultural products, do not seem much more favourable than in the past. Although exports of some products, such as meat, various metals, and new agricultural products could grow more, it is obvious that exports of such commodities as coffee, bananas, wool, fish-meal, petroleum and some cereals and oilseeds will not grow as in the past. Thus, judging by available data, exports of primary products as a whole are not likely to grow much faster than hitherto.

The prospects for increasing the over-all growth rate of exports, therefore, will depend mainly on industrial exports. Great strides have already been made in that direction. Table 8 shows that the total volume of exports grew from 757 million dollars in 1955 to 2,035 dollars in 1968, or at an annual rate of 7.9 per cent. Intra-regional trade, which accounts for a part of these figures, has been more intense, and amounted to 82 million dollars in 1955 and 503 million in 1968, an annual growth rate of 15 per cent; in the latter year, intra-regional trade accounted for 24.7 per cent of total exports of manufactures. This demonstrates the potential of regional integration, since this considerable growth is largely due to the progress made in the Central American Common Market and the initial impetus given to trade by the ALALC countries. The results of the Andean Subregional Integration Agreement are not yet quantifiable but it can be said that the creation of the Andean Group reaffirms the importance of integration. Thus, without entering into speculation on quantities, for which in any event there is little basis, it may be concluded that the strengthening of the manufacturing industry in

/Latin America

Latin America has been closely linked with the increased economic co-operation and integration between the countries of Latin America, which should help to expand the market for each national industry, improve its competitive position and thus give it an increasing ability to export to other than Latin American markets.

#### 4. Imports

The trend of Latin America's imports over the past twenty years has been the same as that of the purchasing power of exports, but this is not apparent from short-term analyses because of the sharp annual fluctuations in both variables. The ups and downs only level out over a fairly long period of time. For example, over the whole period between 1951-1953 and 1966-1968, imports of goods and services increased annually by 3.2 per cent and the purchasing power of exports by 3.1 per cent. Their growth was slow but this did not prevent the gross domestic product from rising by an annual 5.2 per cent during the same period (see table 9).

The drop in the import coefficient, attributable in the main to the advance of import substitution, was particularly noticeable in countries which were the largest producers and had the biggest populations, and in Uruguay, which was a special case. Thus, in Argentina, Brazil, Colombia, Mexico, Uruguay and Venezuela, which account for around 84 per cent of the product and 78 per cent of the population of Latin America, the import coefficient fell to the extent shown in table 10. As a result, the region's average import coefficient for goods dropped from 13.2 per cent in 1950 to 9.4 per cent in 1966-1968; taking goods and services together, it fell 14.8 per cent to 11.5 per cent, which shows that import substitution had not gone so far in the services sector as in that of goods.

Table 9

## LATIN AMERICA: EVOLUTION OF THE PRODUCT, OF PURCHASING POWER AND OF IMPORTS

(Percentage annual growth rates) a/

Country	Product				Purchasing power of exports				Imports			
	1951-1953	1960-1962	1951-1953	1966-1968	1951-1953	1960-1962	1951-1953	1966-1968	1951-1953	1960-1962	1951-1953	1966-1968
	1960-1962	1966-1968	1966-1968	1969	1960-1962	1966-1968	1966-1968	1969	1960-1962	1966-1968	1966-1968	1969
Latin America	5.5	4.8	5.2	6.0	2.6	3.9	3.1	6.4	2.9	3.6	3.2	7.3
Argentina	3.6	2.9	3.4	5.4	3.8	4.7	4.1	3.6	4.8	-1.7	2.2	14.2
Bolivia	0.2	5.7	2.4	6.9	-1.6	15.4	4.9	5.7	5.9	10.6	7.6	9.8
Brazil	7.1	4.2	5.9	8.0	-0.4	4.2	1.5	14.0	0.0	2.0	0.8	10.8
Costa Rica	6.7	7.0	6.8	7.4	2.6	9.3	5.3	10.3	5.9	10.1	7.6	9.8
El Salvador	4.5	6.1	5.2	3.5	2.6	8.6	5.3	-2.0	5.6	9.8	7.3	-3.3
Guatemala	4.2	5.4	4.7	5.3	2.8	10.4	5.8	7.8	4.6	9.9	6.7	3.2
Honduras	3.4	5.6	4.2	4.5	0.4	13.5	5.5	2.0	2.3	14.3	7.0	4.3
Nicaragua	4.5	7.5	5.7	4.2	2.8	13.3	6.8	-0.4	5.3	15.3	9.2	-5.4
Colombia	4.7	4.7	4.7	5.9	0.2	3.0	1.3	7.4	2.5	2.6	2.6	6.7
Chile	3.4	4.8	4.0	2.8	3.0	9.3	5.5	12.0	6.7	3.3	7.3	9.8
Ecuador	4.6	4.7	4.6	4.7	4.0	5.4	4.5	-4.5	6.1	7.3	6.6	7.8
Mexico	5.8	7.5	6.4	6.0	3.1	4.3	3.6	6.6	3.3	4.9	3.9	6.5
Panama	6.0	7.8	6.7	7.9	5.5	11.0	7.7	12.3	6.6	8.9	7.4	9.7
Paraguay	3.3	4.3	3.7	6.7	2.8	5.0	1.3	8.8	3.5	6.3	4.6	7.8
Peru	5.3	5.7	5.5	1.3	8.0	8.8	7.4	4.6	5.1	11.3	7.5	-6.3
Dominican Republic	4.7	3.0	4.0	5.3	3.0	1.9	1.7	11.8	0.7	10.8	4.6	11.1
Uruguay	2.5	0.2	0.9	2.4	-1.7	3.0	0.1	3.8	0.5	-3.8	-1.3	5.4
Venezuela	6.8	4.8	6.0	4.3	3.8	-2.9	1.1	0.3	2.1	0.9	1.6	7.0

Source: ECLA, on the basis of official statistics.

a/ On the basis of 1960 dollar prices, converted at the exchange rates for imports.

Table 10

LATIN AMERICA: RATIO OF IMPORTS OF GOODS TO THE GROSS DOMESTIC PRODUCT, BY COUNTRY <sup>a/</sup>

(Percentages)

Country	1950	1960-1962	1966-1968
Argentina	12.7	11.5	7.8
Bolivia	15.1	20.8	25.9
Brazil	9.2	5.5	4.9
Costa Rica	22.3	23.4	27.3
El Salvador	14.4	19.2	24.0
Guatemala	12.7	12.3	14.5
Honduras	16.5	18.7	29.2
Nicaragua	15.5	19.2	30.0
Colombia	16.4	12.5	10.2
Chile	8.5	13.0	13.5
Ecuador	11.1	12.3	17.9
Mexico	11.7	9.0	7.6
Panama	32.4	32.2	34.3
Paraguay	11.1	15.4	16.2
Peru	16.0	19.8	23.7
Dominican Republic	17.1	15.8	26.4
Uruguay	20.3	17.5	13.3
Venezuela	25.0	14.0	11.8
<u>Latin America</u>	<u>13.2</u>	<u>10.2</u>	<u>9.4</u>

Source: ECLA, on the basis of official statistics.a/ On the basis of 1960 dollar prices, converted at the exchange rates for imports.

The trend of the import coefficient was very different from country to country, falling in some and rising in others. In countries where it fell, imports grew much more slowly than in the others - mainly because of the slower growth of the purchasing power of exports - but their gross domestic product increased faster on the whole. This requires some explanation.

/As a

As a rule, the demand for imported goods is inclined to grow more quickly than the product in Latin American countries. If, however, the capacity to import is too low for this demand to be satisfied, one of two things will happen: either the product will grow even more slowly than imports, or imports will drop to a point where the product is at least able to keep pace with them.

Occasionally, and above all in the early stages of the substitution process, the drop in the import coefficient would seem to be due not so much to a deliberate and broad long-term policy aimed at strengthening the economy and maintaining activity at a higher level than would be possible merely on the basis of export earnings plus a boom period influx of foreign capital as to external bottlenecks deriving essentially from a falling off in the purchasing power of exports (see tables 9 and 10). Moreover, although the drop in the import coefficient was largely reflected in the replacement of imports by greater domestic production of the same goods, it frequently happened that the restrictions placed on imports diverted demand to other domestic goods and services. Even though both are a form of the economy is quite different in qualitative terms.

From the historical point of view, there are two particularly interesting aspects of the import substitution problem. First of all, while it is undoubtedly true that declining import coefficients were attributable largely to the slower growth of the capacity to import, it is equally certain, and possibly even more relevant, that they occurred in countries that were in a far better position to carry on import substitution in view of their level of development and the size of their markets.

On the other hand, it could be assumed that in countries where the import coefficient did not drop, which usually had only a very small domestic market, another factor came into play that might possibly have slowed down the substitution process, namely, the fairly satisfactory growth rate of exports and the greater inflow of external resources (see table 9, and table B of the appendix).

The progress made in import substitution varied according to the type of goods involved. For the region as a whole, the share of imports of consumer durables and non-durables in total private consumption dropped

/from 3.5 per cent

from 3.5 per cent in 1950 to 2.1 per cent in 1966-1968 and that of imports of capital goods and construction materials in gross investment from 25.4 to 15.2 per cent and from 5.5 to 1.6 per cent, respectively (see table 11).

As can be seen, the import coefficient fell most sharply in the capital goods sector, which is understandable seeing that, in the initial phase of the substitution process, it had been mainly consumer goods that had been replaced.

In the larger countries, emphasis was placed on capital goods in the substitution process from about the middle of the 1950s. For instance, the share of imported goods in the total gross investment of Argentina, Brazil and Mexico, which in 1950 had been 23.3 per cent, had dropped to 10 per cent by 1966-1968. These, then, were the countries that made most progress in import substitution, since the corresponding figures for the others were of 28.5 and 26.7 per cent.

Generally speaking, purchases of capital goods varied according to the capacity to import, especially since the major countries of the region replaced nearly all imported consumer goods by local production, except for a very few (in 1966-1968, the share of imported consumer goods in private consumption averaged no more than 0.68 per cent for the whole of Argentina, Brazil and Mexico). Therefore, when it had to meet external financial commitments in 1963, for example, Brazil cut back its imports of capital goods more than its imports of consumer goods. Argentina, for its part, resorted to foreign borrowing in order to increase its imports of capital goods in 1961-1962 but, when export earnings subsequently rose considerably, its purchases of capital goods failed to follow suit because a large part of these earnings had to be set aside to pay off its debts.

As a rule, whenever the import coefficient drops very low and a country's imports are concentrated on capital goods, raw materials and intermediate goods, as happens in the more advanced Latin American countries (the combined import coefficient of Argentina, Brazil and Mexico for these items averaged 6.3 between 1966 and 1968), fluctuations in the capacity to import force the country to choose which of these categories of goods it will postpone purchases of. If, on the one hand, it cuts back imports of raw materials and intermediate goods, the level of economic activity - and therefore employment - will suffer; if, on the other, it decides to reduce its imports of capital goods, it will jeopardize the rate of capital formation and its future economic development.

/Table 11



Table 11

LATIN AMERICA:<sup>a/</sup> EVOLUTION OF THE IMPORT COEFFICIENT <sup>b/</sup>

Year	Imports of consumer goods (percentages of total private consumption)		Imports of capital goods (percentages of total gross investment)		Crude materials, semi- finished goods and fuels (percentages of the total product)	
	Durables	Non- durables	Construction materials	Machinery and equipment	Crude materials and inter- mediate goods	Fuels
1950	1.2	2.3	5.5	25.4	4.0	1.0
1960-1962	1.0	1.6	2.2	18.3	3.7	0.8
1966-1968	0.8	1.3	1.6	15.2	4.1	0.7

Source: ECLA, on the basis of official statistics.

a/ Excluding Cuba, Haiti and Paraguay.

b/ On the basis of 1960 dollar prices, using the exchange rates for imports to convert the figures for the product, investment and consumption originally in national currencies.

/As regards

As regards the order the stages of import substitution followed, it can be seen that, while there was a certain logical and gradual development in keeping with the existing market, there is no denying that postponing for too long the stage when certain basic goods are locally produced did produce problems. Between 1940 and 1950, some countries made big strides in setting up basic industries. The Volta Redonda steel plant in Brazil, the iron and steel industry set up by Corporación de Fomento de la Producción (CORFO) in Chile and several basic industries in Mexico with strong government support are cases in point. Even so, the region as a whole is still far behind in terms of its production of capital and intermediate goods compared with other goods.

There are certain very clear-cut trends in the structure of imports of goods. In 1966-1968, not only did consumer goods account for a mere 15.5 per cent of the total but about 30 per cent of them came from the region itself in 1968 (see tables 8 and 12).

The fastest-growing imports were of raw materials and intermediate goods, whose share of the total increased from 30.5 per cent in 1950 to 43.2 per cent in 1966-1968, largely under the impetus of the substitution process itself, which encouraged the consumption of certain goods for the production of which raw materials and intermediate goods must be imported. As for consumer and capital goods produced by the metal-transforming industries, a start was often made with the assembly of components, and the proportion of locally produced parts was gradually increased until a high degree of self-sufficiency was attained in certain areas.

The declining trend of the import coefficient in relation to the product and the change in the composition of imports has changed the character of external dependence. Although, quantitatively speaking, the countries' vulnerability to external pressures would seem to have diminished, in other ways it has grown, since in 1966-1968 imports of capital goods, raw materials, intermediate goods and fuels made up 80.8 per cent of the total, which means that these are the sectors that would suffer most from a possible cut-back in imports. The problem is even more serious in the bigger countries, since, as already pointed out, Argentina, Brazil and Mexico had combined import coefficient of only 6.3 per cent. This factor has made it abundantly clear that it is necessary to step up exports and, at the same time, to introduce a more selective import substitution policy.

/Table 12

Table 12

LATIN AMERICA: STRUCTURE OF IMPORTS, BY TYPE OF GOODS

(Percentages)

	1950	1960-1962	1966-1968
Non-durable consumer goods	12.3	10.8	9.6
Durable consumer goods	6.7	6.7	5.9
Construction materials	7.4	4.1	3.1
Capital goods	34.5	33.9	29.9
Crude materials and intermediate goods	30.5	35.8	43.2
Fuels	7.8	8.0	7.7
Other	0.8	0.7	0.6
<u>Total imports of goods</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Source: ECLA, on the basis of official statistics.

/Taking each

Taking each country separately, their future prospects obviously vary widely. As has already been shown, the import coefficient of the countries with a relatively large effective market is low and therefore cannot easily be reduced much further. In countries with medium-sized markets, the import coefficient in 1966-1968 ranged from 10.2 per cent in Colombia to 23.7 per cent in Peru. The most outstanding case was Venezuela which by means of a determined consumer goods import substitution policy, reduced its coefficient from 25 per cent in 1950 to 11.8 per cent in 1966-1968; even so, Venezuela, along with Chile, Colombia and Peru, reduced it hardly any further during the latter years - which may be an indication of a limited market. For their part, countries with the smallest effective market in general showed a rising import coefficient, particularly the members of the Central American Common Market, which increased their total imports and pushed their import coefficients fairly high despite a reduction in imports from outside the area.

In the light of such a variety of experiences, is it possible to offer any general pointers to the probable future trend of imports? Any generalization is bound to involve a considerable margin of error, of course, but it may tentatively be said that the restriction of imports as a means of stimulating domestic production and remedying the shortage of foreign exchange can no longer play the role it played in the past, since the structure of imports is such that this could only be achieved at the expense of goods that are indispensable to the economy's growth. The most important objective, therefore, is to attain an adequate capacity to import, mainly by providing systematic export incentives. Naturally this is not in any way to suggest that the import substitution process should be pushed into the backgroup. The fact is that, as the domestic product grows, the demand for final consumer goods increases at different speeds according to the sector. Generally speaking, the demand for manufactured goods, whose direct and indirect import coefficient is greater, tends to rise more quickly than for other goods. Thus, if the import coefficients of all the sectors of the economy remained constant, the over-all coefficient would rise, so that, under normal conditions, and over a fixed period of time, even if total imports maintain a constant

/ratio to

ratio to the product, a process of substitution must be taking place in certain sectors and compensating for this growing demand. Import substitution, particularly of goods for basic industries, still has an important part to play in the development of Latin America.

#### 5. External financing

Although the import coefficient was reduced from 14.8 per cent in 1950 to 11.8 per cent in 1969, export earnings were not sufficient to cover import payments in the region as a whole. The trade deficit for the period from 1950 to 1969 - excluding Venezuela which is a special case because of investment in petroleum amounted to an annual average of 223 million dollars at current prices, or 2.9 per cent of exports for the same period (see table 13).

As can be seen in table 13, on the basis of annual averages for five-year periods, the trade balance shows great ups and downs over the last two decades. The five year periods from 1955 to 1964 show a very significant trade deficit in both absolute and relative terms, which was accompanied by an intensification of gross capital inflow, not only to cover the deficit and help to strengthen the capacity to import, but also to pay for the servicing of the capital borrowed (see tables 5 and 14).

In view of the accumulated indebtedness and the high servicing and other payments thereon, many countries in the region adopted a policy of gradually reducing the amounts outstanding, or at least of keeping loans within certain limits so as to avoid excessive service payments. As a result the trade balance in several countries tended to improve and in some cases even showed a surplus. However, this was not enough to curb the increase in the ratio of service payments on foreign capital to exports of goods and services (see table 15), owing to the accumulated indebtedness referred to above, and to the gradual increase in transfers of profits from direct foreign investment.

/Table 13

Table 13

LATIN AMERICA<sup>a/</sup> TRADE BALANCE, ANNUAL AVERAGES FOR DIFFERENT PERIODS

(Millions of dollars)

Periods	Exports of goods and services (1)	Imports of goods and services (2)	Trade balance (3)=(1)-(2)
<u>Latin America (excluding Venezuela)</u>			
1950-1954	6 013.1	6 040.6	-27.5
1955-1959	6 570.2	6 895.2	-325.0
1960-1964	7 654.6	8 132.0	-527.4
1965-1969	10 821.8	10 833.9	-12.1
<u>Latin America</u>			
1950-1954	7 486.6	7 039.0	+447.6
1955-1959	9 008.8	8 770.5	+238.3
1960-1964	10 206.1	9 664.0	+542.1
1965-1969	13 385.6	12 738.7	+646.9

Source: ECLA, on the basis of IMF, Balance of Payments Yearbook, vols. 8-20.

<sup>a/</sup> Excluding Cuba and Haiti.

/An examination

An examination of the composition of the gross inflow of foreign capital may make it easier to understand the trend in external financing and its effect on service payments. The relative decrease of foreign investment as a source of financing should be pointed out here. For the region as a whole it accounted for an average 26.5 per cent of the gross inflow of foreign capital during the five years from 1950 to 1954, but in 1965 to 1969 this percentage fell to 13.9 per cent; if Venezuela is included the contrast is even more marked, since the percentages would then be 32.4 and 15.4, respectively (see table 14).

One pointer which shows the extent to which many countries had to import more than they exported - as a result of circumstances and not in accordance with any planned long-term trend - is that, throughout the period, compensatory loans accounted for a large proportion of the total gross inflow for Latin America. Loans of this kind represented 38.8 per cent of the gross inflow of foreign capital during the first half of the 1950s. This often meant that the countries could not pay for goods they had to import and had therefore to fall back on financing by commercial banks and monetary authorities. The relatively short repayment periods and high interest rates for commercial bank loans meant that when the due dates came up for repayments, some countries in the region were faced with a critical balance-of-payments situation.

An effort was made to remedy this situation during the 1960s, through refinancing operations which involved longer repayment periods and a re-orientation of the capital inflow to meet the needs of national development programmes in accordance with the policy promoted by the Alliance for Progress in its plan. In fact the proportion of compensatory loans in the gross inflow of capital dropped from 38.8 per cent in 1950-1959 to 14.3 per cent in 1965-1969, while the percentage of medium- and long-term non-compensatory loans rose from 19.6 to 57.5 per cent. However, the proportion of non-compensatory short-term loans also rose, although far less sharply, from 9.2 per cent to 12.7 per cent. Nevertheless these refinancing operations could not prevent a continued rise in the service payments on the external debt and on foreign capital, both in absolute terms and in relation to exports.

/Table 14.

Table 14  
LATIN AMERICA:<sup>a/</sup> INFLOW OF FOREIGN CAPITAL AND NET CONTRIBUTION TO THE FINANCING OF IMPORTS,  
ANNUAL AVERAGES FOR DIFFERENT PERIODS  
(Millions of dollars)

Period	Gross inflow of loans							Amortization of loans							Interest on loans	Net inflow of loans	Direct investment	Depreciation and amortization of direct investment	Profits on direct investment	Net inflow of foreign direct investment	Net official transfer payments	Over-all net contribution to the financing of imports
	Long- and medium-term			Short-term			Total short-, medium- and long-term	Long- and medium-term			Short-term			Total short-, medium- and long-term								
	Autonomous or non-compensatory	Compensatory	Total	Autonomous or non-compensatory	Compensatory	Total		Autonomous or non-compensatory	Compensatory	Total	Autonomous or non-compensatory	Compensatory	Total									
Latin America (excluding Venezuela)																						
1950-1954	216.3	224.3	440.6	93.1	204.7	297.9	738.4	166.2	139.9	306.0	42.7	102.3	145.0	451.1	86.7	200.6	266.4	34.8	350.8	-119.1	21.2	102.7
1955-1959	740.1	257.1	997.2	167.2	200.7	367.9	1 365.2	471.0	159.9	630.9	72.6	183.6	256.2	887.1	160.9	317.2	508.6	36.2	364.4	108.0	85.2	510.4
1960-1964	1 622.0	586.0	2 208.0	363.0	229.6	592.6	2 800.6	890.4	410.2	1 300.5	106.5	165.5	272.0	1 572.5	337.8	890.4	475.7	50.3	501.0	-75.5	123.3	938.2
1965-1969	2 461.6	446.2	2 907.8	538.6	193.7	733.3	3 640.1	1 498.8	511.3	2 010.1	238.0	248.9	486.9	2 497.0	682.3	460.7	588.8	69.7	900.4	-381.3	128.9	208.2
Latin America																						
1950-1954	217.8	224.3	442.1	102.5	207.1	309.5	751.6	168.2	139.9	308.1	43.4	104.9	148.3	456.4	87.1	208.2	360.6	54.4	792.2	-486.0	21.3	-256.5
1955-1959	899.6	277.0	1 176.7	203.3	202.4	405.7	1 582.4	622.3	159.9	782.2	84.7	183.6	268.3	1 050.5	164.0	367.9	842.3	50.5	1 059.5	-267.7	85.4	385.5
1960-1964	1 661.6	702.2	2 363.8	384.3	229.8	614.1	2 977.9	979.1	534.5	1 513.6	127.2	167.7	294.9	1 808.6	358.9	810.5	502.5	177.1	1 099.7	-774.2	123.1	159.4
1965-1969	2 575.4	446.2	3 021.6	567.6	200.1	768.7	3 789.3	1 524.0	523.3	2 047.3	241.2	255.5	496.7	2 544.0	707.9	537.3	689.0	86.1	1 612.4	-1 009.5	126.5	-345.8

Source: ECLA, on the basis of IMF, Balance of Payments Yearbook, vols. 8-20.

a/ Excluding Cuba and Haiti.



Table 15 shows that amortization payments on loans, together with depreciation of direct foreign investment increased from an annual average of 485.9 million dollars for 1950-1954 to 2,566.7 million for 1965-1969. In the same way payments of interest and profits rose from 437.5 to 1,582.7 million over the same periods. Thus the total service payments on foreign capital rose from 923.4 million dollars in 1950-1954 to 4,149.4 million in 1965-1969, whereas over the same period the value of exports of goods and services only rose from 6,013.1 to 10,821.8 million dollars, respectively.

Therefore, the total service payments on foreign capital rose from 15.4 per cent of total exports of goods and services in 1950-1954 to 38.3 per cent in 1965-1969. Although the figures mentioned previously were for Latin America excluding Venezuela, in this case the inclusion of Venezuela does not alter the results to any great extent (see table 15).

However this average coefficient for Latin America as a whole does not show how serious the problem is for some countries, where the corresponding figures are over 40 per cent, as, for example, in Brazil and Mexico, where they rose to 45 per cent in 1966-1968.

It is evident therefore that if development in Latin America is to be speeded up, there must be a substantial change in this situation, since owing to the excessive burden of service payments on foreign capital, the net inflow of foreign financing has been nil during the last few years (see the last column of table 14); and foreign capital is still indispensable, and will be for some time to come, if internal resources are to be more rapidly mobilized.

Table 15

LATIN AMERICA:<sup>a/</sup> FOREIGN CAPITAL SERVICING IN RELATION TO TOTAL EXPORTS,  
ANNUAL AVERAGES FOR DIFFERENT PERIODS

(Millions of dollars)

	Foreign capital servicing			Exports of goods and services	Coefficient of foreign capital servicing (3) ÷ (4)
	Amortization of compen- satory and non- compensatory loans and depreciation of direct investment (1)	Interest payments and profits (2)	Total (3)		
<u>Latin America (excluding Venezuela)</u>					
1950-1954	485.9	437.5	923.4	6 013.1	0.154
1955-1959	923.3	525.3	1 448.7	6 570.2	0.220
1960-1964	1 622.4	838.7	2 461.5	7 654.6	0.322
1965-1969	2 566.7	1 582.7	4 149.4	10 821.8	0.383
<u>Latin America</u>					
1950-1954	510.8	879.3	1 390.1	7 486.6	0.186
1955-1959	1 101.0	1 223.5	2 324.5	9 008.8	0.258
1960-1964	1 985.2	1 458.6	3 444.2	10 206.1	0.337
1965-1969	2 630.1	2 320.3	4 950.4	13 385.6	0.370

Source: ECLA, on the basis of IMF, Balance of Payments Yearbook, vols. 8-20.

a/ Excluding Cuba and Haiti.

## Chapter II

### PROJECTIONS FOR THE 1970s

#### 1. General considerations

The basic material for these projections consists of chronological national accounts series, i.e., series on the gross domestic product, consumption, gross fixed investment, changes in stocks, exports, imports, net factor income from the rest of the world, terms-of-trade gains, national income, net private transfer payments, net external financing (often called external saving), domestic saving and total investment. These series, on which the historical analysis for evaluating the projection assumptions have also been based, are expressed in national currency at 1960 prices, and are to be found in the statistical annexes to the country monographs, which have been published as separate documents.

The assumptions contained in the projections can be divided into two categories: (a) first, those relating to the values of pre-determined variables, and the form taken by the system of relations or the model and the relations themselves; (b) secondly, those relating to the targets, which in this case are the growth rates of the gross domestic product whose implications for the 1970s it is wished to analyse.

The projections taken together are the result of the pre-established targets for the product, a given growth rate for exports, and specific external financing conditions, and it is taken for granted that there will be no change in the system of relations between the economic variables expressed in the model, or in the numerical values for its coefficients and parameters. These projections make it possible to evaluate the nature and the magnitude of the difficulties arising out of the balance-of-payments position and the shortage of savings which Latin America must overcome if the assumed growth targets are to be

/Tables 16,

Tables 16, 17 and 18 present the annual rates of growth of the gross domestic product and of exports for individual countries and the region as a whole, and the explicit external financing assumptions. The model used for the projections is presented and discussed in Chapter III of this report. It must be made clear from the start, however, that in order to give the model a more solid basis, the estimates included in its parameters have been proved, not only as far as their statistical significance is concerned, but also by comparing some of the numerical values for coefficients of structural importance obtained through application of the model, with average historical values, particularly in the latest years for which such data are available. For this purpose, use was made of the conclusions and considerations of the historical analysis, of each of the countries studied.

Special attention has been paid in this study to the independence or interdependence of values and relations in the model. For example, how far would it be correct to accept as given that the estimated relations are valid for rates which are very different from the historical rates, and, in general, what is the sensitivity to certain numerical changes? Although this question is not completely clarified in every case, it has been taken particularly into account in adopting functions and parameters for some countries, especially those whose circumstances are quite different, historically from those which should apparently prevail vis-a-vis much higher growth rates, such as those that are assumed for the future. This is valid, above all, in the case of countries which have stagnated. In other cases where, in the last few years, there have been sweeping changes in external sector trends, which are not sufficiently reflected in the functions obtained by correlation, the functions and values of the parameters used for the projections were selected on the basis of an historical analysis.

## 2. Basic assumptions of the projections

### (a) Growth targets for the product

For the over-all consideration of the projections, two assumptions were adopted concerning the growth of the gross domestic product for each of the eighteen countries. These assumptions were applied from 1971 onwards; the product for 1969 and 1970 was estimated on the basis of the latest available data. The low growth rate hypothesis in some degree reflects the past evolution of the product for each country during the 1960s and assumes a constant growth rate during the 1970s. The accelerated growth hypothesis covers, first, the growth possibilities of each country and, secondly, attain a minimum target per capita growth rate of 3.5 per cent annually in the second half of the 1970s. The low growth rate hypothesis envisages an average annual growth rate of 5.5 per cent for the Latin American product over the period 1970-1980, while the accelerated growth hypothesis would be an average annual rate of 6.8 per cent for 1970-1975 and 7.3 per cent for 1975-1980. Table 16 shows the numerical values of the rates for all the countries considered.

The growth rate assumed for Brazil in the accelerated growth rate hypothesis is 8 per cent, which is reasonable in view of Brazil's enormous expansion over the last few years. The results of a lower growth rate assumption - 6 per cent - are considered under the low growth rate hypothesis.

### (b) Export trends

Three alternative growth rates have been considered for the purchasing power of exports: a low, a medium and a relatively high growth rate. The prospects in terms of volume of exports and their prices by types of goods were analysed separately for all the countries, on the basis partly of past trends and partly of present export promotion policies. Some instances that may be mentioned in this connexion are the plans for expanding production and exports of copper in Chile and tin and petroleum in Bolivia, the plan to promote exports of manufactures in Argentina, Brazil and Mexico, and the effects of integration in the Central American Common Market. The low and medium hypothesis have been determined in this

/Table 16

Table 16

LATIN AMERICA: HYPOTHESES REGARDING THE FUTURE GROWTH OF THE GROSS DOMESTIC PRODUCT, BY COUNTRY

(Percentages)

	Past growth rates					Low growth rate hypothesis	Accelerated growth rate hypothesis					
	1951-1953	1960-1962	1951-1953	1960-1962	1966-1968		1971	1972	1973	1974	1975	1975-1980
	1951-1953	1960-1962	1951-1953	1960-1962	1966-1968		1971	1972	1973	1974	1975	1975-1980 (averages)
Argentina	3.6	2.9	3.4	3.4	3.4	4.0	5.5	5.5	5.5	6.0	6.5	5.8
Bolivia	0.2	5.7	2.4	2.4	2.4	5.0	5.0	5.3	5.6	6.0	6.5	5.7
Brazil	7.1	4.2	5.9	5.9	5.9	6.0	8.0	8.0	8.0	8.0	8.0	8.0
Costa Rica	6.7	7.0	6.8	6.8	6.8	7.5	7.5	7.5	7.5	7.5	7.5	7.5
El Salvador	4.5	6.1	5.2	5.2	5.2	4.8	5.0	5.3	5.6	6.0	6.6 a/	5.6
Guatemala	4.2	5.4	4.7	4.7	4.7	4.9	5.0	5.3	5.6	6.0	6.6 a/	5.6
Honduras	3.4	5.6	4.2	4.2	4.2	6.0	6.2	6.4	6.6	6.8	7.0	6.6
Nicaragua	4.5	7.5	5.7	5.7	5.7	5.2	6.0	6.0	6.0	6.0	6.6 a/	5.6
Colombia	4.7	4.7	4.7	4.7	4.7	4.8	5.0	5.3	5.6	6.0	6.5	5.7
Chile	3.4	4.8	4.0	4.0	4.0	4.4	5.0	5.3	5.6	6.0	6.5	5.7
Ecuador	4.6	4.7	4.6	4.6	4.6	4.7	5.0	5.3	5.6	6.0	6.5	5.7
Mexico	5.8	7.5	6.4	6.4	6.4	6.5	7.0	7.0	7.0	7.0	7.0	7.0
Panama	6.0	7.8	6.7	6.7	6.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Paraguay	3.3	4.3	3.7	3.7	3.7	4.4	5.0	5.3	5.6	6.0	6.5	5.7
Peru	5.3	5.7	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.5	6.0
Dominican Republic	4.7	3.0	4.0	4.0	4.0	4.5	5.0	5.3	5.6	6.0	6.5	5.7
Uruguay	2.5	0.2	0.9	0.9	0.9	3.0	3.0	4.0	4.5	5.0	5.5	4.4
Venezuela	6.8	4.8	6.0	6.0	6.0	5.0	5.0	5.3	5.6	6.0	6.5	5.7
Total	5.5	4.8	5.2	5.2	5.2	5.5	6.6	6.7	6.8	6.9	7.1	6.8
												7.1

Sources: ECLA.

a/ Average for the period.

/way, and

way, and the relatively high growth rate hypothesis by assuming more favourable growth rates for traditional products and more successful results for promotion policies. The relatively high hypothesis must to a certain extent be interpreted as a desirable alternative which could not be achieved without more drastic changes in policy and more favourable external and internal conditions than those currently envisaged in Latin America, and it is determined by adding 1.5 per cent to the medium annual growth assumption. There is no difference between the low and the medium growth rates assumed for Bolivia, the Dominican Republic, Paraguay and Venezuela. The purchasing power of exports of the whole of Latin America, would grow at a cumulative annual rate of 4.5 per cent under the low growth rate hypothesis, and 5.4 per cent under the medium and 6.3 per cent under the relatively high growth rate hypotheses over the projection period from 1966 to 1968-1980. Compared with the average annual rate of 3.1 per cent in the period from 1951-1953 to 1966-1968, it can be seen that the above rates are by no means gloomy prognostications of the future growth of the purchasing power of exports.

Table 17 gives the rates assumed for all the countries concerned.

(c) Import trends

Imports have been projected as a function of demand, as far as possible distinguishing between investment and other consumption expenditure, in line with the relations between these variables in the period 1950-1968.<sup>1/</sup> According to this method, the import coefficient depends on the size of the gross domestic product and the scale of its growth. Under the low growth rate hypothesis for the product, the projections show a reduction in the import coefficient from an average of 11.5 per cent in 1966-1968 to 9.4 per cent in 1980. Under the accelerated growth hypothesis, on the other hand, the import coefficient would rise during the period of accelerated growth to 12.4 per cent in 1975, but would drop again to 11.9 per cent in 1980, when it is assumed that the product will be growing at a constant rate.

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<sup>1/</sup> The functions used for each country are to be found in chapter III, where it can be seen what type of function was used and what parameters were estimated for each country.

Table 17  
LATIN AMERICA: HYPOTHESES FOR THE FUTURE GROWTH OF THE PURCHASING POWER OF EXPORTS OF GOODS AND SERVICES  
(Percentage average annual growth rates) a/

	Exports of goods and services: previous periods			Hypotheses for the growth of exports												
	1960-1962/1966-1968			1966-1968/1969			Low growth rate			Medium growth rate			Relatively high growth rate			
	Volume	Pur- chasing power	Volume	Pur- chasing power	1966-1968	1975	1980	1966-1968	1975	1980	1966-1968	1975	1980	1966-1968	1975	1980
	Volume	Pur- chasing power	Volume	Pur- chasing power	1966-1968	1975	1980	1966-1968	1975	1980	1966-1968	1975	1980	1966-1968	1975	1980
Argentina	3.5	4.7	4.1	3.6	2.9	3.8	3.3	3.3	4.3	3.6	3.5	4.5	3.9	3.9	3.9	3.9
Bolivia	8.2	15.4	2.8	5.1	4.2	3.5	3.9	4.2	3.5	3.9	5.4	5.5	5.4	5.4	5.4	5.4
Brazil	5.2	4.2	13.3	14.0	8.2	4.0	6.5	10.9	7.0	9.3	11.6	8.0	11.6	10.2	10.2	10.2
Costa Rica	9.8	9.3	10.6	10.3	8.6	6.5	7.8	8.8	6.8	8.0	9.3	7.5	9.3	8.6	8.6	8.6
El Salvador	9.1	8.6	0.0	-2.0	4.5	4.5	4.5	4.8	5.5	5.1	5.5	6.4	5.5	5.9	5.9	5.9
Guatemala	12.9	10.4	7.5	7.8	7.0	4.4	6.0	7.2	5.4	6.5	7.6	6.1	7.6	7.0	7.0	7.0
Honduras	11.1	13.5	3.3	2.0	5.6	7.0	6.2	5.8	7.7	6.5	6.5	8.7	6.5	7.3	7.3	7.3
Nicaragua	11.7	13.3	1.8	-0.4	5.8	6.3	6.0	6.0	7.0	6.3	6.8	8.0	6.8	7.2	7.2	7.2
Colombia	3.6	3.0	9.8	7.4	5.5	3.5	4.7	6.1	4.5	5.5	7.1	6.0	7.1	6.7	6.7	6.7
Chile	4.8	9.3	4.1	12.0	4.7	2.9	4.0	6.8	2.7	5.2	7.4	4.0	7.4	6.1	6.1	6.1
Ecuador	5.8	5.4	4.7	4.5	4.2	4.6	4.4	5.5	5.5	5.5	6.6	4.8	6.6	5.9	5.9	5.9
Mexico	4.9	4.3	7.4	6.6	4.6	4.6	4.6	4.9	4.9	4.9	6.4	6.4	6.4	6.4	6.4	6.4
Panama	10.4	11.0	11.9	12.3	7.7	6.0	7.1	8.1	6.6	7.5	9.2	8.1	9.2	8.7	8.7	8.7
Paraguay	3.9	5.0	9.4	8.8	4.9	4.9	4.9	4.9	4.9	4.9	6.1	7.0	6.1	6.4	6.4	6.4
Peru	3.0	8.8	3.2	4.6	1.4	5.9	3.1	4.5	4.3	4.4	4.3	6.4	4.3	5.1	5.1	5.1
Dominican Republic	2.8	1.9	9.9	11.8	6.2	4.5	5.5	6.2	4.5	5.5	6.8	5.5	6.8	6.3	6.3	6.3
Uruguay	3.1	3.0	4.2	3.8	2.3	3.0	2.6	3.3	4.0	3.2	3.9	5.0	3.9	4.3	4.3	4.3
Venezuela	2.9	-2.9	2.3	0.3	2.8	2.5	2.7	2.8	2.5	2.7	3.1	3.5	3.1	3.3	3.3	3.3
Latin America b/	4.5	3.2	6.1	6.4	4.7	4.0	4.5	5.8	4.8	5.4	6.5	6.0	6.5	6.2	6.2	6.2
Latin America c/	5.0	5.8	7.3	7.6	5.2	4.3	4.8	6.4	5.2	6.0	7.1	6.4	7.1	6.8	6.8	6.8

Sources: ECLA, on the basis of official statistics.

a/ On the basis of 1960 prices.

b/ Excluding Cuba and Haiti.

c/ Excluding Cuba, Haiti and Venezuela.

(d) Saving



(d) Saving and investment trends

Gross domestic saving is projected as a function of gross national income, in line with the trend during the period 1950-1969. In most countries the marginal propensity to save was greater than the average propensity; thus the proportion of income represented by saving would be expected to increase during the projection period. In some countries, however, the marginal propensity was less than the average and, consequently, the share of saving would decrease over time.<sup>2/</sup>

Investment needs are determined by the assumed increases in the product. The capital-product coefficient has been estimated for each country on the basis of past observations of cumulative gross fixed investment and the gross domestic product. The result of these estimates is influenced by the degree to which installed capacity has been utilized in the past period considered. With the stepping up of the growth rate of the product, in line with the accelerated growth hypothesis, it may be expected that existing capacity will be more fully utilized, which would mean that the historical ratio represented an over-estimate of investment needs. This possibility has not been taken into account in preparing these projections, however, except in the case of Argentina and Uruguay, for which the capital-product ratio for the projection period is assumed to be lower than the historical ratio.

(e) Terms of financing

In the light of experience in the last decade or so, it has been assumed that 80 per cent of the sum of net external financing and amortization payments will be financed by loans, and the remaining 20 per cent by direct foreign capital investment with an estimated return of 10 per cent. The loans are divided into five categories, with different interest rates and amortization and grace periods. Table 18 summarizes the terms for the five types of loans; the terms now applied rather than those which the Latin American Governments would wish.

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<sup>2/</sup> The functions used for each country are to be found in chapter III.

Table 18

LATIN AMERICA: COMPOSITION OF LOANS AND TERMS OF FINANCING

Type of loan	Share of the total	Grace period (number of years)	Amortization period (number of years)	Interest (percentages)
1	0.25	3.0	7.0	6.00
2	0.30	5.0	15.0	5.00
3	0.20	5.0	40.0	3.00
4	0.10	1.0	1.0	8.00
5	0.15	1.0	7.0	7.00
<u>Total</u>	<u>1.00</u>	<u>3.5</u>	<u>15.4</u>	<u>5.45</u>

Source: ECLA.

### 3. Results of the projections

#### (a) Investment

The above assumptions have been used to determine the investment required to attain the different growth rates of the product. Under the low growth rate hypothesis, 18.1 per cent of the product must go towards gross capital formation. For the accelerated growth of the product, this proportion would gradually have to increase to 23.9 per cent in 1975 (see table 19).

In this case, total gross investment would have to increase by 10 per cent annually during the period of accelerated growth from 1966-1968 to 1975, and the investment growth rate would diminish to 7.3 per cent annually during the second half of the 1970s. There is always the possibility that investment needs will shrink as a result of the fuller utilization of installed capacity, particularly during a period of more dynamic impetus, i.e., under the assumption that the product will grow at an accelerated rate.

#### (b) Potential savings gap

If the ratio of domestic saving to national income remained the same as in the past, under the hypotheses of low growth rates for the product and for the purchasing power of exports by 1975 and 1980 domestic saving would be insufficient to cover investment needs in fourteen and thirteen countries, respectively. The deficit would amount to some 1,450 million dollars in fourteen countries in 1975 and 2,000 million dollars in thirteen countries in 1980, which would represent 7.9 and 9.1 per cent, respectively, of total gross investment in those countries (see table 20). In 1975 the potential savings gap would be smaller than the corresponding potential balance-of-payments deficit (under the low growth rate hypothesis for exports) in all the countries except Brazil, Panama and Venezuela. The difference would be even greater by 1980.

On the assumption of an accelerated growth of the product, on the other hand, the potential savings gap in 1975 would be greater than the potential balance-of-payments deficit in every country except the Central American countries and Mexico; the difference between the two deficits would be somewhat smaller by 1980.

/Table 19

Table 19

LATIN AMERICA: PAST AND PROJECTED COEFFICIENTS OF TOTAL GROSS INVESTMENT

(Percentages of the product)

Period	Total gross investment coefficient		
	Past	Projected	
		Low growth rate hypothesis for the product	Accelerated growth rate hypothesis for the product
1951-1953	20.3	-	-
1960-1962	18.8	-	-
1966-1968	18.6	-	-
1969	19.6	-	-
1975	-	18.1	23.9
1980	-	18.1	23.9

Source: ECLA.

/Table 20

Table 20

## LATIN AMERICA: POTENTIAL DOMESTIC SAVINGS GAP, BY GROUPS OF COUNTRIES, 1975 AND 1980

(Millions of dollars at 1960 prices)

	Hypotheses of a low growth rate for the product and a low growth rate for exports				Hypotheses of an accelerated growth rate for the product and a medium growth rate for exports			
	1975		1980		1975		1980	
	Number of countries	Potential savings gap	Number of countries	Potential savings gap	Number of countries	Potential savings gap	Number of countries	Potential savings gap
Countries showing a deficit	14	1 454.0	13	2 067.6	18	10 405.2	18	14 898.7
Countries showing a surplus	4	-984.6	5	-1 612.1	0	0.0	0	0.0
<u>Total</u>	<u>18</u>	<u>469.4</u>	<u>18</u>	<u>455.5</u>	<u>18</u>	<u>10 405.2</u>	<u>18</u>	<u>14 898.7</u>

Source: ECLA.

/These figures

E/CN.12/865  
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These figures would seem to indicate that in 1975 internal factors would do more to keep down the accelerated growth of the product than external factors, and that the domestic savings gap would determine the volume of external financing required. It must be borne in mind, however, that the small external purchasing power of many Latin American countries limited their ability to import capital goods and thus had an adverse effect on the expansion of investment; it was therefore imperative to bring in external resources to finance regular imports. For these reasons, as time went by, it became impossible to tap the potential domestic savings, which resulted in a comparatively low marginal savings coefficient. The results of the savings model must therefore be interpreted with caution. Nevertheless, the effort required to generate sufficient domestic resources would, on the whole, be considerable, particularly in the early stages of the acceleration of the growth rate. In fact, the results indicate that for an accelerated growth of the product, in line with the medium growth rate hypothesis for exports,<sup>3/</sup> the domestic resources in every country would be insufficient to finance the required volume of investment, and the potential savings gap would amount to some 9,900 million dollars in 1975, and about 14,900 million in 1980, which would represent 24.5 per cent and 26 per cent of total gross investment, respectively. Table 21 shows that by 1980 the savings gap would represent 20 to 50 per cent of total investment in thirteen countries, and over 50 per cent in three others.

It should be noted that net external financing in Latin America has not exceeded 2,000 million dollars.<sup>4/</sup>

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<sup>3/</sup> The results of the projections with respect to the potential savings gap are very similar for the three export hypotheses.

<sup>4/</sup> At 1960 prices.

Table 21

LATIN AMERICA: BREAKDOWN OF COUNTRIES BY POTENTIAL DOMESTIC SAVINGS SURPLUS OR DEFICIT  
(DEFICIT EXPRESSED AS A PROPORTION OF TOTAL GROSS INVESTMENT)

(Number of countries and percentages)

Potential domestic savings surplus or deficit	Hypotheses for the growth of the product			
	Low growth rate		Accelerated growth rate <sup>a/</sup>	
	1975	1980	1975	1980
<u>Number of countries with a potential surplus</u>	4	5	0	0
<u>Number of countries with a potential deficit (percentages of total gross investment)</u>				
0 to 9.9	3	2	1	1
10.0 to 19.9	4	3	1	1
20.0 to 29.9	4	4	5	5
30.0 to 39.9	2	3	6	5
40.0 to 49.9	1	1	2	3
50.0 and over	0	0	3	3

Source: ECLA.

<sup>a/</sup> Based on the medium growth rate hypothesis for exports.

/Here again,

Here again, reference can be made to the possibility of increasing the product-capital ratio by making more use of installed capacity, which would mean that the established targets could be attained with a smaller volume of investment and, therefore, of financing. In any event, it must be borne in mind that these savings projections are based on actual coefficients recorded in the past and that if external and other restrictions were eliminated, the marginal saving coefficient might increase to some extent.

(c) The potential trade gap and balance-of-payments deficit

Although, according to the low growth rate hypothesis for the product, the amount of imports required is relatively small, in many countries the purchasing power of exports would be insufficient to pay for them if exports grew only according to the low growth rate hypothesis. In fact, by 1975, twelve of the eighteen countries considered would have a combined potential trade deficit of some 1,080 million dollars (see table 22). By 1980 there would be fifteen countries with a deficit and their combined deficit would rise to some 1,810 million dollars. If these deficits were financed on the terms mentioned in section 2 (d) above, and if the accumulated interest on debts and profits on foreign capital at the beginning of the period are taken into account, all the countries would have a deficit in their balance of payments, with the exception of Brazil and Venezuela. In fact the total for the countries with balance-of-payments deficits would be some 2,920 million dollars by 1975, and would rise to some 5,030 million dollars by 1980.

As shown in the country monograph on Brazil, this result is related to the assumption that the import coefficient will continue to diminish over the period from 1950 to 1968, although at the same time an accelerated growth rate is assumed for exports, in accordance with the actual trend towards the end of the period. (This hypothesis is not very plausible, however, as it assumes that the import coefficient will continue to decline.) If a declining import coefficient were combined with an accelerated growth of exports, there might be either an additional increase in the growth rate of the product, or a relative liberalization of imports which would bring about a change in their function.

/Table 22



Table 22

## LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS SURPLUS OR DEFICIT, 1975 AND 1980

Low growth rate hypotheses for the gross domestic product and for exports during the 1970s(Millions of dollars at 1960 prices)

	1975				1980			
	Number of countries	Potential trade balance	Net potential remittances of interest and profits	Potential balance-of- payments deficit	Number of countries	Potential trade balance	Net potential remittances of interest and profits	Potential balance-of- payments deficit
Countries with a deficit according to potential trade balance	12	1 083.7	1 526.1	2 609.8	15	1 810.3	3 071.8	4 882.1
Countries with a surplus according to potential trade balance	6	-2 303.0	1 750.6	-552.6	3	-2 845.9	1 566.9	-1 279.0
<u>Total</u>	<u>18</u>	<u>-1 219.3</u>	<u>3 276.7</u>	<u>2 057.2</u>	<u>18</u>	<u>-1 035.6</u>	<u>4 638.7</u>	<u>3 603.1</u>

Source: ECLA.

/If the

If the accelerated growth rate hypothesis for the product were come about, investment would have to increase rapidly, especially in the first stage of the increase in growth rate. In fact for the period from 1966-1968 to 1975, total gross investment would have to grow at an annual rate of 10 per cent, while the projections for the second half of the 1970s show a growth rate of 7.3 per cent annually, compared with rates of 5.5 and 5.6 per cent respectively for the low growth rate hypothesis for the product. Consequently, because of the high import content of investment, an accelerated growth rate would require a greater increase in capital goods imports. Furthermore, the higher growth rate of the product would necessitate a considerable increase in imports of raw materials and intermediate products. That is that average import-product elasticity during the period from 1966-1968 to 1975 would be 1.16 in the event of an accelerated growth rate, compared with 0.67 for the low growth rate hypothesis. For the period from 1975 to 1980, the elasticity in the two cases would be about 0.86 and 0.80, respectively. Therefore, although foreign exchange earnings would be larger if exports grew at a medium rate, the accelerated growth rate of the product would result in a larger trade deficit than if the growth rate of the product were low and that of exports also low. By 1975, according to the medium growth rate for exports hypothesis, combined with the accelerated growth rate for the product, there would be fifteen countries with a trade deficit of some 2,270 million dollars, while three countries would have a small surplus (see table 23). By 1980 all the countries would have a deficit totalling some 4,620 million dollars. If debt servicing and the transfers of profits on foreign capital were calculated, i.e., roughly potential indebtedness, all the countries would have a potential balance-of-payments deficit amounting to 6,060 million dollars by 1975, and some 12,620 million dollars by 1980. Table 24 shows that by 1975 the balance-of-payments deficit for four countries would be equal to less than 20 per cent of the purchasing power of exports, for ten countries between 20 and 40 per cent, and for the remaining countries, over 40 per cent. It can also be proved that by 1980 the situation would be even worst; there would only be one country in which this percentage would be under 20 per cent, and only five countries in which it would be under 40 per cent.

/Table 23

Table 23

## LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT, BY GROUPS OF COUNTRIES, 1975 AND 1980

Accelerated growth rate hypothesis for the gross domestic product during the 1970s(Millions of dollars at 1960 prices)

	1975				1980			
	Number of countries	Potential trade balance	Net potential remittances of interest and profits	Potential balance-of- payments deficit	Number of countries	Potential trade balance	Net potential remittances of interest and profits	Potential balance-of- payments deficit
<u>Medium growth rate hypothesis for exports</u>								
Countries with a deficit according to potential trade balance	15	2 269.6	3 632.2	5 901.8	18	4 623.6	6 447.5	11 071.1
Countries with a surplus (profit) according to potential trade balance	3	-118.5	275.9	157.4	0	0.0	0.0	0.0
<u>Total</u>	<u>18</u>	<u>2 151.1</u>	<u>3 908.1</u>	<u>6 059.2</u>	<u>18</u>	<u>4 623.6</u>	<u>6 447.5</u>	<u>11 071.1</u>
<u>Relatively high growth rate hypothesis for exports</u>								
Countries with a deficit according to potential trade balance	13	1 491.7	2 844.9	4 336.6	14	2 521.7	3 740.4	6 262.1
Countries with a surplus (profit) according to potential trade balance	5	-312.9	929.0	616.0	4	-543.0	2 126.8	1 583.8
<u>Total</u>	<u>18</u>	<u>1 178.8</u>	<u>3 773.9</u>	<u>4 952.6</u>	<u>18</u>	<u>1 978.7</u>	<u>5 867.2</u>	<u>7 845.9</u>

Source: ECLA.

Table 24

LATIN AMERICA: BREAKDOWN OF COUNTRIES BY POTENTIAL BALANCE-OF-PAYMENTS SURPLUS OR DEFICIT  
(DEFICIT EXPRESSED AS A PROPORTION OF THE PURCHASING POWER OF EXPORTS  
OF GOODS AND SERVICES)

Accelerated growth rate hypothesis for the product

(Number of countries and percentages)

Potential balance-of-payments surplus or deficit	1966-1968	Hypotheses for the growth of exports			
		Medium growth rate		Relatively high growth rate	
		1975	1980	1975	1980
<u>Number of countries with a surplus</u>	2	0	0	1	1
<u>Number of countries with a deficit</u> (percentages of purchasing power of exports)					
0.0 to 9.9	1	2	1	3	0
10.0 to 19.9	7	2	0	2	4
20.0 to 29.9	5	2	1	4	2
30.0 to 39.9	3	8	3	6	4
40.0 to 49.9	0	2	4	1	4
50.0 to 59.9	0	0	4	1	2
60.0 to 69.9	0	2	2	0	0
70 and over	0	0	3	0	1

Source: ECLA.

/If the

If the hypothesis of a relatively high growth rate for exports is applied, the accelerated growth rate for the product becomes more practicable, although there would still be a very large deficit. By 1975 there would still be thirteen countries with a trade deficit, but the amount of their combined deficit would be only 1,490 million dollars (see table 23). By 1980, fourteen countries would have a total deficit of 2,520 million dollars. Taking payments of interest and profits into account, only Panama would show a surplus in its balance of payments; by 1975 the deficit of the remaining countries would have reached 4,930 million dollars, and this would have risen to 7,770 million by 1980.

#### Conclusions

The following conclusions can be drawn from the results of the projections. For the low growth rate hypothesis of the product to be achieved, difficulties over the financing of investment would affect only a quarter of the countries. However, in this case the relative shortage of external resources would limit the growth of a greater number of countries if exports were to grow according to the low growth rate hypothesis. On the other hand, on the hypothesis that the growth rate of the product would gradually be accelerated, the small amount of internal resources that would be generated, together with the external factors, would greatly restrict economic growth. If the growth rate of the highest income sectors were reduced, through a more intensive mobilization of internal resources than that to be expected from past performance, solution for these problems might be found. This can be seen from the document mentioned in the next paragraph. In any event this would cause a tremendous internal strain upon the economies. Furthermore, even in the case of a relatively high growth rate for exports, the amount of external resources needed to finance the necessary imports would be very large, and the result would be excessive indebtedness. It may therefore be concluded that if an accelerated growth rate is to be achieved, it will require substantial changes in the trends of some of the internal variables and in the terms of international financing.

/In a

In a joint ECLA/ILPES study,<sup>5/</sup> some of the main solutions for the potential savings and trade gaps were discussed. Sufficient national savings to finance more investment could be generated if the highest income groups consumed less, which would mean a basic change in the structure of production, at the expense of luxury production. Furthermore, better utilization of installed capacity would reduce the amount of investment needed to achieve the accelerated growth rate of the product, which would also reduce the amount of financing to be obtained. It may also be mentioned that personal savings are frequently, especially in inflationary contexts, put into investments which are not directly productive, and therefore tend to increase the capital-product ratio. Measures to deal with these problems must be part and parcel of any policy aimed at finding a solution for the enormous projected savings gap. Three courses of action for solving the problem of balance-of-payments deficits are discussed in the above-mentioned study:

(1) Revitalizing regional import substitution by accelerating the integration of the Latin American countries. The expansion of domestic markets, which would promote the production of capital and intermediate goods, would also encourage more efficient and faster production.

(2) Intensive promotion of exports of manufactures outside the area. This policy and that mentioned in the preceding paragraph are complementary since they provide a parallel approach to the problem of external bottlenecks which has every chance of success, and they are mutually self-supporting; greater efficiency achieved through integration facilitates entry into the world market.

(3) Finally, obtaining more foreign credit on better terms may help to finance the balance-of-payments deficit and thus accelerate the growth rate.

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5/ ECLA/ILPES, "El estrangulamiento externo y la escasez de ahorro en el desarrollo de América Latina: Análisis de los problemas y algunas de las soluciones", 27 May 1970.

### Chapter III

#### DESCRIPTION OF THE MODEL

##### 1. General

The model used to obtain country projections for 1975 and 1980 is based on the relationships between the over-all product, capital formation and external sector variables, with explicit expression of the conditions of compatibility or consistency existing in the economic development of the Latin American countries. The past rate of growth is analyzed to the extent that it was determined by the evolution of the external sector and capital formation.

The model is used to examine the main factors determining the process of growth: (a) production; (b) saving; (c) foreign trade; and (d) external financing. It consists basically of twenty-seven relations, which can be divided into two groups. The first group comprises the production, domestic saving and import functions, which are stochastic functions estimated with chronological data, and the second accounting identities or definitions which give national income, consumption and investment. Total investment is defined as being equal to domestic saving plus external saving. The second group includes all the other relations, including a description of the trend followed by the external debt. Exports are projected as exogenous variables in accordance with the particular conditions in each country. With the 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.

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

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 variants and alternatives without changing the basic structure of the model.

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

## 2. The variables of the model

The variables treated as endogenous or interdependent are:

P	= gross domestic product
Y	= gross national income
C	= total consumption
C*	= adjusted consumption
I	= gross fixed investment
I <sub>t</sub>	= total gross investment
H	= changes in stocks
A <sub>n</sub>	= domestic saving
A <sub>x</sub>	= net external financing (external saving)
M	= total imports of goods and services
B	= potential trade gap or balance
R <sub>u</sub>	= remittances of profits
R <sub>x</sub>	= net factor income from rest of world
R <sub>id</sub>	= interest payments on total external debt (outstanding and new)
R <sub>idn</sub>	= interest payments on the new external debt
R <sub>idn, k</sub>	= interest payments on the new debt, classified by interest rates and repayment and grace period (k = 1, 2, ... , m)
Am <sub>d</sub>	= amortization of the external debt
Am <sub>dn</sub>	= amortization of the new external debt
Am <sub>dn, k</sub>	= amortization of the new external debt, classified by interest rates, etc. (k = 1, 2, ... , m)

/A<sub>n, k</sub> (t)



- $A_{n, k}(t)$  = aliquot part of the new external debt contracted in year  $t$ ,  
 classified by interest rates, etc. ( $k = 1, 2, \dots, m$ )  
 $D_n(t)$  = new external debt contracted in year  $t$   
 $D_{n, k}(t)$  = new external debt contracted in year  $t$ , classified by interest  
 rates, etc.  
 $D_p^e$  = 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:

- $E$  = total exports of goods and services  
 $G$  = terms-of-trade gains  
 $T_x$  = net private transfer payments or donations  
 $Am_{da}$  = amortization of the outstanding external debt  
 $R_{ida}$  = interest payments on the outstanding external debt  
 $\pi$  = terms of trade relationship

The constants established in the model are as follows:

- $r$  = coefficients reflecting policy on forms of financing  
 $\alpha_k$  = coefficient of share of type- $k$  debt in the new external debt  
 ( $k = 1, 2, \dots, m$ )  
 $i_k$  = interest on type- $k$  debt  
 $P_k$  = grace period for type- $k$  debt  
 $n_k$  = repayment period for type- $k$  debt

### 3. Relations of the model

- (1)  $P(t) = a_1 + b_1 \sum_{h=0}^{t-1} I(h)$
- (2)  $M(t) = a_2 + b_2 P(t) + c_2 C + d_2 I(t)$
- (3)  $An(t) = a_3 + b_3 Y(t)$
- (4)  $H(t) = b_4 P(t)$
- (5)  $B(t) = M(t) - [E(t) + G(t)]$
- (6)  $P(t) = C(t) + I(t) + H(t) + E(t) - M(t)$

$$/(7) Y(t) =$$

- (7)  $Y(t) = P(t) + R_x(t) + G(t)$
- (8)  $C(t) = Y(t) + T_x(t) - A_n(t)$
- (9)  $C^*(t) = C(t) + H(t) + E(t) - M(t)$
- (10)  $A_x(t) = M(t) - E(t) - G(t) - R_x(t) - T_x(t)$
- (11)  $I_t(t) = I(t) + H(t)$
- (12)  $A(t) = A_n(t) + A_x(t)$
- (13)  $R_u(t) = b_5 K^e(t-1)$
- (14)  $Amd(t) = Amda(t) + Amdn(t)$
- (15)  $FB(t) = A_x(t) + Amd(t) + D_p^e(t)$
- (16)  $D_p^e(t) = b_6 K^e(t-1)$
- (17)  $Dn(t) = r [FB(t) - D_p^e(t)]$
- (18)  $I^e(t) = (1 - r) [FB(t) - D_p^e(t)] + D_p^e(t)$
- (19)  $K^e(t) = K^e(0) + \frac{t}{1} I^e(h) - \frac{t}{0} D_p^e(t)$
- (20)  $D_{n,k}(t) = \alpha_k D_n(t) \text{ for } k = 1, 2, \dots, m$

$$\sum_{k=1}^m \alpha_k = 1; \alpha_k \geq 0$$

- (21)  $A_{n,k}(t) = D_{n,k}(t)/n_k \text{ for } k = 1, 2, \dots, m$
- (22)  $R_{id}(t) = R_{ida}(t) + R_{idn}(t)$
- (23)  $R_x(t) = R_u(t) + R_{id}(t)$
- (24)  $R_{idn}(t) = \sum_{k=1}^m R_{idm,k}(t)$

/(25)

$$\begin{aligned}
 (25) \quad R_{idn,k}(t) = & \left\{ \begin{aligned} & i_k \cdot \sum_{j=1}^{t-1} D_{nk}(j) && \text{si } 1 < t < p_k + 1 \\ & i_k \left\{ \sum_{j=1}^{t-1} D_{n,k}(j) - \sum_{j=1}^{t-p_k-1} (t-p_k-j) A_{n,k}(j) \right\} && \text{si } 1 + p_k < t \leq p_k + n_k + 1 \\ & i_k \left\{ \sum_{j=t-(p_k+n_k)}^{t-1} D_{n,k}(j) - \sum_{j=t-(p_k+n_k)}^{t-p_k-1} (t-p_k-j) A_{n,k}(j) \right\} && \text{si } t > p_k + n_k + 1 \end{aligned} \right. \\
 \text{for } k = 1, 2, \dots, m
 \end{aligned}$$

$$(26) \quad A_{dn}(t) = \sum_{k=1}^m A_{dn,k}(t)$$

$$\begin{aligned}
 (27) \quad A_{dn,k}(t) = & \left\{ \begin{aligned} & \sum_{j=1}^{t-p_k} A_{n,k}(j) && \text{si } p_k < t < p_k + n_k \\ & \sum_{j=t-(p_k+n_k)-1}^{t-p_k} A_{n,k}(j) && \text{si } t > p_k + n_k \end{aligned} \right. \\
 \text{for } k = 1, 2, \dots, m
 \end{aligned}$$

#### 4. General comments on the model

The model is complete, since it has as many endogenous or interdependent variables as there are equations. In order to obtain the projections which are the object of the present study, however, the product is treated as an exogenous variable, so that annual growth targets can be established for the period considered, and the effect of these targets on the potential trade and balance-of-payments deficits and surpluses analysed. Once the product is fixed, the 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 of foreign trade model. The second, after the import equation is eliminated, would be the saving model. Each of these models gives a different group of projections for the endogenous variables.

The saving and import models operate as economic policy models, when a growth target is established for the gross domestic product, and it is important to take into account the effects of each rate of growth on the actual structure of the model. In both models the growth rate of the gross domestic product can be expressed as a function of the exogenous variables, the pre-determined variables and the ratio of external saving to the gross domestic product in year  $t$ , as follows:

Import model:

$$(28) \quad r_p(t) = a + b \frac{E(t) + G(t)}{P(t)} + c \frac{A x(t)}{P(t)}$$

Saving model

$$(29) \quad r_p(t) = c + d \frac{A x(t)}{P(t)}$$

The potential trade deficit or surplus is defined as:

$$(30) \quad B(t) = M(t) - [E(t) + G(t)]$$

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

$$(31) \quad A_x(t) = M(t) - [E(t) + G(t)] - R_x(t) - T_x(t)$$

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

/The potential

The potential savings deficit or surplus is equal to:

$$(32) \quad A_x(t) = I(t) = A_n(t)$$

This also represents external saving or net external financing, from which imports can be derived using equation (31) as follows:

$$M(t) = A_x(t) + [\bar{E}(t) + G(t)] + R_x(t) + T_x(t)$$

since exports, net external factor income and private transfer payments are assumed to be pre-determined. Hence, 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 (31); and from this and (30) it is possible to obtain domestic saving:  $A_1(t) = I_T(t) - A_x(t)$ , 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.

If the import function is of the following type:

$$(33) \quad M(t) = a + b_2 [\bar{P}(t) - I(t)] + d_2 I(t)$$

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

$$r_p(t) = \frac{I(t) b_1}{P(t)}$$

and therefore:

$$(34) \quad M(t) = a + [\bar{b}_2 + \frac{r_p(t)}{b_1} d_2 - b_2] P(t)$$

Thus the marginal propensity to import varies in relation to  $r_p$ , diminishing or increasing according to the sign of the difference of the coefficients  $d_2$  and  $b_2$ .

/It is

It is interesting to note that if identity (29) is written using the import model and substituting the expression (32) for imports, the result is:

$$(35) \quad A_x(t) = a - [E(t) + G(t) + R_x(t) + T_x(t)] + \frac{b_2 + \frac{r_p(t)}{b_1} (d_2 - b_2)}{b_1} P(t)$$

and, similarly, using (32), (3), (4) (7) and (11), in the saving model, the result is:

$$(36) \quad A_x(t) = -a_4 - b_4 [R_x(t) + G(t)] + [-b_4 + b_5 + \frac{r_p(t)}{b_1}] P(t)$$

Now, if the growth rate of the product is derived from (35) and (36), the result is:

Import model:

$$(37) \quad r_p(t) = -\frac{b_2 b_1}{d_2 - b_2} - \frac{a b_1}{d_2 - b_2} \cdot \frac{1}{P(t)} + \frac{b_1}{d_2 - b_2} + \frac{R_x(t) + T_x(t)}{P(t)} + \frac{b_1}{d_2 - b_2} \cdot \frac{E(t) + G(t)}{P(t)} + \frac{b_1}{d_2 - b_2} \cdot \frac{A_x(t)}{P(t)}$$

Saving model

$$(38) \quad r_p(t) = b_1 [b_4 - b_5] + a_4 b_1 \frac{1}{P(t)} + b_1 b_4 \cdot \frac{R_x(t) + G(t)}{P(t)} + b_1 \cdot \frac{A_x(t)}{P(t)}$$

Hence, the growth rate of the gross domestic product can be expressed as a function of the exogenous variables or the predetermined variables and of relative balances of payments or the ratio of external saving to the gross domestic product in year t.

/Figure 1

Figure I

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

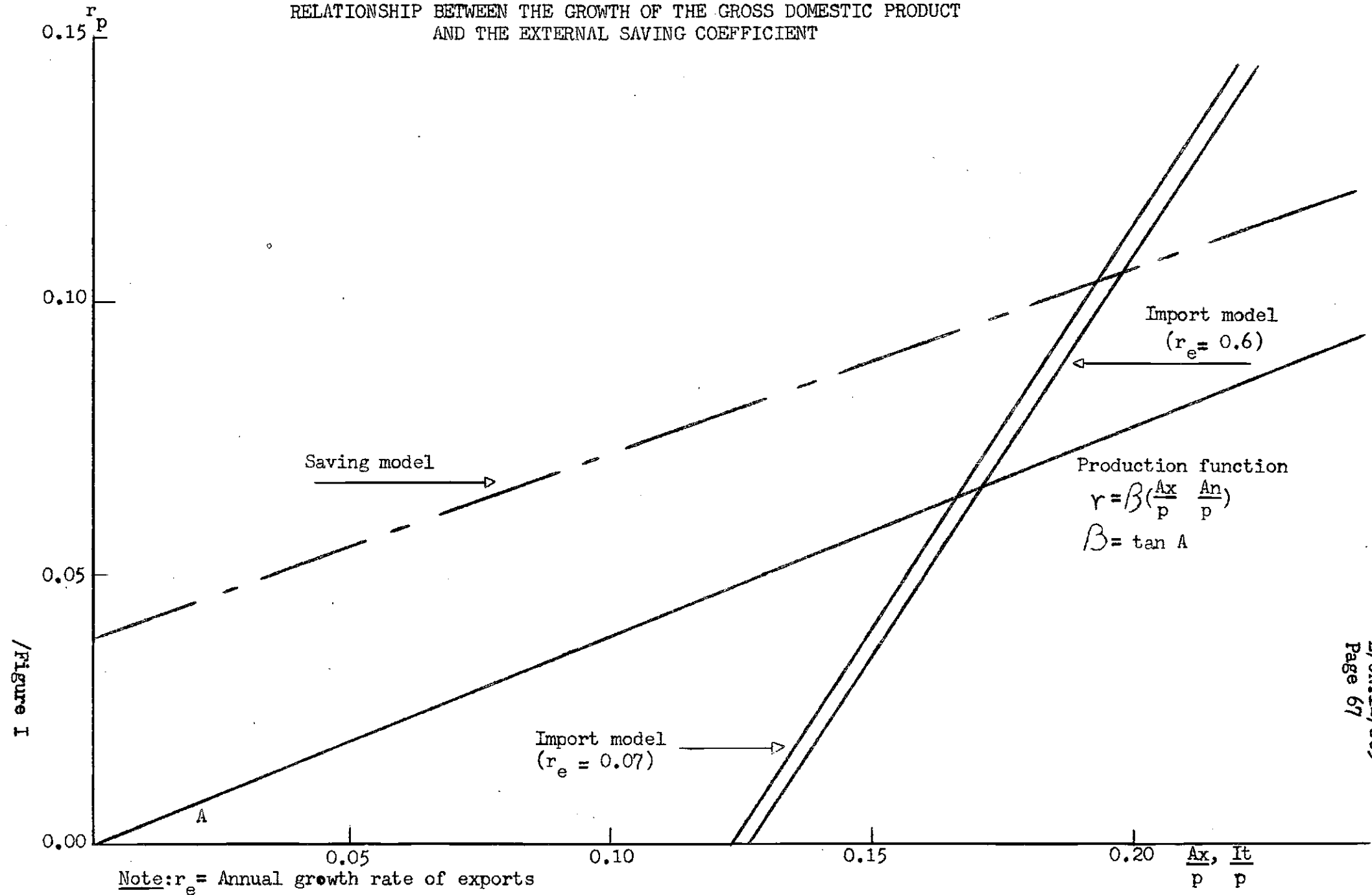


Figure I shows equation (28) for two export values and equation (29), and also the rate  $r_p$  for a specific value of the marginal capital/output ratio, making it possible to estimate investment requirements for a given growth rate of the product, and to determine domestic saving by comparing those requirements with net external financing needs according to the saving or import model. This illustrates a special case, since the values of the parameters (23) and (29) are variables for each year and depend on the values of the product  $[P(t)]$ , terms-of-trade gains  $[G(t)]$ , net factor income from the rest of the world  $[R_x(t)]$  and net private transfer payments or donations  $[TX(t)]$  1/

The dynamic structure of the model, is described in a simplified diagram of its basic causal relations (see figure II). 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.

##### 5. Analysis of the equations of the model

With few exceptions,<sup>2/</sup> the macroeconomic part of the model was determined in the following manner (to simplify the example the constant has been omitted):

$$P = \beta_1 \sum_{h=0}^{t-1} I(h) \quad (1)$$

$$A_n = \beta_2 P \quad (2)$$

$$M = \beta_3 P + \gamma_3 I \quad (3)$$

$$A_n = I + E - M \quad (4)$$

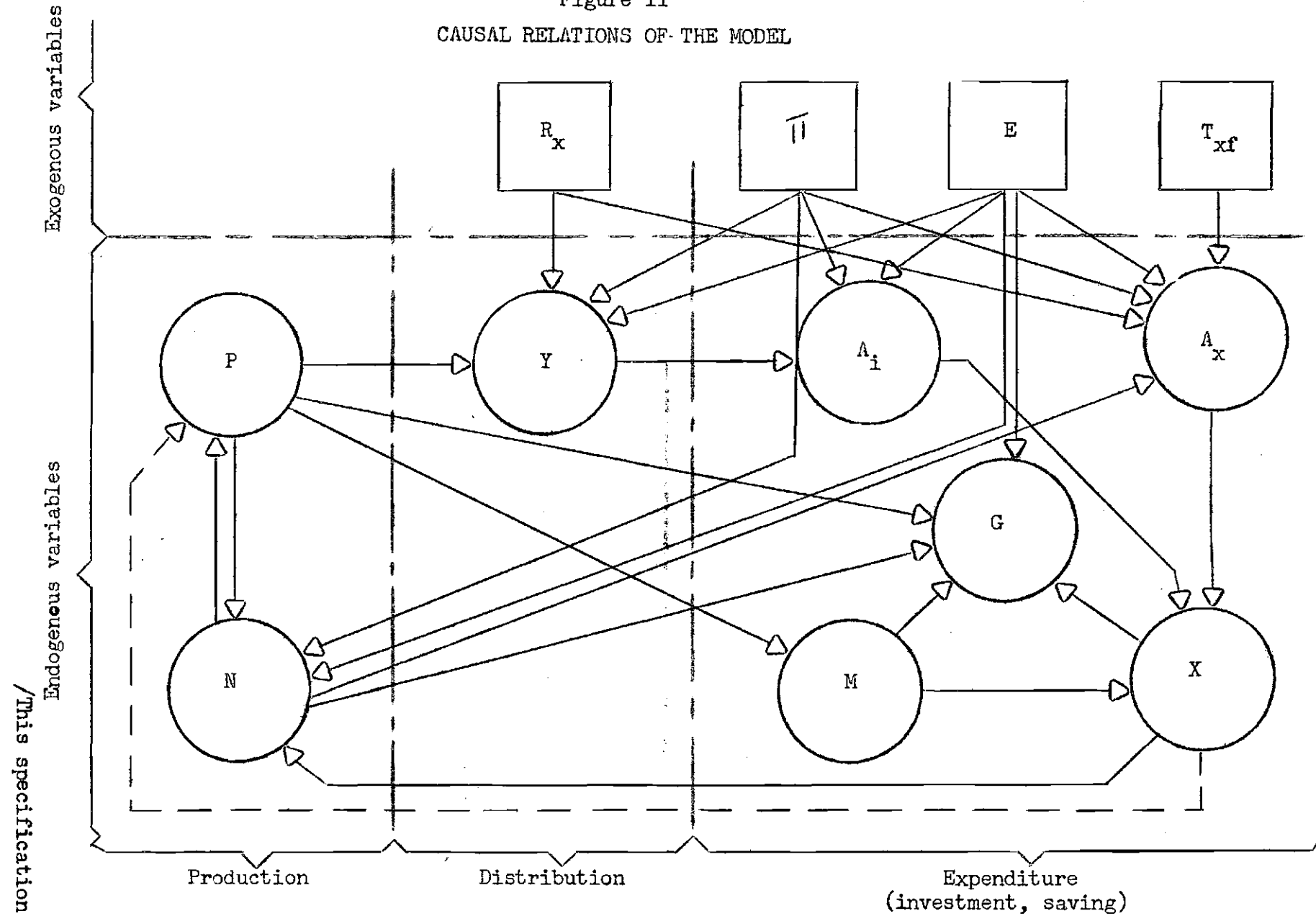
1/ The two steeply inclined parallel lines close together represent equation (29) and give the growth rate of the gross domestic product in terms of external saving,  $A_x/P$ , for the import model, with two rates of exports ( $r_e = 0.06$  and  $r_e = 0.07$ , as indicated in the figure).

The higher of the other two straight lines gives the growth rate of the gross domestic product in terms of  $A_x/P$ , for the saving model, and the lower the growth rate of the gross domestic product in terms of relative investment,  $I_t/P$ .

2/ In fact,  $A_n$  is a function of  $Y$ . In the case of Uruguay,  $A_n = f(Y, E, G)$ . And in some cases imports are a function only of  $P(t)$ . As a rule, when there was no significant correlation additional explanatory variables were added.



Figure II  
CAUSAL RELATIONS OF THE MODEL



Remark:  $\triangleleft$  — current relation     $\triangleleft$  - - - - lagged relation

This specification was adopted for all the countries to facilitate comparison of the structural parameters that are important in the Latin American countries.

The reduced model for the current period can be derived from the expressions (1) - (4):

$$P = \beta_1 \sum_{h=0}^{t-1} I(h) \quad (5)$$

$$A_n = \beta_2 \beta_1 \sum_{h=0}^{t-1} I(h) \quad (6)$$

$$I = \frac{1}{(1 - \gamma_3)} \left\{ (\beta_2 + \beta_3) \beta_1 \sum_{h=0}^{t-1} I(h) - E \right\} \quad (7)$$

$$M = \frac{\beta_1 (\beta_3 + \gamma_3 \beta_2)}{(1 - \gamma_3)} \sum_{h=0}^{t-1} I(h) - \frac{\gamma_3}{1 - \gamma_3} E \quad (8)$$

It can thus be judged whether the values of the parameters in the direct expression (1) - (4) are plausible in the reduced forms (5) - (8).

The production function is lineal, and cumulative investment is taken as an explanatory variable. The correlation coefficient was fairly high in all cases, but the values of the Durbin-Watson ratio were less than one in nine cases and between one and two in the other nine. This points to a possible specification error and an upward bias in the estimates obtained by the least squares method.<sup>3/</sup> Moreover, it is common in most countries for

<sup>3/</sup> When it is specified:  $P(t) = \beta_1 + \beta_1 \sum_{h=0}^{t-1} I(h) + u(t)$ ,

$$\sum_{t=1}^T P(t) \sum_{h=0}^{t-1} I(h) = \beta_1 \sum_{t=1}^T \left[ \sum_{h=0}^{t-1} I(h) \right]^2 + \sum_{t=1}^T u(t) \sum_{h=0}^{t-1} I(h)$$

$$\therefore \hat{\beta}_1 = \beta_1 + \frac{\sum_{t=1}^T u(t) \sum_{h=0}^{t-1} I(h)}{\sum_{t=1}^T \left( \sum_{h=0}^{t-1} I(h) \right)^2}$$

and the estimate using the least squares on  $(\hat{\beta}_1)$  contains an upward bias if  $u(t)$  increases with time (this does in fact happen in most cases).

/the annual

the annual value of the incremental capital-output ratio to fluctuate considerably and to vary approximately in inverse ratio to the growth rate of the gross domestic product. This would suggest changes in marginal productivity as a result of changes in the rate of utilization of capital itself or variations in other factors of production (such as manpower) or for other reasons. It would be an error to assume that the fluctuations in the incremental ratio are only short-term or cyclical. For that reason it would be advisable to modify the production function by introducing labour, technical progress and the coefficient of utilization as explicit factors, and in order to estimate the different specifications (Leontief, Cobb-Douglas, CES, etc.) The distribution of the incremental capital output ratios is as follows:

10.0 ~ 5.0	1
5.0 ~ 3.3	7
3.3 ~ 2.5	7
2.5 ~ 2.0	3

These values coincide for the most part with the estimates of other international organizations.

The import function was specified as a function of investment and non-investment expenditure, as follows:

$$M(t) = \alpha_3 + \beta_3 [P(t) - I(t)] + \gamma_3 I(t) \quad (9)$$

The coefficients were calculated by the usual least squares method in some cases, and by the aggregation of microequations under major headings.<sup>4/</sup> This separation of imports or explanatory variables is necessary in order to project imports, taking account of their relative importance for the development process, and in order to define an area in which it is feasible to modify the propensity to import. The previous equation may also be written as follows:

<sup>4/</sup> For instance, total imports were divided into imports of consumer goods, fuels, construction materials, etc., and the import coefficient of each item was determined; the aggregation was obtained from the equations by simple addition. It must be admitted that aggregation biases may occur.

$$/M(t) =$$

$$\begin{aligned}
 M(t) &= \alpha_3 + \left\{ \beta_3 + (\gamma_3 - \beta_3) \frac{I(t)}{P(t)} \right\} P(t) \\
 &= \alpha_3 + \left\{ \beta_3 + (\gamma_3 - \beta_3) \frac{1}{\beta_1} \frac{\Delta P(t)}{P(t)} \right\} P(t) \quad (10)
 \end{aligned}$$

In this specification, the marginal propensity to import is a function of the investment coefficient. When the import function is generalized in this way, some problems remain, such as import substitution and purchasing power of exports. In some countries (Brazil, for instance), the process of import substitution is already at an advanced stage, and the average propensity to import is therefore fairly low, while in other countries there are still good prospects for import substitution. If a country is increasing the extent of its import substitution, the propensity to import must be a function of capital formation. Therefore, if this variable is omitted, there will be a specification bias and there will be a substantial error in the projection. Here, there are good prospects of revising the equation with a disaggregated analysis by sector. Trends in holdings of foreign exchange or in purchasing power also have an important influence on imports. According to specification (1) - (4), the increase in exports will have a negative effect on imports (normally, the coefficient  $\gamma'$  is strongly positive), owing to the decline in investment. In practice, the increase in purchasing power due to increased exports must exert a positive influence on imports. The introduction of exports in the import equation will give rise to a methodological problem, but this might be interesting to study in the future.<sup>5/</sup>

The domestic saving function was specified as a function of income. In many cases the correlation coefficient was sufficiently high, and in a few cases it was low. The search for the explanatory variables that were missing for the countries where the coefficient of determination was less than 0.8 was successful. But a certain degree of disaggregation would be

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<sup>5/</sup> The original theory, developed by Chenery-Strout, took account of the two current deficits and surpluses, and the four basic structures (production, saving, imports and exports) were independent of each other. If they are no longer independent, it will be more complicated to calculate and explain the significance of the two deficits.

/advisable (for

advisable (for instance, wage and non-wage income or the sectoral breakdown of income) in order to revise the results of the estimate. In some countries the constant was positive, and in the others negative, so that the average propensity to save was declining or increasing according to the country. The investigation of the causes of these trends will be one of the important tasks for the future. The estimates of the marginal propensity to save also show great variations. It would therefore be advisable to make a more detailed analysis of this saving function.

The structures of the three basic functions were revised when fresh information on recent trends became available.

The equation for changes in stocks was specified as a fixed part of the gross domestic product, since the necessary historical data in respect of this type of investment were not available. But as the share of fixed capital investment is small, it cannot greatly affect the results of the projections according to the different specifications of this function.

The results obtained for the countries are given below, and show the values of the coefficient of determination and the Durbin-Watson ratio for each regression equation, and the base period for calculating average propensities. The country monographs contain detailed explanations of these numerical results.

Production functionsArgentina

(modified function)

$$P(t) = 546.0 + 0.23256 \sum_{h=0}^{t-1} I(h)$$

(historical function)

$$P(t) = 702.05 + 0.1687 \sum_{h=0}^{t-1} I(h)$$

(15.75) (0.0009)

$$R^2 = 0.9544$$

$$n = 18$$

$$d = 1.722$$

Bolivia

$$P(t) = 4072.0 + 0.33895 \sum_{h=0}^{t-1} I(h)$$

(25.6) (0.00575)

$$R^2 = 0.9977$$

$$n = 10$$

$$d = 1.916$$

Brazil

$$P(t) = 1348.4 + 0.35875 \sum_{h=0}^{t-1} I(h)$$

(38.3) (0.00843)

$$R^2 = 0.9901$$

$$n = 20$$

$$d = 0.574$$

Colombia

$$P(t) = 24292.4 + 0.29049 \sum_{h=0}^{t-1} I(h)$$

(180.6) (0.00541)

$$R^2 = 0.9969$$

$$n = 12$$

$$d = 1.384$$

Chile

$$P(t) = 4063.6 + 0.28527 \sum_{h=0}^{t-1} I(h)$$

(41.3) (0.00980)

$$R^2 = 0.9918$$

$$n = 9$$

$$d = 1.701$$

Ecuador

$$P(t) = 9135.7 + 0.36517 \sum_{h=0}^{t-1} I(h)$$

(118.2) (0.00687)

$$R^2 = 0.9940$$

$$n = 17$$

$$d = 1.027$$

/Mexico

Mexico

$$P(t) = \frac{79960.1}{(1783.8)} + 0.38068 \sum_{h=0}^{t-1} I(h)$$

$$R^2 = 0.9940$$

$$n = 18$$

$$d = 0.844$$

Panama

$$P(t) = \frac{223.4}{(4.2)} + 0.44444 \sum_{h=0}^{t-1} I(h)$$

(historical function)

$$R^2 = 0.9959$$

$$n = 19$$

$$d = 1.258$$

$$I(t) = 2.51 \sqrt{P(t+1) - P(t)}$$

(modified function,  
1966-1969)

Paraguay

$$P(t) = \frac{25079.1}{(420.4)} + 0.26457 \sum_{h=0}^{t-1} I_T(h)$$

$$R^2 = 0.9827$$

$$n = 18$$

$$d = 0.863$$

Perú

$$P(t) = \frac{32933.7}{(1027.25)} + 0.2753 \sum_{h=0}^{t-1} I(h)$$

$$R^2 = 0.9834$$

$$n = 18$$

$$d = 0.4783$$

Dominican Republic

$$P(t) = \frac{472.2}{(18.1)} + 0.22448 \sum_{h=0}^{t-1} I(h)$$

$$R^2 = 0.9280$$

$$n = 18$$

$$d = 1.799$$

Uruguay

$$P(t) = \frac{1405.3}{(386)} + 0.235 \sum_{h=0}^{t-1} I(h)$$

(modified equation)

$$R^2 = 0.9448$$

$$n = 15$$

$$P(t) = 7968.8 + 0.235 \sum_{h=0}^{t-1} I(h)$$

$$d = 0.61$$

/Venezuela

Venezuela

$$P(t) = 22525.6 + 0.27725 \sum_{h=0}^{t-1} I(h) \\ (423.7) \quad (0.01247)$$

$$R^2 = 0.9822 \\ n = 11 \\ d = 1.300$$

Central America

Guatemala

$$P(t) = 664.8 + 0.43671 \sum_{h=0}^{t-1} I(h) \\ (10.1) \quad (0.00846)$$

$$R^2 = 0.9936 \\ n = 19 \\ d = 0.767$$

El Salvador

$$P(t) = 1310.1 + 0.41839 \sum_{h=0}^{t-1} I_T(h) \\ (36.9) \quad (0.02485)$$

$$R^2 = 0.9690 \\ n = 11 \\ d = 0.733$$

Honduras

$$P(t) = 496.8 + 0.31776 \sum_{h=0}^{t-1} I(h) \\ (12.8) \quad (0.01108)$$

$$R^2 = 0.9790 \\ n = 19 \\ d = 0.686$$

Nicaragua

$$P(t) = 1786.9 + 0.32106 \sum_{h=0}^{t-1} I_T(h) \\ (64.8) \quad (0.01316)$$

$$R^2 = 0.9720 \\ n = 19 \\ d = 0.615$$

Costa Rica

$$P(t) = 1425.4 + 0.32414 \sum_{h=0}^{t-1} I(h) \\ (35.2) \quad (0.00683)$$

$$R^2 = 0.9929 \\ n = 18 \\ d = 1.576$$

Import functions

Argentina

Consumer goods (Mc): period analysed 1950-1968

$$Mc(t) = 0.0031 P(t)$$

/Fuels (Mcb):



Fuels (Mcb): period analysed 1959-1968

$$Mcb(t) = 0.0069 P(t)$$

Raw materials and intermediate goods (mmp): period analysed 1950-1968

$$Mmp(t) = 0.034 P(t)$$

Construction materials (Mmc): period analysed 1950-1968

$$Mmc(t) = 0.0243 I(t)$$

Capital goods (Mk): period analysed 1950-1968

$$Mk(t) = 0.13 I(t)$$

Miscellaneous (Mvar.): period analysed 1950-1968

$$Mvar.(t) = 0.0032 Mb(t)$$

Services (Mser.): period analysed 1950-1968

$$Mser.(t) = 0.35 Mb(t)$$

Travel (Mviaj.): period analysed 1955-1968

$$Mviaj.(t) = 0.0033 P(t)$$

The sum of these partial coefficients gives the following equation:

$$M(t) = 0.0629 P(t) + 0.2090 I(t)$$

The independent term was arrived at by applying these coefficients to the import, product and investment data for 1968.

The resulting function is as follows:

$$M(t) = -8.12 + 0.0629 P(t) + 0.2090 I(t)$$

#### Bolivia

$$M(t) = 0.2548 P(t)$$

(average for 1950-1962)

#### Brazil

$$M(t) = 119.7 + 0.50524 I(t) - 0.07440 C^*(t)$$

(12.4) (0.05559) (0.01270)

$$R^2 = 0.9185$$

$$n = 15$$

$$d = 2.433$$

/Colombia

Colombia

Consumer goods (Mc)

$$Mc(t) = 190.80 \quad (\text{average for 1964-1968})$$

Capital goods (Mk)

$$Mk(t) = -160.30 + 0.31699 I(t) \quad R^2 = 0.6996$$

$$(246.98) (0.05037) \quad n = 19$$

$$d = 0.8329$$

Construction materials (Mmc)

$$Mmc(t) = 44.26 \quad (\text{average for 1964-1968})$$

Raw materials (Mmp)

$$Mmp(t) = -51.60 + 0.11351 I(t) + 0.03655 C^*(t) \quad R^2 = 0.6978$$

$$(259.61) (0.07253) (0.01137) \quad n = 19$$

$$d = 2.9035$$

Services (Mser.)

$$Mser(t) = 175.85 + 62.30 t \quad t=20, 21, \text{ etc.}$$

Total

$$M(t) = 199.0 + 62.30 t + 0.43050 I(t) + 0.03655 C^*(t)$$

Chile

Consumer goods (Mc)

$$Mc(t) = 169.0 (1 + rmc)^t$$

Fuels (Mcb)

$$Mcb(t) = 57.8 \quad (\text{average for 1959-1968})$$

Construction materials (Mmc)

$$Mmc(t) = 23.7 \quad (\text{average for 1959-1968})$$

Raw materials (Mmp)

$$Mmp(t) = 210.05 + 0.08986 P(t) \quad R^2 = 0.8596$$

$$(77.39) (0.01482) \quad n = 8$$

$$d = 2.576$$

/Capital goods

Capital goods (Mk)  
 $Mk(t) = 0.21846 I(t)$  (average for 1963-1968)

Services (Mser.)  
 $Mser(t) = 137.0 (1 + rs)^t$

Total (m)  
 $M(t) = a_2(t) + 0.08986 P(t) + 0.218463 I(t)$

Ecuador

$M(t) = -346.0 + 0.20500 P(t)$   $R^2 = 0.876$   
 (264.8) (0.01988)  $n = 17$   
 $d = 0.989$

Mexico

$M(t) = 6685.7 + 0.07009 P(t)$   $R^2 = 0.946$   
 (654.4) (0.00405)  $n = 19$   
 $d = 1.812$

Panama

Non-durable consumer goods (Mcnd)  
 $Mcnd(t) = 27.3 + 0.03882 C^*(t)$   $R^2 = 0.6283$   
 (2.9) (0.00724)  $n = 19$   
 $d = 1.0455$

Durable consumer goods (Mcd)  
 $Mcd(t) = -1.2 + 0.05515 C^*(t)$   $R^2 = 0.9730$   
 (0.9) (0.02229)  $n = 19$   
 $d = 1.1941$

Fuels (Mcb)  
 $Mcb(t) = 10.8 + 0.06253 P \frac{6/}{(5.2) (0.00864) P}$   $R^2 = 0.9129$   
 $n = 7$   
 $d = 2.2134$

---

6/  $P_p$  = production index for petroleum products.

/Raw materials

## Raw materials (Mmp)

$$Mmp(t) = -22.1 \pm 0.12154 P(t) \\ (1.9) (0.00404)$$

$$R^2 = 0.9816$$

$$n = 19$$

$$d = 0.9909$$

## Construction materials (Mmc)

$$Mmc(t) = 4.0 \pm 0.03568 I(t) \\ (0.4) (0.00525)$$

$$R^2 = 0.7312$$

$$n = 19$$

$$d = 1.8116$$

## Capital goods (Mk)

$$Mk(t) = 2.7 \pm 0.24878 I(t) \\ (1.4) (0.01742)$$

$$R^2 = 0.9231$$

$$n = 19$$

$$d = 1.7198$$

## Total goods (Mb)

$$Mb(t) = 21.5 \pm 0.12154 P(t) \pm 0.09397 C^*(t) \pm 0.28446 I(t) \pm 0.06253 P_p(t)$$

## Services (Mser.)

$$Mser.(t) = 1.8 \pm 0.8880 Mb(t) \\ (2.1) (0.01382)$$

$$R^2 = 0.7085$$

$$n = 19$$

$$d = 1.1085$$

## Total

$$M(t) = Mb \pm Mser. = 25.2 \pm 0.13233 P(t) \pm 0.10231 C^*(t) \\ \pm 0.30972 I(t) \pm 0.06808 P_p(t) \quad P_p(t) = \left( \frac{1.12}{1 \pm r_p(t)} \right)^t P_t$$

Paraguay

$$M(t) = -1662.0 \pm 0.243 P(t) \\ (767.1) (0.021)$$

$$R^2 = 0.8844$$

$$n = 19$$

$$d = 1.45$$

Peru

## Consumer and miscellaneous goods (Mcv)

$$Mcv(t) = -111.75 \pm 0.5363 C^*(t) \\ (370.01) (0.00762)$$

$$R^2 = 0.7445$$

$$n = 19$$

$$d = 1.268$$

/Fuels and

Fuels and raw materials (Mcb,mp)

$$M_{cb,mp}(t) = -2817.30 + 0.12275 P(t) \\ (409.84) (0.00804)$$

$$R^2 = 0.9321 \\ n = 19 \\ d = 1.559$$

Capital goods and construction materials (Mk,mc)

$$M_{k,mc}(t) = -1732.56 + 0.51260 I(t) \\ (358.00) (0.02864)$$

$$R^2 = 0.9496 \\ n = 19 \\ d = 0.802$$

Services (Mser.)

$$M_{ser.}(t) = -939.46 + 0.07184 P(t) \\ (301.34) (0.00494)$$

$$R^2 = 0.9245 \\ n = 19 \\ d = 0.936$$

Total

$$M(t) = -5601.07 + 0.19459 P(t) + 0.05363 C^*(t) + 0.51260 I(t)$$

Uruguay

$$M(t) = 0.2160 P(t)$$

(average for 1951-1953)

Venezuela

$$M(t) = 5367.0 + 0.17816 C^*(t) + 0.82235 I(t) \\ (515.5) (0.02534) (0.08897)$$

$$R^2 = 0.9167 \\ n = 11 \\ d = 2.035$$

Dominican Republic

Capital goods (Mk)

$$M_k(t) = 2.8 + 0.30075 I(t) \\ (23.7)(0.17899)$$

$$R^2 = 0.7655 \\ n = 16$$

Other goods and services (Mobs)

$$M_{obs}(t) = -66.9 + 0.38245 [P(t) - I(t)] \\ (106.8) (0.18488)$$

$$R^2 = 0.8302 \\ n = 16$$

Total (M)

$$M(t) = -64.1 + 0.38245 C^*(t) + 0.30075 I(t)$$

/Central America

Central America

Guatemala

Imports from outside the Central American Common Market

Capital goods (Mk)

$$\begin{aligned} \text{Mk}(t) &= 17.7 + 0.23204 \text{ I}(t) & R^2 &= 0.6973 \\ & (7.6) (0.05096) & n &= 11 \\ & & d &= 1.431 \end{aligned}$$

Other goods and services (Mobs)

$$\begin{aligned} \text{Mobs}(t) &= -16.0 + 0.13254 \text{ C}^*(t) & R^2 &= 0.7593 \\ & (29.0) (0.02487) & n &= 11 \\ & & d &= 1.006 \end{aligned}$$

Imports from within the Central American Common Market (Mca)

$$\begin{aligned} \text{Mca}(t) &= -80.7 + 0.08199 \text{ P}(t) & R^2 &= 0.9882 \\ & (14.5) (0.00194) & n &= 11 \\ & & d &= 1.370 \end{aligned}$$

Total (M)

$$\text{M}(t) = -79.0 + 0.08199 \text{ P}(t) + 0.13254 \text{ C}^*(t) + 0.23204 \text{ I}(t)$$

El Salvador

Imports from outside the Central American Common Market

Capital goods (Mk)

$$\begin{aligned} \text{Mk}(t) &= -22.8 + 0.48842 \text{ I}(t) & R^2 &= 0.9490 \\ & (9.7) (0.03745) & n &= 11 \\ & & d &= 2.727 \end{aligned}$$

Other goods and services (Mobs)

$$\begin{aligned} \text{Mobs}(t) &= 12.3 + 0.16884 \text{ C}^*(t) & R^2 &= 0.7930 \\ & (43.9) (0.02875) & n &= 11 \\ & & d &= 1.366 \end{aligned}$$

/Imports from

Imports from within the Central American Common Market (Mca)

$$\begin{aligned} \text{Mca}(t) &= -154.9 \pm 0.13158 P(t) & R^2 &= 0.9729 \\ & (13.6) (0.00732) & n &= 11 \\ & & d &= 2.322 \end{aligned}$$

Total (M)

$$M(t) = -165.4 \pm 0.13158 P(t) \pm 0.16884 C^*(t) \pm 0.48842 I(t)$$

### Honduras

Imports from outside the Central American Common Market

Capital goods (Mk)

$$\begin{aligned} \text{Mk}(t) &= 2.3 \pm 0.42545 I(t) & R^2 &= 0.9690 \\ & (3.9) (0.02509) & n &= 11 \\ & & d &= 0.9947 \end{aligned}$$

Other goods and services (Mobs)

$$\begin{aligned} \text{Mobs}(t) &= -150.7 \pm 0.37555 C^*(t) & R^2 &= 0.9740 \\ & (16.3) (0.02029) & n &= 11 \\ & & d &= 1.026 \end{aligned}$$

Imports from within the Central American Common Market (Mca)

$$\begin{aligned} \text{Mca}(t) &= -136.5 \pm 0.19188 P(t) & R^2 &= 0.9767 \\ & (9.4) (0.00972) & n &= 11 \\ & & d &= 1.346 \end{aligned}$$

Total (M)

$$M(t) = -284.9 \pm 0.19188 P(t) \pm 0.37555 C^*(t) \pm 0.42545 I(t)$$

### Nicaragua

Imports from outside the Central American Common Market

Capital goods (Mk)

$$\begin{aligned} \text{Mk}(t) &= -44.1 \pm 0.43917 I(t) & R^2 &= 0.9728 \\ & (17.6) (0.02446) & n &= 11 \\ & & d &= 2.161 \end{aligned}$$

/Other goods

## Other goods and services (Mobs)

$$\text{Mobs}(t) = -201.0 \pm 0.29777 \text{ C}^*(t) \\ (147.7) (0.04870)$$

$$R^2 = 0.8965$$

$$n = 11$$

$$d = 0.8623$$

## Imports from within the Central American Common Market (Mca)

$$\text{Mca}(t) = -391.3 \pm 0.14494 \text{ P}(t) \\ (56.1) (0.01499)$$

$$R^2 = 0.9122$$

$$n = 11$$

$$d = 0.7339$$

## Total (M)

$$\text{M}(t) = -636.4 \pm 0.14494 \text{ P}(t) \pm 0.29777 \text{ C}^*(t) \pm 0.43917 \text{ I}(t)$$

Costa Rica

## Imports from outside the Central American Common Market

## Capital goods (Mk)

$$\text{Mk}(t) = 43.1 \pm 0.28252 \text{ I}(t) \\ (27.8) (0.03759)$$

$$R^2 = 0.8625$$

$$n = 11$$

$$d = 2.454$$

## Other goods and services (Mobs)

$$\text{Mobs}(t) = 1.5 \pm 0.23710 \text{ C}^*(t) \\ (99.0) (0.03608)$$

$$R^2 = 0.8275$$

$$n = 11$$

$$d = 1.696$$

## Imports from within the Central American Common Market (Mca)

$$\text{Mca}(t) = -468.5 \pm 0.15600 \text{ P}(t) \\ (54.6) (0.1396)$$

$$R^2 = 0.9469$$

$$n = 11$$

$$d = 0.994$$

## Total (M)

$$\text{M}(t) = -423.9 \pm 0.15600 \text{ P}(t) \pm 0.23710 \text{ C}^*(t) \pm 0.28252 \text{ I}(t)$$

Saving functionsArgentina

$$\text{An}(t) = -74.80 \pm 0.26030 \text{ Y}(t) \\ (21.94) (0.2320)$$

$$R^2 = 0.8810$$

$$n = 19$$

$$d = 1.4314$$

/Bolivia



Bolivia

$$An(t) = -492.8 \pm 0.17370 Y(t) \\ (225.9) (0.03869)$$

$$R^2 = 0.7422 \\ n = 9 \\ d = 1.134$$

Brazil

$$An(t) = -28.3 \pm 0.18238 Y(t) \\ (48.2) (0.1541)$$

$$R^2 = 0.9150 \\ n = 15 \\ d = 1.893$$

Colombia

$$An(t) = 0.17 Y(t)$$

(average for 1958-1968)

Chile

$$An(t) = -364.15 \pm 0.21904 Y(t) \\ (233.10) (0.4591)$$

$$R^2 = 0.7648 \\ n = 9 \\ d = 1.2147$$

Ecuador

$$An(t) = 419.6 \pm 0.09566 Y(t) \\ (161.7) (0.01232)$$

$$R^2 = 0.801 \\ n = 17 \\ d = 1.548$$

Mexico

$$An(t) = -2853.2 \pm 0.20120 Y(t) \\ (1639.1) (0.01037)$$

$$R^2 = 0.957 \\ n = 19 \\ d = 1.372$$

Panama

$$An(t) = -37.0 \pm 0.20077 Y(t) \\ (2.3) (0.01359)$$

$$R^2 = 0.9327 \\ n = 19 \\ d = 1.6820$$

Paraguay

$$An(t) = 0.11 Y(t)$$

(average for 1950-1968)

/Peru

Peru

$$An(t) = 2018.3 \pm 0.1712 Y(t) \\ (1092.3) (0.0178)$$

$$R^2 = 0.8447 \\ n = 19 \\ d = 2.1573$$

Dominican Republic

$$An(t) = 0.13 Y(t)$$

Uruguay

$$An(t) = -1395 \pm 0.094 Y(t) \pm 0.835 \sqrt{E(t)} \pm G(t) \\ (403) (0.0167) (0.0808)$$

$$R^2 = 0.8154 \\ n = 19 \\ d = 2.06$$

Modified equation:

$$An(t) = 1114.35 \pm 0.094 Y(t) \pm 0.835 \sqrt{E(t)} \pm G(t)$$

Venezuela

$$An(t) = 3542.1 \pm 0.10173 Y(t) \\ (791.0) (0.02900)$$

$$R^2 = 0.5775 \\ n = 11 \\ d = 1.600$$

Central America

Guatemala

$$An(t) = -103.1 \pm 0.17037 Y(t) \\ (58.8) (0.01470)$$

$$R^2 = 0.9425 \\ n = 11 \\ d = 1.066$$

El Salvador

$$An(t) = -19.1 \pm 0.13209 Y(t) \\ (33.5) (0.01844)$$

$$R^2 = 0.9508 \\ n = 11 \\ d = 2.020$$

Honduras

$$An(t) = -33.6 \pm 0.16896 Y(t) \\ (15.4) (0.01588)$$

$$R^2 = 0.9263 \\ n = 11 \\ d = 2.255$$

/Nicaragua

Nicaragua

$$An(t) = 56.4 + 0.12113 Y(t) \\ (58.2) (0.01792)$$

$$R^2 = 0.7288$$

$$n = 19$$

$$d = 1.1124$$

Costa Rica

$$An(t) = 0.155 Y(t)$$

Other parameters

Coefficients of changes in stocks:  $b_4$

Central America

Argentina	$b_4 = 0.0000$	Guatemala	$b_4 = 0.0030$
Bolivia	$b_4 = 0.0100$	El Salvador	$b_4 = 0.0100$
Brazil	$b_4 = 0.0100$	Honduras	$b_4 = 0.0000$
Colombia	$b_4 = 0.0226$	Nicaragua	$b_4 = 0.0000$
Chile	$b_4 = 0.0139$	Costa Rica	$b_4 = 0.0150$
Ecuador	$b_4 = 0.0200$		
Mexico	$b_4 = 0.0177$		
Panama	$b_4 = 0.0197$		
Paraguay	$b_4 = 0.0000$		
Peru	$b_4 = 0.0300$		
Dominican Republic	$b_4 = 0.0000$		
Uruguay	$b_4 = 0.0040$		
Venezuela	$b_4 = 0.0100$		

Coefficient of yield of foreign capital:  $b_5 = -0.10$

/Depreciation coefficient:

Depreciation coefficient:  $b_6 = 0$

Coefficient of distribution of financing:  $r = 0.80$

Other financing coefficients:

$k$	$\lambda_k$	$i_k$ (percentage)	$p_k$ (years)	$n_k$ (years)
1	0.25	6	3	7
2	0.30	5	5	15
3	0.20	3	5	40
4	0.10	8	1	1
5	0.15	7	1	7

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## A P P E N D I X



Table A

LATIN AMERICA: SHARE OF THE PRINCIPAL SECTORS IN THE GENERATION OF THE GROSS DOMESTIC PRODUCT AT FACTOR COST <sup>a/</sup>

(Percentages of the total)

Country	Agriculture			Mining and quarrying			Manufacturing			Construction			Electricity, gas and water			Transport and communications			Commerce and finance			Other services		
	1950-1952	1960-1962	1966-1968	1950-1952	1960-1962	1966-1968	1950-1952	1960-1962	1966-1968	1950-1952	1960-1962	1966-1968	1950-1952	1960-1962	1966-1968	1950-1952	1960-1962	1966-1968	1950-1952	1960-1962	1966-1968	1950-1952	1960-1962	1966-1968
Argentina	18.9	16.8	16.5	0.6	1.3	1.6	29.5	32.4	34.7	5.0	4.1	4.0	1.0	1.4	2.0	8.1	7.5	7.4	18.9	19.8	18.4	18.0	16.7	15.4
Bolivia	30.5	30.5	25.9	17.6	10.5	12.5	12.5	11.9	13.5	2.3	3.5	4.4	1.1	1.2	1.6	6.5	9.0	8.4	10.9	10.8	11.2	18.6	22.6	22.5
Brazil	26.8	21.8	21.3	0.2	0.5	0.6	18.1	23.2	23.5	1.7	1.4	1.0	1.9	2.1	2.4	6.1	6.8	7.3	22.2	20.6	20.2	23.0	23.6	23.6
Costa Rica	35.7	27.0	24.0	0.0	0.0	0.0	15.5	16.1	18.7	4.5	5.4	5.0	1.2	1.4	1.7	3.0	4.3	4.4	14.2	14.8	15.3	26.0	31.1	30.9
El Salvador	36.2	33.6	26.4	0.8	0.2	0.2	12.6	13.9	17.7	2.9	3.6	4.1	0.6	1.3	1.8	4.5	5.1	5.2	19.3	20.1	23.9	23.1	22.3	20.7
Guatemala	32.5	29.9	28.1	0.2	0.2	0.1	10.0	10.9	12.8	2.8	2.1	1.9	0.5	0.7	1.1	3.1	4.5	4.5	30.0	30.1	32.7	20.8	21.5	18.8
Honduras	38.0	43.9	41.3	1.6	1.1	2.0	9.2	12.8	14.6	5.7	3.7	4.8	0.2	0.5	0.8	4.9	5.5	6.3	13.1	14.6	15.4	16.8	17.9	14.7
Nicaragua	41.0	34.5	31.6	2.3	1.9	1.5	8.2	10.0	12.2	1.7	2.9	3.8	0.4	1.3	2.1	3.4	5.7	5.4	18.4	19.0	19.1	24.6	24.7	24.3
Colombia	39.0	33.7	30.8	3.7	3.6	3.3	14.5	17.4	18.2	3.1	3.8	4.1	0.5	0.9	1.1	5.9	6.7	7.2	15.1	15.9	16.7	18.1	17.9	18.6
Chile	-	11.6	10.6	-	10.0	9.8	-	24.0	25.8	-	4.9	4.1	-	1.2	1.5	-	7.7	10.1	-	17.3	17.0	-	23.3	21.0
Ecuador	40.5	37.4	33.1	2.1	2.3	2.2	15.7	15.4	16.9	2.5	4.0	4.4	0.6	1.3	1.5	4.9	4.2	3.7	11.5	13.9	13.3	22.2	21.6	24.9
Mexico	18.0	16.5	13.8	4.3	4.8	4.2	18.8	19.2	21.7	4.2	4.1	4.7	0.5	0.9	1.2	3.4	3.4	3.4	30.2	30.0	30.3	20.5	20.9	20.6
Panama	29.3	24.3	22.0	0.3	0.3	0.3	9.8	13.8	16.5	4.6	6.3	6.4	1.4	2.2	2.5	4.1	5.1	6.0	11.0	12.1	12.7	39.4	36.0	33.5
Paraguay	41.1	39.0	35.7	0.0	0.1	0.3	18.2	17.4	18.2	1.5	2.2	3.1	0.3	0.7	0.8	4.1	4.1	4.4	17.6	17.9	17.9	17.3	18.5	19.7
Peru	25.0	23.6	19.1	5.2	7.7	6.8	14.7	18.2	21.5	4.9	4.3	4.1	0.8	0.9	1.1	4.8	4.7	4.9	14.9	14.5	15.4	29.7	26.1	27.2
Dominican Republic	30.9	29.8	25.9	0.2	1.6	1.6	12.3	13.6	12.7	5.1	3.3	5.3	0.3	1.1	1.5	4.6	5.0	6.8	17.7	17.1	17.8	28.9	28.4	28.4
Uruguay	23.1	19.9	20.5	0.0	0.0	0.0	17.9	20.5	21.6	4.8	4.5	3.6	0.9	1.6	1.9	7.7	7.3	7.1	23.2	22.5	20.4	22.3	23.7	24.9
Venezuela	8.1	7.2	7.8	25.7	27.2	24.2	8.2	11.0	12.9	4.8	3.5	3.1	0.6	1.6	2.6	4.8	3.9	4.0	11.3	12.1	13.9	36.4	33.5	31.5
<b>Total</b>	<b>22.8</b>	<b>19.2</b>	<b>18.3</b>	<b>3.2</b>	<b>4.4</b>	<b>4.2</b>	<b>19.6</b>	<b>21.9</b>	<b>23.3</b>	<b>3.8</b>	<b>3.4</b>	<b>3.4</b>	<b>1.0</b>	<b>1.4</b>	<b>1.8</b>	<b>5.8</b>	<b>5.8</b>	<b>6.0</b>	<b>21.0</b>	<b>21.1</b>	<b>21.4</b>	<b>22.1</b>	<b>22.1</b>	<b>21.6</b>

Source: ECLA, on the basis of official statistics.

<sup>a/</sup> Based on 1960 prices.

Table B

## LATIN AMERICA: SHARE OF DOMESTIC SAVING AND EXTERNAL FINANCING IN TOTAL GROSS INVESTMENT, BY COUNTRY

(Percentages of total gross investment)

Country	Domestic saving								Net external financing							
	1950	1951- 1953	1954- 1956	1957- 1959	1960- 1962	1963- 1965	1966- 1968	1969	1950	1951- 1953	1954- 1956	1957- 1959	1960- 1962	1963- 1965	1966- 1968	1969
Argentina	110.3	92.2	94.6	91.3	86.6	107.1	105.1	94.8	-10.3	7.8	5.4	8.7	13.4	-7.1	-5.1	5.2
Bolivia	100.0	82.6	71.4	30.6	41.4	56.8	58.8	54.9	0.0	17.4	28.6	69.4	58.6	43.2	41.2	45.1
Brazil	105.0	88.5	97.3	92.7	91.3	100.7	95.2	97.1	-5.0	11.5	2.7	7.3	8.7	-0.7	4.8	2.9
Costa Rica	106.8	96.1	87.7	78.1	79.9	68.3	66.3	65.5	-6.8	3.9	12.3	21.9	20.1	31.7	33.7	34.5
El Salvador	136.2	115.7	108.2	101.7	87.5	83.6	78.8	85.1	-36.2	-15.7	-8.2	-1.7	12.5	16.4	21.2	14.9
Guatemala	100.0	109.9	89.9	63.6	76.4	78.9	77.2	89.4	-	-9.9	10.1	36.4	23.6	21.1	22.8	10.6
Honduras	98.3	88.4	90.1	83.3	99.5	81.2	74.0	74.7	1.7	11.6	9.9	16.7	0.5	18.8	26.0	25.3
Nicaragua	102.1	103.2	88.4	89.0	84.2	85.1	58.6	70.3	-2.1	-3.2	11.6	11.0	15.8	14.9	41.4	29.7
Colombia	97.2	102.7	93.1	108.6	84.9	89.3	82.6	83.5	2.8	-2.7	6.9	8.6	15.1	10.7	17.4	16.5
Chile	96.9	94.2	99.8	86.4	68.7	86.0	88.9	97.8	3.1	5.8	0.2	13.6	31.3	14.0	11.1	2.2
Ecuador	141.4	108.2	80.2	93.1	86.4	84.4	72.3	47.6	-41.4	-8.2	19.8	6.9	13.6	15.6	27.7	52.4
Mexico	103.7	91.0	99.0	87.5	89.4	90.4	88.5	87.7	-3.7	9.0	1.0	12.5	10.6	9.6	11.5	12.3
Panama	68.6	49.5	61.4	40.6	60.3	70.0	80.3	94.6	31.4	50.5	38.6	59.4	39.7	30.0	19.7	5.4
Paraguay	158.8	93.8	83.3	75.0	78.7	83.6	71.4	61.3	-58.8	6.2	16.7	25.0	21.3	16.4	18.6	38.7
Peru	97.7	86.8	87.0	79.2	97.6	87.1	76.6	99.1	2.3	13.2	13.0	20.8	2.4	12.9	23.4	0.9
Dominican Republic	147.4	102.1	100.9	94.7	125.3	64.0	55.9	53.1	-47.4	-2.1	-0.9	5.3	-25.3	36.0	44.1	46.9
Uruguay	118.4	94.6	88.1	76.0	73.5	110.9	113.4	99.8	-18.4	5.4	11.9	24.0	26.5	-10.9	-13.4	0.2
Venezuela	101.6	102.2	97.1	84.2	130.3	121.6	95.9	87.4	-1.6	-2.2	2.9	15.8	-30.3	-11.6	4.1	12.6
<b>Total</b>	<b>104.8</b>	<b>93.2</b>	<b>95.6</b>	<b>89.3</b>	<b>91.7</b>	<b>97.3</b>	<b>91.8</b>	<b>91.3</b>	<b>-4.8</b>	<b>6.8</b>	<b>4.4</b>	<b>10.7</b>	<b>8.3</b>	<b>2.7</b>	<b>8.2</b>	<b>8.7</b>

Source: ECLA, on the basis of official statistics.



Table C

LATIN AMERICA:<sup>a/</sup> GROWTH AND DISTRIBUTION OF THE GROSS DOMESTIC PRODUCT AND TREND OF THE EXTERNAL SECTOR

Period	Gross domestic product	Terms-of-trade effect	Net remittance of profits and interest abroad	Gross national income	Net external private transfer payments	Consumption		Financing of total gross investment			Exports of goods and services		Imports of goods and services
						Private	Public	Gross domestic saving	Net external saving	Total	Volume	Purchasing power	
Annual averages, in millions of dollars at 1960 prices <sup>b/</sup>													
1950	42 638	1 421	979	43 080	-29	30 834	4 229	7 988	-367	7 621	6 268	7 689	6 314
1951-1953	47 088	1 103	979	47 212	-52	33 581	4 723	8 856	647	9 503	6 492	7 596	7 211
1954-1956	55 314	1 037	1 149	55 202	-86	39 327	5 457	10 332	471	10 803	7 658	8 695	7 931
1957-1959	64 836	335	1 244	63 927	-80	46 139	6 608	11 100	1 326	12 426	8 699	9 034	9 036
1960-1962	76 310	-239	1 303	74 768	-90	53 497	8 019	13 162	1 187	14 349	9 802	9 563	9 357
1963-1965	87 245	-534	1 488	85 223	-19	60 709	9 006	15 489	436	15 925	11 279	10 745	9 674
1966-1968	100 982	-726	1 967	98 289	-3	70 980	10 077	17 229	1 540	18 769	12 739	12 013	11 583
1969	113 452	-750	2 191	110 571	-9	78 990	11 304	20 268	1 942	22 210	14 340	13 590	13 332
Percentage ratios to the gross domestic product													
1950	100.00	3.33	2.30	101.04	-0.07	72.32	9.92	18.73	-0.86	17.87	14.70	14.70	14.81
1951-1953	100.00	2.34	2.08	100.27	-0.11	71.31	10.03	18.81	1.37	20.18	13.79	16.13	15.31
1954-1956	100.00	1.87	2.08	99.80	-0.16	71.10	9.87	18.68	0.85	19.53	13.84	15.72	14.34
1957-1959	100.00	0.52	1.92	98.60	-0.12	71.17	10.19	17.12	2.05	19.17	13.42	13.93	13.94
1960-1962	100.00	-0.31	1.71	97.98	-0.12	70.10	10.51	17.25	1.56	18.80	12.84	12.53	12.26
1963-1965	100.00	-0.61	1.71	97.68	-0.02	69.58	10.32	17.75	0.50	18.25	12.93	12.32	11.09
1966-1968	100.00	-0.72	1.95	97.33	-	70.29	9.98	17.06	1.53	18.59	12.62	11.90	11.47
1969	100.00	-0.66	1.93	97.46	-0.01	69.62	9.96	17.86	1.71	19.58	12.64	11.98	11.75
Annual growth rate with respect to the previous period, in percentages													
1950	...	-	...	...	-	...	...	...	-	...	...	...	...
1951-1953	5.1	-	-	4.7	-	4.4	5.7	5.3	-	11.7	1.8	-0.6	6.9
1954-1956	5.5	-	5.5	5.4	-	5.4	4.9	5.3	-	4.4	5.7	4.6	3.2
1957-1959	5.4	-	2.7	5.0	-	5.5	6.6	2.4	-	4.8	4.3	1.3	4.4
1960-1962	5.6	-	1.6	5.4	-	5.0	6.7	5.8	-	4.9	4.1	1.9	1.2
1963-1965	4.6	-	4.5	4.5	-	4.3	3.9	5.6	-	3.2	4.8	4.0	1.1
1966-1968	5.0	-	9.7	4.9	-	5.3	3.8	3.6	-	5.6	4.1	3.8	6.2
1969	6.0	-	5.5	6.1	-	5.5	5.9	8.5	-	8.8	6.1	6.4	7.3

Source: ECLA, on the basis of official statistics.

<sup>a/</sup> Excluding Cuba and Haiti.<sup>b/</sup> Converted at the exchange rates for

Table D  
LATIN AMERICA: <sup>a/</sup> GROWTH AND DISTRIBUTION OF THE GROSS DOMESTIC PRODUCT AND TREND OF THE EXTERNAL SECTOR

Period	Gross domestic product	Terms-of-trade effect	Net remittance of profits and interest abroad	Gross national income	Net external private transfer payments	Consumption		Financing of total gross investment			Exports of goods and services		Imports of goods and services
						Private	Public	Saving		Total	Volume	Purchasing power	
								Gross domestic saving	Net external saving				
Annual averages, in millions of dollars at 1960 prices <sup>b/</sup>													
1950	38 985	1 045	441	39 589	-7	28 854	3 781	6 947	-351	6 596	5 002	6 047	5 248
1951-1953	42 720	787	449	43 058	-19	31 332	4 207	7 500	676	8 176	5 009	5 796	6 004
1954-1956	49 722	552	439	49 835	-23	36 250	4 865	8 696	422	9 118	5 798	6 350	6 309
1957-1959	57 748	-81	509	57 158	-2	42 038	5 617	9 501	1 026	10 527	6 333	6 252	6 767
1960-1962	68 413	-156	735	67 522	-9	49 201	6 922	11 390	1 599	12 989	7 204	7 048	7 903
1963-1965	78 049	109	900	77 258	56	56 122	7 649	13 544	639	14 183	8 371	8 480	8 275
1966-1968	90 546	253	1 394	89 405	79	65 754	8 424	15 306	1 458	16 764	9 651	9 904	10 047
1969	102 089	361	1 620	100 890	72	73 266	9 449	18 247	1 652	19 899	11 109	11 470	11 573
Percentage ratios to the gross domestic product													
1950	100.0	2.68	1.13	101.55	-0.02	74.01	9.70	17.82	-0.90	16.92	12.83	15.51	13.46
1951-1953	100.0	1.84	1.05	100.79	-0.04	73.34	9.85	17.56	1.58	19.14	11.73	13.57	14.05
1954-1956	100.0	1.11	0.88	100.23	-0.05	72.91	9.78	17.49	0.85	18.34	11.66	12.77	12.69
1957-1959	100.0	-0.14	0.88	98.98	-	72.80	9.73	16.45	1.78	18.23	10.97	10.83	11.72
1960-1962	100.0	-0.23	1.07	98.70	-0.01	71.92	10.12	16.65	2.34	18.99	10.53	10.30	11.55
1963-1965	100.0	0.14	1.15	98.99	0.07	71.91	9.80	17.35	0.82	18.17	10.73	10.87	10.60
1966-1968	100.0	0.28	1.54	98.34	0.09	72.62	9.30	16.90	1.61	18.51	10.66	10.94	11.10
1969	100.0	0.35	1.59	98.83	0.07	71.77	9.26	17.87	1.62	19.49	10.88	11.24	11.34
Annual growth rate with respect to the previous period, in percentages													
1950	...	-	...	...	-	...	...	...	-	...	...	...	...
1951-1953	4.7	-	0.9	4.3	-	4.2	5.5	3.9	-	11.3	0.1	-2.1	7.0
1954-1956	5.2	-	-1.2	5.0	-	5.0	5.0	5.1	-	3.7	5.0	3.1	1.7
1957-1959	5.1	-	5.1	4.7	-	5.1	4.9	3.0	-	4.9	3.0	-0.5	2.4
1960-1962	5.8	-	13.0	5.7	-	5.4	7.2	6.2	-	7.3	4.4	4.1	5.3
1963-1965	4.5	-	7.0	4.6	-	4.5	3.4	5.9	-	3.0	5.1	6.4	1.5
1966-1968	5.1	-	15.7	4.8	-	5.4	3.4	4.2	-	5.7	4.9	5.3	6.7
1969	6.2	-	7.8	6.4	-	8.4	5.9	9.2	-	9.0	7.3	7.6	7.3

Source: ECLA, on the basis of official statistics.

a/ Excluding Cuba, Haiti and Venezuela.

b/ Converted at the exchange rates for imports.

Table E

## LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT AND DOMESTIC SAVINGS GAP, BY COUNTRY, 1975 AND 1980

Low growth rate hypothesis for the gross domestic product in the 1970s and low growth rate hypothesis for exports

	Average annual growth rate									Potential trade balance a/		Net potential remittance of profits and interest b/		Potential balance-of-payments deficit		Potential savings gap	
	Product			Exports			Imports			1975	1980	1975	1980	1975	1980	1975	1980
	1960-62	1966-68	1975	1960-62	1966-68	1975	1960-62	1966-68	1975								
	1966-68	1975	1980	1966-68	1975	1980	1966-68	1975	1980								
	Percentages									Millions of dollars at 1960 prices							
Argentina	2.9	4.4	4.0	3.5	3.6	3.8	-1.7	4.0	4.2	-194.7	-195.9	299.9	348.2	105.2	152.3	-846.4	-1 247.9
Bolivia	5.7	5.0	5.0	8.2	4.3	3.5	10.6	1.5	5.0	-7.5	8.9	35.7	52.3	28.2	61.2	20.3	16.0
Brazil	4.2	6.9	6.0	5.2	7.5	4.0	2.0	3.1	3.5	-1 022.8	-1 313.1	433.3	402.6	-589.5	-910.5	119.3	43.9
Costa Rica	7.0	6.9	7.3	9.8	8.4	6.4	10.1	8.6	8.4	71.2	148.3	46.6	100.6	117.8	248.9	105.4	174.1
El Salvador	6.1	4.5	4.8	9.1	4.5	4.4	9.8	4.8	5.6	45.0	80.9	27.3	58.1	72.3	139.0	3.9	2.5
Guatemala	5.4	5.1	5.0	12.9	6.2	4.5	9.9	6.3	5.8	18.5	57.1	41.5	69.3	60.0	126.4	-2.2	-33.4
Honduras	5.6	5.7	6.0	11.1	6.4	7.4	14.3	8.8	8.0	89.6	151.1	80.0	218.5	169.6	369.6	36.5	44.6
Nicaragua	7.5	5.0	5.2	11.7	6.2	6.5	15.3	5.7	6.4	59.4	82.4	41.7	83.6	101.1	166.0	36.6	49.1
Colombia	4.7	5.0	4.8	3.6	5.7	3.5	2.6	4.9	4.5	76.6	51.1	192.9	308.2	269.5	359.3	192.4	246.9
Chile	4.8	4.0	4.4	4.8	6.4	2.9	3.3	5.1	4.0	-75.7	60.5	213.2	291.2	137.5	351.7	6.6	-17.8
Ecuador	4.7	4.8	4.7	5.8	4.5	4.6	7.3	4.2	5.0	28.2	42.7	53.4	86.5	81.6	129.2	71.8	98.3
Mexico	7.5	6.8	6.5	4.9	4.6	4.4	4.9	5.1	5.4	249.6	472.9	686.2	1 065.3	935.8	1 538.2	-63.3	-212.5
Panama	7.8	8.0	7.8	10.4	7.4	6.0	8.9	7.6	7.4	-3.0	44.0	38.6	57.2	35.6	101.2	58.8	69.2
Paraguay	4.3	4.6	4.4	3.9	5.1	5.0	6.3	4.8	4.8	27.6	34.0	20.0	39.1	47.6	73.1	39.3	40.7
Peru	5.7	4.6	5.5	3.0	3.6	5.9	11.3	4.3	6.2	322.1	458.5	255.7	489.0	577.8	947.5	203.1	290.9
Dominican Republic	3.0	4.7	4.5	2.8	5.7	4.5	10.8	4.6	4.6	50.1	64.8	40.1	77.6	90.2	142.4	80.9	103.6
Uruguay	0.2	2.5	3.0	3.1	3.1	3.0	-3.8	7.0	3.0	45.8	53.1	40.7	75.3	86.5	128.4	-72.7	-100.5
Venezuela	4.8	4.8	5.0	2.9	2.5	2.5	0.9	0.8	0.1	-999.3	-1 336.9	729.9	816.1	-269.6	-520.9	479.1	887.8
<u>Latin America a/</u>	<u>4.8</u>	<u>5.8</u>	<u>5.5</u>	<u>4.5</u>	<u>4.8</u>	<u>4.0</u>	<u>3.6</u>	<u>3.9</u>	<u>4.4</u>	<u>-1 219.3</u>	<u>-1 035.6</u>	<u>3 276.7</u>	<u>4 638.7</u>	<u>2 057.2</u>	<u>3 603.1</u>	<u>469.4</u>	<u>455.5</u>
<u>Latin America d/</u>	<u>4.8</u>	<u>6.0</u>	<u>5.6</u>	<u>5.0</u>	<u>5.5</u>	<u>4.3</u>	<u>4.1</u>	<u>4.3</u>	<u>4.8</u>	<u>220.0</u>	<u>301.3</u>	<u>2 546.8</u>	<u>3 822.6</u>	<u>2 326.8</u>	<u>4 123.9</u>	<u>-9.7</u>	<u>-432.3</u>

Source: ECLA, on the basis of official statistics.

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

b/ Including net external private transfer payments.

c/ Excluding Cuba and Haiti.

d/ Excluding Cuba, Haiti and Venezuela.

Table F

## LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT AND DOMESTIC SAVINGS GAP, BY COUNTRY, 1975 AND 1980

Accelerated growth rate hypothesis for the gross domestic product in the 1970s and medium growth rate hypothesis for exports

	Average annual growth rate									Potential trade balance a/  19751980	Net potential remittance of profits and interest b/  19751980	Potential balance-of- payments deficit  19751980	Potential savings gap  19751980				
	Product			Exports			Imports										
	1960-62	1966-68	1975	1960-62	1966-68	1975	1960-62	1966-68	1975								
	1966-68	1975	1980	1966-68	1975	1980	1966-68	1975	1980								
	Percentages									Millions of dollars at 1960 prices							
Argentina	2.9	5.6	6.5	3.5	4.0	4.3	-1.7	8.1	6.7	429.3	925.0	416.0	794.4	845.3	1 719.4	1 477.6	1 766.6
Bolivia	5.7	5.4	7.0	8.2	4.3	3.5	10.6	1.9	7.0	-0.9	43.6	36.0	58.6	35.1	102.2	68.9	85.4
Brazil	4.2	8.1	8.0	5.2	10.2	7.0	2.0	11.8	6.4	398.2	369.3	907.9	1 406.1	1 306.1	1 775.4	3 769.3	5 558.8
Costa Rica	7.0	7.4	7.5	9.8	8.7	6.6	10.1	9.2	8.5	85.2	168.9	48.8	109.5	134.0	278.4	126.0	183.9
El Salvador	6.1	5.0	6.6	9.1	4.7	5.4	9.8	5.9	8.0	66.6	149.5	30.1	76.1	96.7	225.6	47.1	96.6
Guatemala	5.4	5.5	6.6	12.9	6.4	5.1	9.9	7.0	7.8	35.2	115.7	42.6	81.9	77.8	197.6	63.9	106.5
Honduras	5.6	5.7	6.0	11.1	6.6	8.1	14.3	9.4	9.3	101.3	188.3	83.0	240.7	184.3	429.0	66.7	90.4
Nicaragua	7.5	5.5	6.6	11.7	6.4	7.2	15.3	6.5	8.1	77.2	135.5	44.3	98.0	121.5	233.5	70.4	135.4
Colombia	4.7	5.6	7.0	3.6	6.3	4.5	2.6	8.0	6.3	320.0	556.4	219.8	452.4	539.8	1 008.8	869.1	1 254.9
Chile	4.8	4.8	7.0	4.8	6.4	3.0	3.3	7.2	6.8	-98.8	257.5	203.7	196.2	104.9	453.7	661.3	816.0
Ecuador	4.7	5.4	7.0	5.8	5.8	5.5	7.3	4.8	7.4	15.1	62.2	51.8	83.2	66.9	145.4	190.4	281.5
Mexico	7.5	7.1	7.0	4.9	4.9	4.8	4.9	5.4	5.8	247.5	496.6	682.4	1 062.0	929.9	1 558.6	384.9	428.1
Panama	7.8	8.0	7.8	10.4	7.6	6.6	8.9	7.6	7.4	-18.8	2.3	36.2	45.5	17.4	47.8	58.5	68.6
Paraguay	4.3	5.4	7.0	6.3	5.1	5.0	6.3	5.7	7.6	35.8	66.5	20.7	45.9	56.5	112.4	97.8	129.8
Peru	5.7	4.8	7.0	3.0	6.7	4.3	11.3	5.7	7.8	203.7	585.1	222.9	429.7	426.6	1 014.8	460.6	696.3
Dominican Republic	3.0	5.4	6.5	2.8	5.7	4.5	10.8	5.4	6.6	71.8	142.5	41.8	94.5	113.6	237.0	208.5	294.2
Uruguay	0.2	3.3	7.0	3.1	4.1	4.0	-3.8	7.9	7.0	46.0	97.8	37.4	76.1	83.4	173.9	117.9	157.6
Venezuela	4.7	5.3	7.0	2.9	2.5	2.5	0.9	7.6	3.2	136.7	260.9	782.7	1 096.7	919.4	1 357.6	1 666.3	2 748.1
Latin America c/	4.8	6.7	7.3	4.5	5.8	5.7	4.8	7.8	6.3	2 151.1	4 623.6	3 908.1	6 447.5	6 059.2	11 071.1	10 405.2	14 898.7
Latin America d/	4.8	6.8	7.3	5.0	6.6	5.3	4.1	7.8	6.3	2 014.4	4 362.7	3 125.4	5 350.8	5 139.8	9 713.5	8 738.9	12 150.6

Source: ECLA, on the basis of official statistics.

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

b/ Including net external private transfer payments.

c/ Excluding Cuba and Haiti.

d/ Excluding Cuba, Haiti and Ve.

Table C

## LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT AND DOMESTIC SAVINGS GAP, BY COUNTRY, 1975 AND 1980

Accelerated growth rate hypothesis for the gross domestic product in the 1970s and relatively high growth rate hypothesis for exports

	Average annual growth rate									Potential trade balance a/		Net potential remittance of profits and interest b/		Potential balance-of-payments deficit		Potential savings gap	
	Product			Exports			Imports			1975	1980	1975	1980	1975	1980	1975	1980
	1960-62	1966-68	1975	1960-62	1966-68	1975	1960-62	1966-68	1975								
	1966-68	1975	1980	1966-68	1975	1980	1966-68	1975	1980								
	Percentages									Millions of dollars at 1960 prices							
Argentina	2.9	5.6	6.5	3.5	4.2	4.5	-1.7	8.1	6.7	390.6	845.2	408.7	765.4	799.3	1 610.6	1 477.6	1 766.6
Bolivia	5.7	5.4	7.0	8.2	5.5	5.5	10.6	1.9	7.0	-21.6	-8.3	33.6	43.9	12.0	35.6	67.6	82.1
Brazil	4.2	8.1	8.0	5.2	11.0	8.0	2.0	11.8	6.4	167.6	-243.8	876.3	1 233.3	1 043.9	989.5	3 771.1	5 564.9
Costa Rica	7.0	7.4	7.5	9.8	9.2	7.3	10.1	9.2	8.5	71.7	133.1	47.0	99.3	118.7	232.4	126.1	184.3
El Salvador	6.1	5.0	6.6	9.1	5.4	6.4	9.8	5.9	8.0	50.7	109.0	28.0	64.4	78.7	173.4	47.3	97.3
Guatemala	5.4	5.5	6.6	12.9	6.9	6.1	9.9	7.0	7.8	20.6	78.1	40.8	69.7	61.4	147.8	64.3	108.7
Honduras	5.6	6.0	7.0	11.1	7.3	9.1	14.3	9.4	9.3	87.5	149.1	78.8	214.6	166.3	363.7	66.4	89.6
Nicaragua	7.5	5.5	6.6	11.7	7.2	8.1	15.3	6.5	8.1	58.7	88.5	42.1	84.9	100.8	173.4	70.2	134.8
Colombia	4.7	5.6	7.0	3.6	7.3	6.0	2.6	8.0	6.3	239.0	347.2	210.1	394.2	449.1	741.4	870.5	1 258.4
Chile	4.8	4.8	7.0	4.8	6.9	4.1	3.3	7.2	6.8	-167.0	51.8	199.3	247.4	32.3	299.2	656.1	821.6
Ecuador	4.7	5.4	7.0	5.8	6.9	4.8	7.3	4.8	7.4	-13.8	38.6	47.4	67.9	33.6	106.5	190.6	281.6
Mexico	7.5	7.1	7.0	4.9	6.4	6.5	4.9	5.4	5.8	-52.4	-184.5	616.0	817.1	563.6	632.6	389.5	438.9
Panama	7.8	8.0	7.8	10.4	8.8	8.1	8.9	7.6	7.4	-58.1	-106.4	32.7	32.5	-25.4	-73.9	57.9	66.9
Paraguay	4.3	5.4	7.0	3.9	6.3	7.0	6.3	5.7	7.6	26.9	42.5	19.6	39.4	46.5	82.1	97.7	129.6
Peru	5.7	4.8	7.0	3.0	6.6	6.4	11.3	5.7	7.8	219.4	439.8	224.2	417.9	443.6	857.7	461.0	693.0
Dominican Republic	3.0	5.4	6.5	2.8	6.4	5.5	10.8	5.4	6.6	55.8	101.9	39.9	83.0	95.7	184.9	207.8	292.3
Uruguay	0.2	3.3	7.0	3.1	4.7	5.0	-3.8	7.9	7.0	31.4	61.4	35.7	65.7	67.1	127.1	105.6	126.7
Venezuela	4.8	5.3	7.0	2.9	2.8	3.5	0.9	7.6	3.2	71.8	35.5	793.7	1 126.6	865.4	1 162.1	1 169.6	2 763.6
Latin America c/	4.8	6.7	7.3	4.5	6.4	5.9	3.6	7.3	6.3	1 178.8	1 978.7	3 773.9	5 867.2	4 952.6	7 845.9	9 896.9	14 900.8
Latin America d/	4.8	6.8	7.3	5.0	7.4	6.4	4.1	7.8	6.8	1 107.0	1 943.2	2 980.2	4 740.6	4 087.2	5 683.8	8 727.3	12 137.3

Source: ECLA, on the basis of official statistics.

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

b/ Including net external private transfer payments.

c/ Excluding Cuba and Haiti.

d/ Excluding Cuba, Haiti and Venezuela.

Table H

LATIN AMERICA: HYPOTHESES FOR THE GROWTH OF THE GROSS DOMESTIC PRODUCT

(Millions of dollars at 1960 prices) a/

Country	Low growth rate hypothesis		Accelerated growth rate hypothesis					
	1975	1980	1971	1972	1973	1974	1975	1980
Argentina	20 380.9	24 788.4	17 672.3	18 644.5	19 669.9	20 850.0	22 205.5	30 424.4
Bolivia	791.4	1 010.0	651.1	685.6	723.9	767.4	817.3	1 146.3
Brazil	57 144.7	76 471.9	46 117.5	49 807.0	53 792.1	58 095.6	62 743.0	92 189.5
Costa Rica	1 202.8	1 710.7	935.8	1 006.0	1 081.4	1 162.5	1 249.7	1 794.1
El Salvador	1 225.9	1 549.7	1 018.1	1 072.1	1 132.2	1 200.1	1 272.1	1 751.1
Guatemala	2 221.3	2 821.6	1 836.2	1 933.6	2 041.9	2 164.4	2 294.1	3 158.0
Honduras	869.3	1 163.3	689.9	734.0	782.5	835.7	894.2	1 254.1
Nicaragua	969.6	1 249.3	797.7	845.5	896.3	950.0	1 007.0	1 386.2
Colombia	8 321.3	10 519.5	6 911.5	7 277.8	7 685.4	8 146.5	8 676.0	12 168.5
Chile	7 574.0	9 393.5	6 412.2	6 752.1	7 130.2	7 558.0	8 049.3	11 289.6
Ecuador	1 708.1	2 149.1	1 425.6	1 501.1	1 585.2	1 680.3	1 789.5	2 510.0
Mexico	32 292.0	44 243.0	25 219.2	26 984.5	28 873.4	30 894.5	33 057.2	46 364.3
Panama	1 326.5	1 931.1	982.3	1 058.9	1 141.5	1 230.5	1 326.5	1 931.1
Paraguay	533.9	660.7	452.0	475.9	502.6	532.8	567.4	795.8
Peru	4 541.1	5 935.1	3 665.7	3 885.6	4 118.8	4 365.9	4 649.7	6 521.4
Dominican Republic	1 267.9	1 580.0	1 068.3	1 124.9	1 187.9	1 259.2	1 341.0	1 837.3
Uruguay	1 489.3	1 726.5	1 323.2	1 376.1	1 438.0	1 509.9	1 593.0	2 131.8
Venezuela	15 227.5	19 434.6	12 527.8	13 191.6	13 931.0	14 766.3	15 726.0	22 056.4
<b>Total</b>	<b>159 087.5</b>	<b>208 338.0</b>	<b>129 706.4</b>	<b>138 356.8</b>	<b>147 714.2</b>	<b>157 969.6</b>	<b>169 258.5</b>	<b>240 709.9</b>
<b>Total b/</b>	<b>143 860.0</b>	<b>188 903.4</b>	<b>117 178.6</b>	<b>125 165.2</b>	<b>133 783.2</b>	<b>143 203.3</b>	<b>153 432.5</b>	<b>218 653.5</b>

Source: ECLA.

a/ Converted at the exchange rate for imports.

b/ Excluding Venezuela.

Table I

LATIN AMERICA: PROJECTED TOTAL GROSS INVESTMENT

(Millions of dollars at 1960 prices) a/

Country	Low growth rate hypothesis		Accelerated growth rate hypothesis	
	1975	1980	1975	1980
Argentina	3 504.2	4 263.6	6 208.0	8 500.6
Bolivia	124.7	159.1	177.0	248.2
Brazil	10 153.5	13 587.7	14 653.5	21 532.5
Costa Rica	281.5	421.5	307.8	442.1
El Salvador	152.9	193.3	201.3	310.5
Guatemala	256.0	325.1	332.6	515.8
Honduras	164.1	219.6	197.0	276.0
Nicaragua	157.0	202.3	194.5	302.2
Colombia	1 563.3	1 976.5	2 287.0	3 207.7
Chile	1 273.3	1 579.3	2 087.1	2 926.8
Ecuador	254.0	319.6	378.9	531.3
Mexico	6 085.2	8 337.6	6 663.6	9 346.3
Panama	285.9	416.0	285.9	416.0
Paraguay	88.8	110.1	150.1	210.5
Peru	1 043.6	1 363.7	1 321.7	1 853.8
Dominican Republic	253.9	316.7	388.5	531.9
Uruguay	196.1	227.3	413.1	552.8
Venezuela	2 898.9	3 698.9	4 128.0	5 789.1
<u>Total</u>	<u>28 736.2</u>	<u>37 717.2</u>	<u>40 375.6</u>	<u>57 494.1</u>

Source: ECLA.

a/ Converted at the exchange rate for imports.

Table J

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

(Millions of dollars at 1960 prices)

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Country	Past annual average				Hypotheses for the purchasing power of exports of goods and services					
	Quantum		Purchasing power		Low growth rate		Medium growth rate		Relatively high growth rate	
	1960-1962	1966-1968	1960-1962	1966-1968	1975	1980	1975	1980	1975	1980
Argentina	1 289	1 586	1 273.3	1 674.7	2 111.2	2 549.0	2 166.9	2 667.5	2 205.6	2 747.3
Bolivia	61	98	64.0	151.0	209.2	248.4	209.2	248.4	229.8	300.3
Brazil	1 465	1 991	1 406.0	1 803.5	3 374.6	4 107.0	4 113.2	5 769.3	4 344.7	6 384.2
Costa Rica	108	190	105.3	179.2	345.6	474.2	351.2	487.1	364.8	523.0
El Salvador	136	229	129.6	211.8	302.0	375.2	301.3	403.9	325.4	444.4
Guatemala	139	289	130.4	236.0	404.1	501.3	410.9	534.1	425.5	571.6
Honduras	76	143	80.5	172.1	266.5	374.6	270.6	391.8	284.4	431.1
Nicaragua	87	168	89.6	189.6	297.6	404.9	301.7	422.5	320.2	469.5
Colombia	592	735	571.9	682.0	1 045.0	1 241.2	1 096.5	1 366.4	1 177.5	1 575.7
Chile	568	753	556.0	950.0	1 367.7	1 578.1	1 609.8	1 840.2	1 678.1	2 045.8
Ecuador	160	225	158.0	216.0	300.7	376.6	330.4	431.0	359.4	454.6
Mexico	1 426	1 897	1 372.0	1 767.0	2 537.3	3 151.7	2 593.1	3 276.7	2 892.9	3 957.8
Panama	141	255	143.9	269.0	486.9	651.1	502.8	690.7	542.1	799.5
Paraguay	46	58	46.0	61.6	90.0	114.8	90.0	114.8	98.9	138.7
Peru	556	665	548.1	907.7	1 016.4	1 353.7	1 287.8	1 589.5	1 272.1	1 734.7
Dominican Republic	162	138	180.5	202.5	326.8	407.2	326.8	407.2	342.8	447.8
Uruguay	192	231	192.0	229.5	275.9	319.8	298.1	362.6	312.7	399.1
Venezuela	2 598	3 088	2 515.0	2 109.0	2 636.4	2 982.9	2 636.4	2 982.9	2 701.4	3 208.4
Latin America a/	9 802	12 739	9 563.0	12 013.0	17 393.9	21 211.7	18 904.7	23 986.6	19 878.3	26 633.5
Latin America b/	7 204	9 651	7 048.0	9 904.0	14 757.5	18 228.8	16 268.3	21 003.7	17 176.9	23 425.1

Source: ECLA, on the basis of official statistics.

a/ Excluding Cuba and Haiti.

b/ Excluding Cuba, Haiti and Venezuela.



Table K

LATIN AMERICA: HYPOTHESES FOR THE FUTURE GROWTH OF EXPORTS

Country	Hypotheses					
	Low growth rate		Medium growth rate		Relatively high growth rate	
	1975	1980	1975	1980	1975	1980
Argentina	2 111.2	2 549.0	2 166.9	2 667.5	2 205.6	2 747.3
Bolivia	136.6	162.3	136.6	162.3	150.1	196.2
Brazil	3 552.6	4 322.8	4 329.8	6 072.8	4 573.7	6 720.2
Costa Rica	363.4	495.5	369.3	508.5	383.9	547.1
El Salvador	324.7	403.1	332.1	431.6	349.9	477.3
Guatemala	464.4	576.1	472.3	606.9	489.1	657.0
Honduras	235.9	337.5	239.5	353.0	251.7	338.4
Nicaragua	272.3	373.5	276.6	391.6	293.0	433.5
Colombia	1 142.6	1 357.1	1 198.9	1 494.0	1 287.4	1 722.8
Chile	1 247.9	1 447.6	1 247.9	1 447.8	1 292.8	1 583.4
Ecuador	319.9	400.6	351.5	458.6	382.3	483.7
Mexico	2 725.3	3 385.3	2 785.2	3 519.6	3 107.3	4 251.2
Panama	450.0	601.8	464.7	638.4	501.0	738.9
Paraguay	86.1	109.9	86.1	109.9	94.6	132.7
Peru	885.3	1 179.2	1 121.8	1 384.6	1 108.1	1 511.1
Dominican Republic	215.0	267.9	215.0	267.9	225.5	294.6
Uruguay	295.7	342.8	319.5	388.7	335.1	427.7
Venezuela	3 766.3	4 261.3	3 766.3	4 261.3	3 859.1	4 583.4
<u>Total</u>	<u>18 595.2</u>	<u>22 573.5</u>	<u>19 880.0</u>	<u>25 164.4</u>	<u>20 890.2</u>	<u>27 846.5</u>
<u>Total a/</u>	<u>14 828.9</u>	<u>18 312.2</u>	<u>16 113.7</u>	<u>20 903.1</u>	<u>17 031.1</u>	<u>23 263.1</u>

Source: ECLA.

a/ Excluding Venezuela.

Table L

LATIN AMERICA: POTENTIAL SAVINGS GAP AS A PERCENTAGE OF TOTAL GROSS INVESTMENT

Country	Average 1966-1968	Low growth rate hypothesis for the product		Accelerated growth rate hypothesis for the product <sup>a/</sup>	
		1975	1980	1975	1980
Argentina	-5.1	-24.2	-29.3	23.8	20.8
Bolivia	41.2	16.3	10.1	38.9	34.4
Brazil	4.8	1.2	0.3	25.7	25.8
Costa Rica	33.7	37.4	41.3	40.9	41.6
El Salvador	21.2	2.6	1.3	23.4	31.1
Guatemala	22.8	-0.9	-10.3	19.2	20.6
Honduras	26.0	22.2	20.3	33.9	32.8
Nicaragua	41.4	23.3	24.3	36.2	44.8
Colombia	17.4	12.3	12.5	38.0	39.1
Chile	11.1	0.5	-1.1	31.7	27.9
Ecuador	27.7	28.3	30.8	50.3	53.0
Mexico	11.5	-1.0	-2.5	5.8	4.6
Panama	19.7	20.6	16.6	20.5	16.5
Paraguay	18.6	44.3	37.0	65.2	61.7
Peru	23.4	19.5	21.3	34.8	37.6
Dominican Republic	44.1	31.9	32.7	53.7	55.3
Uruguay	-13.4	-37.1	-44.2	28.5	28.5
Venezuela	4.1	16.5	24.0	40.0	47.5
<u>Total</u>	<u>8.2</u>	<u>1.7</u>	<u>1.3</u>	<u>24.5</u>	<u>26.0</u>

Source: ECLA.

<sup>a/</sup> Medium growth rate hypothesis for exports.

Table M

LATIN AMERICA: POTENTIAL TRADE GAP AS A PERCENTAGE OF THE PURCHASING POWER OF EXPORTS ON  
THE HYPOTHESIS OF AN ACCELERATED GROWTH RATE FOR THE PRODUCT

Country	Medium growth rate hypothesis for exports		Relatively high growth rate hypothesis for exports	
	1975	1980	1975	1980
Argentina	19.8	34.7	17.7	30.8
Bolivia	-0.4	17.6	-9.4	-2.8
Brazil	9.7	6.4	3.9	-3.8
Costa Rica	24.3	34.7	19.7	25.4
El Salvador	21.5	37.0	15.6	24.5
Guatemala	8.6	21.7	4.8	13.7
Honduras	37.4	48.1	30.8	34.6
Nicaragua	25.6	32.1	31.5	36.9
Colombia	29.2	40.7	20.3	22.0
Chile	-6.1	14.0	-10.4	2.5
Ecuador	4.6	14.4	4.2	9.0
Mexico	9.5	15.2	-1.8	-4.7
Panama	-3.7	0.3	-10.7	-13.3
Paraguay	39.8	57.9	27.2	30.6
Peru	15.8	36.8	17.2	25.4
Dominican Republic	22.0	35.0	16.3	22.8
Uruguay	15.4	27.0	10.0	15.4
Venezuela	2.7	3.6	2.7	1.1
<u>Total</u>	<u>13.7</u>	<u>22.3</u>	<u>5.9</u>	<u>7.4</u>

Source: ECLA.

Table N

LATIN AMERICA: POTENTIAL BALANCE-OF-PAYMENTS DEFICIT AS A PERCENTAGE OF THE PURCHASING POWER  
OF EXPORTS ON THE HYPOTHESIS OF AN ACCELERATED GROWTH RATE FOR THE PRODUCT

Country	Average 1966-1968	Medium growth rate hypothesis for exports		Relatively high growth rate hypothesis for exports	
		1975	1980	1975	1980
Argentina	-8.4	39.0	64.5	36.2	58.6
Bolivia	26.5	16.8	41.1	5.2	11.9
Brazil	15.4	31.8	30.8	24.0	15.5
Costa Rica	27.4	38.2	57.2	32.5	44.4
El Salvador	13.2	31.3	55.9	24.2	39.0
Guatemala	16.5	18.9	37.0	14.4	25.9
Honduras	15.7	68.1	109.5	58.5	84.4
Nicaragua	30.2	40.3	55.3	31.5	36.9
Colombia	26.5	49.2	73.8	38.1	47.1
Chile	10.9	6.5	24.7	1.9	14.6
Ecuador	20.4	20.2	33.7	9.3	23.4
Mexico	26.4	35.9	47.6	19.5	16.0
Panama	11.9	3.5	6.9	-4.7	-9.2
Paraguay	35.5	62.8	97.9	47.0	59.2
Peru	19.5	33.1	63.8	34.9	49.4
Dominican Republic	36.3	34.8	58.2	27.9	41.3
Uruguay	-8.7	28.0	48.0	21.4	31.8
Venezuela	3.9	34.9	45.5	32.0	36.2
<u>Total</u>	<u>12.8</u>	<u>32.1</u>	<u>46.2</u>	<u>26.6</u>	<u>31.1</u>

Source: ECLA.



