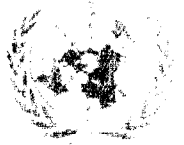
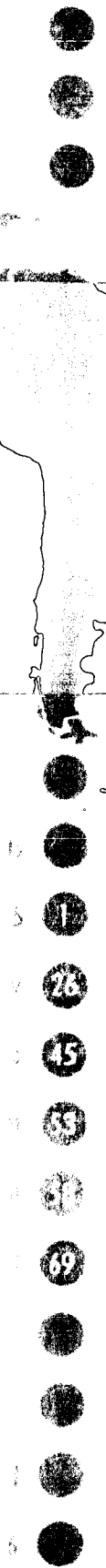


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Economic Bulletin for Latin America



The *Economic Bulletin for Latin America*, published by the secretariat of the Economic Commission for Latin America, appears twice yearly, in January and September. The essential purpose of this periodical is to provide a résumé of the economic situation of the region designed to supplement and bring up to date the information published in the Commission's annual economic surveys. Apart from this summary, which is to appear in every issue, special articles on different subjects related to the economy of Latin America are also included.

The ECLA secretariat assumes entire responsibility for the *Bulletin*. Its content—intended for the information both of public officials and of the general reader—was not submitted to the Commission's member governments before publication.

EXPLANATION OF SYMBOLS

Two dots (..) indicate that data are not available or are not separately reported.

A dash (—) indicates that the amount is nil or negligible.

A minus sign (–300) indicates a deficit or a decrease.

A slash (/) indicates a crop year or a fiscal year, e.g., 1954/55.

“Tons” and “dollars” are metric tons and United States dollars, respectively, unless otherwise stated.

Minor discrepancies in totals and percentages are due to rounding.

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UNITED NATIONS

REVIEW OF THE ECONOMIC SITUATION IN LATIN AMERICA DURING 1955

I. FOREIGN TRADE

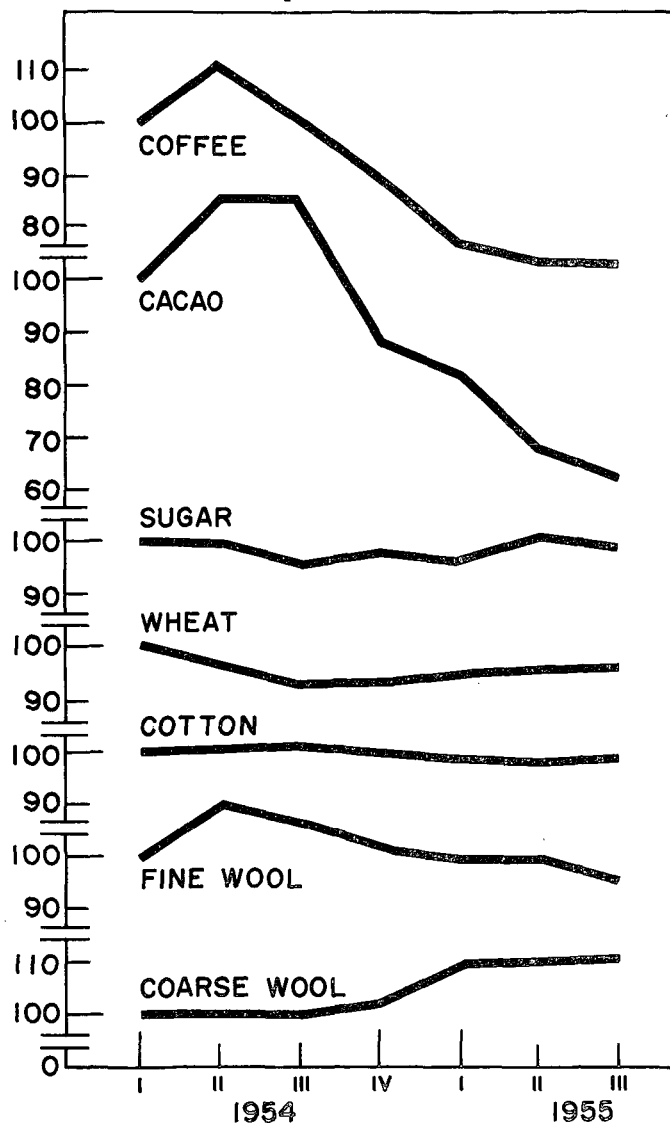
1. INTRODUCTION

In the first half of 1955, Latin American foreign trade was characterized by a sharp decrease in the credit balance of the region as a whole, as well as by greater discrepancies

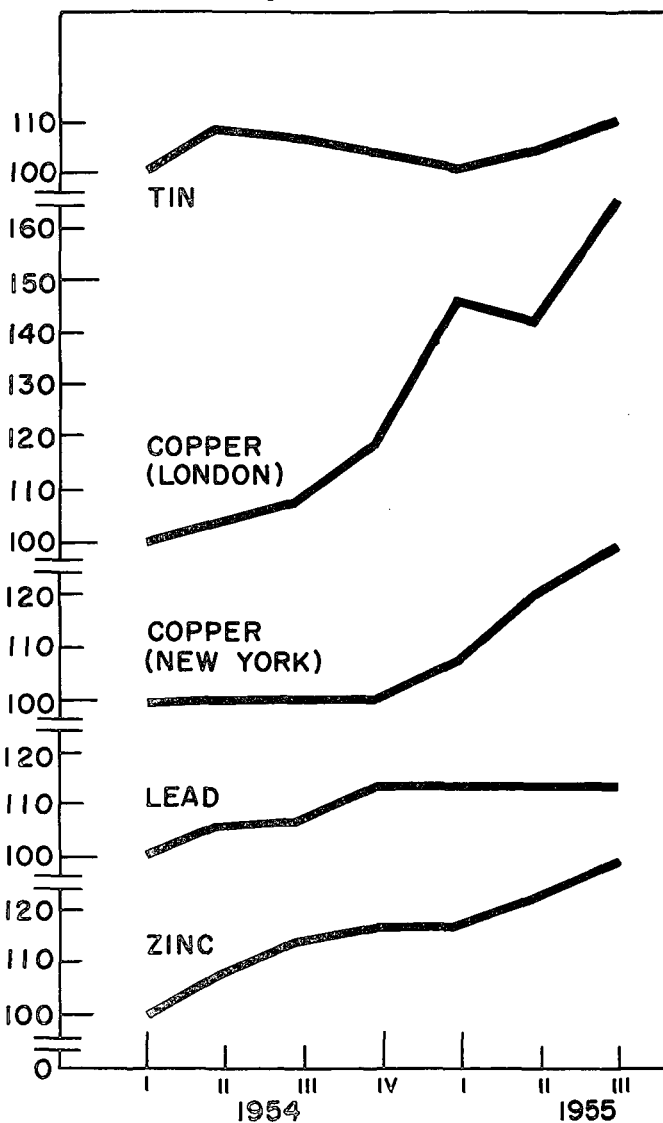
between individual economies. Some—although very few—managed to improve their net income, but the majority experienced increasing difficulties with regard to their external payments problem.

Chart I-A
(Natural scale)

PRICES OF AGRICULTURAL EXPORTS
(1st quarter 1954=100)



PRICES OF MINERAL EXPORTS
(1st quarter 1954=100)



Although the decline in net income from foreign trade is not yet reflected, except in certain countries and to a comparatively limited degree, in a reduction of the Central Bank's gross reserves of gold and foreign exchange, this is due to growing short-term liabilities, in the form either of increased credit or of heavier arrears in payment for goods and services received. The combination of several different factors reduced credit balances to a level which—given Latin America's other permanent commitments on its external current account—at present implies rapidly increasing debts and a further immediate curtailment of foreign purchases over the short term. Statistics for the first six months of 1955 do not yet reveal this contraction of imports, especially if they are compared with the figures for the same period of the preceding year. In fact, almost all the Latin American countries made heavier purchases abroad, as an inevitably belated outcome of the increased value of exports during early 1954. Undoubtedly, herein lies the first determinant of the 1955 foreign trade deficit.

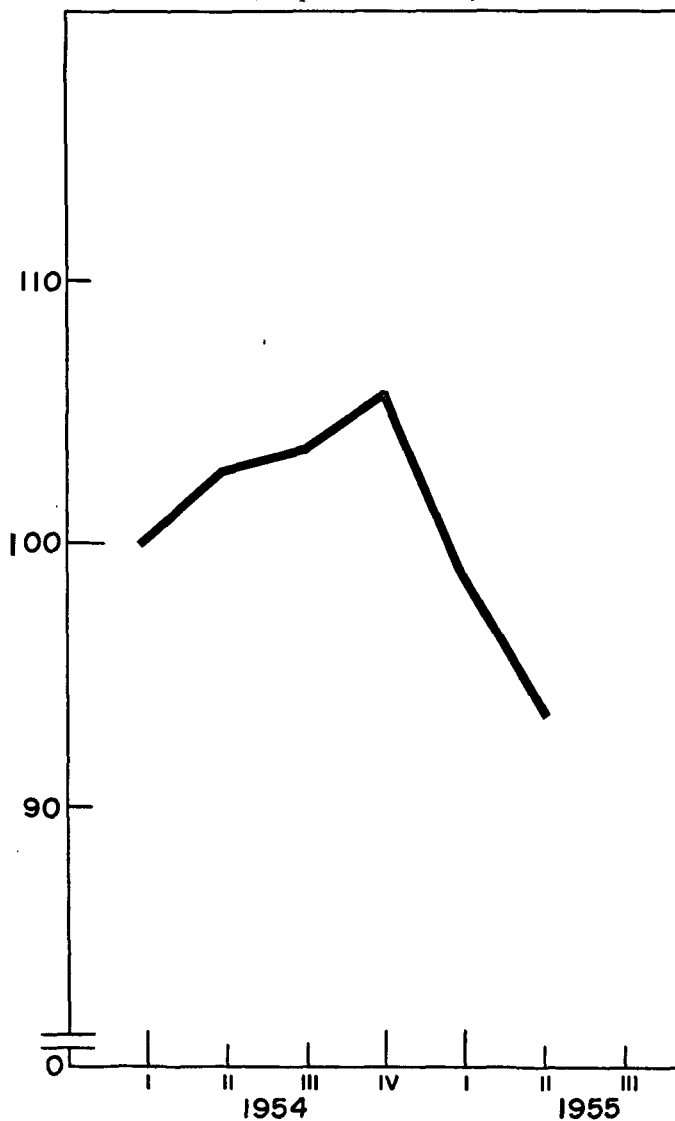
The second is the fall in the prices of most of the Latin American exports. The impact varied considerably, according to the staple exports of each country. The coffee and cacao producers were, of course, the worst affected, while exporters of agricultural products also suffered, but to a lesser extent.

These negative factors were somewhat offset by two positive elements: a very slight reduction in average import prices and a small increase in the volume of exports. In brief, the region's collective trade balance (exports f.o.b.; imports c.i.f.) fell from 564 million dollars in the first half of 1954 to 130 millions in the same period of 1955. Part of this reduction—51 per cent—was due to a discrepancy between the import and export volumes, and the remaining 49 per cent to the fact that export prices dropped much more sharply than those of imports—in other words, to a deterioration in the terms of trade.

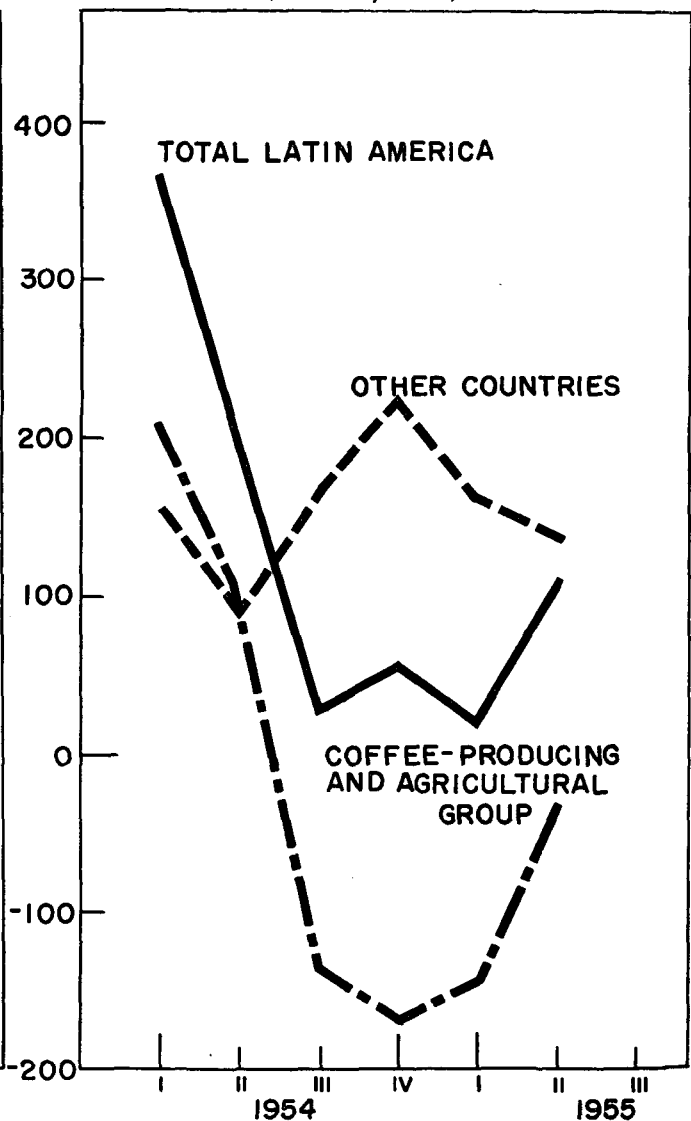
Another notable feature of Latin American trade in the

Chart I-B
(Natural scale)

LATIN AMERICA: TERMS OF TRADE
(1st quarter 1954=100)



LATIN AMERICA: TRADE BALANCE IN CURRENT VALUES
(Millions of dollars)



period under review is that capital goods imports were unaffected by the reduction in export earnings. In this respect, the foreign sector does not appear to have prejudiced economic development. Nevertheless, it is clear that the present disequilibrium in the balance of payments cannot be allowed to continue much longer, and that the contraction of imports, which must inevitably take place unless the export situation changes substantially in the very near future, will constitute a potential threat. The situation thus described is in contrast with the exceptional prosperity of the large industrial countries of Europe and North America. The high index of economic activity and the increase in *per capita* income in these countries do not appear to have had the beneficial effects on the Latin American raw material and foodstuffs producers that might have been expected.

Neither are these favourable influences reflected, according to the incomplete information available, in trade trends for the third quarter of the year—at least, not to the extent required. A preliminary estimate, computed on the basis of data for eight countries, which together account for more than 60 per cent of the region's total trade, reveals a considerable expansion of exports—11 per cent more than the average for the two preceding quarters—which, however,

is still insufficient to match the figures for the third quarter of 1954. The main reason for this partial recovery lies in the increase in Brazilian and Colombian sales abroad.

Export prices also registered a slight improvement. Although coffee, fine wool and, above all, cacao fell still lower, the trend for wheat and tin underwent a complete reversal, while prices for coarse wool, zinc and especially copper continued to rise substantially. Nevertheless, it would seem strange that total imports do not appear to have diminished. It is true that they are at a lower level than in 1954, but the slow decline which began at the end of that year seems to have been interrupted notwithstanding the measures designed to restrict purchases abroad. Only in Colombia has such action proved effective, with the result that an appreciable reduction (16 per cent) of the volume registered in the first six months of the year was witnessed in the third quarter of 1955, when Colombia's trade balance, like that of Brazil, was on the credit side. On the other hand, Argentina's deficit continued to grow, and the situation in Uruguay appears to have reached a critical point, owing to the still more serious falling-off in its exports. In only two months—July and August—the latter country lost 8 per cent of the gold and foreign exchange reserves it was holding in mid-1955. Lastly, al-

Table I
LATIN AMERICA: EXPORTS
(Millions of dollars, current f.o.b. values)

Countries and groups of countries ^a	1954		1955			Variation (B) to (A)	
	1st half (A)	2nd half	1st half (B)	1st quarter	2nd quarter	Millions of dollars	Percentages
Grand total.....	3,932.7	3,857.4	3,744.5	1,840.8	1,903.7	-188.2	-4.8
<i>Coffee and cacao</i>							
Total.....	1,481.9	1,355.6	1,221.0	604.7	616.4	-260.9	-17.6
Brazil.....	730.2	831.5	612.3	297.6	314.8	-117.9	-16.1
Colombia.....	357.9	299.2	252.1	125.9	126.2	-105.8	-29.6
Costa Rica.....	46.0	36.5	49.6	24.4	25.2	3.6	7.8
Dominican Republic.....	73.4	45.4	58.1	25.2	32.9	-15.3	-20.8
Ecuador.....	40.3	59.3	40.6	19.2	21.5	0.3	0.7
El Salvador.....	79.1	25.9	83.0	40.8	34.2	3.9	4.9
Guatemala.....	78.4	24.3	62.5	33.3	29.2	-15.9	-20.3
Haiti.....	35.3	20.2	22.6	11.1	11.4	-12.7	-36.0
Nicaragua.....	41.3	13.3	40.2	19.2	21.0	-1.1	-2.7
<i>Agricultural products</i>							
Total.....	993.1	878.9	917.2	443.2	474.2	-75.9	-7.6
Argentina.....	521.3	528.7	464.8	228.7	236.2	-56.5	-10.8
Cuba.....	315.5	223.5	345.4	157.3	188.1	29.9	9.5
Paraguay.....	15.3	18.7	17.6	7.4	10.3	2.3	15.0
Uruguay.....	141.0	108.0	89.4	49.8	39.6	-51.6	-36.6
<i>Metallic ores</i>							
Total.....	225.2	269.0	259.0	123.1	135.9	33.8	15.0
Bolivia.....	42.9	47.1	41.2	20.5	20.7	-1.7	-4.0
Chile.....	182.3	221.9	217.8	102.6	115.2	35.5	19.5
<i>Miscellaneous products</i>							
Total.....	131.8	172.7	132.8	68.2	64.6	1.0	0.8
Honduras.....	30.9	36.0	23.3	16.4	6.9	-7.6	-24.6
Peru.....	100.9	136.7	109.5	51.8	57.7	8.6	8.5
Total 17 countries.....	2,832.0	2,676.2	2,530.0	1,239.2	1,291.1	-301.8	-10.7
<i>Remaining countries</i>							
Total.....	1,100.7	1,181.2	1,214.3	601.6	612.6	113.6	10.3
Mexico.....	250.8	314.3	293.9	145.2	148.7	43.1	17.2
Panama.....	12.8	14.3	12.9	6.4	6.4	0.1	0.8
Venezuela.....	837.1	852.6	907.5	450.0	457.5	70.4	8.4

Source: Economic Commission for Latin America, on the basis of national statistics.

^a Countries grouped according to staple exports.

Table II
LATIN AMERICA: IMPORTS
(Millions of dollars, current c.i.f. values)

Countries and groups of countries	1954		1955		Variation (B) to (A)		
	1st half (A)	2nd half	1st half (B)	1st quarter	2nd quarter	Millions of dollars	Percentages
<i>Grand total</i>	3,369.2	3,770.7	3,614.1	1,819.5	1,794.6	244.9	7.3
<i>Coffee and cacao</i>							
<i>Total</i>	1,333.4	1,551.4	1,310.0	678.7	631.3	-234.0	-18.0
Brazil.....	746.5	882.7	659.9	350.4	309.5	-86.6	-11.6
Colombia.....	306.2	365.5	350.1	179.5	170.6	43.9	14.3
Costa Rica.....	41.3	39.3	38.8	16.4	22.4	-2.5	-6.0
Dominican Republic.....	45.4	49.0	53.7 ^a	29.0 ^a	24.7 ^a	8.3	18.3
Ecuador.....	55.5	65.2	55.8	26.5	29.3	0.3	0.5
El Salvador.....	42.3	44.4	46.7 ^a	23.6	23.1 ^a	4.4	10.4
Guatemala.....	42.3	44.0	47.0 ^a	23.5	23.5 ^a	4.7	11.1
Haiti.....	24.0	23.6	21.6	11.6	10.0	-2.4	-10.0
Nicaragua.....	29.9	37.7	36.4 ^a	18.2 ^a	18.2 ^a	6.5	21.7
<i>Agricultural products</i>							
<i>Total</i>	827.5	987.1	1,002.7	511.5	491.2	175.2	21.2
Argentina.....	433.3	535.2	589.2	299.3	289.9	155.9	36.0
Cuba.....	262.6	270.9	287.4 ^a	152.9 ^a	134.5 ^a	24.8	9.4
Paraguay.....	19.8	18.3	16.9	7.7	9.2	-2.9	-14.6
Uruguay.....	111.8	162.7	109.2	51.6	57.6	-2.6	-2.3
<i>Metallic ores</i>							
<i>Total</i>	214.4	204.9	232.6	113.7	118.9	18.2	8.5
Bolivia.....	32.5	42.8	40.0 ^a	20.0	20.0 ^a	7.5	23.1
Chile.....	181.9	162.1	192.6	93.7	98.9	10.7	5.9
<i>Miscellaneous products</i>							
<i>Total</i>	152.4	154.3	166.9	78.5	88.4	14.5	9.5
Honduras.....	29.9	27.1	32.2	15.5	16.7	2.3	7.7
Peru.....	122.5	127.2	134.7	63.0	71.7	12.2	10.0
<i>Total 17 countries</i>	2,527.7	2,897.7	2,712.2	1,382.4	1,329.8	184.5	7.3
<i>Remaining countries</i>	841.5	873.0	901.9	437.1	464.8	60.4	7.2
Mexico.....	365.9	347.5	375.9	184.4	191.5	10.0	2.7
Panama.....	41.1	41.9	44.1 ^a	22.0 ^a	22.1 ^a	3.0	7.3
Venezuela.....	434.5	483.6	481.9	230.7	251.2	47.4	10.9

Source: Economic Commission for Latin America, on the basis of national statistics.

^a Provisional.

though data on Latin America as a whole are as yet incomplete, it would seem that the losses incurred in gold and foreign exchange far outstrip the small increment registered during the first six months of the year.

2. THE GREATER VOLUME AND SMALLER VALUE OF EXPORTS

Latin America's export situation during the first half of 1955 cannot be considered satisfactory. In comparison with the same period of 1954, current values declined by 4.8 per cent; thus ground was lost in relation to 1953 and 1951. (See table I.)¹

The fall in the prices of most of the staple exports is directly, though not exclusively, responsible for this recession, which would have been more serious had there not been an appreciable increase in the export volume during the second half of the year.

If average prices in the first six months of 1954 and 1955 are viewed collectively, an adverse trend is apparent.

¹ Table I, showing Latin American exports, and table II, illustrating the region's imports (the analysis of which begins on p. 6), are presented together on pages 3 and 4 in the interests of comparison. They have been given roman numerals in order to distinguish them from the other tables in this article.

Its effects are especially marked in the case of coffee and cacao, slightly less so in that of wheat and fine wool, and rather light in that of sugar and tin. Prices of crude petroleum remained stable, while those of coarse wool, lead, zinc and copper were rising. Higher quotations for the last-named commodity vary considerably according to the market: 13.7 per cent in New York and 39.9 per cent in London. (See table I.)

It is true that these world market fluctuations do not always find mathematically precise expression in the export trade of producer countries. For example, the existence of large wheat stocks in the United States and Canada forced Argentina to bring its prices still nearer to the world level, to enable it to compete with other producers and to ensure the sale of its harvest. Thus, the real prices of Argentine wheat exports fell by 6 per cent, which contrasts with a decline of barely 4 per cent in world market quotations. This development also reveals the present inadequacy of those bilateral arrangements to which Argentina has so far resorted in defence of its export prices. On the other hand, the special system whereby the United States makes its sugar purchases provided Cuba—and, to a much smaller extent, the other Latin American producers—with a certain

Table 1
LATIN AMERICA: COMPARISON OF THE PRICES OF
STAPLE EXPORTS IN THE FIRST HALF OF
1954 AND 1955
(Cents per pound)^a

Products ^b	Average prices in first half of 1954	Average prices in first half of 1955	Percentage variation
<i>Agricultural products</i>			
Coffee (New York)	82.30	58.45	-29.0
Cacao (New York)	59.35	41.30	-30.4
Sugar (New York)	3.315	3.255	-1.8
Wheat (Canada)	1.86	1.785	-4.0
Cotton (London)	38.5	37.55	-2.5
Wool (London)	113.4	107.85	-4.9
Wool (Boston)	86.5	94.55	9.3
<i>Minerals</i>			
Copper (New York)	29.9	34.0	13.7
Copper (London)	29.7	41.55	39.9
Tin (New York)	91.35	90.45	-1.0
Lead (New York)	13.6	15.0	10.3
Zinc	10.6	12.25	15.6

Source: Economic Commission for Latin America, on the basis of trade statistics.

^a Except in the case of wheat, the quotation for which is in dollars per bushel.

^b Coffee: Santos No. 4; Cacao: Accra; Sugar: United States free market, f.o.b. Havana; Wheat: Manitoba No. 1; Wool: London auction prices, Boston; Uruguayan 5-40's; Cotton: American Middling

measure of protection against the price depression in the open market.

The changes which took place between the first and second quarters of 1955 are all characterized by an aggravation of the previous decline. Since a completely opposite trend had prevailed a year previously, the recession was much more pronounced between the second quarter of 1954 and the same period of 1955 than in the first three months of both years.

Table 2 gives a detailed illustration, by groups of Latin American countries,² of the influence of price and volume on the expansion or contraction of the capacity to import derived from exports.

A cursory examination of the situation by countries and groups of countries provides confirmation of the fact that the recession was most marked for the exporters of coffee

² Countries have been grouped according to their staple exports.

and cacao. However, very sharp differences exist among the countries forming this group. Three of them—Costa Rica, Ecuador and El Salvador—managed to increase their foreign exchange earnings by expanding the volume of exports. Brazil and Colombia—the main coffee exporters—are in very different positions. The former country maintained a steady volume of exports, while the latter suffered from the adverse effects of a fall in prices combined with a 26-per-cent reduction in the volume of sales abroad.³ The first half of 1954 was an exceptionally favourable period for Colombia, since it was at this time of higher foreign market quotations that the country was able to sell more of its coffee. This is probably why the Colombian trade balance now displays greater disequilibrium. It should also be recalled that coffee forms a larger proportion of Colombia's total exports than of Brazil's, and that, moreover, neither the volume nor the prices of the other Colombian exports increased. The influence of favourable factors was therefore of no avail in mitigating the effects of the coffee crisis.

On the other hand, the sometimes extraordinary progress achieved by Brazil in previous months in placing its remaining exportable commodities was maintained during the second quarter of 1955.⁴ Throughout the first six months of the year the volume of exports expanded in the following way: pinewood by 21 per cent; cacao by 24 per cent; iron ore by 64 per cent; and manganese by almost 100 per cent. These increases resulted from the development of production and the opening up of new markets. Apart from having recovered its position on the United States market, iron ore was exported in greater quantities to Germany and the United Kingdom, and also found an important place in the trade with Czechoslovakia. Increased Argentine purchases explain the larger pinewood exports. The United States was responsible for the progress recorded in cacao exports, while at the same time a larger proportion of Brazilian coffee was sold to this market. The effects of all the favourable factors reviewed here were to a great extent counteracted by the contraction in exports of hides, which declined by 30 per cent, by the failure to export sugar and, above all, by the 46 per cent drop in cotton sales, partly attributable to an exchange regulation that the producers consider to be lacking in flexibility in face of rising costs.

³ In the closing months of 1955, there seems to have been a striking recovery in the volume of Colombia's coffee exports.

⁴ See *Economic Review of Latin America*, Special issue, Bogotá, August 1955, p. 19.

Table 2
LATIN AMERICA: COMPARISON OF UNIT VALUE INDICES, VOLUME AND CURRENT
VALUE OF EXPORTS IN THE FIRST AND SECOND QUARTERS OF 1955 WITH THE
CORRESPONDING FIGURES FOR 1954
(Percentage variations)

Country groups	Unit value		Volume		Current value	
	I	II	I	II	I	II
Total Latin America	-4	-8	-5	8	-8	-1
Coffee and cacao	-2	-19	-23	12	-25	-9
Agricultural products	-3	-6	-3	-3	-6	-9
Mining products	6	6	37	-9	45	-3
Miscellaneous	8	4	1	-11	10	-7
Total 17 countries	-2	-10	-11	2	-13	-8
Remaining countries	-6	-3	10	22	3	19

Sources: Tables I and II.

The group of countries exporting agricultural and livestock products, taken as a whole, also presents a somewhat unfavourable picture, although this is due more to internal factors than to external influences; so much so that Argentina, where the value of exports underwent the most marked decrease, was able to profit by a considerable increment in the average unit value of its products. The depressive factors which operated throughout the whole of the first half of 1955 were the loss of the maize crop, and certain difficulties attending the sale of other commodities, namely, hides, oats, barley, rye and oleaginous by-products. The remarkable recovery in meat exports made itself felt only from June onwards and did not suffice to offset the downward movements already described.

In Uruguay, too, it was domestic factors—a standstill in meat exports and the withholding of greasy wool from the market—which mainly determined a very serious fall in export earnings during the first half of 1955, when they were 36 per cent lower than over the same period in 1954.

Conversely, however, Cuba was able to strengthen its free market sugar sales sufficiently to compensate for the effects of the price decline and to increase its resources by about 10 per cent. A powerful influence was exerted by the boom in sales to both Eastern and Western European countries.⁵

Except for Bolivia and Honduras, the other Latin American countries, especially Chile and Mexico, witnessed an increase in the value of their exports. Chile and Peru are the only countries in the region that succeeded in reaping the joint benefits of a larger volume of exports and a rise in prices. The impact of the second factor was obviously stronger in Chile, of whose exports a higher proportion is represented by metals. As regards Peru, the improvement in the price of ores was largely cancelled out by a slight contraction in sugar and cotton quotations.

A considerable increase also took place in the quantum of Venezuela's and Mexico's exports, owing to the increment in their volume, which easily counterbalanced the really rather insignificant reduction in their unit value. At first glance, the boom in Mexican exports would appear spectacular. Nevertheless, it should be borne in mind that they underwent a marked decrease in the second quarter of 1954, when the national currency was devalued. It is therefore clear from the figures registered in the second quarter of 1955, which were already somewhat higher than those for the first quarter, that the 1954 emergency is a thing of the past and that a trend towards progress has begun. This has already found expression in the export statistics now becoming available for the third quarter. Except in the case of Cuba, the outstanding development in Central America and the West Indies was the reduction in the volume of coffee exports, in addition, of course, to the fall in prices. Improved sales of cacao and bananas, however, more or less offset this decline.

3. THE CAPACITY TO IMPORT AND THE TERMS OF TRADE

A comparison between the first quarter of 1955 and the same period in 1954 shows that the Latin American countries' capacity to import was adversely affected by a decline

⁵ Sales of sugar to the USSR in 1955 are estimated at 568,000 tons, while Cuba's total sugar exports were only some 340,000 tons higher than those of the previous year.

of about 5 per cent in the resources (in current values) accruing from exports, and was only very slightly offset by a fall in average import prices. (See table 3.)

These data are not final, but as it has been possible to cover 77 per cent of the value of imports, and to include seven out of the nine countries which account for the largest proportion of the total volume of trade,⁶ it seems justifiable to take the information given as representative of the over-all situation in Latin America.

The fall in import prices between the first quarter of 1955 and the same period of the preceding year is, in reality, negligible, as it barely amounted to 0.75 per cent. It is clear from an examination of the figures for each quarter that the general trend was unfavourable. In 1954 import prices were 1.9 per cent lower in the second than in the first quarter. In 1955, on the other hand, they rose again during the same period by 1 per cent. A comparison of the relevant data therefore shows that in the first quarter of 1955 the index was lower and in the second higher than during the corresponding periods of 1954.

The decrease in export prices, barely mitigated by the trend in the prices of imports, was reflected in a deterioration in the terms of trade, which was provisionally estimated at 5.3 per cent for the first quarter. The fact that the terms of trade were 11.2 per cent lower in the second quarter of 1955 than in the last three months of 1954 leaves no doubt as to the probability of an aggravation of the situation.

4. HIGHER IMPORTS

These trends towards a lower export income and a deterioration in the terms of trade combined to determine a reduction in the capacity to import. Nevertheless, from the statistics for the first quarter of 1955, it is not absolutely clear, at any rate at a first glance, that real imports have decreased. On the contrary, in current values they rose by 7.3 per cent between the first quarter of 1954 and the corresponding period of 1955. (See table II.)⁷

Still greater importance attaches to the fact that imports expanded in sixteen countries, and that the only noteworthy reduction, both in absolute and relative terms, was recorded in Brazil. Similarly, if the data for groups of producer countries are examined, all show increases except the coffee exporters, in whose case a reduction of less than 2 per cent is to be observed. This is surprising when it is remembered that the sharp fall in coffee and cacao prices began a year previously. A partial explanation may lie in the fact that the boom in imports had not reached its climax by the first quarter of 1954; an analysis of the quarterly statistics reveals a continuous rise throughout that year, since imports, the value of which was 1,640 million dollars in the first quarter, amounted to 1,730 millions, 1,860 millions and more than 1,900 millions in the second, third and last quarters respectively. The situation was reversed at the beginning of 1955; imports fell to a value of 1,820 millions in the first three months and 1,795 millions in the second quarter. Nevertheless, the average for the first half of the year was higher in 1955 than in 1954, and, as is well known, imports have a greater propensity to increase than to decrease. When export earnings expand to an unusual degree, as was the case in a

⁶ Countries whose exports and imports both represented a value of over 200 million dollars in 1954.

⁷ See p. 4.

Table 3
LATIN AMERICA: UNIT VALUES INDICES IN DOLLARS AND TERMS OF TRADE
(1950=100)

	1954				1955	
	I	II	III	IV	I	II
<i>Latin America:</i>						
Exports.....	113.8	114.7	116.6	114.6	109.5	105.3
Imports.....	110.4	108.3	109.2	105.3	108.0	109.2
Terms of trade.....	103.1	105.9	106.8	108.8	101.4	96.4
<i>Argentina:</i>						
Exports.....	95.0	96.7	102.5	102.7	97.8	100.8
Imports.....	104.7	113.9	113.5	99.4	110.7	110.7 ^a
Terms of trade.....	90.7	84.9	90.3	103.3	88.3	91.1
<i>Brazil:</i>						
Exports.....	124.3	132.3	141.9	128.9	113.9	102.0
Imports.....	113.1	102.0	107.2	102.7	105.1	103.4
Terms of trade.....	109.9	129.7	132.4	125.5	108.4	98.6
<i>Chile:</i>						
Exports.....	123.6	134.9	130.2	131.8	133.2	145.7
Imports ^b	112.4	109.0	114.3	115.2	107.6	106.9
Terms of trade.....	110.0	123.8	113.9	114.4	123.8	136.3
<i>Colombia:</i>						
Exports.....	113.8	141.6	147.8	136.2	126.2	116.7
Imports ^c	110.8	110.0	110.8	111.5	109.2	109.2
Terms of trade.....	102.7	128.7	133.4	122.2	115.6	106.9
<i>Peru:</i>						
Exports.....	89.6	90.7	95.6	97.5	96.9	96.8
Imports.....	108.0	101.9	99.0	100.0	97.4	101.5
Terms of trade.....	83.0	89.0	96.6	97.5	99.5	95.4
<i>Venezuela:</i>						
Exports.....	113.1	113.8	113.9	110.6	106.1	110.2
Imports.....	110.2	114.1	109.3	114.1	111.1	117.1
Terms of trade.....	102.6	99.7	104.2	96.9	95.5	94.1
<i>Mexico:</i>						
Exports.....	117.6	110.5	103.9	107.8	109.5	108.2
Imports ^d	112.4	109.2	107.9	102.1	108.9	111.2
Terms of trade.....	104.6	101.2	96.3	105.6	100.6	97.3

Source: Economic Commission for Latin America, on the basis of national statistics.

Notes: Imports are in c.i.f., and exports in f.o.b., terms.

The index of exports for Latin America as a whole is based on statistics from twenty countries. That of annual imports is also calculated on the basis of these twenty countries, unlike the quarterly index, later incorporated with the annual index, for the calculation of which the figures for the seven countries mentioned were used.

^a Owing to difficulties involved in defining the rate of exchange

operative during the second quarter, the figure for the first quarter has been repeated.

^b The index for 1954 and 1955 was calculated by the Banco Central de Chile and incorporated with the index computed by ECLA up to 1953.

^c The price index for 1954 and 1955 was obtained from the *Revista Económica* and incorporated with the index computed by ECLA up to 1953.

^d The International Monetary Fund's *International Financial Statistics* supplied the index for 1954 and 1955, which was later incorporated with that calculated by ECLA.

number of countries at the beginning of 1954, orders are immediately placed abroad, both for consumer goods and raw materials, which are likely to be received promptly, and for equipment and machinery, which will be delivered over the longer term. The arrival of the latter, when the period of prosperity is already over, helps to maintain imports at a level higher than is justified by the reduction in income.

Herein also lies the explanation of another phenomenon witnessed in the first half of 1955, namely, that the share of capital goods in total imports, far from decreasing, actually seems to have expanded slightly. (See table 4.)

The most significant case is undoubtedly that of Brazil. Its imports of capital goods remained at virtually the same absolute level, despite a decline of more than 11 per cent in the total value of imports. Although complete data were

available only on the five countries included in the table, information from other sources suggests the conclusion that at least three more countries display similar trends. In Uruguay, for example, although total imports were reduced, there was an absolute increment of 15 per cent in purchases of machinery and spare parts.

Data from a Colombian source which cover ten months of 1955 indicate a slight increase in the share of capital goods in total imports, a proportion which rose from 48.2 per cent in 1954 to 49.7 per cent in 1955. Imports of machinery and chemical products are those for which the highest index of growth was registered in Mexico.

Export data for the industrial countries also provide very interesting material for study. The total value of exports from the United States to the twenty Latin American republics, which had risen from 1,546 million dollars

Table 4
LATIN AMERICA: COMPOSITION OF IMPORTS IN VARIOUS COUNTRIES
(Percentage based on current values in millions of dollars)

	Total		Consumer goods		Raw materials		Fuels		Capital goods	
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)
Argentina.....	100.0	100.0	14.9	13.8	24.5	31.3	13.3	10.3	47.3	44.6
Brazil.....	100.0	100.0	13.7	12.4	35.8	32.2	15.0	15.7	35.5	39.7
Chile.....	100.0	100.0	25.5	25.5	21.0	25.0	15.6	12.5	37.9	37.0
Peru.....	100.0	100.0	20.4	22.5	29.2	31.4	3.1	2.2	47.3	43.9
Venezuela.....	100.0	100.0	29.5	30.7	20.4	20.3	1.9	1.8	48.2	47.2
Total.....	100.0	100.0	19.1	19.0	27.9	28.4	10.9	9.7	42.1	42.9

Source: Economic Commission for Latin America, on the basis of national statistics.

Note: (A) = First half 1954.

(B) = First half 1955.

in the first half of 1954 to 1,661 millions in the second, declined again to 1,515 millions in the first six months of 1955. In other words, it was 2 per cent and almost 9 per cent lower than in the first and second halves of 1954 respectively. The decrease in exports of machinery, however, was proportionally smaller, and only in the third quarter of 1955 were there signs of a new trend, in that total exports from the United States to Latin America underwent a reduction of 8.5 per cent, whereas exports of machinery fell by 12 per cent. This situation was almost entirely brought about by a sudden drop in the region's purchases of agricultural machinery, including tractors; the full magnitude of the decline will doubtless become apparent when the final 1955 statistics for Latin America are available.

To attack the problem from yet another angle, export data for the United States, Canada and the industrial countries of Western Europe were considered in the aggregate. An analysis of their exports of capital goods⁸ to Latin America shows that in the first six months of 1955 these were 4.6 per cent higher than in the corresponding period of the preceding year, and 3.7 per cent lower than in the second half of 1954. Equally clear is the progress made by the European countries in the Latin American capital goods market. Their sales in the first half of 1955 rose by 17.1 per cent, whereas those of the United States and Canada fell by 2.1 and 17.5 per cent respectively. Although to a less marked degree, the same trends are reflected in the total value of United States, Canadian and European exports to Latin America.

Chart II, based on the quarterly statistics for total exports from the industrial countries to Latin America, corroborates the trends described. It can clearly be seen that these exports were somewhat heavier in the first six months of 1955 than during the corresponding period in 1954, and also that shipments of capital goods from the United States and Canada, which slightly increased in the course of 1953 and 1954, for the first time declined in two consecutive quarters in 1955. The situation was reversed in the case of European exports in the same category, which rose in the second quarter. The increased sensitivity of consumer goods exports, especially of United States origin, is also apparent. Finally, it is interesting to note that the propor-

⁸ Including the whole of Section 7 in the *Standard International Trade Classification*, plus groups 661 and 681 (cement, and iron and steel products). This covers approximately 38 per cent of Latin America's total imports.

tion of capital goods is much greater in European exports to Latin America than in those of the United States and Canada.

5. SIGNIFICANT RECESSION IN TRADE BALANCES

The cumulative effect of the increase in imports and the decrease in export prices reduced trade balances by 78 per cent in the first half of 1955, thus bringing them down to a level much lower than the indispensable minimum required to cover the deficit which the other elements in the balance of payments on current account invariably present. (See table 5.)

If Mexico, Panama and Venezuela are excluded,⁹ it can be seen that the remaining seventeen countries had a trade deficit of over 180 million dollars. Since the invisible income of most of them is not very large, the situation is patently a difficult one.

An examination may usefully be made of the factors which, in the seventeen countries in question, caused the favourable balance of 304 million dollars registered in the first half of 1954 to be replaced, in the corresponding period of 1955, by a deficit of 182 millions. Of this difference of 486 millions, the expansion of imports accounts for 205 millions, and the contraction of exports for 121 millions.¹⁰ The remainder—160 million dollars—is attributable to the deterioration in the terms of trade. In the whole of Latin America this last factor represents a net loss of 211 millions, that is, almost 50 per cent of the reduction in the credit trade balance.

If the position of each country is examined, very wide divergencies become apparent. It is in Argentina and Colombia that the greatest disequilibria are found, and in both cases they are largely due to an increase in imports. Brazil's deficit is not so high in either absolute or relative terms, but its situation is aggravated by the persistent recurrence of the imbalance for several years past. Uruguay,

⁹ Their exclusion can be justified because, in the case of Venezuela, its high trade balance is largely absorbed by external payments on current account, and in that of Mexico and Panama, their invisible income, from tourism and other sources, is very large, and generally offsets their substantial trade deficits.

¹⁰ Exports and imports at prices corresponding to the first half of 1954. It should be explained that, if the volume of exports increased for Latin America as a whole, this was essentially due to the boom in exports from Mexico and Venezuela. Among the seventeen countries under review, Chile, Cuba and Peru registered favourable figures, but these did not suffice to offset the recession experienced by the rest.

like Argentina and Colombia, had a surplus in 1954 and a deficit in 1955. Although the value of its exports rose, Peru witnessed an increase in its deficit, and it might well seem that there is danger of a return—though on a smaller scale—to the relative excess of imports which in 1953 threatened the country with a monetary crisis, afterwards fortunately averted.

Among the nine most important countries, only three—Chile, Cuba and Venezuela—maintained and even raised the favourable balance recorded in the preceding year. Notwithstanding a considerable expansion of imports, it was Chile that achieved the greatest improvement, but as at the beginning of the year this country was burdened by a relatively heavy accumulation of short-term trade debts, the progress made in 1955 was not enough to restore the balance of trade to normal, cover arrears and finance other payments on current account. Nevertheless, it is safe to assert that Chile's foreign payments position has been

greatly eased, and that the country has been able to effect sufficient imports to meet its requirements of basic foodstuffs and raw materials. Cuba, despite the not too favourable sugar situation, preserved a remarkable balance between its exports and imports, both of which are following an upward course. Mexico was the only one of the nine countries that was able to reduce its deficit, although this is still manifest in its visible trade.

With reference to the remaining countries, attention must be called to the recovery achieved by Paraguay, which recorded a surplus in the first half of 1955 as against a deficit in the corresponding period of 1954. In contrast, the West Indies, and Central America with the exception of Costa Rica, suffered a serious setback as a direct result of the coffee crisis.

A study of the quarterly data clearly shows that the present disequilibrium is tending to right itself. In the twenty Latin American republics, taken as a whole, the

Chart II
EXPORTS^a OF SELECTED COUNTRIES TO LATIN AMERICA
(Millions of dollars)
(Natural scale)

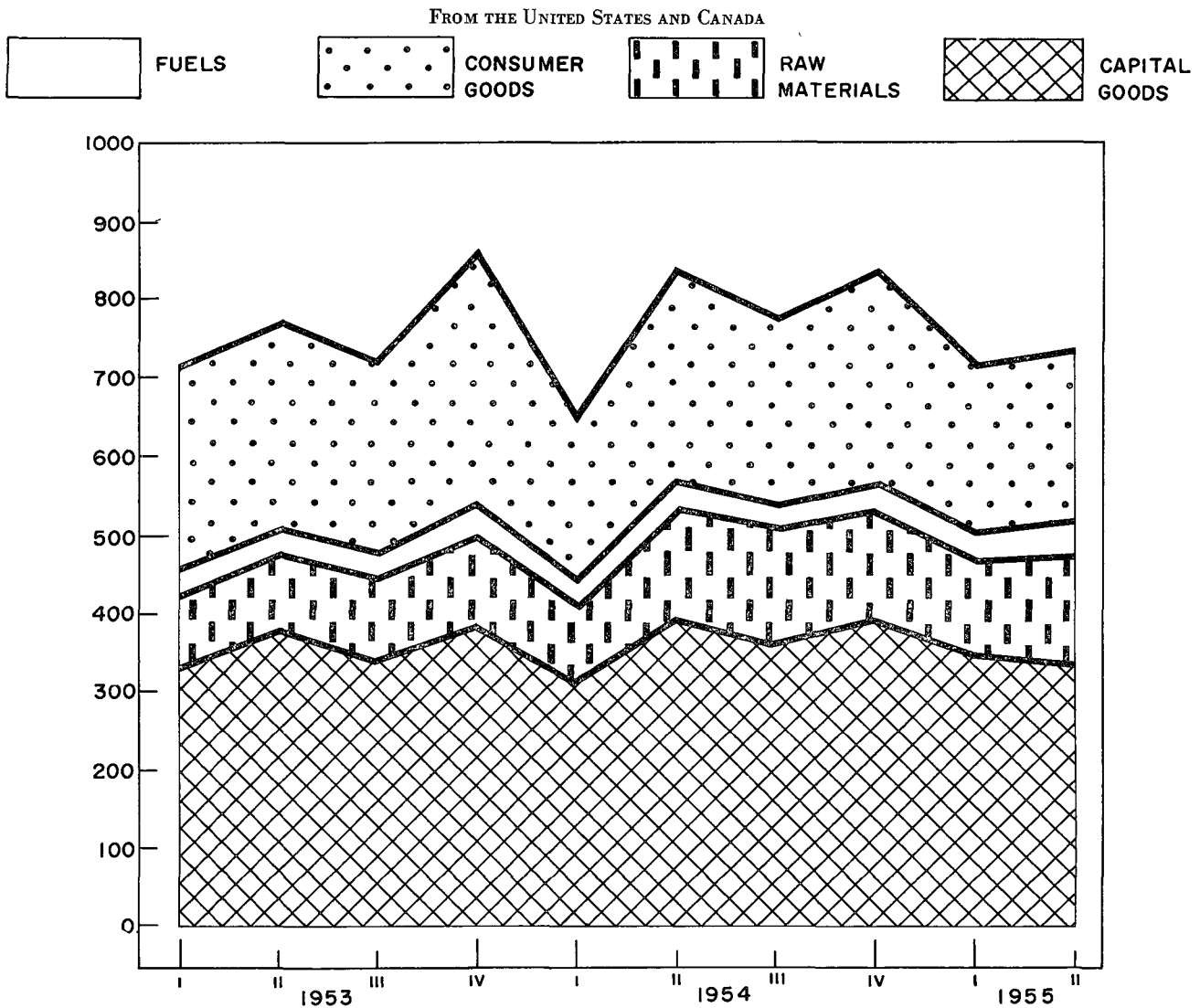
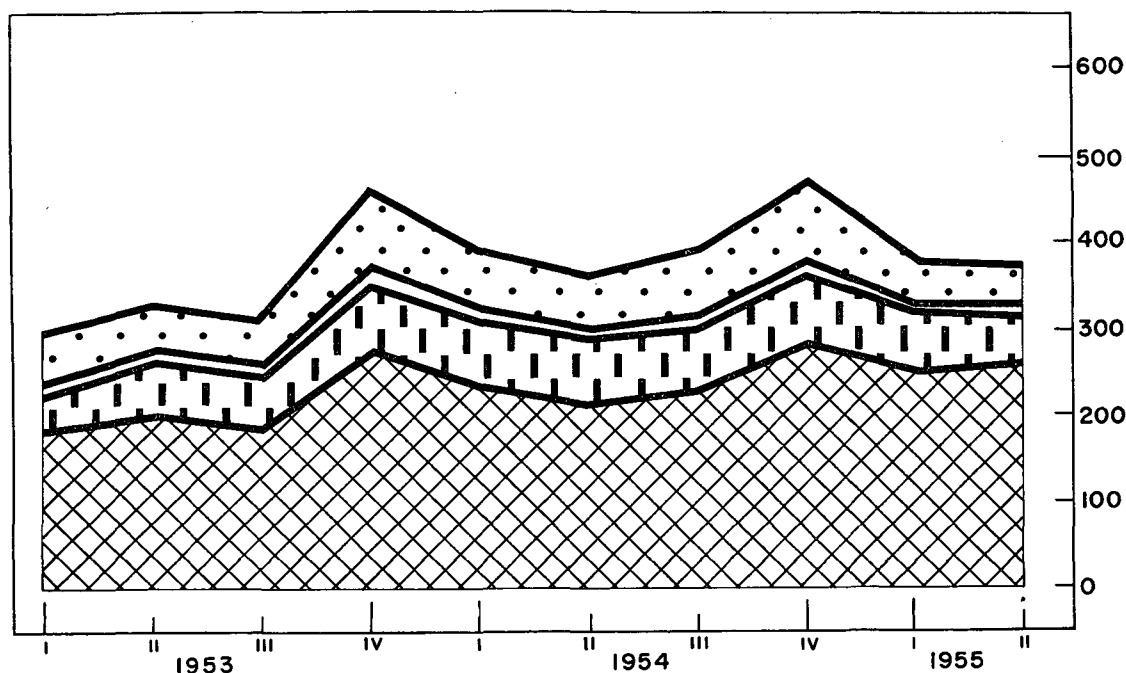


Chart II (continued)

FROM EUROPE^b



Source: United Nations Statistical Office.

^a Excluding Groups CUCI 911 and 931.

^b Belgium, France, Germany, Italy, Netherlands, Norway, Sweden and United Kingdom only.

favourable balance of trade in the first quarters of 1954 and 1955 fell from 367 million dollars to only 21 millions, but in the second quarter of the latter year it rose to 109 millions, as compared with 196 over the same period in

1954. A similar, but even more marked, trend is observable in the seventeen countries mentioned above. Here the trade deficit declined from 143 to 39 million dollars between the first and second quarters of 1955, surpluses of

Table 5

LATIN AMERICA: HALF-YEARLY TRADE BALANCES (EXPORTS F.O.B.; IMPORTS C.I.F.)

(Millions of dollars, current values)

Countries and groups of countries	1954		Total	1955	Variation (B) to (A)
	I (A)	II		I (B)	
Grand total.....	563.5	86.9	650.4	130.2	-433.3
Coffee and cacao					
Total.....	148.5	-195.7	-47.2	-89.0	-237.5
Brazil.....	16.3	-51.2	-67.5	-47.6	-31.3
Colombia.....	51.7	-66.2	-14.5	-98.0	-149.7
Others.....	113.1	-78.3	34.8	56.6	-56.5
Agricultural products					
Total ^a	165.6	-108.3	57.3	-85.5	-251.1
Argentina.....	88.0	-6.5	81.5	-124.4	-212.4
Cuba.....	52.9	-47.4	5.5	58.0	5.1
Metallic ores					
Total ^b	10.8	64.1	74.9	26.4	15.6
Chile.....	0.4	59.8	60.2	25.2	24.8
Miscellaneous products					
Total ^c	-20.6	18.5	-2.1	-34.1	-13.5
Peru.....	-21.6	9.6	-12.0	-25.2	-3.6
Total 17 countries.....	304.3	-221.4	82.9	-182.2	-486.5
Mexico.....	-115.1	-33.2	-148.3	-82.0	33.1
Venezuela.....	402.6	369.1	771.7	425.6	23.0

Source: Economic Commission for Latin America, on the basis of national statistics.

^a Includes Paraguay and Uruguay.

^b Includes Bolivia.

^c Includes Honduras.

181 and 124 millions respectively having been registered in the corresponding quarters of the preceding year.

It seems that this improvement is attributable to an expanding trade with Europe, as no increase is apparent (in fact, quite the contrary) in trade with the United States and Canada, which are the chief sources of freely convertible hard currency. As no direct and detailed Latin American statistics are as yet available on the region's trade movements, data for the commerce of the industrial countries with Latin America must be utilized. Between the first six months of 1954 and the first half of 1955, the United States reduced its imports of Latin American products by 162 million dollars. On the other hand, United States exports to Latin America were curtailed by only 34 millions. The dollar balance in favour of the Latin American countries therefore fell from 180 to 52 millions. It must also be remembered that United State statistics deal with exports and imports on an f.o.b. basis. If the figures for Latin America's imports are expressed in c.i.f. terms,¹¹ negative balances of 32 and 155 million dollars in 1954 and 1955 respectively are revealed. It is obvious that there is a tendency for the imbalance to be aggravated. The data for the first and second quarters of 1955 (on an f.o.b./c.i.f. basis) show that the deficit in the latter stood at 166 millions, whereas in the former there had been a slight surplus of 11 million dollars.

If the same comparison, (i.e., between the first halves of 1954 and 1955) is made for trade with Canada and the whole of Western Europe, a slight increase in Latin America's favourable balance becomes apparent. This amounts to 22 million dollars with Canada and 12 millions with Europe, and originates from the increase in Latin American exports to the latter and the reduction in its imports from the former. The favourable balance of trade with Japan fell from 40 to 10 million dollars, as the result of a decline of 20 per cent in Japanese imports from Latin America.

6. THE GROSS RESERVES OF THE CENTRAL BANKS

In view of the Latin American trade situation, it was inevitable that the gross reserves of gold and foreign exchange in the majority of the Central Banks should be subjected to a severe strain. Nevertheless, in the first quarter of 1955, a slight improvement was registered for

¹¹ With an agreed surcharge on f.o.b. values of 13 per cent in the United States and Canada, and 15 per cent in Europe and Japan.

the region as a whole in comparison with the volume of reserves available at the close of 1954. The increment was very small—less than 15 million dollars—but compares favourably with the negative results of the preceding year. (See table 6.)

Once more, however, an examination of the statistics by countries and groups of countries reveals wide divergencies. The reserves of countries with a mining industry, like Mexico and Venezuela, increased to a remarkable extent. In contrast, the situation of exporters of coffee and other agricultural products deteriorated so far that the loss of gold and foreign exchange was a good deal heavier in only six months of 1955 than throughout the whole of 1954. In actual fact, the decrease was considerable only in two countries, Argentina and Colombia, where it amounted to 115 and 116 million dollars respectively. The drain on the latter country's reserves was especially severe, as it came to represent 46 per cent of the reserves existing at the end of 1954. On the other hand, it should be borne in mind that favourable results were recorded in the second quarter for practically all countries, Argentina and Uruguay being the only exceptions worth mentioning.

If the trade balances are compared with the movement of reserves it is clear that the latter only partially reflects the negative nature of the former.¹² The discrepancy, to which must be added the invisible trade deficit,¹³ was offset in part by movements of capital and in part by a further expansion of the volume of trade arrears.¹⁴

¹² In seventeen countries reserves fell during the first half of 1955 by 125.9 million dollars, in face of a deficit of 182.2 millions in commodity trade alone. The other three countries witnessed an increase of 140.5 millions in their reserves in comparison with a trade surplus of 312.4 millions.

¹³ Mention should also be made of exports of gold and silver bullion which are not included in foreign trade statistics, and which represent a by no means inconsiderable contribution to the adjustment of the balance of payments of countries producing these metals. In the first half of 1955, Colombia, Mexico and Peru alone acquired 35 million dollars from this source.

¹⁴ By way of example, Brazil's balance of payments may be cited. In the first half of 1955, its over-all deficit reached 131 million dollars, made up of 48 millions corresponding to the unfavourable balance of trade (imports c.i.f.; exports f.o.b.), of 56 millions representing the net deficit in the remaining components of the services account, and of a net outflow of capital amounting to 27 millions. This deficit was covered by loans and foreign credit to the value of 189 million dollars, from which 54 millions must be deducted for amortizations of previous loans, as well as the 4 millions used to reduce arrears in current trade payments, which are still estimated at 123 million dollars.

Table 6

LATIN AMERICA: VARIATIONS IN THE GROSS RESERVES OF THE CENTRAL BANKS IN 1954 AND FIRST TWO QUARTERS OF 1955

(Millions of dollars)

Countries and groups of countries	1954 ^a	1955		Total
		I	II	
Total Latin America	-157.7	-78.2	92.8	14.6
Coffee and cacao group	-56.0	-120.1	39.6	-80.5
Agricultural group	-68.0	-19.8	-52.0	-71.8
Metallic ores group	-7.0	15.0	8.7	23.7
Miscellaneous	8.4	-4.7	7.4	2.7
Total 17 countries	-122.6	-129.6	3.7	-125.9
Venezuela	-2.0	-15.0	84.0	69.0
Mexico and Panama	-33.1	66.4	5.1	71.5

Source: Economic Commission for Latin America, on the basis of International Monetary Fund data.

^a Net variation between 31 December 1953 and 31 December 1954.

II. AGRICULTURE

1. THE OVER-ALL SITUATION

The 5-per-cent increase in Latin America's agricultural production in 1955 was an improvement on the average

annual rate of 3 per cent at which production had expanded during the five-year period 1950-54; but the *per capita* output was still 5 per cent lower than in the pre-war years. (See table 7.)

Table 7
LATIN AMERICA: INDICES OF THE VOLUME OF AGRICULTURAL PRODUCTION
(1949/50=100)

	Average 1933/34- 1937/38	1950/51	1951/52	1952/53	1953/54	1954/55 ^a
Total production.....	82.4	103.1	103.3	110.0	112.2	118.0
<i>Per capita</i> production.....	110.7	101.0	98.9	102.3	102.1	105.0

Source: Economic Commission for Latin America.

^a Provisional.

Before the trends of Latin American agriculture in 1955 are analysed, stress must be laid on one of its aspects which has long been of vital importance for the region's future, and which was in great evidence throughout the year in almost all the Latin American countries: namely, the advances made in agricultural production techniques. Not only is the trend towards mechanization increasingly marked, but various technological practices designed to improve yields and reduce risks are also coming into more and more general use. Similarly, the findings of agricultural research, and their dissemination, are acquiring ever

greater importance, while in 1955, as in previous years, international co-operation continued to play a decisive role.

During the year under review more emphasis was placed on the production of foodstuffs than on that of raw materials and stimulants. In fact, while the former increased by 5.6 per cent in relation to 1954, thus raising *per capita* supplies to their pre-war level, the increment in the latter was only 4.2 per cent, and *per capita* availabilities were consequently 20 per cent lower than before the war. (See table 8.)

Table 8
LATIN AMERICA: INDICES OF TOTAL AND *PER CAPITA* AGRICULTURAL PRODUCTION, CLASSIFIED BY FOODSTUFFS, RAW MATERIALS AND STIMULANTS
(1949/50=100)

	Average 1933/34- 1937/38	1950/51	1951/52	1952/53	1953/54	1954/55 ^a
<i>Total production</i>						
Foodstuffs.....	79	104.5	101.5	111.4	112.8	119.1
Raw materials and stimulants ^a	93.7	98.6	109.1	105.7	109.9	114.5
<i>Per capita production</i>						
Foodstuffs.....	106.2	102.4	97	103.6	102.6	106.0
Raw materials and stimulants ^b	125.9	96.6	104.3	98.3	100	101.9

Source: Economic Commission for Latin America, on the basis of official statistics.

^a Provisional.

^b Including industrial oleaginous products and fibres.

Most countries succeeded in improving their production. While the influence of the mainly favourable weather conditions must not be overlooked, it may safely be asserted that the satisfactory results recently achieved reflect Latin America's desire to promote the recovery of the agricultural sector. This intention springs either from the pressing need to replace imports, or from that of creating larger exportable surpluses, and, in a good many cases, from both. But whatever the motive, the primary aim is, to increase supplies.

In Brazil, many crops yielded harvests of unprecedented size, and others attained high levels; its agricultural production consequently expanded by 6 per cent. The figures for that of Mexico, thanks to an increase in the area under irrigation, to abundant rainfall and to an energetic devel-

opment policy, were 10 per cent higher than in 1954. Argentina, while sharing in the general improvement, did no more than recover its 1953/54 losses, as far as crops were concerned, but its livestock sector, on the other hand, showed obvious signs that the crisis of recent years was over. In all, its agricultural output rose by 9.6 per cent. Venezuela's production, despite adverse weather conditions, increased at a rate of 3.7 per cent, which was higher than that of demographic growth. The 4-5 per cent increment obtained by Central America implies that in 1956 the shortage of basic foodstuffs from which these countries suffered during 1955 will be considerably relieved. One of the most important of the agricultural developments in this area was the continued expansion of cotton production. The progress made by Colombia included substantial in-

creases in several staple items; and Chile, thanks to good cereal harvests, raised its production by 9 per cent. Although the over-all agricultural situation in Peru cannot be appraised for lack of full data, an improvement in sugar and coffee and a slight falling-off in cotton production seem to have taken place.

Among the countries which failed to follow this upward trend in 1955 was Uruguay. While in the crops sector the high yield of 1953/54 was successfully equalled, a decline was registered in livestock production, on account of a

further reduction in the number of cattle slaughtered, and a smaller output of wool.

Domestic demand once more proved a dynamic factor in Latin American agricultural development in 1955. Production for home consumption attained a volume which exceeded that of 1954 by 7 per cent, and the annual average for the five years before the war by more than 68 per cent. In contrast, production primarily for export registered increases in relation to these two periods of only 3 and 13 per cent respectively. (See table 9.)

Table 9
LATIN AMERICA: COMPOSITION OF AGRICULTURAL PRODUCTION
(1949/50=100)

	Average 1933/34- 1937/38	1950/51	1951/52	1952/53	1953/54	1954/55 ^a
<i>Total production</i>						
For export.....	103.2	103.9	99.1	113.4	112.9	116.5
For domestic consumption.....	71.1	102.7	105.6	108.2	111.8	119.7
<i>Per capita production</i>						
For export.....	138.7	101.8	94.7	105.5	102.7	103.6
For domestic consumption.....	95.6	100.6	101.0	100.6	101.7	106.4

Source: Economic Commission for Latin America, on the basis of official statistics.
^a Provisional.

This situation arose partly from conditions relating to the external demand for the staple Latin American products. During 1955 markets were burdened with world surpluses, especially of sugar, wheat, rice and cotton, which exerted the inevitable pressure on prices. The market was also weak even for certain other products of importance to the region's economy—such as cacao and wool—where no surplus problem was involved.

Nevertheless, Latin America has been combating these difficulties with relative success, and, with one or two exceptions, the countries of the regions were not obliged to impose direct restrictions on production. A slight falling-off was registered, however, in production for export.

A few individual cases may usefully be considered. In that of sugar, only Cuba and the Dominican Republic were obliged to reduce their output; Brazil, Mexico and Peru, on the other hand, raised their production, and now have larger quantities available for export. Brazil, by means of various exchange measures, succeeded in increasing its shipments abroad, and Peru had no difficulty in placing its surpluses; but Mexico was faced with more or less uncertain market prospects and a considerable increment in its sugar stocks.

As regards cotton, world surpluses have not hindered Latin America from extending its plantations and enlarging its crops, which as a general rule it has been able to sell on foreign markets. With respect to wheat, Argentina found little difficulty in placing most of its 1954/55 exportable production. At the close of the year, however, it was holding larger surpluses than after the previous season. Uruguay encountered various obstacles to the sale of its crop, and cut down the prices paid to the producers in order to prevent any expansion of wheat-growing.

Perhaps the product that suffered the greatest market vicissitudes in 1955 was coffee. Not only were exports curtailed because of the possibility—afterwards eliminated by

the frosts in Brazil—that production might exceed demand, but, furthermore, prices stood lower than in 1954. In the closing months of the year, however, the coffee market showed signs of recovery and a return to normal.

The Latin American countries adopted various measures aimed at combating the effects of the situations described, at ensuring their own capacity to compete at prevailing prices, and at maintaining farmers' earnings at levels high enough to constitute an incentive to production. Attempts were made to attain these ends by the devaluation of the export exchange rate, by special bonuses, by purchases on behalf of the State and by the establishment of minimum prices. Provisional agreements were even concluded at the international level with a view to promoting the consumption and regulating the supply of specific products.

2. THE SITUATION IN CERTAIN COUNTRIES

Argentina

Recent events in Argentina have brought about a re-orientation of the country's economy, which is already finding expression in a radical alteration of the agricultural policy pursued in the immediate past. This new policy is beginning to take shape—in fact, in some cases it has done so already—in a series of measures designed to promote, by means of greater economic incentives, an expansion of production and the application of improved techniques. To begin with, higher prices are being paid to the producer, and modifications have been introduced in the exchange rate policy, while it is the intention of the government authorities to hand over the marketing of the crops, both at home and abroad, to the private sector, as soon as circumstances permit.

As these special aspects of the situation in Argentina are discussed elsewhere,¹⁵ the present analysis will deal only

¹⁵ See "The situation in Argentina and the new economic policy", p. 26.

with the actual events of the last agricultural year. Moreover, the effects of the new economic policy cannot make themselves felt to any major extent so early as the 1955/56 season. The sowings of wheat, fodder crops and linseed, in fact, were made when the former discouraging price conditions were still in force. Those of linseed and winter cereals, especially wheat, were smaller than in the previous season. For other cereals, in contrast, such as oats, barley and rye, which can be used as fodder crops, higher figures were recorded. (See table 10.)

Table 10

ARGENTINA: AREAS SOWN TO CEREALS AND LINSEED
(Thousands of hectares)

	Average 1949/50- 1953/54	1954/55	1955/56 ^a	Percentage difference between 1955/56 and 1954/55
Wheat.....	5,891.3	5,936.8	5,226.0	-12
Oats.....	1,386.2	1,375.7	1,452.0	5.5
Barley.....	953.1	1,089.6	1,245.2	14.3
Rye.....	2,195.9	2,492.7	2,578.6	3.4
Linseed.....	911.7	739.3	693.6	-6.2
TOTAL	11,338.2	11,634.1	11,195.4	-3.8

Source: Servicio Estadístico Nacional, *Síntesis Estadística Mensual*.
^a Third estimate of the *Servicio*.

Together with the reduced sowings of wheat, unfavourable weather conditions, which will have an adverse effect on yields and areas harvested, must be taken into consideration. According to expert opinion, of the total area under wheat some 4.4-4.5 million hectares will be actually harvested in 1955/56, and that production will amount to approximately 5 million tons, that is 2.7 millions less than in 1954/55. The exportable surplus is not likely to exceed 1.2 million tons, as against 3.9 millions in the preceding year. The fact that nearly 1 million tons of surplus stocks were held on 1 December 1955 will partly mitigate the impact of this poor harvest on exports in 1956.

As regards other crops, the stimulus of the new prices seems to have given rise to more extensive sowings of sunflower and maize, especially in areas where the wheat was damaged by frosts.

Such, in broad outline, are the prospects and conditions attendant upon the 1955/56 season. Some consideration must now be devoted to the development of agriculture and stock-breeding in 1954/55, when a number of different

circumstances led to a 9.6 per cent recovery in agricultural production in relation to 1953/54. This recent increase raised Argentina's output to its peak for the last six years, and implies an annual rate of growth considerably more rapid than that of 3.4 per cent registered over the preceding five years. Even so, *per capita* production was still 4 per cent below the levels attained in the five-year period before the war.

In this improvement in Argentina's agricultural production, a vital role was played by the remarkable recuperation in the livestock sector, whose output exceeded that of 1954 by 14 per cent. (See table 11.)

Crops. The 7.4 per cent expansion in the crop production implied only the recovery of previous losses. There was no uniformity of development among the various crops. For the main variations in production, weather conditions were largely responsible. Indeed, the notable increment in the output of wheat and other winter cereals, such as barley and rye, was principally attributable to this factor, of which the favourable influence was felt in bigger yields and the harvesting of a much higher percentage of the area sown. Maize, sunflower and sugar cane, on the other hand, were not so fortunate.

The good wheat harvest made a decisive contribution to the improvement recorded for the crops sector as a whole. The 7.69 million tons obtained constituted a substantial increase over the previous harvest and the annual average for the five-year period 1949/50-1953/54. Only on three occasions during the last twenty-five years (in 1933/34, 1938/39 and 1940/41) has this figure been exceeded.

With regard to maize, the situation was different. The 2.5 million tons produced were one of the lowest yields since 1929/30; only in 1942/43, 1949/50 and 1951/52 were smaller outputs recorded. This decrease amounted to 43 and 70 per cent in relation to the preceding year and to the annual average for the five-year period before the war, respectively. Sales abroad, at first suspended, were afterwards fixed at only 340,000 tons, in the placing of which no difficulty was experienced.

A general falling-off in 1954/55 in the output of edible oil products—cotton-seed, sunflower and peanuts—sharpened still further the downward trend which began in 1949/50. The fall in earnings per hectare, caused by the low prices previously established, and by the decline in the yields, was still the main reason why so limited an area was sown to these crops. Available supplies were 23 per cent lower than in the preceding year, and less than half

Table 11

ARGENTINA: INDICES OF TOTAL AND *PER CAPITA* AGRICULTURAL PRODUCTION
(1949/50=100)

	1950/51	1951/52	1952/53	1953/54	1954/55 ^a
<i>Total production</i>	104.2	91.8	116.7	109.9	120.5
<i>Crops</i>	112.7	90.5	133.5	123.3	132.4
<i>Livestock</i>	92.2	93.7	93.2	91.2	103.8
<i>Per capita production</i>					
<i>Total</i>	101.6	87.5	109.1	100.8	108.2
<i>Crops</i>	109.8	86.3	124.8	113.1	118.9
<i>Livestock</i>	89.9	89.3	87.1	83.7	93.2

Source: Economic Commission for Latin America, on the basis of official statistics.
^a Provisional.

those obtained in 1948/49—below 25 per cent in the case of sunflower. Production of this crop reached its peak in the latter season, and in the year under review amounted to only 283,000 tons. The output of peanuts, again, was 30 per cent smaller, and that of cotton-seed also represented a decrease. The serious effect of this situation on availabilities of raw material for the manufacture of edible oils resulted in a deficit of the latter which amounted in 1955 to roughly 100,000 tons, and had to be met from imports. Linseed virtually remained at the already low levels of the preceding season.

Sugar production declined, but reserves carried over

from the year before were enough to satisfy domestic requirements. There was also a reduction in the output of cotton fibre.

Livestock production. There can be no doubt that one of the most important developments in 1955 was the recovery registered in livestock production. To judge from the rate of slaughter for the first eleven months of the year, the improvement was extended to all species, though it was most striking in the case of beef cattle, both on account of the proportions it attained, and because of the importance attaching to this branch of stock-breeding. (See table 12.)

Table 12
ARGENTINA: SLAUGHTERING AND MEAT YIELD
(Thousands of head; thousands of tons)

	1934-38	1950-54	1954	1955 ^a	Percentage difference between 1955 and 1954
<i>Beef cattle</i>					
Animals slaughtered.....	7,325	8,700.1	7,942.7	9,700	22.1
Meat yield.....	1,608	1,853.0	1,787.3	2,093	17.1
<i>Sheep</i>					
Animals slaughtered.....	10,395	9,448.0	9,927.3	11,761	18.5
Meat yield.....	185	179.3	188.5	223.2	18.4
<i>Pigs</i>					
Animals slaughtered.....	2,012	1,862.4	1,806.3	1,949	7.9
Meat yield.....	136	145.7	141.3	152.5	7.9

Source: Instituto Nacional de Carnes.

^a Estimate based on data for January to November.

The number of cattle slaughtered approached the record 1950 figure as a result of the prolonged drought whose local effects began to be felt in 1948. But whereas in the former year the unusually high rate of slaughter was achieved at the expense of animal stocks, in 1955 the increase was consequent upon herd recovery. Domestic requirements were satisfactorily met, and by mid-August it was possible to suspend the one-day-a-week ban on the sale of beef.

The increment in the meat output meant a substantial rise in export availabilities. In fact, although total beef consumption was 4.2 per cent higher than in 1954, the exportable balance in 1955 seems to have amounted to about 440,000 tons, as against 231,000 in the preceding year. It was therefore 56 per cent larger than in the five-year period 1950-54, but still 24 per cent less than in pre-war times. Thus there was a reversal of the trend observable in recent years, whereby the exceptional expansion of total and *per capita* consumption gradually reduced the exportable surpluses until in 1953 and 1954 they had fallen to only 230,000 and 231,000 tons.

An increase also took place in the slaughter of sheep and pigs, in the former case, however, simply because the price of wool provided no incentive to production, and farmers therefore liquidated their flocks. Over the five-year period 1945-49, the output of wool reached an annual average of 187,000 tons, but the 1953/54 and 1954/55 shearings yielded only 180,000 and 165,000 tons respectively. The new export exchange rate for wool will probably give a fresh lease of life to this sector of production.

Brazil

Here agricultural production expanded by 6 per cent in 1955, or at a rate rather more rapid than that of 1954 (5.6 per cent), and a good deal higher than the average annual rate of 3.3 per cent recorded during the five-year period 1950-54. This meant that the *per capita* output rose by 3.7 and 7.5 per cent in comparison with the same periods.

In 1954 crops were mainly responsible for the larger volume of production. In 1955, on the other hand, the livestock sector played its part in this development, although the share of crops was still the greater. (See table 13.)

Table 13
BRAZIL: INDICES OF AGRICULTURAL PRODUCTION
(1950=100)

	1951	1952	1953	1954	1955 ^a
Total production.....	100	105.7	107.8	113.8	120.7
Crops.....	98.3	104.7	105.2	112.0	118.4
Livestock.....	106.4	109.6	117.6	120.3	126.8

Source: Economic Commission for Latin America, on the basis of official statistics.

^a Provisional.

The growth described resulted from a number of different circumstances, among them the favourable weather conditions which as a general rule prevailed throughout seed- and harvest-time. The rainfall in 1955, unlike that of previous years, was of positive benefit in the north-west; and the frosts in the south early in the second half of the year had no very serious effect on yields. Their consequences will make themselves felt, however, when the next harvests are gathered in, particularly where coffee and sugar are concerned.

The increase in the area under seed was slight, especially in comparison with the progress achieved between 1953 and 1954.¹⁶ Hence it is plain that the higher rate of growth of agricultural production is very largely attributable to the increment in yields. This in its turn was due not only to the propitious weather conditions, but also to the exploitation of tracts of more fertile soil recently brought under cultivation, to the wide-spread adoption of improved agricultural techniques, and to the advances made in the process of mechanization.¹⁷

The modifications introduced into the exchange policy adopted in October 1953 must also be reckoned among the factors that tended to encourage agricultural development, especially in the export crop sector. The improved rates of exchange for the various export commodities, and the flexibility with which they have been applied within the different categories established, have strengthened Brazil's position as a competitor on world markets, while at the same time facilitating its export trade and guaranteeing the producers better earnings. It was impossible for the measures in question to take effect in 1954, as sowing was then too far advanced, but their impact was plainly felt in 1955, when export crops not only absorbed 50 per cent of the increase in the area under cultivation, but also reached a level of production 8 per cent higher than that of 1954, in which year there had been practically no change from 1953.

Agricultural credit developed satisfactorily in 1955, not so much in respect of its volume in real terms as because its benefits were extended to a greater number of producers. A redistribution of such credit by activities gave the advantage to the crops sector, at the expense of that of livestock.

Again, incentives to agricultural production for domestic consumption were provided by the high 1954 price levels, as well as by the minimum price policy which had been in force for some years, and which also covered several of Brazil's export products.

Agricultural production for domestic consumption. Although the expansion in agricultural production for the home market was only 4.9 per cent in 1955 as against 9.3 per cent in the previous season, the output exceeded that of 1950 by 24 per cent. (See table 14.) Larger yields were registered for all crops except beans and tobacco, the most striking improvement being observable in cereals whose aggregate production increased by 9 per cent, due to record harvests of all the different kinds of grain: wheat, maize, rice, barley, oats and rye.

¹⁶ In 1955 this increase amounted only to 222,000 hectares (1.1 per cent) whereas the difference was a little more than 1.2 millions between 1953, when the area under seed was 19.7 million hectares, and 1954 when it reached 20.9 millions.

¹⁷ Between January 1954 and August 1955 Brazil imported 19,935 tractors, 85 per cent of which were for agricultural use.

The production of wheat continued to receive liberal government support. Fuller assistance through credit was given; the process of mechanization was speeded up by the acquisition in 1954 and 1955 of 3,000 additional tractors with the appropriate equipment; fertilizers were more widely utilized and the official programme for the reproduction and distribution of certified seed was extended. The cultivation of this crop was still further expanded, particularly by incorporating the natural meadows of the States of Rio Grande do Sul and Santa Catalina, where the extreme poverty of the soil and the shortage of man-power were offset by the intensive use of fertilizers and machinery. Although the area sown to wheat increased only on a very small scale in 1955, production seems to have risen by 13 per cent, reaching a volume of 983,000 tons. The position of producers was securely established by the fixing of a minimum price 40 per cent higher than that of 1954 (420 cruzeiros per 60-kilogramme bag).

There was also a considerable expansion in the production of rice (16.4 per cent). To a total output of 3.9 million tons (unpolished) the most important contributions were made by the good harvests in Rio Grande do Sul, Goiás and Minas Gerais. The cultivation of maize, on the other hand, improved only slightly—by 1.7 per cent—and production amounted to a little over 6.9 million tons.

The figures for tubers (potatoes, manioc and yams), despite a limited increase of only 3 per cent, constituted a record for Brazil. The output of peanuts rose by 30 per cent, reaching 219,000 tons in São Paulo, the main production centre. Fruit- and vegetable-growing continued to increase steadily, attaining levels 24 and 50 per cent higher than in 1950.

Under the stimulus of prices compatible with costs for marginal producers, the production of sugar outstripped the expansion of demand, mainly owing to the contribution of São Paulo. The 1954/55 harvest yielded 2.125 million tons, and, according to estimates, that of 1955/56 will be larger still (2.168 million tons), even when due account is taken of the damages caused by frosts in Santa Catarina, Paraná and São Paulo. The sugar output for 1954/55 exceeded the preceding year's by 6.5 per cent, and was 31 per cent larger than the annual average for the five-year period 1949/50-1953/54.

After the requirements of domestic consumption (1.827 million tons) had been satisfied, the last season left an exportable surplus of nearly 300,000 tons. The incentive of higher exchange rates raised exports, in the same period,¹⁸ to 306,000 tons, or 35 per cent more than in 1953/54, thus causing a slight decrease in the stocks previously held over (218,000 tons). There are grounds for the hope that a still further reduction will be effected in the course of the current trade year (1955/56).¹⁹

Livestock production also underwent an improvement, which was reflected in better supplies of meat, milk and eggs. Preliminary estimates suggest an expansion of 4 per cent for meat in the aggregate (including beef, mutton,

¹⁸ The sugar year begins on 1 June and ends on the following 31 May.

¹⁹ Commitments amount to 290,000 tons, that is, they exceed by rather more than 40,000 tons the export availabilities estimated for the 1955/56 crop. In 1955, Brazil, which had not yet signed the International Sugar Convention, decided not to become a contracting party, as it felt that the quota allotted to it (175,000 tons) was too small.

pork and goat-flesh) and of 4.5 per cent for milk. For eggs, the corresponding increase exceeded 8 per cent.

Production for export. The rise in the output for domestic consumption was proportionally less than the

7.7 per cent increment in production for export, which, however, failed to surpass the 1952 figure, Brazil's peak for the last seven years. (See table 14.) The over-all increase was due to coffee, cotton, and castor-oil, as the cacao, tung and sisal yields declined.

Table 14
BRAZIL: INDICES OF AGRICULTURAL PRODUCTION, ACCORDING TO DESTINATION
(1950=100)

	1951	1952	1953	1954	1955 ^a
For export.....	94.9	111.4	99.7	99.8	107.5
For domestic consumption.....	99.9	101.4	107.9	117.9	123.7

Source: Economic Commission for Latin America, on the basis of official statistics.

^a Provisional.

Coffee production reached its highest level since 1937/38, with a volume of 1.173 million tons, or 19.55 million bags, which was 13 per cent larger than the preceding year's production. In the achievement of this expansion a decisive role was played by the State of Paraná, which raised its output from 132,000 to 206,000 tons.

The earnings of the coffee sector improved in 1955, not only on account of the better harvest but also owing to the official policy of guaranteeing planters a minimum price for their product. To this end the Government authorized a devaluation of the coffee cruzeiro and bought up large quantities of coffee through the Serviço do Financiamento da Produção.²⁰

The areas where the most important plantations are located were ravaged by frosts in the early part of August 1955. The damage was considerable, and will mean lower yields for next season and for at least two years more.²¹

These frosts in Brazil dispelled the existing fears that an expansion of production might endanger the balance between world supply and demand, and thus bring about a fall in prices.

In the trade year 1954/55, coffee exports sank to one of the lowest levels on record for the present century: 647,700 tons.²² This represented a decline of 25 per cent in relation to the preceding trade year's 859,500 tons. The chief causes of so sharp a drop were probably the high minimum export prices established by the Brazilian Government, the unwillingness of the United States to purchase on such terms, and the prospects—before the frosts—of a substantial increase in production. The reduction of shipments to

²⁰ The exchange rate for coffee rose from 31.5 to 37.06 cruzeiros to the dollar when this product was transferred from the first to the second category. The Government purchased 193,000 tons.

²¹ The State worst affected was Paraná, where the largest increases in production had been expected. The number of trees damaged amounted to 624.5 millions, or 74.5 per cent of the existing plantations, many of which are situated in the newly-incorporated areas and were to enter production in 1956 and 1957. Less severe effects were felt in São Paulo, where the 127 million coffee trees that suffered damage represented only 9 per cent of the plantations. The falling-off in production will therefore not be as serious as in Paraná, especially since the heavy rains that followed the frosts helped the trees to recuperate faster. In expert estimates, export availabilities accruing from the 1955/56 crop will fluctuate in the trade year 1956/57 between only 810,000 and 582,000 tons, that is, between levels 20 and 24 per cent below those of the current year.

²² Exports were lower on only five occasions—1904/05; 1917/18; 1918/19; 1941/42, and 1942/43—four of which, it should be noted, fell within either the First or the Second World War.

the United States from 478,100 to 349,300 tons played an especially important part in bringing down the figures for Brazil's sales abroad.

The consequence of the smaller volume of exports was the piling-up of large surpluses, which by the end of the trade year amounted to 391,000 tons, of 96 per cent more than in the preceding year. If to these surpluses is added the exportable production of 1.062 million tons, the availabilities for the current trade year—1955/56—total 1.453 million tons; that is, they exceeded by 414,000 tons the corresponding figure for 1954/55.

At the close of this latter trade year, however, a significant change took place in the volume of exports and in price trends, when the danger of a large output from Brazil disappeared, and United States stocks had fallen extremely low,²³ while demand was showing a tendency to return to normal. Thus, during the first four months of the trade year 1955/56 (July-October 1955, inclusive), 351,500 tons of coffee were exported, in favourable contrast with the 170,000 corresponding to the same period in the preceding year.

The production of cotton slightly exceeded the previous season's (by 2.7 per cent), attaining a volume of 406,000 tons. Despite the instability of the world market, the prices received by producers followed a satisfactory course, as a consequence of the better cruzeiro export rate²⁴ and the prospects of an exchange reform which may have resulted in still better export earnings for cotton fibre. If it is further taken into account, firstly, that projects are on foot for sowing cotton on those coffee plantations that were affected by the frosts, and, secondly, that peanut prices have fallen as a result of the recent exceptional output, a considerable expansion of the area at present under cotton, with the consequent increment in next season's production, may well be predicted.

The output of cacao (161,600 tons) was 0.8 per cent smaller than the heavy yields obtained from the preceding year's crop; and much the same was true of sisal. To encourage sales abroad and improve producers' earnings, cacao was transferred from the second to the third category of export commodities, which meant a higher rate from dollar earnings from this source.

²³ Stocks held by the United States usually amount to 240,000 tons; but on 30 June 1955 they stood at only 105,000.

²⁴ In May, cotton was transferred from the second to the third category for purposes of export exchange earnings.

Mexico

In this country agricultural production in 1955 exceeded that of the year before by 10 per cent. It is true that this rate of increase did not equal the 18.9 per cent recorded for 1954, but it was higher than the annual average of 6.8 per cent corresponding to the five-year period 1949-53; and such an expansion involved increments in total and *per capita* production of 36.5 and 18.1 per cent

respectively, in relation to 1950. (See table 15.) Better domestic supplies and larger exportable balances of various commodities resulted.

Although the development of livestock production cannot be assessed on the inadequate data available, it may be noted that there was a considerable increase in exports of cattle on the hoof, especially to the United States.

Table 15

MEXICO: INDICES OF TOTAL AND *PER CAPITA* AGRICULTURAL PRODUCTION, CLASSIFIED BY FOODSTUFFS, RAW MATERIALS AND STIMULANTS
(1950=100)

	1951	1952	1953	1954	1955 ^a
Total production.....	104.6	98.5	105.3	125.2	137.6
Foodstuffs.....	101.8	94.6	104.0	126.6	131.2
Raw materials and stimulants ^b	108.4	103.5	106.9	123.5	146.0
Per capita production.....	101.7	93.1	96.8	112.0	119.6
Foodstuffs.....	98.9	89.5	95.6	113.2	114.1
Raw materials and stimulants ^b	105.3	97.8	98.3	110.4	126.8

Sources: Economic Commission for Latin America, on the basis of official statistics. For 1955, *Foreign Crops and Markets*, Anderson Clayton and Co., Unión Nacional de Productores de Azúcar and Comisión Nacional del Café.

^a Provisional.

^b Cotton fibre, henequen, cotton seed, copra, sesame, palm kernels, peanuts, linseed, sugar cane, tobacco and alfalfa.

The factors contributing to agricultural expansion have been of various kinds. Among them may be mentioned the plentiful supply of water for both irrigated and seasonal crops;²⁵ the incorporation of new land, especially for cotton-, wheat- and rice-growing; the unusually favourable situation on the domestic market; and the Government's development programmes. These last were designed, as in previous years, to provide producers with sufficient credit and more stable and accessible markets, as well as to obtain higher and steadier yields through the expansion of the area under irrigation and the use of fertilizers and improved seeds. Attention must also be called to the safeguarding of farmers' earnings by the minimum-price policy now in force, and by the agricultural insurance facilities available as from the present season.

Record harvests were yielded in 1955 by many crops, especially rice, maize, copra, bananas, cotton, cacao, coffee and sugar. (See table 16.)

A harvest of cereals (wheat, maize, rice and barley) about 7 per cent larger than that of 1954 and 25 per cent

²⁵ The distribution of rainfall throughout the year was erratic, the rains being late, excessively prolonged, and at certain periods torrential; in some cases this left the soil either too dry or too wet, and even resulted in floods, to the detriment mainly of the coffee, beans, maize and tomato crops and of the quality of cotton fibre. Tropical hurricanes, frosts at seed-time, and other adverse conditions also caused further losses, which, according to official estimates, were equivalent in the aggregate to 300,000 hectares, or 5 per cent of the total area sown to annual crops in 1955.

It is calculated, however, that these losses due to weather conditions were offset by the increase in the land under cultivation; by the larger proportion of the dry-soil areas that produced a harvest, thanks to the abundant rainfall; and by the improvement in the yields.

Moreover, the heavy rains in two consecutive years (1954 and 1955) renewed ground-water supplies and enabled record quantities to be stored up in the reservoirs. It is hoped that the high levels of production thus made possible will be maintained for at least one year more.

in excess of the annual average for the preceding five years,²⁶ enabled Mexico, after providing for price control requirements and domestic supplies, to export comparatively large tonnages of maize and rice, basic elements in the national diet.²⁷ It was many years since this had been possible.

By 1954, in virtue of the gradual increase in the production of wheat during recent years, it was already possible to cut down imports to only 71,000 tons, as against 366,000 in the previous three-year period. A larger 1955 harvest will perhaps render Mexico self-sufficing as far as wheat is concerned, or will at any rate greatly reduce imports.

It seems that the cotton crop also attained record levels, although the quality of the fibre may have been adversely affected by the undue prolongation of the rainy season. The considerable expansion of the irrigated area under cotton raised the already high volume of production registered in 1954 by 22 per cent, which means that the average annual output for the five-year period 1945-49 was almost quadrupled. It is estimated that exports may have amounted to 340,000 tons, as compared with 269,000 in 1954, and with an annual average of 64,500 over the five-year period just mentioned. Cotton fibre will thus be able to maintain its position as Mexico's principal export product.

The deterioration observable in the production of sesame was partly due to competition from cotton for the use of the soil. Supplies of raw material for the manufacture of oil, however, far from declining on this account, improved, thanks to the more plentiful availabilities of cotton-seed.

²⁶ Volume estimated at constant prices.

²⁷ During the first eight months of 1955, 48,000 tons of maize and 8,000 tons of beans were sold to several countries, the principal buyer being Guatemala. It was expected that by the end of the year 17,000 tons of rice—that is, the surplus from the last crop—would have been exported.

Table 16
MEXICO: MAIN CROPS IN 1955, 1950-54 AND 1954
(Thousands of tons)

	Average 1950-54	1954	1955 ^a	Percentage difference between 1955 and 1954	
<i>Cereals</i>					
Wheat.....	639.9	839.5	881.3	37.7	5.0
Maize.....	4,328.0	4,825.0	5,000.0	15.5	3.6
Rice.....	167.8	169.9	227.0	35.3	33.6
Barley.....	163.3	161.5	150.0	-8.1	-7.1
<i>Vegetables</i>					
Beans.....	453.5	524.0	500.0	10.2	-4.6
<i>Oleaginous products</i>					
Cacao.....	9.5	12.6	14.0	47.4	11.1
Cotton-seed.....	500.7	652.1	728.8	45.6	11.8
Sesame.....	87.2	90.8	101.0	15.8	11.2
Copra.....	55.0	75.2	75.5	37.2	0.4
Peanuts.....	70.5	78.2	75.2	6.7	-3.8
Sugar.....	708.5	830.4	910.0	28.3	9.6
Bananas.....	215.0	223.6	307.8	43.2	37.7
Coffee.....	75.4	84.9	93.0	23.3	9.5
Cotton.....	293.2	380.4	465.4	58.7	22.3

Source: See the sources of table 15.
^a Provisional.

The steady expansion of sugar production led to an increase of 910,000 tons in 1955, and thus confronted Mexico with a problem of surpluses. The country became self-sufficing owing to the growth of production, in 1947, and a little later began to export without encountering any difficulty until 1952. From that year onward stocks have been steadily increasing, and have exceeded the volume which might be regarded as a normal reserve wherewith to meet the requirements of the domestic market. The 1955 output alone left an exportable surplus of some 220,000 tons, to be added to the carry-over from previous years. It should be pointed out that only for about 80,000 tons is there an assured market.²⁸

Coffee production continued to expand, and for 1954/55 was estimated at 93,000 tons, representing a 10-per-cent increase on the preceding season's maximum. A still bigger harvest, estimated at 102,000 tons, may be expected in 1955/56, and large new plantations will be incorporated.²⁹ A similar trend was manifest for exports, which probably amounted to 76,000 tons in 1955, as against a maximum of 73,400 in 1954.

No statistics are available for an appraisal of the year's livestock production. Once the foot-and-mouth disease which broke out in the early months of 1953 was eliminated, the United States lifted, as from January 1955, the ban on imports of meat and cattle on the hoof from Mexico. Its markets were therefore once more opened to northern Mexico's livestock production, and a recovery in exports, which, for the reasons already indicated, had been very low in 1954, was thus facilitated.³⁰

²⁸ The International Sugar Convention, at its session on 1 July 1955, allotted Mexico an export quota of 69,802 tons, to which must be added a further 10,000 tons for the United States market.

²⁹ The Comisión Nacional del Café is largely responsible for this development. During the 1955 planting season it issued a free distribution of more than 3.2 million coffee trees and large quantities of selected seed.

³⁰ From the data for the first nine months of 1955, it may be estimated that rather more than 280,000 head were exported in the course of the year, as against 4,600 in 1954 and 134,600 in 1953. The United States import quota for 1955 was established at 331,000 head (livestock, and meat in terms of cattle on the hoof).

Progress achieved in specific development measures. While it is true that the expansion of Mexican agriculture in recent years, and especially in 1954 and 1955, was largely due to the abundant rainfall, credit must also be given to the steady endeavours to raise production made by the Government and by the farmers themselves. One aspect of this effort which deserves mention is the irrigation programme whereby in 1955, 280,000 hectares were reclaimed for production purposes (76,000 more than in 1954).³¹

The official agricultural credit organizations continued to give their support, and maintained their policy of guarantee prices, though for some commodities these were readjusted in proportions ranging from 11 to 15 per cent. Furthermore, fifty-seven storage units, with a total capacity of 300,000 tons, were brought into service in various parts of the country. Again, programmes for the reproduction of improved seed placed increasingly large quantities in the hands of farmers.³²

Outstanding among the agricultural measures adopted in 1955 was the implementation of a programme of insurance on several types of crops and against various risks, which will help to guarantee the farmers' earnings.³³ During its first stage, risks will be covered for up to 5 million cultivated hectares. Should receipts from premiums prove inadequate to cover payments for damages, the losses incurred will be borne by the Government. This type of insurance is expected to encourage investment in agriculture and the more wide-spread use of such aids to production as, for example, improved seeds, fertilizers, weed-killers and insecticides.

³¹ The allocation of 636 million pesos to irrigation works in 1955 enabled four large undertakings to be completed, besides sixty-four small irrigation plants and 184 deep wells.

³² Availabilities for the 1955 sowings comprised 5,400 tons of hybrid maize, 3,500 tons of beans and 23,000 tons of wheat, of selected strains, resistant to weather and to a variety of diseases and pests.

³³ The crops insured are cotton, wheat, maize, beans, rice, sesame, peanuts, potatoes, barley, chickpeas and chili peppers. This insurance gives protection against the following risks: hail, frosts, hurricanes, drought, floods, pests, disease, and accidental fires.

As regards livestock production, various steps have been taken to improve quality, fodder resources and sanitary conditions.

Central America

Agricultural production in Central America, which had been showing a tendency to remain stationary since 1951, gave signs of increasing in 1955. According to provisional crop estimates, this expansion seems to vary between levels 4 and 5 per cent higher than those of the preceding year.

Weather conditions were unfavourable to agriculture in this area in 1955. There were unseasonable rains in the early months of the year and a subsequent postponement of the rainy season, the result being a drought at the end of April and May which spoiled the blossom of the coffee trees and held up sowings of maize. Again, the excessively heavy rains which followed in June and July hampered the sowing of cotton. The prolongation of these rains, together with hurricanes at the end of the season, caused floods in Costa Rica and on the northern coast of Honduras, to the detriment of crops and young livestock.

Despite these adverse factors, the recovery in the production of maize, beans and rice in Guatemala, and the considerable increase in the cotton output of both this country and El Salvador, helped to determine an increment in Central America's total production. (See table 17.)

Table 17

CENTRAL AMERICA: MAIN CROPS AND BEEF CATTLE AND PIG PRODUCTION IN 1954 AND 1955
(Thousands of tons; thousands of head)

	1954	1955 ^a	Percentage difference between 1955 and 1954
<i>Crops</i>			
Maize.....	981	1,029	4.9
Rice.....	94	96	3.0
Beans.....	120	128	6.6
Cotton-seed.....	128	152	19.3
Sugar.....	138	140	1.7
Bananas ^{b c}	28,089	27,520	-2.0
Coffee ^b	168	171	1.8
Cotton.....	79	94	19.0
<i>Livestock^d</i>			
Beef cattle.....	589	581	-1.4
Pigs.....	676	693	2.5

Sources: For Guatemala: Banco de Guatemala (coffee and bananas); Asociación Guatemalteca de Productores de Algodón (cotton fibre and seed); and Dirección General de Estadística (remainder). For El Salvador: Instituto Regulador de Cereales (maize, rice and beans); Cooperativa Algodonera (cotton); Dirección General de Estadística (coffee exports and beef slaughtering); and Departamento de Estudios Económicos y Estadística del Ministerio de Agricultura (remainder). For Honduras: Ministerio de Hacienda (banana exports); and Sección Estudios de Economía Agrícola del Ministerio de Recursos Naturales (remainder). For Nicaragua: Dirección General de Estadística. For Costa Rica: Dirección General de Estadística.

^b Preliminary figures.

^a Exports during calendar years 1954 and 1955, except in the case of Honduras, where the periods are the financial years (1 July to 30 June) 1953/54 and 1954/55.

^c Thousands of bunches.

^d In terms of animals slaughtered during calendar years 1954 and 1955.

An analysis of the over-all situation in 1955 brings to light several significant facts. In the first place, the inadequacy of domestic supplies of basic foodstuffs deter-

mined heavy imports of maize, beans and rice from countries outside the region, and, furthermore, reduced the export trade of Honduras and Nicaragua, which are traditional suppliers for the other Central American countries. Secondly, stress must be laid on the continued expansion of cotton production, on the decline in the coffee crop,³⁴ and on the striking increase in the use of fertilizers and insecticides in agriculture.

As regards supplies, it should be pointed out that the deficit had its origin in the poor harvest of 1954, when the five countries in the aggregate obtained outputs of maize, beans and rice which were smaller, by 12, 17, and 28 per cent respectively, than those registered in 1953. The countries which suffered most were Guatemala and El Salvador. The former, which had for some years been self-supplying, and had even exported certain quantities of these basic commodities to El Salvador and Mexico, found itself obliged in 1955 to effect larger imports of foodstuffs than at any other time in this last decade: 37,000 tons of maize, 5,000 tons of rice, and 9,200 tons of beans. The decline in sowings and harvests in 1954 brought about by internal disturbances accounts for this situation. In El Salvador the disequilibrium between the country's natural resources and its population—already accentuated by the expansion of cotton cultivation, which meant that grain was sown only on marginal land—was aggravated by the poor harvest of 1954. Imports of maize amounted to 42,000 tons, and were thus 76 per cent higher in 1955 than in the preceding year, and more than three times as great as the annual average for the five-year period 1950-54. Imports of rice and beans were not quite so high, although still considerable. The failure of Honduras and Costa Rica to produce enough grain obliged these countries to resort to imports for the first time in many years. Nicaragua was the only country in Central America which did not need to purchase grain abroad in 1955, but on the other hand its exports were heavily reduced, owing to the encroachments of cotton on land formerly used for cereals.

Prospects for 1956 are decidedly different, except perhaps for El Salvador and Costa Rica. The 1955 harvests, from which consumption in 1956 will be met, were good in Guatemala and normal in Honduras and Nicaragua, and it is expected that the first of these countries will prove self-sufficient and that the other two will be able to increase their exports. It is estimated that El Salvador's imports of beans and rice will be curtailed, but that, on the other hand, it will have to make larger purchases of maize abroad, on account of a further decline in the 1955 crop. The Government is endeavouring to achieve a relatively short-term improvement in the present situation, mainly on the basis of programmes for the reproduction of hybrid strains of maize from Mexico. Costa Rica will be the only country whose deficit will be aggravated in 1956, as its output decreased in consequence of the hurricanes and floods in 1955.

With respect to cotton, it is of interest to note that the rate of expansion attained in recent years makes Central America the area in which the highest relative increase has been achieved. Production, which in 1948 amounted to barely 5,900 tons of fibre, has expanded almost without interruption, until in 1955 it reached a volume of 93,700 tons. The harvest was 19 per cent and 134 per cent larger than those of 1954 and 1953 respectively. The countries

³⁴ See note 36 on page 21.

where cotton sowings increased most in 1955 were El Salvador and Guatemala. This growth of cotton production in Central America, which began during the post-war period of high prices, continued even after prices had fallen. Yields in these countries are among the best in the world,³⁵ and costs can therefore be kept relatively low.

One of the advantages of the expansion described, based as it is on the application of very advanced techniques, is that it has aroused interest in all technological innovations among farmers in Central America. A new type of agricultural *entrepreneur* is to be found among the present generation of planters, who will no doubt exert considerable influence on other branches of the region's agriculture in the years to come. In cotton-planting, wide-spread use is already made of mechanized methods of the selection and disinfection of seed, of pest control by the spraying of organic insecticides from the air and of the fertilization of the soil, as well as other new techniques. By way of example may be cited the significant rise in the consumption of inorganic fertilizers, from an annual average of 42,000 tons between 1949 and 1953, to about 74,000 in 1955.

In contrast to the development of cotton production, the coffee crop was small as compared with that of the preceding year.³⁶ The only country which obtained a normal harvest was Honduras; all the rest—and especially El Salvador—registered lower figures, despite increases in the area of the plantations and notwithstanding a variety of technical improvements. The fall in production was exclusively due to bad weather, which, furthermore, affected the quality of the product and, consequently, the earnings of coffee planters.

The output of bananas was once again limited. Only Honduras made some progress, but without equalling the production of previous years.

Livestock production remained relatively at a standstill. That of beef cattle declined by 1.4 per cent in the area as a whole, owing to small decreases in Guatemala, Honduras and Nicaragua; but that of pigs improved by 2.5 per cent, except in the case of Nicaragua and Costa Rica.

Cuba

Broadly speaking, the conditions that had prevailed during the previous three years were maintained in Cuba in 1955. This country's agricultural production caters mainly for the domestic market, and there is a tendency to restrict export products. In 1955, in fact, not only was the production of sugar once more curtailed, but various measures were adopted with a view to limiting that of tobacco in 1956. The position is different with respect to products for domestic consumption, as the bean, maize and potato crops increased, the output of rice remained high, and the coffee harvest was large enough not merely

³⁵ In 1955 El Salvador obtained an average yield of 646 kilogrammes of cotton fibre per hectare, and Guatemala 610, without having recourse to irrigation.

³⁶ This decline in production is not fully reflected in the figures given in table 17. The lack of adequate statistics compelled ECLA to make use of export data, which are supplied for calendar years and in which the vicissitudes of production are partly offset from one year to another. Thus, while the figures for 1954 in table 17 reflect to some extent the poor harvest of 1953/54, those for 1955 are affected by the relatively high output of 1954/55, and comprise only part of the poor crop in 1955/56.

to meet consumption but also to provide fairly substantial export surpluses, for the first time in many years.

Market conditions, and the existence of carry-overs from earlier years, obliged the authorities to place further restrictions on the production of sugar. The output—4.53 million tons—was 7.3 and 38 per cent lower than those of 1954 and 1952 respectively. Mainly as the result of the sale of 568,000 tons to the USSR, exports are estimated to have exceeded those effected in 1954 by approximately 310,000 tons. Even so, the sugar surplus, which reached its post-war peak of 1.94 million tons at the close of the calendar year 1954, probably increased by the end of 1955, reaching a still higher maximum of 2.22 million tons.

One factor which may help to relieve the situation of the sugar economy, in face of the successive restrictions on production since 1952, is the processing of molasses, a practice which had virtually been abandoned in 1944, but was renewed ten years later. In 1954, 495 million litres were obtained, and, in 1955, 874 millions. The output for both years was exported.

The production of tobacco in recent years considerably outstripped both local consumption and exports, with the consequent piling-up of stocks, which were withdrawn from the market upon the creation of a special stabilization fund. This situation has necessitated the establishment of a system of controls restricting production in the areas sown to tobacco. The effects of this measure did not make themselves felt before 1956, and the 1955 harvest was larger than that of the preceding season.

In the rice crop it is estimated that there will be little change from that of 1954 (192,000 tons, unpolished). Producers have had to cope with a number of problems, among which mention may be made of the shortage of water, the immoderate growth of weeds, a loss of fertility in many tracts of soil and a reduction in credit facilities.

The output of maize was larger, and a still greater expansion is expected in the next few years, owing to the more wide-spread use of hybrid seed, which has given excellent results and which is being reproduced and distributed on a commercial scale. To this must be added the incentive to producers provided by the minimum-price policy. Although most of the production of maize is absorbed for human consumption, there is an increasingly marked tendency to use it in the preparation of feed concentrates, especially for poultry.

Cuba has normally been an importer of coffee. Nevertheless, for the first time in many years, its good 1955 harvest provided an exportable surplus estimated at not less than 120,000 bags. Its output seems to have amounted to 41,000 tons, or 7 per cent more than in the preceding year. Satisfactory yields of beans and potatoes were also obtained, enabling imports of the former to be reduced. The production of potatoes was once more in excess of consumer requirements, and there is no market for this product abroad.³⁷ It is therefore deemed advisable that production be curtailed in the next few years. Nevertheless, the lack of proper storage facilities, and the resulting impossibility of keeping the potatoes in good condition, forces Cuba to import them for home consumption during the last three or four months of the calendar year.

³⁷ In 1955, an unusual shortage of potatoes in the United States enabled Cuba to export a small quantity to this market.

The production of beef declined in the latter part of 1954 and the first half of 1955, after a prolonged drought. The shortage became more acute half-way through the

year, and induced the Government to lift the customs duties on beef imports as a means of easing the supply situation. This measure was adopted for a period of three months.

III. INDUSTRIAL PRODUCTION

I. THE GENERAL SITUATION

During the second quarter of 1955 Latin America's industrial production displayed the same symptoms of weakness as were to be observed in the first three months of the year. The rapid expansion which had been brought about in 1954 by the recovery in Argentina and Mexico,

and the continuance of vigorous industrial growth in Brazil, Colombia and Venezuela, was no longer in evidence during the first half of 1955. Throughout the quarter under review, no increase over the output of the previous six months was recorded. This indicates a short-term trend towards a stagnation of industrial production. (See table 18.)

Table 18
LATIN AMERICA: INDICES OF THE VOLUME OF INDUSTRIAL PRODUCTION, BY QUARTERS
(1950=100)

	Average	1954 IV	1955		Percentage variations		
			I	II	I 1955/ IV 1954	II 1955/ I 1955	II 1955/ IV 1954
Brazil ^a	132.5	141.5	139.0	134.7	-1.8	-3.0	-4.8
Argentina ^a	102.5	110.4	109.7	112.0	-0.6	2.1	1.4
Mexico.....	110.0	115.5	118.7	119.1	2.8	0.3	3.1
Colombia.....	141.5	141.3	147.0	147.4	4.0	0.3	4.3
Venezuela.....	143.2	155.3	165.7	163.3	6.7	-1.4	5.2
Chile ^a	143.9	146.6	137.6	133.0	-6.1	3.3	-9.3
Total 6 countries.....	122.4	129.2	129.8	128.8	0.5	-0.8	-0.3
Other countries.....	112.6	118.2	117.0	117.8	-1.0	0.7	-0.3
Total Latin America.....	121.1	127.8	128.1	127.4	0.2	-0.5	-0.3

Source: Economic Commission for Latin America, on the basis of official statistics.

^a Adjusted for seasonal variation.

It may be noted that in Brazil and Chile the situation of industry definitely deteriorated, and that it began to do so in Venezuela, despite the favourable circumstances at present attending the country's economic development. In Colombia the rate of industrial growth, in relation to the first quarter of the year, was practically nil, while the modest increase in Argentina's output amounted to only 1.4 per cent in relation to the fourth quarter of 1954.

These trends in Latin American industry are in contrast with the situation in other countries. In the United States, industrial production during the first six months of 1955 reached peak levels, exceeding that of the second half of 1954 by 8 per cent; in the United Kingdom it expanded by 5 per cent; and in the other industrialized countries of Europe it registered increments which, though differing from one country to another, were considerable in every case.³⁸

Despite the dynamic forces stimulating the expansion of industry in Latin America, there are a number of factors which have been militating against its progress. Different as they are, most of these have a common origin in the direct and indirect effects of foreign trade. In some cases the trouble rises from the persistent failure to increase

exports; in others, there is a gradual deterioration in the terms of trade. As a result of this latter development, the Latin American countries' capacity to import tends, on the whole, to remain stationary, or, at all events, does not keep pace with import requirements. When this relative inflexibility of the capacity to import becomes even more rigid, at certain periods, it brings about downward movements in domestic production over the short term. Similarly, it has caused competition between imports of consumer goods and those of capital goods and raw materials, thus increasing the difficulty attaining higher investment coefficients and intensifying industrial activity. It should be borne in mind that the more acute the balance-of-payments tensions, the greater, as a rule, is the tendency to curtail essential imports such as capital goods, raw materials and fuels, and that this hampers the normal development of industry. Such was apparently the case in Brazil and Chile in 1955. Some countries, which for several years past have shown a marked trend towards a relative decline in their capacity to import, suffered in addition from shortcomings in energy and transport, which also hindered their economic evolution over the medium and long term. Outstanding examples are Argentina and, again, Chile.

Nevertheless, the influence thus exerted by the foreign sector, with the accompanying restrictions on imports and devaluation of currencies, has sometimes stimulated industrial development, as it has given additional protection to domestic manufactures. A recent case in point is that of Mexico, which, after the devaluation of its currency in

³⁸ An examination by branches of activity shows that in the United States and the United Kingdom the highest increases were recorded for iron and steel, chemical products, machinery and vehicles. In contrast, very slow rates of growth were noted in textiles and other non-durable consumer goods, and some degree of stagnation was to be observed in the industries producing processed foodstuffs.

April 1954 and the virtual stabilization of its balance of payments, increased its income from agriculture and energetically expanded industrial production.

Recently, too, factors of another kind have had a still stronger impact on industrial development in Latin America. The stationary income levels in Argentina and Chile implied a certain stagnation of demand, which meant that in both countries idle capacity existed in some branches of industry. Income distribution in Mexico might, over the long term, prove a powerful impediment to any expansion of the domestic market, especially for consumer goods. Finally, restrictions on credit aimed at controlling internal disequilibria, taxation through exchange-rate differentials, and the fiscal policy in relation to private enterprise, seem to have affected the development of industry in Colombia, Chile and Brazil during the first quarter of 1955.

2. THE SITUATION IN SELECTED COUNTRIES

Argentina

The serious basic problems with which Argentina's industrial activity has been confronted since 1950—shortage of energy and transport, and the need to renew equipment—have not hitherto been tackled in accordance with any clearly defined principle. This naturally constitutes an obstacle to the expansion of the manufacturing sector; in fact, the satisfactory development of industry achieved in 1954 was sufficient only to raise total production to former levels, such as that of 1951, without enabling it to exceed them. If population growth is taken into account, it is clear that there was actually a marked decline in *per capita* production, which reduced it to a level 10 per cent below that of 1951.³⁹

The rapid recovery of Argentina's industry in 1954, which involved an expansion of 8 per cent in relation to 1953, and its slower continuance in the second quarter of 1955, when output was 2 per cent greater than in the first three months of the year, were primarily due to adventitious factors originating in a rise in demand which allowed existing resources to be more fully utilized. The industrial

³⁹ For an analysis of these problems and the existence of idle productive capacity, see the article entitled "The Situation in Argentina and the New Economic Policy", section 4, "Prospects for Industry", on p. 41 of this issue.

growth of 1954 was largely based on that year's wage increases, but its effects gradually weakened as prices rose and demand therefore inevitably declined. In 1955, the expansionist effects of the demand for manufactured goods apparently arose from an increase in the gross national product,⁴⁰ accruing from the better harvests in 1954/55 and from the development of other sectors of the economy. It seems, therefore, that until the end of 1955 it was the fluctuations of demand that controlled the evolution of industrial production.

It should be noted, first and foremost, that the expansion of Argentina's industry observable in the second quarter of 1955 originated mainly from the durable goods sector. It was here that the greatest increments were registered (see table 19), notably for rubber goods (25 per cent), metals (22 per cent), vehicles and machinery (15 per cent) and electrical equipment and apparatus (24 per cent).

In contrast, the output of non-durable goods in 1954 and 1955 remained practically stationary in relation to that of preceding years. This was true of almost all branches, but especially of the foodstuffs industry, where, in the second quarter of 1955, the activity registered was only 3.5 per cent greater than in the first three months of the year, when production had already fallen 6.5 per cent below the figures for October-December 1954. This standstill in the output of foodstuffs was attributable to the following causes. Great progress was previously necessitated by Argentina's long record of high consumption levels, so that any further expansion of this industry was able to keep pace only with demographic growth and not with an additional rise in demand. The situation was also influenced by the unsatisfactory sales in some export industries, as well as in others producing commodities for domestic consumption, such as flour, butter, cheese and oils. Since the foodstuffs industry represents 30 per cent of the non-durable goods sector and 20 per cent of Argentina's entire manufacturing activity, its incidence on the general level of industrial production is considerable. In the output of textiles—another of the important non-durable goods industries—a substantial increase of 28 per cent was registered in the second quarter. It must be taken into

⁴⁰ Estimated at 4 per cent, in real terms, for the whole of the year.

Table 19
ARGENTINA: INDICES OF INDUSTRIAL PRODUCTION, BY QUARTERS
(1950=100)

	1954 IV	1955		Percentage variations		
		I	II	I 1955 IV 1954	II 1955 I 1955	II 1955 IV 1954
Volume of industrial production *	110.4	109.7	112.0	-0.6	2.1	1.4
Number of workers employed	93.0	94.9	96.0	2.0	1.2	3.2
Number of man-hours worked	97.6	90.8	102.1	-7.0	12.4	4.6
Volume of certain items:						
Foodstuffs	102.3	95.6	98.9	-6.5	3.5	-3.3
Textiles	95.6	77.6	99.2	-18.8	27.8	3.8
Rubber	175.9	151.3	188.6	-14.0	24.7	7.2
Metals	111.3	102.9	126.0	-7.5	22.4	13.2
Vehicles and machinery	127.3	124.3	142.8	-2.4	14.9	12.2
Electrical equipment and apparatus	168.5	137.1	170.0	-18.6	24.0	0.9

Source: Economic Commission for Latin America, on the basis of official statistics.

* Seasonal variation eliminated.

account, however, that this upward trend in textiles followed a period during which production was very low, as is indicated by the fact that the output fell by 30 per cent between 1950 and 1953, and was 19 per cent less in the first quarter of 1955 than in the last three months of 1954.

In addition, there was a marked expansion of the paper industry, in which Argentina holds first place among the Latin American countries, accounting for almost 30 per cent of the region's production; and it is probable that in the course of 1955 the output of 330,000 tons attained in former peak years was exceeded. Alongside this development, there was also considerably more activity in printing and reproduction.

To sum up, the relative maintenance of industrial recovery in the second quarter of 1955, after the more striking expansion in 1954, can in no way be held to indicate that the fundamental problems affecting the long-term development of manufacturing activity in Argentina have been successfully solved.

Brazil

The same factors which played an important part in the decline of industrial production during the first three months of 1955 seem to have continued operating throughout the second quarter, if anything with more vigour than before. A further decrease in industrial activity brought it down to levels 5 per cent and 3 per cent below those prevailing in October-December 1954 and in the first three months of 1955, respectively.

Bank credit restrictions continued to exert a discouraging influence on industry during almost the whole of the second quarter. From June onwards, there was a relative increase in credit to the private sector, the effects of which could not be assessed earlier than the third quarter of 1955. Imports of raw materials also pursued their downward trend, although prices of some of these apparently tended to decrease in national currency because of the relatively lower dollar quotations during the quarter under review, as regards both the weighted average and some of the categories into which the exchange market is divided. The considerable wage increases granted in the first quarter and during part of the second certainly implied higher production costs, the effects of which were discouraging as long as credit restrictions were in force; but it would seem that, at the same time, they reinvigorated consumer demand, in which a certain contraction had been noted during the first three months of 1955. It was precisely in consumer goods that the most marked decline in production was observable during this quarter. (See table 20.) Between April and June, on the other hand, there was a reversal of this trend, as the output of consumer goods recovered by 2 per cent in relation to the first quarter, while that of producer goods underwent a 12-per-cent decrease. This decline seems to have been caused partly by the credit restrictions mentioned above, as the producer goods industries are those which most frequently resort to bank credit in Brazil, and partly by specific movements in certain important branches, determined in their turn by other factors.

Table 20
BRAZIL: INDICES OF INDUSTRIAL PRODUCTION,^a BY QUARTERS
(1950=100)

	1954 IV	1955		Percentage variations		
		I	II	I 1955 IV 1954	II 1955 I 1955	II 1955 IV 1954
Total	141.5	139.0	134.7	-1.8	-0.3	-4.8
Producer goods	158.2	157.4	138.1	-0.5	-12.3	-12.7
Consumer goods	135.8	129.7	132.1	-4.5	1.9	-2.7
Building	151.8	153.6	139.6	1.2	-9.1	-8.0
Electric energy	130.8	147.0	148.7	12.4	1.2	13.7

Source: Economic Commission for Latin America, on the basis of official statistics.

^a Seasonal variation eliminated.

The iron and steel industry must perhaps have suffered during the first and second quarters of 1955 from the changes introduced by the Companhia Siderúrgica Nacional into its production plans, which are not usually very flexible. The falling-off in the demand for specific types of steel, with the resultant piling-up of stocks, seems to have led to a proportionate reduction of the output of these particular types in subsequent periods. Production plans are drawn up every three months by this Company.

The decline in the building industry in the second quarter of 1955 involved a contraction of the demand for certain kinds of glass and iron products, the output of which consequently decreased. The fact that cement production continued to increase in the first quarter of the year, despite the relative stagnation in building, was mainly due to the inauguration of new factories. Between

April and June, however, the cement output fell by 3 per cent as a result of this decline in construction activities.

Another branch of industry which followed the same downward course as in the first quarter was the manufacture of paper (almost exclusively newsprint). Here a vital influence was exerted by the disadvantage at which domestic production was placed, partly because the exchange system favoured the foreign product, and partly because the cost of imported pulp, already high, gradually rose with the rising cost of the foreign exchange required to cover it.

Short-term development prospects for Brazil's industry seem at present to be dominated, on the one hand, by the expansion of bank credit, which came into play as a favourable factor from June 1955 onward, and, on the other, by balance-of-payments difficulties and the deterioration in the terms of trade, with all their adverse effects

on the supply of capital goods and raw materials from abroad, and on the national income.

Colombia

One of the most outstanding events in the economic life of Colombia was the signing of a contract between the Instituto Industrial, which had the full support of the Government, and an Italian company, for the building of a fertilizer factory which will utilize the gas from the El Centro petroleum deposits managed by the Empresa Colombiana de Petróleos. This plant, for which the investment required will be in the neighbourhood of 12 million dollars, including 7 millions in foreign currency to cover equipment and technical services, will enter production in mid-1958, with a daily capacity of 50 tons of ammonia, 150 tons of nitric acid, 65 of ammonium nitrate and 35 of urea. Together with the Solvay plant at Zipaquirá, it will place Colombia in the forefront of the Latin American countries with respect to the heavy chemical industry.

Chile

Chile's industrial output continued to decline in the second quarter of 1955, falling 3.3 per cent lower than in the preceding three months, when it had already decreased by 6.1 per cent in relation to the last quarter of 1954. No very great changes were to be noted in installed capacity or in the general difficulties besetting industry during the previous period.⁴¹ The cotton textile branch maintained its development without any enlargement of its former capacity, though its supplies of raw material were apparently somewhat improved. Production of rayon filament remained at a low level. The textile and clothing industries in general, however, expanded by 20 per cent—a considerable recovery in comparison with the period from January to March—but still failed, by the same percentage, to equal the figures recorded for the last quarter of 1954. In the iron and steel industry a sharp downward movement was caused by particular circumstances (repairs to the Huachipato blast furnace, which are usually carried out once in three or four years, and the seventeen-day strike which held up activities in June). Lastly, the building industry expanded by about 50 per cent in relation to the preceding period, in sharp contrast with its evolution in the first quarter of 1955, when it fell 20 per cent lower than in the last three months of 1954.

Again, in the second quarter of 1955, credit restrictions operated in much the same way as in the previous three months, making it difficult for raw material availabilities to be financed over the short term and for stocks to be maintained. In contrast, supplies of imported raw materials improved considerably, thanks to the larger inflow of foreign exchange accruing from the rise in the price of copper. The shortage of electric energy was also somewhat eased, mainly owing to the entry into production of a new power station in May. On the other hand, the continuance of inflationary price increases reduced the purchasing power of specific sectors of the population; demand for certain manufactured products therefore contracted, with the consequent aggravation of the problem of idle capacity.

Peru

At the end of the first and during the second quarter of

⁴¹ See *Economic Review of Latin America*, special issue, Bogotá, August 1955, pp. 4-6.

1955, Peru witnessed the emergence of various industrial projects, some of which imply a significant expansion of basic heavy industry. Five agreements for financing the completion of the Chimbote iron and steel plant and of the Cañón del Pato hydroelectric power station, were concluded between the Corporación Peruana del Santa and a French consortium made up of a bank and four private enterprises. The installation of the steel rolling mill was subsequently begun in Chimbote.

A new cement factory entered production with a capital of 70 million soles and a current daily capacity of 1,500 barrels. According to calculations, this rate of production will shortly be doubled. Another proposal took definite shape when work began on the construction of the country's third cement factory at Chiclayo. Its estimated capacity is 1,300 barrels daily, and the capital involved is 60 million soles. Furthermore, a 2.5-million-dollar credit, with a government guarantee, was granted by the International Bank for Reconstruction and Development to a cement company, for the building of the new plant at Pacasmayo.

Important projects are also under way in the fertilizer and explosives sector. Four are of particularly far-reaching significance. The first, for obtaining ammonium products, will probably enter production at the beginning of 1956.

As regards the consumer goods industry, competition from imported goods has tended to prevent it from progressing in 1955. At any rate, this seems to have been the case in certain branches, such as the textile industry, which was adversely affected by competition from foreign, especially Japanese, products.

Mexico

At the opening of 1955, Mexico's industrial situation was characterized by the same expansionist forces as had made themselves felt in the second half of 1954, basically deriving from that year's exceptional harvests, from a vigorous campaign to replace capital and durable consumer goods imports and from a considerable increase in public expenditure. Nevertheless, these factors, which really came into play only from July 1954 onwards, seem to have originated relatively smaller effects in the course of the first semester of 1955, to judge by comparison with the rate of industrial growth in the second half of 1954. During that period, industrial production increased by almost 8 per cent in relation to the first six months of the year, but the figures reached were exceeded by 5 per cent in the first half of 1955.

Again, such development as was still observable in 1955, seems to have been principally based on the manufacture of capital goods. Within the process of Mexico's industrialization, this branch of industry has followed a steady upward course. Consequently, the expansion recorded in 1954 and its continuance in 1955 introduces no radical change into the situation of Mexican industry, but simply represents the prolongation of a long-term trend, only interrupted, as in 1953, by an over-all recession in economic activity.

In the first half of 1955, the output of pig-iron was 12 per cent larger than in the second half of 1954, while that of steel bars rose by about 5 and that of cement by 10 per cent. In contrast, certain branches of consumer goods manufactures, which had declined in recent years

and had expanded during the second half of 1954, again remained more or less stationary in 1955. The index for the textile industry, which, given 1950 as the base year, was 106 in the second half of 1954, rose by only 1 per cent in the first six months of 1955. Between these two periods, there was no change in the output of tires, while that of soap and beer declined; the production of edible oils, on the other hand, increased to an exceptional extent.

The influence of an exaggerated concentration of earnings in the higher income groups, and the consequent stagnation of the domestic market, coupled with the fact that in the consumer goods industries there was practically no

margin for the further replacement of imports, prevented output from keeping pace in recent years with over-all economic development. After the expansion which took place in the second half of 1954, these adverse factors apparently began to operate afresh during the first six months of 1955.

The generation of electric energy increased by almost 7 per cent in relation to the second half of 1954. The continually growing market for energy was kept comparatively well supplied, as a result of the strong impetus given to electrical construction by the Mexican Government, through its Comisión de Electricidad.

THE SITUATION IN ARGENTINA AND THE NEW ECONOMIC POLICY

1. SOME ASPECTS OF ARGENTINA'S ECONOMIC DEVELOPMENT DURING RECENT YEARS

If economic development is judged by the growth of the nation's *per capita* income and by the degree of efficiency with which man-power and capital resources are utilized, the balance for the last ten years shows that Argentina's over-all economy has not made any real advance, and that the utilization of basic resources has actually deteriorated. During this interval, periods of progress have alternated with others of recession, but the former had not enough impetus to continue for any length of time, either because the structural basis essential for steady growth was lacking, or because the unfavourable action of fortuitous circumstances led to a loss of the ground gained. Although the endeavour to accelerate industrialization at times raised production to high levels, most of its achievements were merely transient, or at best, out of proportion to the effort made.

Table I shows that in 1954 the *per capita* gross product was barely 3.5 per cent higher than in 1946.¹ (See also chart I.)

If the increment in the stock of capital is considered, the figures for the same period are somewhat more satisfactory, but the effects of increased investment seem to have been offset by a decline in productivity. (See table 2.)

Allusion has already been made to the vicissitudes characterizing the period under review. If fluctuations from one year to another are set aside, two phases can be clearly distinguished. The first comprises the early post-war years up to 1948. This stage was marked by a rapid and pronounced rise in income, investment and productivity, *per capita* income reaching its peak at the end of the period. Thenceforward, a decline set in, and the 1948 level was not regained in any subsequent year.

¹ For the statistical sources utilized, see the Appendix to this article, p. 45.

Table I
ARGENTINA: INFLOW OF AVAILABLE GOODS AND INVESTMENT
(Millions of pesos at 1950 prices)

	National gross income	Terms of trade effect in relation to 1950 (A)-(C)	National gross product	Export import balance	Available goods and services			
					Total	Consumption	Net investment	Gross investment depreciation
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1935.....	37,538	39	37,499	2,538	34,961	27,094	3,239	7,867
1936.....	39,303	1,492	37,811	1,705	36,106	28,379	3,741	7,727
1937.....	44,200	3,649	40,551	843	39,708	30,252	4,516	9,456
1938.....	41,441	765	40,676	-1,228	41,904	29,972	7,515	11,932
1939.....	42,674	441	42,233	1,375	40,858	31,448	3,758	9,410
1940.....	42,895	-23	42,918	821	42,097	33,731	2,776	8,366
1941.....	44,896	-265	45,161	2,065	43,096	33,805	4,003	9,291
1942.....	45,674	15	45,659	2,229	43,430	35,380	2,458	8,050
1943.....	45,563	215	45,348	3,798	41,550	34,042	2,376	7,508
1944.....	50,881	425	50,456	3,700	46,756	38,746	1,634	8,010
1945.....	48,983	147	48,836	3,667	45,169	37,939	2,060	7,230
1946.....	55,198	2,001	53,197	2,674	50,523	38,946	5,369	11,577
1947.....	63,253	4,139	59,114	-1,958	61,072	42,346	12,906	18,726
1948.....	65,961	3,608	62,353	-3,118	65,471	46,311	13,247	19,160
1949.....	62,829	1,285	61,544	-1,998	63,542	49,670	7,759	13,872
1950.....	62,291	—	62,291	425	61,866	48,282	6,966	13,584
1951.....	64,219	-3	64,222	-1,517	65,739	49,776	9,155	15,963
1952.....	59,740	-246	59,986	-1,412	61,398	46,919	7,817	14,479
1953.....	63,010	-215	63,225	1,333	61,892	50,285	4,287	11,607
1954.....	65,987	-104	66,091	724	65,367	51,386	7,070	13,981

Table 1 (continued)

	National gross income	Terms of trade effect in relation to 1950 (A)-(C)	National gross product	Export import balance	Available goods and services			
					Total	Consumption	Net investment	Gross investment depreciation
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Per capita VALUES								
(Pesos at 1950 prices)								
1935.....	2,901	3	2,898	196	2,702	2,094	250	358
1936.....	2,989	113	2,876	130	2,746	2,158	285	303
1937.....	3,305	273	3,032	63	2,969	2,262	338	369
1938.....	3,045	56	2,989	90	3,079	2,205	552	325
1939.....	3,083	32	3,051	99	2,952	2,272	272	408
1940.....	3,052	-2	3,054	58	2,995	2,400	198	398
1941.....	3,143	-19	3,162	145	3,017	2,367	280	370
1942.....	3,146	1	3,145	154	2,991	2,437	169	385
1943.....	3,088	15	3,073	257	2,816	2,307	161	348
1944.....	3,392	28	3,364	247	3,117	2,583	109	425
1945.....	3,210	10	3,200	240	2,960	2,486	135	339
1946.....	3,557	129	3,428	172	3,255	2,509	346	400
1947.....	4,007	262	3,744	-124	3,868	2,682	818	369
1948.....	4,097	224	3,873	-194	4,067	2,876	823	367
1949.....	3,803	78	3,725	-121	3,847	3,007	470	370
1950.....	3,673	—	3,673	25	3,648	2,847	411	390
1951.....	3,686	—	3,686	-87	3,773	2,857	525	391
1952.....	3,346	-14	3,360	-79	3,439	2,628	438	373
1953.....	3,457	-12	3,469	73	3,395	2,759	235	402
1954.....	3,555	-6	3,561	39	3,522	2,768	381	372

Source: *Producto e ingreso de la República Argentina en el período 1953-54*, Buenos Aires, 1955. Col. (A): *op. cit.*, table 17; Col. (B): Col. (A) minus Col. (C); Col. (C): *op. cit.*, table 15; Col. (D): Col. (C) minus Col. (E); Cols. (E) and (F): *op. cit.*, table 18; Col. (G): *op. cit.*, table 18 and Col. (H): *op. cit.*, tables 5, 18 and 31.

Several factors combined to determine first the upward and later the downward movement.

The close of the Second World War found Argentina in possession of abundant reserves, thanks to the greater decline in imports than in exports, which resulted in favourable balances, notwithstanding the deterioration in the terms of trade.

But the scanty imports during the war years meant that

Table 2

ARGENTINA: CAPITAL STOCK, PRODUCTIVITY, AND THE UTILIZATION OF PRODUCTIVE CAPACITY PER ACTIVELY EMPLOYED PERSON, 1945-54

(Pesos at 1950 prices)

Years	Capital stock		Gross product per actively employed person (C)	Gross product per unit of capital stock (D)
	Total (A)	Per actively employed person (B)		
1945.....	114,437	18,984	8,101	0.427
1946.....	116,497	18,954	8,656	0.457
1947.....	121,866	19,446	9,432	0.485
1948.....	134,772	20,979	9,706	0.463
1949.....	148,019	22,346	9,291	0.416
1950.....	155,778	22,848	9,136	0.400
1951.....	162,744	23,180	9,147	0.395
1952.....	171,899	23,832	8,316	0.349
1953.....	179,716	24,345	8,565	0.352
1954.....	184,003	24,211	8,696	0.359

Sources: *Producto e ingreso de la República Argentina en el período 1953-54*. *Op. cit.*, table 1 and ECLA, *Economic Surveys* for 1951-52 and 1953. Col. (A): for 1945, *Economic Survey of Latin America, 1951-52*; for other years, table 1. Col. (B): Col. (A) divided by the estimate of active population cited in ECLA's *Economic Surveys*. Cols. (C) and (D): table 1 and source of Col. (B).

the country was undergoing an intensive process of disinvestment.

Later, the reserves held were largely used to repatriate the external debt and to nationalize foreign investments in public services. So heavy a pressure was exerted by imports at the end of the war that they expanded much more than exports, thus bringing about a reversal of the former trend. While exports reached their maximum tonnage in 1946, when their volume was 16 per cent larger than in the preceding year, imports almost doubled in the same space of time, and in 1947 registered a similar increment, which raised them to their peak—370 per cent higher than in 1945—by 1948, just when there was a marked falling-off in sales abroad. Only the remarkable improvement in the terms of trade enabled exports, despite a lesser increase and a subsequent decrease in their volume, to finance heavy foreign purchases. But in 1948-49 their continued decline coincided with a deterioration in the terms of trade. (See table 3 and chart II.)

It is thus not surprising that by 1949 a trade debt had accumulated which compelled Argentina to apply for a loan from the Export-Import Bank.

The downward trend of world prices was prolonged in the following years despite the slight recovery to which the war in Korea gave rise. Among its well-known causes were the magnitude of the output from the larger producer centres, and the consequent inevitable piling-up of stocks. Again, the very low level of Argentina's exports in specific years—1952, for example—was due to weather conditions which damaged crops, and in some cases, to the Government's exchange policy.

At all events, exports never recovered the high levels prevailing during the five years before the war (1935-39),

Chart I
ARGENTINA: NATIONAL GROSS PRODUCT AND INCOME, TERMS OF TRADE EFFECT, AND
PER CAPITA GOODS AND SERVICES AVAILABLE FOR CONSUMPTION AND INVESTMENT
(Pesos)
 (Semi-logarithmic scale)

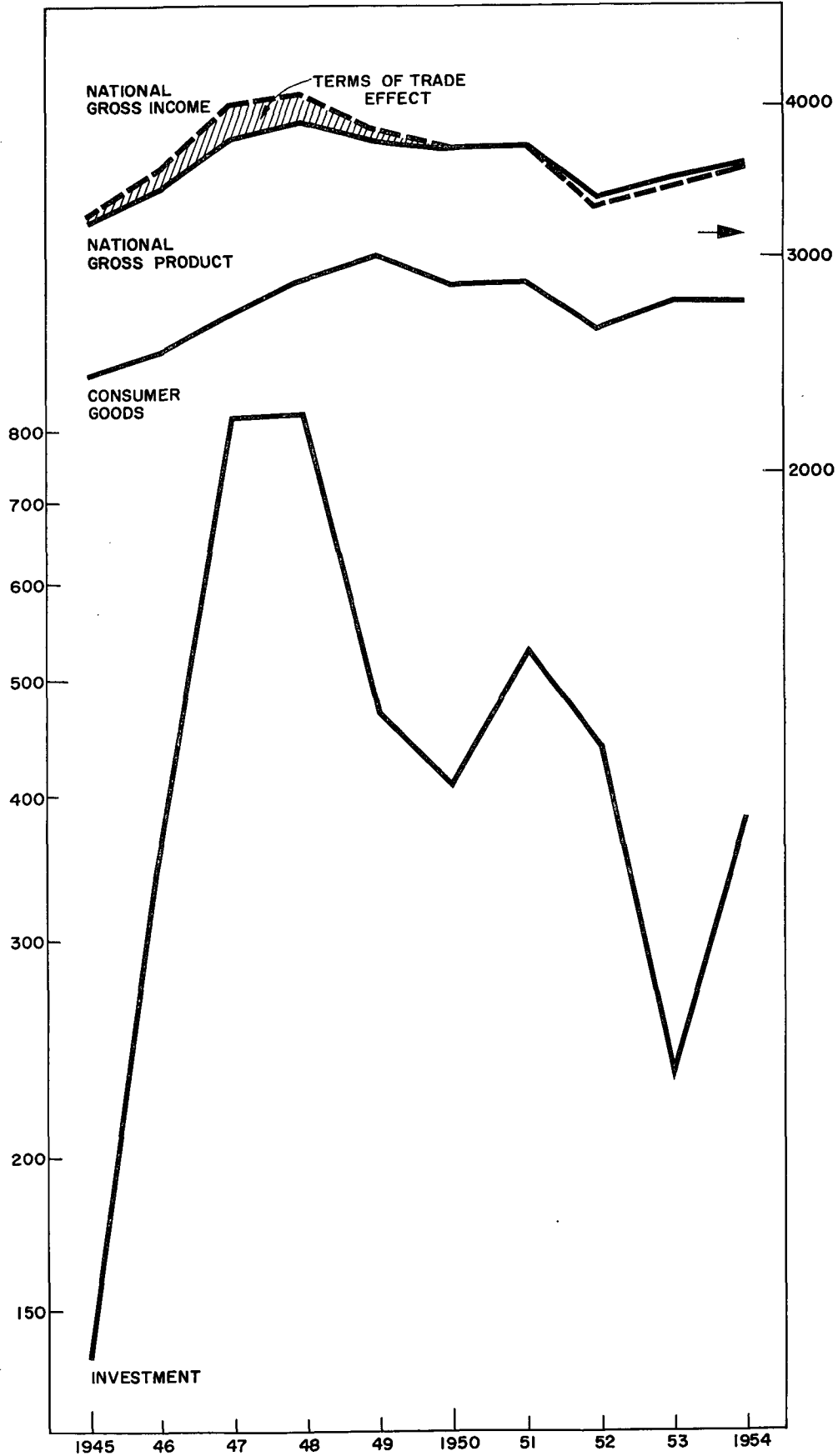


Chart II
ARGENTINA: TERMS OF TRADE (A); VOLUME OF EXPORTS (B); VOLUME OF IMPORTS (C); AND
PURCHASING POWER OF EXPORTS (D)
(1950=100)
 (Semi-logarithmic scale)

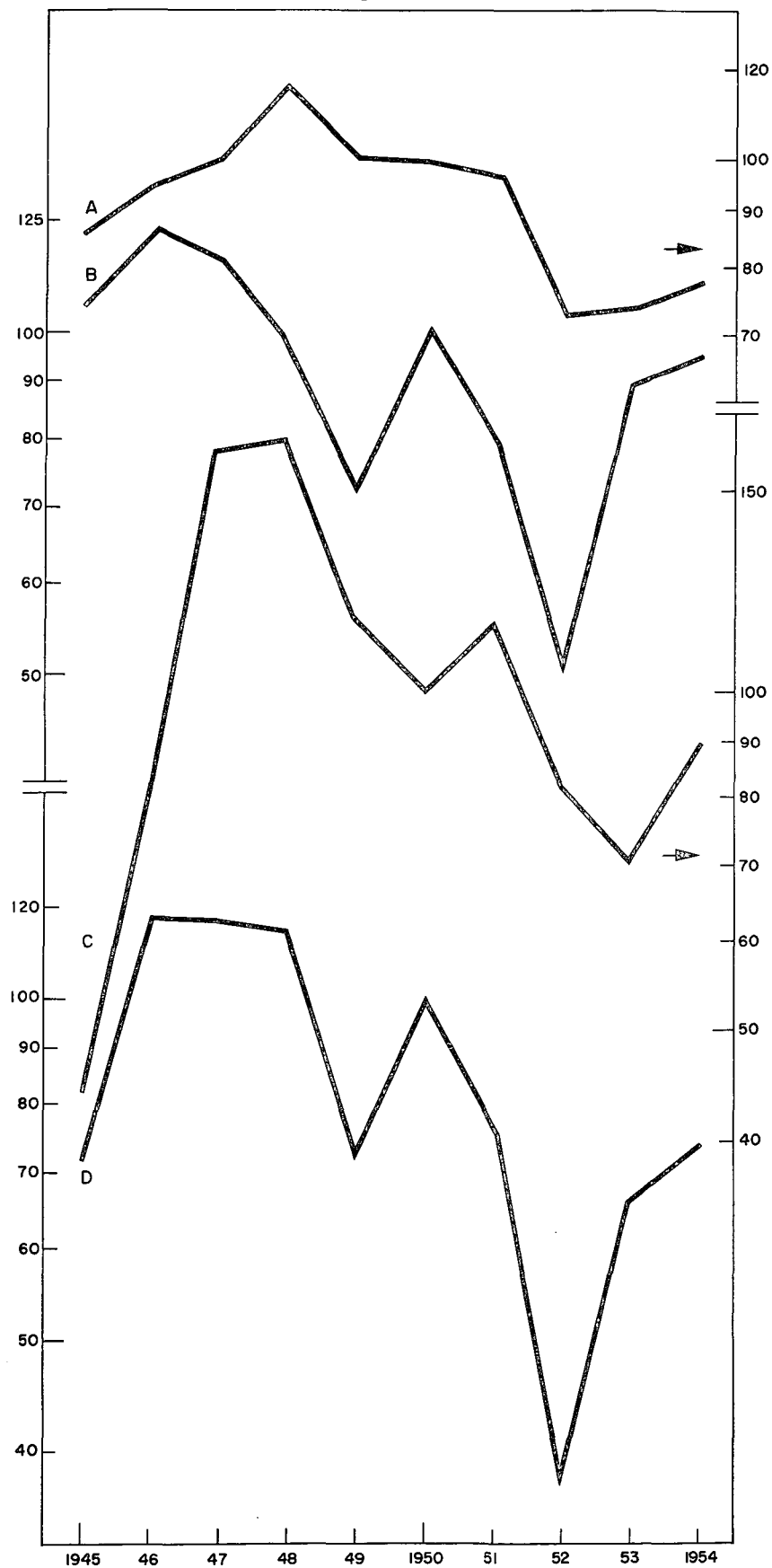


Table 3
ARGENTINA: THE TERMS OF TRADE AND THE
PURCHASING POWER OF EXPORTS, 1935-54
(1950=100)

Year	Terms of trade (A)	Volume of exports (B)	Volume of imports (C)	Purchasing power of exports (D)
1935	67.7	139.6	102.5	94.5
1936	83.4	127.8	105.7	106.6
1937	93.6	146.9	143.1	137.5
1938	76.5	104.3	135.9	19.8
1939	73.5	127.5	111.8	93.7
1940	68.8	104.4	97.1	71.8
1941	71.0	105.8	74.7	75.1
1942	64.5	97.3	62.3	62.8
1943	66.4	107.0	42.6	71.0
1944	61.7	106.3	43.7	65.6
1945	86.5	106.1	44.4	72.7
1946	96.0	123.0	81.5	118.1
1947	101.3	115.5	162.5	117.0
1948	117.6	97.3	165.4	114.4
1949	101.0	72.5	116.8	73.2
1950	100.0	100.0	100.0	100.0
1951	97.2	78.6	114.2	76.4
1952	73.3	51.0	82.3	37.4
1953	74.3	88.9	70.5	66.1
1954	77.9	94.9	88.6	73.9

Sources: Col. (A): 1935-48, Banco Central de Argentina, *La evolución del balance de pagos de la República Argentina*, Buenos Aires, 1952; 1948-54, Ministerio de Comercio de Argentina, *Memoria Anual, Ejercicio 1953*, Buenos Aires, 1954, and statistics brought up to date on the basis of information from the same source. Cols. (B) and (C): table 1; Col. (D): Col. (A) x Col. (B).

and the peak which they reached in 1946 was still far below the index attained in 1937.

From this cursory analysis and the statistics on which it is based, one characteristic feature of Argentina's economic development clearly emerges, which is, moreover, common to most of the Latin American countries: the influence of the terms of trade. Their fluctuations cause increases or decreases in income and investment. This latter, in the case of Argentina, keeps so closely parallel with the terms of trade as to emphasize the role of external factors in the country's development. Capital formation, which must to a large extent be founded on imports, depends on the capacity for foreign payments, which in its turn is influenced by the terms of trade. The statistics reveal, furthermore, that Argentina's exports tend to expand less than the country's economy, making the latter dangerously vulnerable to outside contingencies, so long as this dependence persists.

An exceptional impetus was given to industry in the post-war period. During the war years, the fall in imports had already constituted an incentive to the expansion of industrial production, thus relieving the shortage brought about by restrictions, and providing a larger fund of experience which it was afterwards possible to exploit under the aegis of a definitely protectionist policy and in a period of heavy capital goods imports.

Industrial expansion was also fostered by the shift of man-power from agriculture, and by the rise in income, which led to an increase in domestic demand for manufactured goods.

The evolution of the statistics for the value of production by sectors provides interesting material for study, and clearly illustrates the two stages indicated above. (See table 4 and chart III.)

Production in the agricultural and stock-breeding sector has remained stationary for at least ten years. This situation is the more serious, since domestic demand has increased not only for the reasons mentioned but also on account of population growth, so that availabilities for export have diminished.

Industry has followed a similar trend over the last five years. Annual statistics show that the index of 100.7 recorded for 1948 was not exceeded until 1951, and then only very slightly. The indices for *per capita* production are even more discouraging.

Between the stagnation of primary activities and the decline in industry there was obviously a relationship of cause and effect. The persistent weakening of exports deprived industrial development of a support which is indispensable until it has reached a stage advanced enough to lessen its dependence on external contingencies. Argentina's economy, like that of all countries in a similar phase of development, has not yet undergone the structural changes which would enable it to carry the weight of industrialization without substantial imports of capital goods, raw materials and fuels. In the case of Argentina, no heavy industry exists, and there are few accessible sources of regular and adequate fuel and raw material supplies. Sufficient illustration is provided by the fact that petroleum imports came to constitute 49 per cent of total energy consumption, as against only 39 per cent before the war.

Again, the growth of industry itself created an ever-increasing demand for fuels and raw materials, and the composition of imports had to be modified accordingly, a development which, although satisfactory in principle, renders manufacturing activities still more vulnerable to fluctuations in the capacity to import. This partly explains why the expansion in productive capacity achieved in years of heavy purchases abroad could not be fully exploited when it was no longer possible to import sufficient quantities of raw materials and fuels. (See table 5.)

It should be noted that these changes in the structure of imports—largely in favour of fuels and raw materials—took place as from 1948 within a steadily decreasing volume of total imports.

With the external difficulties arising from the contraction in imports were coupled the internal setbacks to industrial activity inherent in an inflationary process. The costs inflation resulting from wage and salary increases was financed by means of bank credit. Between 1946 and 1948 real remunerations improved, owing to an increment of over 5 per cent in gross income, which was doubtless partly attributable to the exceptionally favourable external conditions then prevailing. So favourable a consequence of the improvement in the terms of trade and the increase in productivity enabled wages and profits to rise simultaneously in the industrial sector; but once these conditions ceased to exist, a price-wage spiral became manifest, real remunerations fell, and industrial activity could be maintained only with the help of a further extension of bank credit. To all this must be added the decline in productivity per employed worker and per unit of capital.

Table 4
ARGENTINA: NATIONAL GROSS PRODUCT, BY SECTORS AND PER CAPITA, 1935-54

Year	Total	Agriculture and fisheries	Stock-breeding	Industry and mining	Building	General services
A. DISTRIBUTION OF GROSS PRODUCT						
(As a percentage of total)						
1935.....	100.0	17.2	10.5	20.0	4.8	47.5
1936.....	100.0	14.3	10.7	21.3	5.0	48.7
1937.....	100.0	13.8	10.2	21.2	6.1	48.7
1938.....	100.0	11.6	10.3	21.9	6.7	49.5
1939.....	100.0	13.3	10.2	22.0	5.9	48.6
1940.....	100.0	14.3	10.4	21.8	5.2	48.3
1941.....	100.0	15.6	10.7	21.6	5.1	47.0
1942.....	100.0	14.7	10.9	21.6	5.1	47.7
1943.....	100.0	11.2	11.4	22.8	5.3	49.3
1944.....	100.0	13.9	10.6	23.1	5.8	46.6
1945.....	100.0	9.5	10.8	23.0	5.8	49.9
1946.....	100.0	9.6	9.9	24.6	5.7	50.2
1947.....	100.0	9.9	8.9	25.5	5.2	50.5
1948.....	100.0	9.7	8.2	24.4	6.4	51.3
1949.....	100.0	8.5	8.3	24.0	7.2	52.0
1950.....	100.0	7.7	8.0	24.4	7.3	52.6
1951.....	100.0	8.7	7.4	24.2	7.0	52.7
1952.....	100.0	7.2	8.1	24.2	6.4	54.1
1953.....	100.0	10.5	8.1	22.4	5.8	53.2
1954.....	100.0	9.6	7.8	23.2	6.2	53.2
B. Per capita GROSS PRODUCT						
(Pesos at 1950 prices)						
1935.....	2,898	498	304	580	139	1,377
1936.....	2,876	411	308	613	144	1,400
1937.....	3,032	418	309	643	185	1,477
1938.....	2,989	347	308	655	200	1,479
1939.....	3,051	406	311	671	180	1,483
1940.....	3,054	437	318	666	159	1,474
1941.....	3,162	493	338	683	161	1,486
1942.....	3,145	462	343	679	160	1,500
1943.....	3,073	344	350	701	163	1,515
1944.....	3,364	468	357	777	195	1,567
1945.....	3,200	304	346	768	185	1,597
1946.....	3,427	329	339	843	195	1,721
1947.....	3,745	371	333	955	195	1,891
1948.....	3,873	376	318	945	248	1,986
1949.....	3,726	317	309	894	268	1,937
1950.....	3,673	283	294	896	268	1,932
1951.....	3,686	321	273	892	258	1,943
1952.....	3,360	242	272	813	215	1,818
1953.....	3,468	364	281	777	201	1,845
1954.....	3,561	342	278	826	221	1,894

Source: Table 1 and *Producto e ingreso de la República Argentina en el período 1953-54*, *op. cit.*, tables 15 & 16 & Appendix IV.

Industry was thus compelled to meet high production costs, while at the same time it was confronted with a weakening of domestic demand, brought about by the decrease both in real wages and in the earnings of agriculture. It should be remembered, however, that while inflation raised the general level of prices, those paid to farmers for basic products improved only slightly or remained unchanged; a transfer of income from this sector to the non-agricultural activities was thus promoted, and the effect produced upon these latter by the altered circumstances was to some extent counteracted. Moreover, industry enjoyed the advantage of the import replacements achieved, by virtue of which its own products could be substituted for many formerly purchased abroad.

This process of import replacement, however, was itself

slowed down by the difficulties described. Investment—mainly channelled into public works, which, however desirable they may be, do not produce goods to satisfy consumer demand—lost its impetus, imports of raw materials declined, and fuel availabilities just sufficed to maintain industrial activity at a level which, if it represented no progress, at least did not involve a significant deterioration.

The interplay of all these factors resulted in an industrial situation that prevented the serious problem of the two basic sectors of Argentina's economy—energy and transport—from being grasped in its full magnitude. The deficit in electric energy, in particular, has in recent years been responsible for the imposing of restrictions on consumption which, in the case of many industries in the

Chart III
ARGENTINA: PER CAPITA NATIONAL GROSS PRODUCT, BY SECTORS
(Pesos at 1950 prices)
(Semi-logarithmic scale)

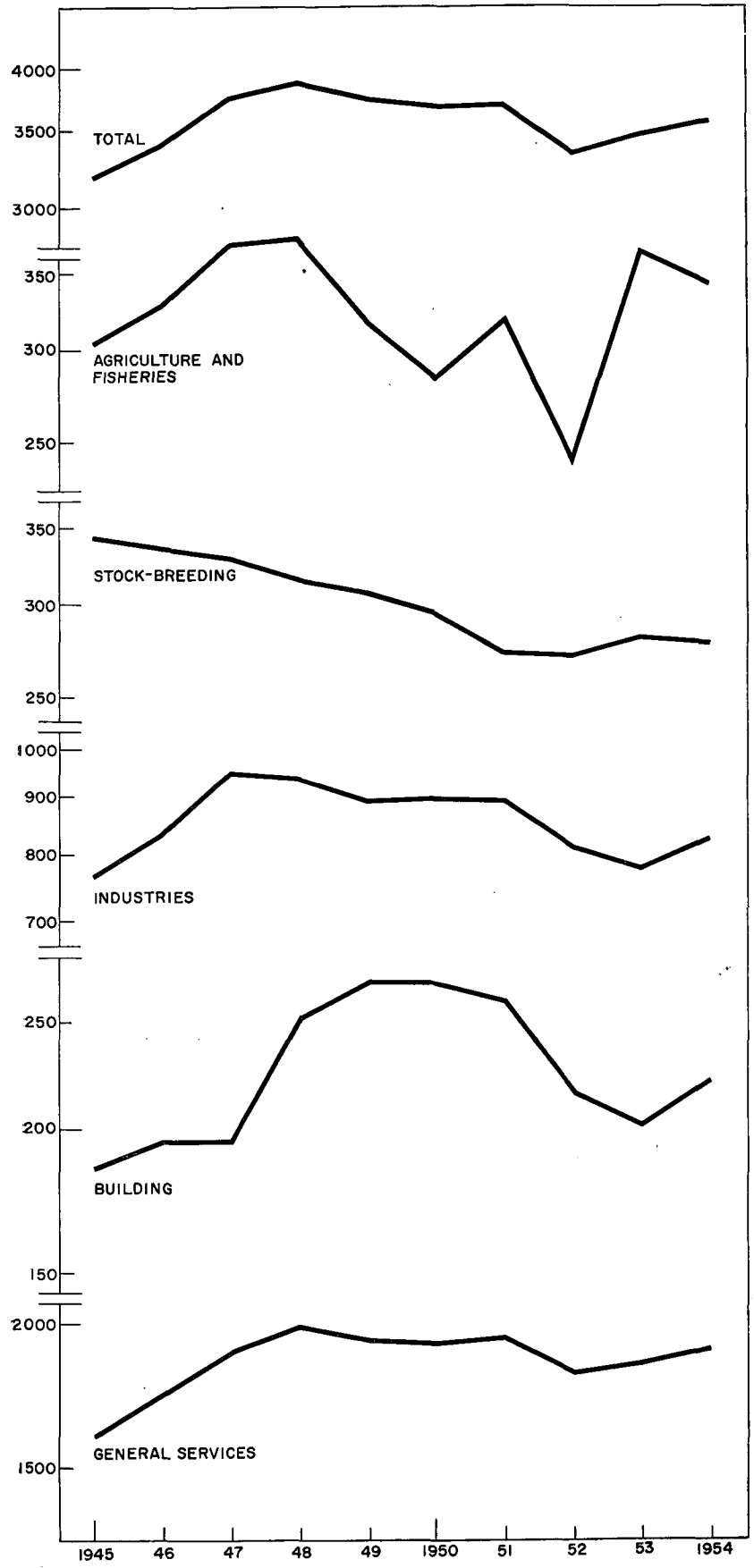


Table 5
ARGENTINA: COMPOSITION OF IMPORTS, 1935-54

A. 1935-54

Year	Total	(Millions of pesos at 1950 prices)				(As a percentage of total)			
		Consumer goods	Raw materials	Fuels	Capital goods	Consumer goods	Raw materials	Fuels	Capital goods
1935	6,227	2,111	1,899	648	1,569	33.9	30.5	10.4	25.2
1936	6,421	2,055	2,003	655	1,708	32.0	31.2	10.2	26.6
1937	8,693	2,730	2,538	817	2,608	31.4	29.2	9.4	30.0
1938	8,256	2,733	2,130	867	2,526	33.1	25.8	10.5	30.6
1939	6,792	2,031	2,051	835	1,875	29.9	30.2	12.3	27.6
1940	5,899	1,758	1,840	684	1,617	29.8	31.2	11.6	27.4
1941	4,538	1,243	1,734	535	1,026	27.4	38.2	11.8	22.6
1942	3,785	1,132	1,609	303	742	29.9	42.5	8.0	29.6
1943	2,588	846	1,227	189	326	32.7	47.4	7.3	12.6
1944	2,655	1,033	1,197	181	244	38.9	45.1	6.8	9.2
1945	2,697	1,055	1,090	194	358	39.1	40.4	7.2	13.3
1946	4,951	1,490	1,401	624	1,436	30.1	28.3	12.6	29.0
1947	9,872	2,754	2,201	800	4,117	27.9	22.3	8.1	41.7
1948	10,048	1,879	2,281	1,125	4,763	18.7	22.7	11.2	47.4
1949	7,096	1,100	2,129	930	2,937	15.5	30.0	13.1	41.4
1950	6,075	869	1,512	820	2,874	14.3	24.9	13.5	47.3
1951	6,938	1,138	1,936	839	3,025	16.4	27.9	12.1	43.6
1952	5,000	635	1,115	915	2,335	12.7	22.3	18.3	46.7
1953	4,283	600	998	822	1,863	14.0	23.3	19.2	43.5
1954	5,382	640	1,496	872	2,373	11.9	27.8	16.2	44.1

B. 1950-54^a

(Thousands of pesos at 1950 prices)

	1950	1951	1952	1953	1954
Non-durable consumer goods	540,923	500,625	324,862	370,769	388,246
Durable consumer goods	91,572	393,953	145,375	106,943	108,187
Fuels	593,318	661,065	679,989	653,835	674,032
Raw materials for industry	1,094,614	1,526,449	827,024	797,309	1,156,945
Capital goods materials	583,362	776,532	445,802	287,788	665,824
Building materials	504,361	507,766	322,916	223,627	355,889
Capital goods for agriculture	152,517	161,969	177,234	175,847	82,888
Capital goods for industry and mining	588,650	568,868	442,836	378,621	439,233
Capital goods for transport	257,456	367,406	339,259	418,737	288,988
TOTAL	4,406,773	5,464,633	3,715,297	3,413,476	4,160,232

Source: *Economic Survey of Latin America, 1951-52* (information brought up to date by ECLA).

^a In this new and more detailed classification of imports, no data earlier than those for 1950 are available.

Greater Buenos Aires area, have made themselves felt in a reduction of the number of working days. But as demand was not great enough to allow industry to work at full capacity, the impact of these measures was felt only in part.

As regards transport, the situation is, if possible, still more critical. During the period 1948-54, disinvestment in rolling stock and equipment amounted to more than 20 per cent.

Where the railways are concerned, this process of disinvestment is reflected in the age and state of disrepair not only of the rolling stock, but also of the repair workshops and sheds. According to estimates, only one-fourth of the steam engines, which still make up most of the traction power available, are in good condition; 38 per cent should be completely overhauled or removed from service. To this must be added the unsatisfactory condition of many of the tracks, the average age of which varies from thirty-two to fifty years on the main railway lines. All this results in an increasingly defective service

and in heavy financial deficits on the operating costs. The average distance covered annually by freight cars has decreased in recent years by more than 50 per cent.

A similar state of affairs exists with respect to motor vehicles and the road network. According to official data, the extent of the national highways kept in good repair fell from 52,192 kilometres in 1947 to 51,582 in 1954; and it is estimated that the mending and reconstruction of the road surfaces on the principal highways—for the most part in poor condition or completely destroyed, the normal expansion of the network and the building of approach roads, plus the cost of road upkeep and the renewal of road equipment, would call for investment to the value of 1,900 million pesos in 1956 and 2,300 millions in each of the ten following years.

At the end of 1953, the total number of motor vehicles was calculated to be 657,000. The economic importance of lorries (265,000 units out of the above total) is underlined by the following data for 1951: while the railways carried about 33 million tons of goods and accounted for

17,700 million ton/kilometres, lorries were responsible for the transport of 76 million tons of goods and for 14,000 million ton/kilometres. The average age of vehicles is probably over fifteen years, and many have been in use for more than twenty, which means heavy expenditure on repairs and maintenance. Estimates suggest that the renewal of the lorry park would call for at least 100,000 new units.

River transport facilities, except for the Paraná fleet of push-tow boats, are also out of date and obsolete. Finally, there is a pressing need for the renewal of some of the port installations and equipment, and for the reform of port administration and management, with a view to eliminating the risks of congestion which a possible increase in the volume of exports would incur.

This background information may help to explain the critical situation in which Argentina's economy found itself in mid-1955, and to account for the emergency measures adopted by the Government.

As has already been stated, industrial development was energetically promoted by the authorities, and in the early years of the post-war period enjoyed the benefit of exceptionally favourable external circumstances. In accordance with the normal process in such a case, industry attracted man-power from primary activities and absorbed the flow of immigrants. Furthermore, as a result of the heavy imports effected in 1946-48, it was able to increase investment and was kept well supplied with raw materials. These factors seem to have sufficed to raise both the product and the productivity of industry over the short term, and to achieve a certain degree of import replacement. But they have shown themselves incapable of maintaining the rate of development and enabling industry to reach a more advanced stage.

The development of industry was attended by a two-fold disequilibrium. On the one hand, that of energy and transport failed to keep pace with it; and on the other, it was effected at the expense of agriculture, which, in contrast, was handicapped by backward techniques and a lack of incentives from prices and demand.

The latter difficulty arose from the channelling of productive resources and available foreign exchange towards public works and away from agriculture. This explains why, with a rate of investment which on the whole appears satisfactory, recent years have witnessed a persistent decline in productivity per unit of capital and per active worker. (See again table 2.)

The transfer of manpower to industry was not strictly confined to "surplus" agricultural workers. It was simply a shift of population resulting from the attraction of the better salaries and wages offered by the urban industries, and did not coincide with any increase in investment or any improvement in farming techniques, which, by raising agricultural yields per active worker and per unit of land, would have rendered this transfer innocuous.

Data on the stock of capital and on productivity by sectors shed interesting light on the situation. (See table 6 and chart IV.)

The sometimes abrupt annual fluctuations in the product-capital ratio for agriculture, as well as in productivity per active worker, appear to have resulted almost exclusively

from weather conditions which increased or reduced crops. Thus the sharp decline registered in 1952 was due to the disastrous effects of weather conditions in that year, and the exceptional recovery in 1953 to the very favourable weather then prevailing. In another sense, variations in the product-capital ratio are also a reflection of the low rate of investment in agriculture. Broadly speaking, no progress is being made.

Much the same was true of the industrial sector as far as the output per worker is concerned. A decline was registered in 1952 and 1953 and a recovery in 1954. But here investment was more intensive and the product-capital ratio fell steadily.

Lastly, in services, where available capital was highest, and, moreover, increased slightly, productivity per unit of capital decreased, and a still sharper drop was observable in the product per active worker.

A comparison of these data with changes in the structure of employment leads to an obvious conclusion. The process which has been taking place of late in Argentina is retrogressive, since the transfer of man-power from the high-productivity sectors to the comparatively non-productive services is just the opposite of the movement characteristic of a developing economy, which had been noted in previous years. Moreover, the degree of efficiency with which productive resources are being utilized is patently tending to decline.

Hence it is clear that Argentina constitutes a typical instance of the promotion of development without the balance and integration which are essential if the growth achieved is to prove strong and lasting. Lacking such support, industrial activities weakened after an initial period of intense prosperity, and, consequently, as soon as external factors ceased to be favourable, the economy betrayed its traditional vulnerability to their adverse influence.

The expansion of industry demands a considerable increase in capital formation, and this is impossible without imports of producer goods, raw materials and fuels. Such replacements as can be achieved enable the composition of imports to be modified in favour of these indispensable prerequisites. It is a question, therefore, not of curtailing purchases abroad, but of selecting them. In fact, they must be increased, at least during the early stages. Argentina was able to do this, especially in 1947 and 1948, when it enjoyed exceptionally advantageous terms of trade, which coincided with a boom in agricultural production. The subsequent deterioration in the terms of trade was accompanied by a falling-off in primary production and an increase in domestic consumption, and exports did not suffice to finance imports, limited as these were. A balance-of-payment problem thus arose, so that the country had to restrict its purchases severely in some cases, and in others was obliged to contract debts or resort to its reserves. The situation was at times temporarily relieved, as in 1953 and 1954, by excellent harvests, but the latent disequilibrium once more became a reality in 1955, when the estimated balance-of-payments deficit amounted to 200 million dollars. The addition of previous commitments, originating chiefly in the use of credit in bilateral agreements and in debts on deferred-payment imports, would raise this sum to about 800 million dollars.

Table 6
ARGENTINA: CAPITAL AND PRODUCTIVITY, BY SECTORS, 1945-54
(Pesos at 1950 prices)

Year	Capital stock (Millions of pesos)	Distribution (As percentage of total)	Capital stock per actively employed person	Gross product/ capital stock ratio	National gross product per actively employed person
A. AGRICULTURE AND FISHERIES					
1945.....	27,375	23.9	13,086	0.362	4,739
1946.....	27,959	24.0	14,353	0.371	5,325
1947.....	28,273	23.2	15,830	0.393	6,222
1948.....	29,650	22.0	16,780	0.376	6,316
1949.....	31,380	21.2	17,739	0.329	5,845
1950.....	31,779	20.4	18,201	0.308	5,601
1951.....	32,061	19.7	18,716	0.323	6,036
1952.....	33,177	19.3	18,401	0.277	5,090
1953.....	34,146	19.0	18,497	0.344	6,371
1954.....	34,041	18.5	17,916	0.338	6,053
B. INDUSTRY, BUILDING AND MINING					
1945.....	11,498	10.1	8,954	1.266	11,334
1946.....	12,349	10.6	8,266	1.305	10,789
1947.....	14,746	12.1	8,256	1.231	10,161
1948.....	18,194	13.5	9,937	1.056	10,489
1949.....	21,167	14.3	11,295	0.907	10,247
1950.....	23,211	14.9	12,426	0.851	10,571
1951.....	24,899	15.3	13,084	0.805	10,529
1952.....	26,816	15.6	14,807	0.684	10,136
1953.....	28,575	15.9	16,546	0.624	10,324
1954.....	29,808	16.2	17,053	0.652	11,116
C. SERVICES					
1945.....	75,564	66.0	28,493	0.322	9,188
1946.....	76,189	65.4	28,176	0.351	9,876
1947.....	78,847	64.7	29,257	0.379	11,077
1948.....	86,928	64.5	30,760	0.368	11,320
1949.....	95,472	64.5	32,027	0.335	10,735
1950.....	100,788	64.7	31,457	0.325	10,226
1951.....	105,784	65.0	31,067	0.320	9,940
1952.....	111,906	65.1	31,094	0.290	9,017
1953.....	116,995	65.1	30,715	0.287	8,831
1954.....	120,154	65.3	30,403	0.293	8,897

Source: See sources of table 2.

This deficit in the balance of payments, the short-term inflexibility of the capacity to import, the inadequate energy supplies and the disinvestment in the transport system, together with the renewal of the inflationary process, would thus seem to have been the outstanding features of Argentina's critical economic situation in mid-1955.

2. THE EXCHANGE REFORM AND THE NEW AGRICULTURAL PRICES

The new policy upon which the Government has embarked is designed to give a completely new direction to the economy. The preparation of a programme covering its most vital aspects has been announced, but in face of the pressing nature of certain problems and the need to overcome the most immediate difficulties, short-term emergency measures have been adopted. The most important of these, to which the present remarks will be confined, are related to the exchange system and to basic prices for agricultural products.

It has long been realized that the Argentine peso was

heavily over-valued on the official exchange market (the only one authorized). In actual fact, the basic rates of 5 pesos to the dollar for ordinary exports and priority imports, 7.50 pesos for ordinary imports and priority exports, and 14 pesos for minor exports, non-essential imports and financial transactions, as well as for the various combinations of all these, were completely out of line with internal price and cost levels. They involved a disparity in purchasing power that within the internal economy was reflected in a discouraging lack of incentives for agricultural producers; heavy losses for the Argentine Institute of Trade Promotion, which finances purchases of crops by official institutes; an expansion of bank credit; exceptionally high profits for some importers and dealers; and an increasing number of clandestine transactions.

The aim of the reform brought into force on 28 October 1955 is to eliminate the deficit in grain transactions and the resulting inflationary pressure; to raise farmers' income; to reduce the excessive profits of intermediaries; to prevent the flight of foreign exchange export earnings; and, finally, to create an atmosphere favourable to the inflow of capital, and to the expansion not only of exports

as a whole, but also of those which were proving merely marginal.

The measures adopted may be summed up as follows:

(a) Standardization of the exchange rate at 18 pesos to the dollar on the official market, through which most foreign trade transactions will still be negotiated. Since not all agricultural prices require a readjustment equivalent to this devaluation, it may be possible to retain up to

25 per cent of the national currency obtained by liquidating foreign exchange export earnings in this sector. There will be a special duty on imports in process of negotiation.

(b) The creation of a free exchange market. This will handle movements of capital—except in the case of foreign capital already in the country, which for the moment will remain under the control of the Central Bank—as well as remittances of profits obtained after 30 June 1955 on

Chart IV
A. — ARGENTINA: NATIONAL GROSS PRODUCT PER CAPITA OF THE ACTIVE POPULATION
(Thousands of pesos at 1950 prices)
(Semi-logarithmic scale)

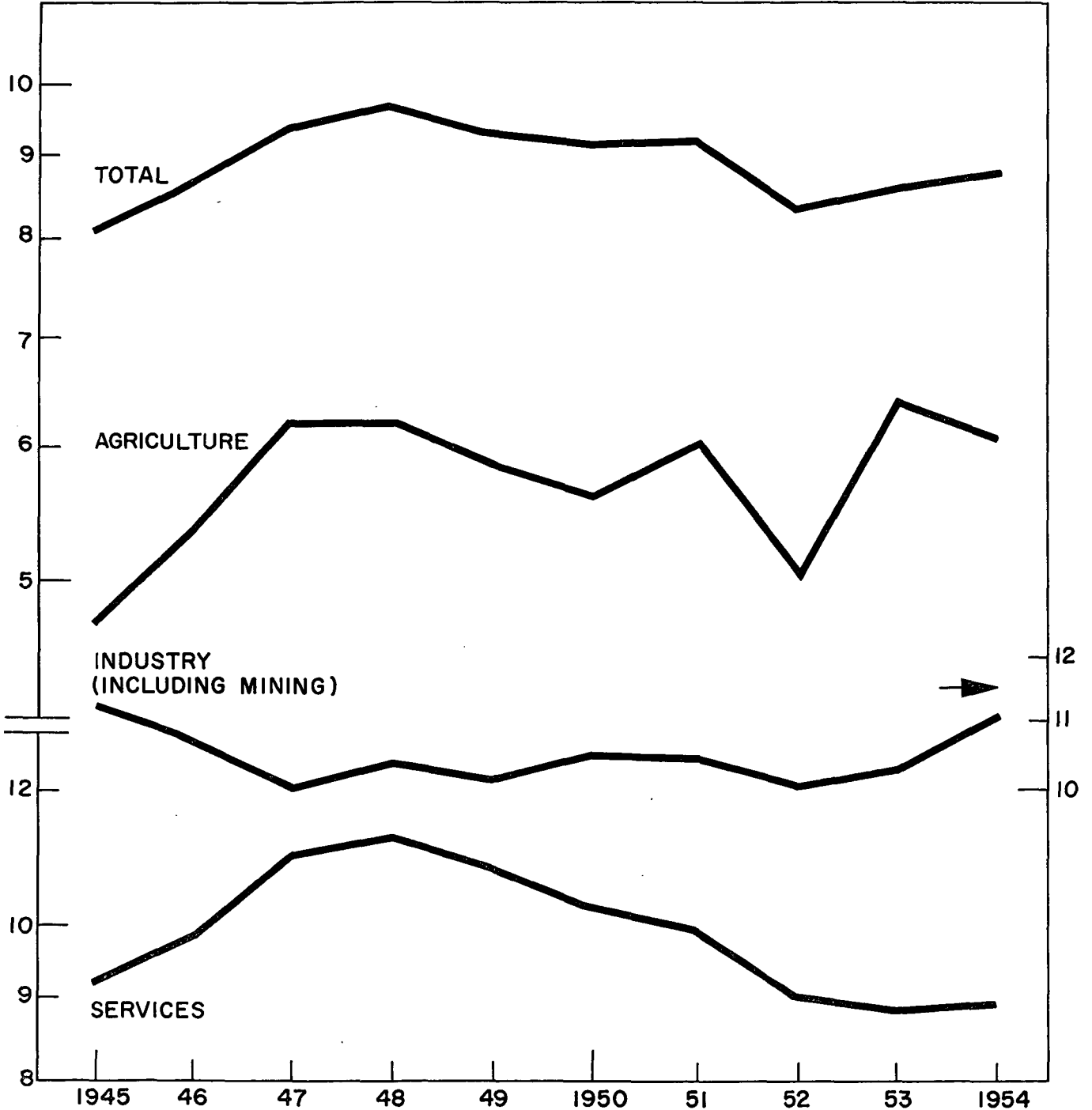
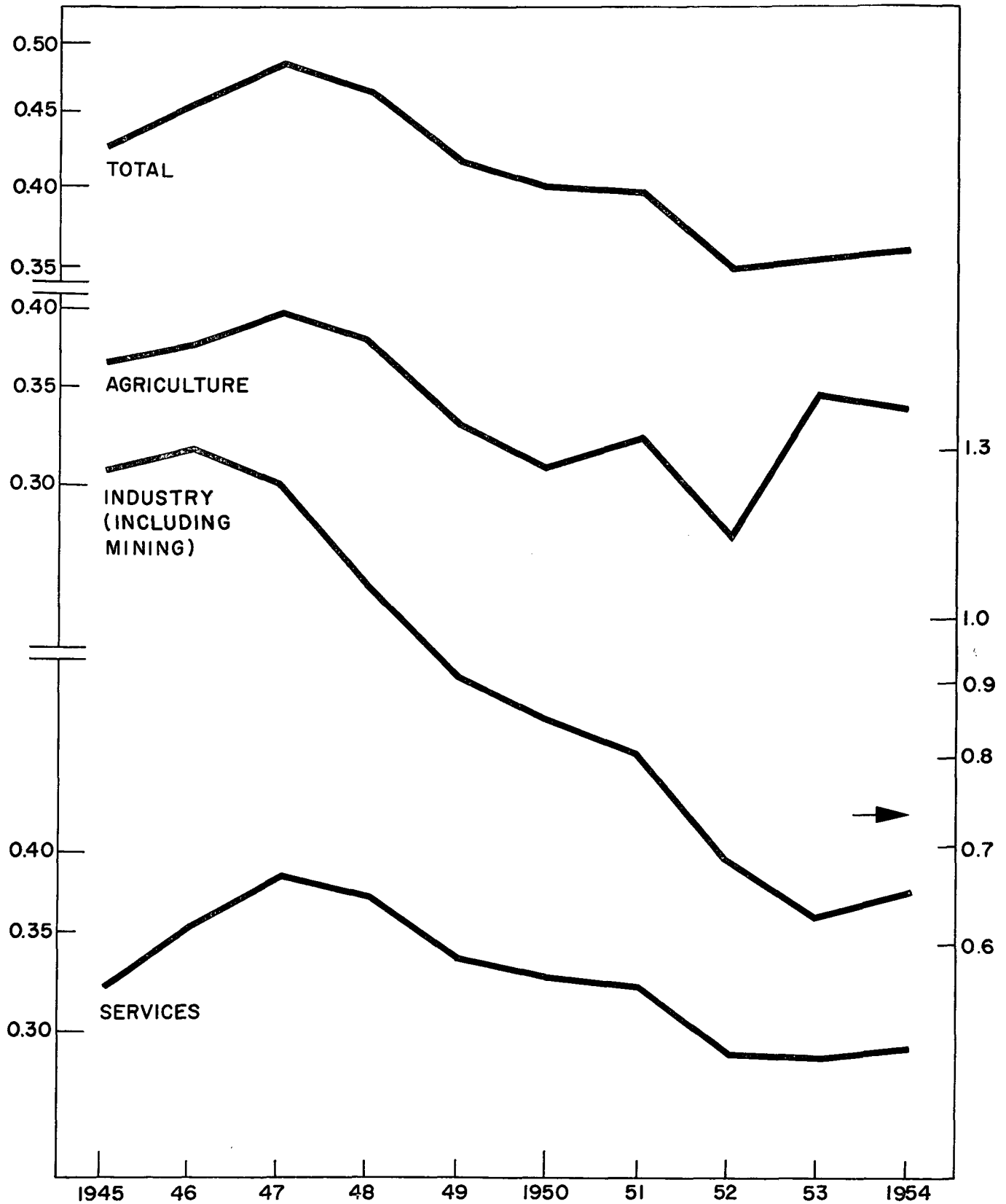


Chart IV (continued)

B. - ARGENTINA: GROSS PRODUCT-CAPITAL STOCK RATIO

(Pesos at 1950 prices)



capital already invested. This market will also deal with import transactions determined by the Central Bank, and export operations not included on the official market list, always provided that the products concerned do not incorporate imported materials to a value exceeding 20 per cent of their external sales price.

(c) The application by the Ministry of Finance of exchange-rate surcharges and even exceptional duties in specific cases (for example, that of automobiles), so as to avoid a boom in imports through the free market, which might exert exaggerated pressure on the rate of exchange or prejudice domestic production.

(d) The creation of the Fondo de Restablecimiento Económico Nacional, which will draw upon a variety of resources, among them the retentions, surcharges and duties enumerated. This Fund will be entirely devoted to improving the technological and economic situation of agriculture, and to paying whatever subsidies may have to be granted in order to mitigate the possible effects of the devaluation of the peso.

Three aspects of this reform deserve special emphasis: in the first place, the marked devaluation of the national currency; secondly, the standardization of the official rates, despite the multiplicity that may result from surcharges and retentions, which are, in any event, regarded as temporary; and, thirdly, the creation of the free market. According to official statements, the scope of the free exchange system will be gradually extended as and when circumstances permit.

Apart from their importance in establishing some degree of freedom and more realistic exchange rates, these measures are directed towards one outstanding goal which seems to be the dominant feature of the Argentine Government's short-term policy—namely, the revival of agriculture, neglected for the reasons already described. Shortly after the adoption of the exchange reform, the authorities raised minimum guarantee prices for the following products, bringing them closer to international parities: wheat, barley, oats, rye, linseed, maize, sunflower and peanuts. In one case, that of linseed, the increase amounted to almost 100 per cent; in the other instances, it varied between 15 and 40 per cent.

An examination of government statements, however, reveals that the official programme, although linked to the basic and traditional sector of Argentina's economy, where recovery is essential, embraces further aims, some immediate and others more remote. These comprise the easing of the balance-of-payments situation by means of an expansion of the export trade; an increase in the capacity to import; and the encouragement of industry. It can thus be seen that the special character of the steps taken does not imply neglect of the economy as a whole or of its future prospects, and that these measures in fact constitute an approach to the more vigorous development programme which is in course of preparation. It is impossible, without venturing into the realm of conjecture, to appraise the efficacy of the incentives provided so that Argentina may find a rapid way out of its serious difficulties. But what can be briefly analysed within the limits imposed by the nature of these notes, is the country's present economic state, together with the possibilities of a satisfactory response to the stimuli in question.

3. THE RECOVERY OF AGRICULTURE

Over the short term, the devaluation of the currency is practically equivalent to a redistribution of income in favour of agriculture, since an immediate expansion of production cannot be achieved for obvious reasons of time, except to some extent in the case of maize and sunflower. A beneficial influence may perhaps be exerted on the care with which the crops are sown and harvested.

This redistribution of income was designed not only to remedy the unfavourable treatment to which the agricultural sector has been subjected, but also to provide means of increasing capital formation and introducing better techniques. It is this principle, as well as the aim of averting immediate inflationary effects, that lies behind the proposed temporary retention of some part of the surcharge established.

After a somewhat longer interval, Argentina's agricultural sector, once it has felt the benefit of improved techniques and of the stimulus provided by remunerative prices, will probably be able to contribute substantial increases to the volume of production. This assumption requires illustration with a brief assessment of the effects of the agrarian policy followed during recent years.

Among the main features of this policy were the fixing of prices for basic products, and the centralization of such purchases and exports in the hands of the State. Other agricultural commodities remained outside the scope of this system. An examination may now be usefully made of the differing evolution of the areas sown to these two groups of products (by five-year periods, to prevent the variations due to weather conditions from weighing too heavily).

Table 7 shows, in the first place, the serious reduction of the total area under cultivation, which has decreased by as much as 4.5 million hectares in the last twenty-five years. If population growth is taken into account, it will be seen that the *per capita* figures were 1.66 hectares in the pre-war period and 0.96 in 1950-54.

In the second place, while there was a gradual decline in the area sown to crops with fixed official prices, that occupied by products subject to no price control registered a continuous increase. This trend became more obvious from 1945 onwards. One reservation must be made: the crops grouped in the table as free from price controls include not only those that really were so, but also some which, although directly or indirectly subject to official price regulations, were nevertheless better off than cereals and oleaginous products, since their prices were relatively more advantageous. In practice, the policy of official prices for exportable products provided the intended stimulus only in certain periods. In some instances, the improvement in world prices benefited the purchasing institutes; in others, as was the case in recent years, the established buyer prices were too low to encourage production.

Little by little, farmers abandoned the cultivation of crops covered by the system of fixed prices. The most striking example was offered by oleaginous products; the 3.6 million hectares under cultivation in the five-year period 1940-44 decreased to 2.3 millions in the next five years, and to only 1.5 millions by 1955. In the area sown to cereals, the reduction amounted to 24 per cent, or some 4.2 million hectares. (See table 8.)

Table 7
ARGENTINA: AREA UNDER SEED
(Thousands of hectares)

	1934-38	1940-44	1945-49	1950-54	1955
Total area.....	21,814	21,245	18,974	17,349	17,254
Index.....	100	97.4	87.0	79.5	79.1
<i>(A) Crops subject to controlled prices</i>					
Cereals ^a	17,347	16,309	13,870	13,176	13,896
Oleaginous products ^b	3,277	3,607	3,492	2,285	1,455
TOTAL	20,624	19,916	17,362	15,461	15,352
Index.....	100	96.6	84.2	75.0	74.4
<i>(B) Crops not subject to controlled prices ^c..</i>					
Index.....	100	111.6	135.4	158.6	159.8

Source: Economic Commission for Latin America, on the basis of data from *Síntesis Estadística Mensual*.

^a Wheat, maize, oats, barley and rye.

^b Sunflower, peanuts and linseed.

^c Rice, potatoes, manioc, yams, beans, chickpeas, cotton, sugar cane, miscellaneous vegetables, mate, tobacco, vineyard products, castor oil, millet and canary-seed.

As regards yields, except in the case of wheat, barley, rye and peanuts, where a moderate upward trend is registered, the situation is not very encouraging, as production is either stationary or declining.

This demonstrates that in agricultural techniques Argentina is either backward, or has failed to make due progress. The deterioration in the yields of maize, sunflower and oats is especially serious.

Table 8
ARGENTINA: AREA SOWN TO VARIOUS CEREALS
(Thousands of hectares)

	1934-38	1940-44	1945-49	1950-54	1955
Wheat.....	7,499	7,057	5,985	5,891	5,937
Maize.....	6,699	5,397	3,518	2,750	3,002
Oats.....	1,459	1,699	1,601	1,386	1,376
Barley.....	739	767	1,033	953	1,090
Rye.....	952	1,389	1,733	2,196	2,493

Sources: Economic Commission for Latin America, on the basis of data from *Síntesis Estadística Mensual*, and Food and Agriculture Organization.

Such a situation contrasts with developments in other producer countries (see table 9), where considerable advances have been achieved through the creation of disease-resisting strains producing better or earlier yields, the wide-spread use of such aids as fertilizers, insecticides and weed-killers, or a higher degree of mechanization.

This picture might be interpreted as indicative of the destruction or exhaustion of renewable basic resources. Soils would seem to be undergoing a loss of fertility and even, in some cases, changes in their original composition. This accounts for the disadvantage at which Argentina finds itself when it has to compete on a world market burdened with surpluses.

Lastly, the effects of the price policy also made themselves felt in a reduction of the farmers' real earnings per hectare and in the internal price distortions which caused the replacement of one crop by another within the general downward trend. (See table 10.)

Statistics show that as a general rule—valid even for those crops which were in a relatively more privileged position—earnings per hectare in recent years were lower

than in 1946-48, and in some instances failed to equal those registered in 1934-38. The wide disparities in the income of the different sectors are also evident. Further, a close parallel exists between the relative reduction of income and the decrease in the areas under seed. (See again table 8.) Thus, in the case of maize, which suffered very heavy losses in 1949-53, the 1954/55 sowing covered barely 3 million hectares, as against 6.7 millions in the five years before the war. The sharp decline in earnings on oleaginous products meant the complete elimination of exports of edible oil and oil seeds, and a deficit of not less than 100,000 tons of oil in supplies for home consumption.

From these data some idea can be formed of the scope of the incentives to production now created. In 1956, under the new price régime, and on the assumption that yields similar to those of the preceding five-year period will be obtained, a general improvement in earnings is expected; this will, however, be highest for those products which were at the greatest disadvantage, and for which, as has already been pointed out, larger price increases were granted. Thus, even if the different products are not entirely restored to the relative positions they occupied

Table 9
COMPARISON OF THE YIELDS OF WHEAT, MAIZE, OATS, AND BARLEY IN THE PRINCIPAL PRODUCING COUNTRIES
(Kilogrammes per hectare)

	1930-34	1935-39	1940-44	1945-49	1950-54	Percentage difference between 1950-54 and 1930-34
Wheat:						
United States.....	908	888	1,150	1,137	1,150	+26.6
Canada.....	914	821	1,177	998	1,373	+50.2
Australia.....	821	869	759	944	1,136	+38.4
Argentina.....	934	977	1,102	1,099	1,164	+24.6
Maize:						
United States.....	1,386	1,568	2,007	2,239	2,402	+73.3
Canada.....	2,460	2,551	2,493	2,840	3,340	+35.8
Mexico.....	576	565	602	713	757 ^a	+31.4
Argentina.....	1,874	1,810	1,998	1,766	1,529	-18.4
Italy.....	1,889	1,962	1,777	1,547	2,092	+10.7
Oats:						
United States.....	942	1,045	1,139	1,228	1,203	+27.7
Canada.....	1,015	973	1,288	1,083	1,455	+43.3
France.....	1,392	1,450	1,208	1,276	1,554	+11.6
Argentina.....	1,146	946	812	1,063	1,220	+ 6.5
Barley:						
United States.....	1,080	1,188	1,274	1,228	1,203	+11.4
Canada.....	1,184	1,114	1,243	1,159	1,552	+43.2
Argentina.....	1,182	965	1,182	1,211	1,264	+ 6.9

Sources: Economic Commission for Latin America and Food and Agriculture Organization, on the basis of national statistics.

^a Average 1950-53.

in 1934-38, at least there will no longer be such wide disparities between them.

It may now be asked whether, with due regard to the time required for the newly-sown crops to mature, the better prices are likely to bring about an increase in production. If the decline was due to a fall in productivity and a reduction of the area under cultivation, an affirmative reply is logically justifiable and in line with Argentina's own experience. It has just been shown that, despite the persistent decrease in the total area sown to crops, there was a steady rise in the proportion utilized for products not subject to price regulations, and that, within the controlled group, the crops least unfavourably placed with respect to earnings and prices tended to oust those that were worst off.

But the problem of the land available for producing

more export crops is not so simple. It was only in part that cultivation for home consumption, encouraged as it was by the expansion of demand and the higher prices fetched, was responsible for the displacement of products grown for the foreign market. There was competition from industrial crops as well, and in every case considerations of comparative costs had to be taken into account. At the same time, the shifts of emphasis from one crop to another took place within a total cultivated area that was constantly diminishing. This was largely because livestock production also competed for the available land; stockbreeding became more wide-spread, and larger tracts were needed for this activity.² Lastly, it should be noted that a certain amount of land was left to lie fallow.

² For a study of livestock questions, see the article in this issue entitled "The Latin American Meat Problem", p. 58.

Table 10
ARGENTINA: INDICES OF FARMERS' GROSS INCOME PER HECTARE, 1934-38 AND 1945-54
(At 1950 prices)

Year	Wheat	Oats	Barley	Rye	Maize	Linseed	Sunflower	Peanuts
1934-38.....	116.3	147.8	155.6	131.9	301.5	159.9	183.6	124.1
1945.....	87.2	189.5	243.2	173.2	258.0	93.1	181.1	129.2
1946.....	112.0	286.0	326.6	300.4	343.4	213.5	181.0	119.2
1947.....	109.1	142.3	182.8	157.8	303.9	148.3	118.6	97.7
1948.....	156.9	184.9	159.6	178.2	304.7	130.7	143.5	108.7
1949.....	114.4	138.1	127.6	109.3	213.0	75.3	119.5	96.2
1950.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1951.....	92.9	113.0	132.9	112.2	208.9	87.3	98.4	81.6
1952.....	60.8	103.1	103.7	89.9	239.7	91.0	78.4	95.8
1953.....	142.3	178.9	197.0	221.5	269.2	92.2	77.5	96.2
1954.....	119.8	171.5	188.4	160.2	305.3	107.3	86.0	71.8

Sources: Economic Commission for Latin America, on the basis of official statistics, table 1, and *Producto e ingreso de la República Argentina en el período 1953-54, op. cit.*, table 31.

Thus, the expansion of agricultural production, especially for export, must be considered from several points of view.

The most important of these, in a programme of agricultural recovery, would seem to be that of productivity. The low standards to which farming technique had sunk give grounds for the hope that a higher degree of mechanization, the use of such aids as fertilizers, weed-killers, insecticides and improved strains, and the adoption of more rational methods, may enable current yields to be greatly exceeded.

If it is further assumed that land is to some extent lying idle, and that such areas are those least fitted, or too exhausted, for the defective and anti-economic exploitation to which they were formerly subjected, the raising of yields by the employment of more advanced techniques seems an indispensable measure for the prevention of the excessive rise in costs which would otherwise result from the reincorporation of marginal land. This is especially true in view of the need for Argentina's agriculture to strengthen its ability to compete with other producer countries. It is almost superfluous to point out that the effort to introduce technical improvements must definitely be extended to livestock production, so that the claims of stock-breeding on the land available may not redound too greatly to the detriment of crop cultivation. Progress made in this sphere will mean that the former activity requires less space and will be able to make restitution of tracts which it formerly took over from agriculture.

Other problems must be considered in checking the reliability of the assumption that the policy undertaken will be successful.

The channelling into investment of the additional income accruing from the price reform is not likely to be a spontaneous development. The desire to return to levels of consumption prevailing in more prosperous times might divert resources towards non-productive uses. Furthermore, the financial situation of agricultural enterprises is far from flourishing. The agricultural portfolio of the Banco de la Nación, which is the main source for this type of credit, records long delays in the payment of debts. In April 1955, when the loans registered in this section totalled 6,500 million pesos, only 48 per cent of those due for repayment was recovered, and, by 1954, 43 per cent could be regarded as bad debts or in arrears.

The whole question is closely bound up with that of credit policy, and of the measures already taken by the Government to increase investment—such as, for instance, the retention of part of the fixed price—or, like those relating to taxation, announced for the near future. There is also the problem of foreign exchange availabilities for importing agricultural capital goods.

Another serious difficulty is that of transporting crops to the ports of embarkation. Government purchases of cereals which it had not been possible to remove from inland rural districts to the ports were estimated, in mid-1955, at 2.1 million tons.

Lastly, a potential expansion of agricultural production raises the problem of its sale abroad.

Reference is made in this connexion, not to the current agricultural season (1955/56) which is already far ad-

vanced, and the results of which will be largely unaffected by the Government's recent measures, but to the future expansion which these may bring about. It is well known that some of Argentina's products have to face market difficulties in consequence of the accumulation of stocks in the United States and Canada and the increment in European production, this being especially true of wheat. Hitherto, an outlet for such commodities has been supplied by bilateral agreements, and any reform aimed at the restoration of a multilateral régime will have to provide for the maintenance of certain specific sale-purchase contracts or for some other system of ensuring a market for products which are difficult to place.

For some items, however, prospects are very favourable. The maize situation, for instance, displays particular features which seem to promise a return to Argentina's former export levels, despite the upward trend in the world output. The low production costs of linseed might perhaps enable it to recover the United States market, or at all events to gain others. Some of the Latin American countries are potential purchasers of certain products such as sunflower seed. As a general rule, market conditions are good and prices comparatively steady for meat and livestock, and the same can be said of dairy produce—cheese, whey and butter—a field in which Argentina enjoys, in some cases, an advantage over its competitors from the standpoint of quality, and, in others, seasonal opportunities. Lastly, the reformed exchange rate will place many other products in a position to compete on world markets, always provided that the response of agricultural *entrepreneurs* to the incentives supplied takes the form of additional investment and higher standards of technique which will reduce costs and raise yields.

4. PROSPECTS FOR INDUSTRY

A rapid recovery in industry is another of the aims pursued through agricultural recuperation and the improvement of the balance-of-payments situation.

The exchange measures adopted in October 1955 do not offer a direct stimulus to industry, except in the shape of access to the official market for imports of replacements. Indirectly, however, the new exchange rates constitute an additional form of protection for industry against competition from imported products, which may further the substitution process and open up better prospects for the export of domestically-produced goods.

As has already been stated, the immediate outlook for the balance of payments is not particularly promising; during the next few months the Government proposes to restrict purchases through the official market to essential products, on a better basis of selection, but at levels strictly compatible with the maintenance of economic activity. It is impossible to forecast the capacity of the newly-instituted free market, or the feasibility of importing the goods required for industry through this medium. Short-term industrial recovery should therefore be envisaged on the assumption that some time must elapse before the balance-of-payments situation permits of any considerable increase in capital goods imports, but that it will not preclude the purchase of the raw materials and fuels essential for the full utilization of currently available capacity.

In face of these limitations, a short-term increment in industrial production, on the supply side, would in theory

presuppose the existence of (a) idle or under-utilized capacity, and (b) available man-power.

How far these prerequisites are present may be judged with the help of the statistical data given earlier in this article.

As regards the former—the existence of under-utilized capacity—a first impression may be based on the figures for investment in industry. (See again table 6.) During the last five years there has been a satisfactory increase in this sector's capital stock; at the same time, however, the product-capital ratio has steadily declined, and, except in 1954, the product per active worker has remained practically stationary. It is true that in these statistics the building industry is included, but an examination of the composition of capital goods imports (see again table 5) shows that those for industry were maintained at a relatively high level, at least during 1950-52. It should also be remembered that very heavy imports of this type were effected between 1947 and 1949. If it is further borne in mind that the active population employed in industry has gradually decreased since 1951 (see table 11), it is not too hazardous to assume a downward trend in the efficiency with which the country's productive resources are utilized.

There is an insufficiency of statistical data on which to assess the existence and extent of unemployment in Argentina; but shifts of the active population from one occupation to another provide useful grounds for conjecture.

Employment in industry has been diminishing in both absolute and relative terms, since the period of rapid expansion which it underwent between 1947 and 1950, when agricultural employment declined; whereas an absolute increase in the number of farm workers, largely due to the vegetative growth of the rural population, has enabled the agricultural labour force to preserve its relative position in the last few years. On the other hand, both absolute and relative increments are registered in the services sector, which means that it has been absorbing the workers freed by industry. Here, then, is confirmation of the previous statement that Argentina is witnessing a retrogressive transfer of its active population from the more productive branches of employment to those where productivity is lower.

When, in addition, the rise in investment in the services sector and the fall in the product-capital ratio are recalled,

no further proof is needed that the country's resources were not used to the best advantage in recent years.

Consequently, if data to determine the existence of unemployment are lacking, there are indications of under-employment, which appear the more deserving of consideration, inasmuch as in services the productivity per worker has declined more sharply than in other activities. It would seem justifiable to draw the provisional conclusion that a recrudescence of industrial production can be achieved through fuller utilization of the country's productive resources, and the absorption of the labour force under-employed in services. It may safely be asserted that the former development alone would suffice to ensure success. But whether or not it takes place depends upon the behavior of other factors and the validity of certain assumptions.

Among these latter is the supposition that Argentina's foreign exchange availabilities will be enough to keep its industry adequately supplied with raw materials. It is a well-known fact that such imports, after reaching their peak in 1951, underwent a sharp decline. (See again table 5.) In 1954, however, they again approached their 1950 level, and the fact that their volume was also considerable in 1955 implies in some cases an accumulation of stocks. A reasonable hypothesis, based on official declarations, would be that in 1956 industry would have at its disposal raw material supplies equivalent to those of 1954. It would then be able to maintain activities at a satisfactory level, as the 1950 production index was equalled in the latter year.

As for fuels, they have been absorbing an increasingly larger share of available foreign exchange, and are among the essential imports unaffected by the Government's programme of restrictions designed to stabilize the balance of payments.

If in these aspects of the economy no very great difficulties present themselves, the same cannot be said of energy and transport. Attention has already been called to the disinvestment in Argentina's transport system and the problems to which it gives rise for the agricultural sector, which are, *mutatis mutandis*, much the same as those it creates for industry. It was also pointed out that owing to the shortage of electric energy, restrictions have inevitably been imposed on industrial activity. It is here that any

Table 11
ARGENTINA: ACTIVE POPULATION, 1945-54

Year	Total	Agriculture	Industry (including mining)	Services	Agriculture	Industry	Services
		(Thousands)			(Percentage of total)		
1945	6,028	2,092	1,284	2,652	34.7	21.3	44.0
1946	6,146	1,948	1,494	2,704	31.7	24.3	44.0
1947	6,267	1,786	1,786	2,695	28.5	28.5	43.0
1948	6,424	1,767	1,831	2,826	27.5	28.5	44.0
1949	6,624	1,769	1,874	2,981	26.7	28.3	45.0
1950	6,818	1,746	1,868	3,204	25.6	27.4	47.0
1951	7,021	1,713	1,903	3,405	24.4	27.1	48.5
1952	7,213	1,803	1,811	3,599	25.0	25.1	49.9
1953	7,382	1,846	1,727	3,809	25.0	23.4	51.6
1954	7,600	1,900	1,748	3,952	25.0	23.0	52.0

Sources: *IV Censo General de la Nación, 1947*; *Síntesis Estadística Mensual*; Emilio Llorens and Carlos Correa Avila, *Demografía argentina* (Buenos Aires, Universidad Nacional, 1948); Economic Commission for Latin America, *Economic Survey of Latin America, 1953*.

short-term increase of existing capacity seems far from easy. The entry into production of the San Nicolás plant has been delayed, since many months' work is still required before interconnexion with the Greater Buenos Aires grid will be completed. Even then, only part of the deficit will be covered. Nothing short of heavy investment—higher than the capacity to import can be expected to finance in the near future—will enable further expansion to be achieved.

But the unknown quantity hardest to assess is demand.

The depressive factors responsible in 1952 for a marked decrease in national income and the accompanying contraction of demand, did not fail to affect industrial production, for which in the following year the lowest figures in the five-year period were recorded. The subsequent recovery, largely brought about by good harvests, restored the industrial output index for 1954 to its 1950 level, and such data as are available for the first half of 1955 indicate that the upward movement continued, though at a somewhat slower rate. It should also be recalled that in the early months of 1954 a wide-spread rise in wages had a tonic effect on economic activities, which had previously suffered from the depressive influence of deflation.

Hence it may be inferred, in the first place, that insistence on the role of agriculture as the basis of the capacity to import, and especially of the power to purchase capital goods and raw materials for industry, is fully justified. (See again table 5.) Secondly, it is clear that industrial supply has a high demand-elasticity; and, finally, that the stagnation of industry over the last five years was due to the combined action of lower investment and of the reduction in raw material availabilities caused by the foreign exchange shortage, as well as to the falling-off in demand. These factors arose in their turn from the decline in agriculture, brought about by weather conditions or low prices. The recent recovery has coincided with good harvests, which partly offset the unsatisfactory price levels still prevailing on world markets. Thus the dynamic force which agriculture represents for Argentina is once more thrown into relief, as is also the incidence of the balance-of-payments situation on economic activity.

Thus, the recuperation of agricultural income would seem destined to improve the short-term prospects of industrial recovery. But the tension in the balance-of-payments situation has obviously reached a moment of crisis, and will not be influenced as readily as usual by the agricultural sector; firstly, because, as has already been pointed out, the expansion of production and of the export trade will not take place at once, and secondly because the requirements of the basic sectors—energy and transport—in capital goods and fuel imports have become more pressing, and will absorb both the foreign exchange savings achieved in other branches, and the increments obtained.

For the rather more distant future the outlook varies. The assumption that industry will increase its output was based on another hypothesis: namely, that despite the high indices for 1954 and 1955, there will still be idle capacity. But later the need to replace industrial equipment will arise, and the limitations imposed by the energy deficit and the shortcomings of the transport system will be greater still. It is these considerations that the Government has to bear in mind in planning its longer-term economic programme.

Nevertheless, to return to short-term possibilities, it is by no means certain that the rise in demand from the agricultural sector will suffice in itself alone as a stimulus to industry, if what is achieved for the moment is only a redistribution, and not an over-all increase, of income. This leads back to the subject of inflation—one of the risks involved in the devaluation of the currency authorized through the new rates of exchange.

5. INFLATION AND PRODUCTIVITY

The first effect, foreseen by the authorities themselves, is a rise in prices of imports which spreads to other goods. Some comment may usefully be made in passing on the influence exerted on internal price levels in recent times by the over-valuation of the currency. This was very small indeed, as imports generally reached the consumer by way of a chain of intermediaries in whose hands remained the profits accruing from over-valuation. Where exports were concerned, buyers' prices for crops were much higher than quotations at the official exchange rate, and the purchasing institution's losses were financed with bank credit. That is, inflationary pressure resulted almost exclusively from the action of internal factors, which prevented the fall in prices that over-valuation might otherwise have brought about. The other domestic elements in Argentina's inflationary process are well known. They included credit expansion, higher salaries and wages, inflationary financing of mortgages, and increased public expenditure. These conditions were continually creating monetary income which went to satisfy consumption rather than investment needs. There is a very significant disparity between the figures for the increment in the national gross income in current values, and those for real income at constant prices.

Apparently, therefore, the repercussion of the higher exchange rates on domestic prices will be limited, or at all events much less than the magnitude of the adjustment would suggest. According to official estimates, the cost of living will not rise more than 10 per cent.

Neither will the inflationary process be the same as before. Hitherto the creation of monetary income in the ways already described exerted pressure on costs and demand, and raised prices; whereas now the initial price increases will be consequent upon the new exchange rates, and the higher monetary income will serve to maintain demand, or to expand that originating from agriculture.

If additional income were created in excess of that required by the initial rise in prices, there would be an increase in total monetary expenditure which might bring pressure to bear on prices and accelerate their upward trend. Nevertheless, so long as unemployment and idle or under-utilized capacity existed, the increment in income would remedy these defects rather than force up prices, and would ultimately be reflected in an expansion of production.

This favourable result, in theory the most likely, is in practice dependent upon an increase in productivity. If a larger output could be obtained only by the use of less efficient capacity and man-power, a further rise in prices would be inevitable, under the twofold influence of higher costs and a more plentiful money supply. But this does not seem to be the case in Argentina.

Inflation, which had come to a halt in 1953, gained fresh impetus from the 1954 rise in wages. The new exchange

measures were adopted while this upward trend was still continuing. If real wages go on decreasing in consequence of price increases, which in many cases have already destroyed the advantages gained in 1954, pressure for fresh readjustments will soon make itself felt, and what was at first a mere redistribution in favour of agriculture will end up as an over-all expansion of monetary income. Thus the hypothesis formulated above seems a very probable one.

But there are also decidedly hopeful prospects of a rise in productivity, which would suffice not only to meet the greater monetary demand and offset its inflationary consequences, but also to bring about an increase in real wages. This might even be compatible with a functional distribution of income which would reduce the share of labour. Herein perhaps lies the most important aspect of Argentina's economic future, with respect both to the risks of more serious inflation and to the success of the measures which have been or may be adopted to rescue the country from its present difficulties. Some further explanation is consequently called for.

In 1949 the remuneration of workers absorbed 59.4 per cent of the country's total net income, as against only 46.7 per cent in 1945. Since then it has fluctuated around the same figure. It was also in 1949 that remuneration per worker reached its peak level, but in subsequent years it followed a gradual downward course which was not interrupted until 1954. (See table 12.)

This implies that although labour retained a high proportion of total income, individual wages declined along with income and the product-capital ratio.

If a general rise in wages were to occur in the next few months, coupled with the increment in the income of the agricultural sector, and if there were not at the same time an increase in the national product, the inflationary process would inevitably become more acute, and the various problems besetting Argentina, far from finding a solution, would become graver still. Further, even were labour to maintain its share in income, real wages per worker could improve only at the expense of other sectors.

It has already been shown that the weak point in Argen-

Table 12

ARGENTINA: DISTRIBUTION OF INCOME AND REAL INCOME PER WORKER, 1945-54
(Millions of pesos at 1950 prices)

Year	Total net income	Salaries and wages		
		Total	As a percentage of total net income	Wages per worker
1945	43,813	20,461	46.7	4,816
1946	48,990	22,927	46.8	4,389
1947	57,433	27,510	47.9	5,164
1948	60,048	31,465	52.4	5,763
1949	56,716	33,689	59.4	5,984
1950	55,673	33,905	60.9	5,851
1951	57,411	32,552	56.7	5,454
1952	53,078	32,378	61.0	5,281
1953	55,690	32,300	58.0	5,147
1954	59,076	35,209	59.6	5,450

Source: Table 1, *Producto e ingreso de la República Argentina en el período 1953-54*, tables 5, 7 and 31 and the sources of table 11.

tina's economy is the decline in productivity, due to the under-utilization or unsuitable channelling of resources. Attention was also called to the obstacles in the way of a substantial short-term increase in such resources, mainly created by the balance-of-payments situation and the priority that will have to be given to improving energy supplies and transport. Thus, the most accessible road to a significant rise in income seems to be by way of higher productivity. If 1957 were to witness a recovery of the product-capital ratio obtained in 1948—which was not the peak figure, as that of 1947 exceeded it—the progress made could be considered more than satisfactory. It is this that table 13 attempts to demonstrate.

The estimates envisage normal demographic growth and are based on a number of reasonable assumptions: namely, that the active population will represent about the same proportion of total population as in 1954; that the stock of capital will increase in accordance with a net investment rate rather lower than those recorded in 1954 and 1955; and that, finally, the labour sector's share in income will be 52.4 per cent, as in 1948—that is, a good deal lower than in any of the years that followed.

Table 13

ARGENTINA: PRODUCTIVITY AND REAL WAGES PER WORKER IN 1957 ON THE BASIS OF A HYPOTHETICAL IMPROVEMENT IN THE UTILIZATION OF MAN-POWER AND CAPITAL RESOURCES

Unit	Present		Hypothetical	
	1948	1954 (Pesos at 1950 prices)	1957	
Population	(Thousands)	16,100	18,562	19,800
Active population	(Thousands)	6,424	7,600	7,920
Gross product	(Millions of pesos)	62,353	66,091	90,285
Capital stock	(Millions of pesos)	134,772	184,003	195,000
Capital stock per actively employed person	(Pesos)	20,979	24,211	24,621
Gross product per unit of capital	(Pesos)	0,463	0,359	0,463
Gross product per actively employed person	(Pesos)	9,706	8,696	11,400
Gross product per person	(Pesos)	3,873	3,561	4,560
Total net income	(Millions of pesos)	60,048	59,076	81,257
Total wages	(Millions of pesos)	31,465	35,209	42,579
Wages as percentage of net income	(Percentage)	52.4	59.6	52.4
Wages per worker	(Pesos)	5,763	5,450	6,325

Source: Tables 1, 2, 11 and 12.

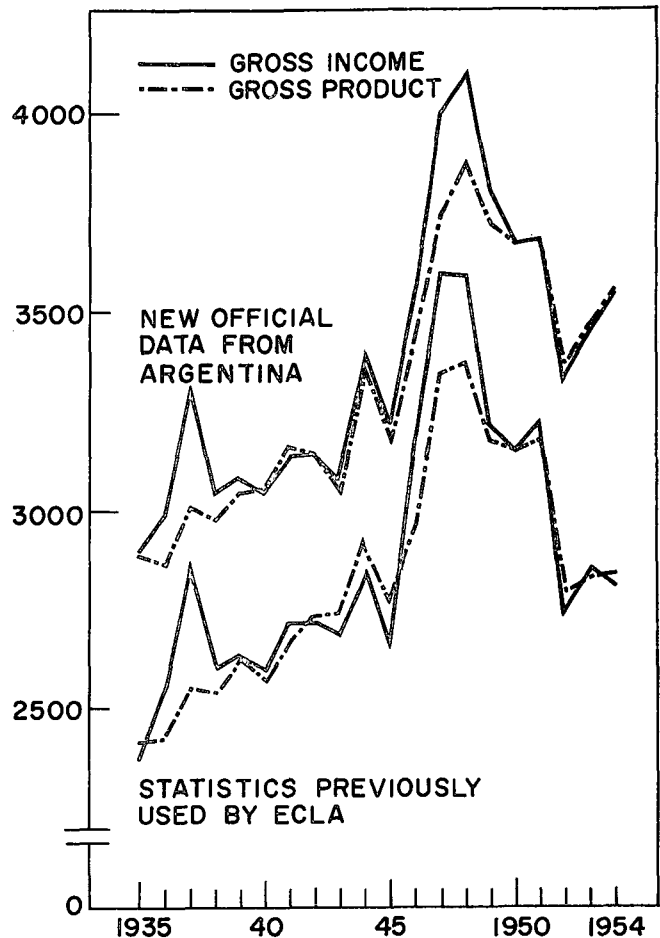
Under these hypotheses, a product of 0.463 pesos per unit of capital—which was the figure reached in 1948—would imply (see again table 13) an increment of more than 35 per cent in net national income and an improvement of 16 per cent in real wages per worker.

The fundamental argument to be deduced from these postulates is simply an indication of the possibilities inherent in a policy mainly aimed at raising the productivity of capital and labour. Whether or not they are frustrated will depend upon a number of other conditions which have also been enumerated in this article. Undoubtedly the most important unknown quantities are to be found in the evolution of the balance of payments; in the degree to which this evolution permits an expansion of energy production, a reform of the transport system, and the purchase of the fuels and raw materials required for the attainment of a higher level of activity; in the availability or non-availability of foreign loans and investment; and in the other fiscal, credit and monetary measures adopted by the Government. In other words, a whole body of factors will come into play whose nature forbids any prophecy as to the course of inflation and of Argentina's economic development in the near future.

APPENDIX

Attention is drawn to the fact that the analysis presented here is mainly based upon a new and important compilation of economic statistics published by the Government of Argentina: *Producto e Ingreso de la República Argentina en el período 1935-54* (Buenos Aires, 1955). This constitutes the first official report on national income available since that published in 1946 by the Banco Central de la República Argentina. The new survey represents a considerable advance upon former research in comprehensiveness and depth, since it fills up a gap in Latin American economic statistics and supplies data on the gross product by economic activities, on the national income by distributive shares and on the distribution of expenditure between consumption and investment. Information on expenditure and the gross product by sectors is presented both in current prices for each year covered by the survey and in 1950 constant prices. The method of calculation adopted was based on the value added for each activity sector and, at the same time, on the difference between the gross value of production and the cost of goods and services provided by other sectors. A vital aspect of the work of estimating national income was constituted by the preparation of an analysis of inter-industrial relationships, which not only facilitates the computation of the value added by activity sectors, but also renders possible an integrated analysis of production (by activity), foreign

Chart V
(Natural scale)



trade, movement of goods and services, and final expenditure on consumption, investment and exports.

It is interesting to note the implications of this new report with respect to the analyses of Argentina's economic development made by ECLA in recent years. In this connexion it should be noted that for want of official data, previous ECLA studies of this country's economic trends have been partly based on extra-official estimates. A standard of comparison now exists, for instance, by which to appraise the presentation of three important aspects—gross product, gross income and gross investment at 1950 constant prices—in the *Economic Survey of Latin America* for 1951-52, 1953 and 1954. Such a comparison, as shown in the accompanying chart, clearly demonstrates that the analyses of these aspects made in the Commission's earlier publications are fully confirmed by the new official data.

SOME ASPECTS OF THE ACCELERATION OF THE INFLATIONARY PROCESS IN CHILE

1. INTRODUCTION

The purpose of this article is to analyse the sharp acceleration of the inflationary process, which began in the second half of 1953, from the standpoint of the influence of foreign trade and fiscal policy.¹ The abrupt price decline on the international metals markets which took place

early in 1953 adversely affected Chile's most important export commodity. The contraction in copper exports had

¹ For an analysis of long-term factors which have stimulated the inflationary process in Chile, see *Economic Survey of Latin America, 1954* (E/CN.12/362/Rev.1; United Nations publication, Sales No.: 1955.II.C.1), chapter I, entitled "The growth of income, investment and inflationary expansion", section III. "Inflation and anti-inflationary policy. A. The example of Chile", pp. 22-38.

serious repercussions on public finances, since a considerable proportion of government income is obtained from taxes levied on the large copper companies. Moreover, this revenue covers the financing of import subsidies, which, in 1952, represented a relatively high proportion of total government "expenditures" in real terms. The Government was therefore obliged to resort to heavy devaluation of the currency as a means of lessening these subsidies and thus reducing the budget deficit. The immediate effect of devaluation was a significant rise in prices, which was later accentuated with the granting of compensatory adjustments in wages and salaries, and the maintenance of a liberal credit policy. In addition to the inflationary pressures brought about by the adoption of these measures, an increase in domestic taxation also contributed to the price rise, since it took the form of heavier indirect taxes and was financed through the expansion of the money supply. Along with the considerable growth of effective demand—a concomitant of the situation just described—there was a restriction of the total supply of goods and services, owing to the critical foreign trade position.

Although conditions improved in 1954, the crisis in the government budget and in the system of exchange-rate subsidies persisted, its prolongation being influenced by the granting of higher "returned-value" exchange rates² to the large copper companies, with a consequent drop in public revenues and a further reduction of import subsidies. Moreover, the inability of taxes to keep pace with an accelerated inflation, because of the rigidity of the tax system, resulted in a loss of revenue. Again, the exchange situation further deteriorated when the growing foreign exchange requirements of the Government reduced availabilities for the granting of subsidies, through preferential exchange rates, to the private sector. Thus it was that the 1953 crisis in the basic export commodity, far from producing deflationary effects through depressing the level of income, caused a series of measures to be adopted which more than doubled the rate of inflation prevailing in former years.

An analytical approach to the study of this phenomenon requires the prior examination of certain structural and institutional conditions which determine the relationship of the large copper-mining companies to the rest of the

² For an explanation of this concept, see section 3 on treatment of copper export proceeds, below.

national economy. Firstly, it would be well to measure the enormous discrepancy between the productivity of these enterprises and that of other economic activities, before an analysis is made of the mechanisms whereby the country absorbs part of the difference in productivity through taxation and the system of exchange subsidies. It is also necessary to assess in quantitative terms the relative importance of copper production and exports within the Chilean economy.

2. PRODUCTIVITY OF THE LARGE COPPER COMPANIES

In table 1, the productivity of the large copper companies is contrasted with the productivity of the economy as a whole and that of industry and agriculture.

During the period covered, average productivity in the export sector was eleven times greater than that of the economy as a whole, about thirteen times that of industry and almost twenty times that of agriculture. In these great disparities lies the fundamental reason why copper plays such an important role in the Chilean economy. Its extremely high productivity and relatively favourable competitive position in the world markets enable copper mining to bear a heavy tax burden, by which the country retains a considerable proportion of the proceeds from copper sales. In other words, copper makes a substantial contribution to the financing of the budget and external payments.

3. TAXATION, EXCHANGE-RATE SUBSIDIES AND TREATMENT OF COPPER EXPORT PROCEEDS

Taxation, as it stood in the early months of 1955, can be classified as follows:³

(a) *Income tax*: in recent years this consisted almost exclusively of a 50-per-cent tax applied to the difference between the sales price in New York and cost of copper delivered to that market;⁴

(b) *Customs duties*;

(c) *Special tax on sales or surtax*: established in May

³ For a detailed account of the legislation applicable to the large copper companies, see Banco Central de Chile, *Balanza de Pagos de Chile, 1951, 1952 and 1953*. Act 11828 of May 1955 greatly modified the system of taxing these enterprises. A description of the terms of the Act is to be found in the Appendix to this article.

⁴ In 1952 this rate had been raised to 60 per cent.

Table 1

CHILE: GROSS PRODUCT, ACTIVE POPULATION AND PRODUCTIVITY OF COPPER MINING, INDUSTRY, AGRICULTURE AND THE ECONOMY AS A WHOLE
(Pesos at 1950 prices)

Year	Economy as a whole			Copper mining			Industry			Agriculture		
	Gross product (Thousands of millions)	Active population (Thousands)	Productivity	Gross product (Thousands of millions)	Active population (Thousands)	Productivity	Gross product (Thousands of millions)	Active population (Thousands)	Productivity	Gross product (Thousands of millions)	Active population (Thousands)	Productivity
1950	149.4	2,178.7	68.6	11.2	14.5	770.6	26.3	438.2	60.0	25.1	629.5	39.9
1951	155.4	2,232.8	69.6	11.8	14.2	826.1	27.2	455.6	59.8	25.1	630.3	39.9
1952	161.8	2,288.7	70.7	12.5	14.6	853.2	30.0	473.6	63.3	25.4	631.3	40.2
1953	156.1	2,341.5	66.7	11.2	16.2	691.7	32.8	500.0	65.5	27.2	632.0	43.1
1954	160.7	2,383.6	67.4	12.0	14.4	837.0	33.6	27.0

Sources and methods: Economic Commission for Latin America. See *Economic Survey of Latin America, 1951-52*, p. 33, and *Economic Survey of Latin America, 1954*, p. 24, table 11. The figures for copper mining were based on data from the Servicio Nacional de Estadística, *Anuario de Minería*; Banco Central de Chile, *Balanza de Pagos de Chile*; Ministerio de Minería; and Departamento de Estudios Financieros del Ministerio de Hacienda. The estimates are preliminary and subject to revision and amendment.

1952, when the Banco Central de Chile assumed control of sales;⁵

(d) *Implicit "tax" on production costs*: represents the amount of over-valuation of the exchange rate at which the copper companies purchased pesos to cover expenses paid in Chilean currency.⁶ This is the difference between the so-called "returned-value" rate and the rate at which the Government sells the dollars obtained through the sale of pesos to the companies.

In order to estimate the Government's real income, derived from all the above taxes, on the one hand, and the amount of the subsidies granted to the various imports, on the other, it is necessary to convert the dollars obtained to national currency at a rate that will account for the over-valuation of the peso, which has been very large indeed in recent years. For the purpose of this analysis, the method is the same as that used by ECLA for computing the gross product at constant values: that is, the conversion is made at a purchasing power parity peso-dollar rate based on a pre-war equilibrium rate adjusted for subsequent price movements.⁷ The parity rate can be applied to the full amount of dollars obtained from income tax, the special sales or surtax, and customs duties. However, a complication arises in estimating the public sector's income from the implicit "tax", since for each dollar required to cover local expenditures of copper production the Government must disburse a peso amount equivalent to the "returned-value" exchange rate. As a result, the public sector's real income from this source amounts only to the difference between the "returned-value" rate and the parity rate. The Government's real income from all these taxes is made up of two parts: firstly, the proceeds that actually flowed into the budget as a consequence of the sale of the dollars obtained from the large mining sector; and, secondly, the difference between the selling rate and the purchasing power parity rate, which represents the adjustment of the Government's real income. Fundamental importance at-

⁵ The price received over and above 24.5 cents per pound on all sales was retained by the Government.

⁶ This rate of exchange, known as the "returned-value" rate, was maintained at 19.37 pesos to the dollar between 1935 and 1951. As from the latter year, it was applied to only part of the "returned value". Exchange rates of 50 pesos to the dollar in 1952, 60 pesos in the following year and 110 pesos in 1954 were applied to the remaining part, which yearly represented a greater proportion of the total. Thus, average "returned-value" exchange rates were as follows:

Year	Pesos to the dollar
1952	23
1953	34
1954	62

⁷ For fuller explanation, see *Economic Survey of Latin America, 1951-52*, general note on concepts, sources and methods, p. 33.

taches to the selling rate, since therein lies the explanation of the direct relationship existing between the government income obtained from the large mining companies and the system of exchange-rate subsidies. The Government grants these subsidies through the sale of these dollars (obtained from the copper companies) at highly over-valued rates of exchange. The difference between the parity and selling rates of exchange therefore determines the magnitude of the subsidies. In order to ensure consistency of methodology, it is necessary to treat as government expenditure this exchange differential between the selling and the parity rates, which has, as indicated above, already been considered as government receipts.⁸

It should also be pointed out that all the large mining companies—copper, nitrate and iron—are accorded special treatment with regard to the return to Chile of part of the value of their export sales. Normally, exporters are obliged to return the entire proceeds of their sales, whereupon the Consejo Nacional de Comercio Exterior authorizes all remittances abroad and any imports that are approved. The large mining companies, on the other hand, are required to return only the foreign exchange needed to cover production costs in local currency. Thus, these enterprises, unlike the other sectors of Chilean economic activity, do not depend on the balance-of-payments situation for their purchases of capital goods and other imports, nor are they prevented from remitting abroad their profits and interest, etc.

4. THE IMPORTANCE OF THE LARGE COPPER COMPANIES IN THE CHILEAN ECONOMY

Some idea of the importance of copper can be obtained by comparing its gross income with that of the economy as a whole. The proportion represented by the former rose to an average of almost 8 per cent between 1950 and 1954. (See table 2.) On the other hand, the gross product of the copper sector forms 7.5 per cent of the total gross product. Since large-scale copper-mining is in the hands of only three foreign enterprises employing less than 1 per cent of the active population, these percentages become all the more significant.

⁸ Foreign exchange for import subsidies is obtained not only from the copper companies, but also from other large mining enterprises, including nitrate and iron. However, estimates of exchange differentials exclude the insignificant contribution of the large iron-mining companies. Nitrate, which had previously accounted for 21-26 per cent of the total, began to lose importance after 1950. As from 1951, the "returned-value" exchange rate of the nitrate sector rose rapidly. As a result, in 1953 and 1954, about 90 per cent of the import subsidy was financed by copper exchange-differentials. It is clear, then, that copper mining determines the exchange-subsidy policy.

Table 2
CHILE: INCOME AND GROSS PRODUCT OF COPPER IN COMPARISON WITH TOTAL INCOME AND GROSS PRODUCT

(Thousands of millions of pesos at 1950 prices)

Year	Gross income of copper (A)	Total gross income (B)	(A) as a percentage of (B)	Gross product of copper (C)	Total gross product (D)	(C) as a percentage of (D)
1950	11.2	149.4	7.5	11.2	149.4	7.5
1951	11.5	157.9	7.3	11.8	155.4	7.6
1952	16.5	166.9	9.9	12.5	161.8	7.7
1953	12.5	161.5	7.7	11.2	156.1	7.2
1954	12.2	165.0	7.4	12.0	160.7	7.5

Source: Table 1.

From such comparisons it is not, however, possible to obtain an exact impression of the way in which the importance of copper makes itself felt in the national economy. The relationship with public financing is the first point that needs to be examined. In 1952, taxes levied on the large copper companies amounted to a maximum 74.5 per cent of their gross value added. (See table 3.) As has already been pointed out, the high proportion of gross income captured by taxation represents the public sector's absorption of part of the great discrepancy between the productivity of the copper sector and that of the rest of the economy. It is because of the heavy tax burden and the relative importance of copper mining within the national product that this sector makes such a substantial contribution to total governmental income. As a matter of fact, during 1950-54, between one quarter and one third of all fiscal revenue came from this source, the proportion reaching 37.5 per cent in 1952. (See again table 3.)

Exchange-rate subsidies are closely linked to government income from the copper sector, and an assessment of their magnitude is still another way of demonstrating the

Table 3
CHILE: TAXATION ON COPPER MINING
(Thousands of millions of pesos at 1950 prices)

Year	Tax burden on copper mining (Percentages) (A)	Taxation on copper mining (B)	Total government receipts (C)	(B) as a percentage of (C)
1950	57.1	6.4	24.6	26.0
1951	61.7	7.1	26.7	26.6
1952	74.5	12.3	32.8	37.5
1953	72.8	9.1	29.5	30.8
1954	65.6	8.0	26.2	30.5

Source: Economic Commission for Latin America. Col. (A): table 8; Col. (B): on the basis of data from the Banco Central de Chile, *Balanza de Pagos de Chile*; Col. (C): table 9.

importance of this source of revenue. Table 4 shows that only in the first two years of the period 1950-54 did exchange-rate subsidies represent less than 20 per cent of total governmental expenditure, reaching in 1952 the extraordinary figure of 26.4 per cent.

Table 4
CHILE: TOTAL EXPENDITURE OF THE CENTRAL GOVERNMENT
(Millions of pesos at 1950 prices)

Year	Total expenditure of the Central Government (A)	Current expenditure (B)	Investment (C)	Total (D)	Transfers		
					Exchange rate subsidies (E)	Other transfers to the private sector ^a (F)	Transfers to the public sector ^b (G)
1950	27,261.0	10,143.0	4,342.0	12,776.0	6,060.7	3,195.3	3,520.0
1951	28,287.6	10,373.8	5,137.7	12,777.1	5,351.9	3,303.4	4,121.8
1952	38,622.2	11,394.9	5,794.9	21,432.4	10,205.2	5,995.9	5,231.3
1953	36,577.2	13,410.4	5,147.0	18,019.8	7,428.2	4,768.0	5,823.6
1954	31,967.1	12,880.0	5,200.7	13,886.4	5,596.6	4,194.6	5,095.2

PERCENTAGES

1950	100.0	37.2	15.9	46.9	22.2	11.8	12.9
1951	100.0	36.7	18.2	45.1	18.9	11.7	14.5
1952	100.0	29.5	15.0	55.5	26.4	15.5	13.6
1953	100.0	36.7	14.1	49.2	20.3	13.0	15.9
1954	100.0	40.3	16.3	43.4	17.5	13.1	12.8

Source: Economic Commission for Latin America, on the basis of data from the Departamento de Estudios Financieros del Ministerio de Hacienda.

Note: Col. (A) = Col. (B) + Col. (C) + Col. (D).

^a Includes subsidies to non-profit-making organizations; return of revenue; other contributions and subsidies.

^b Includes social security payments; intergovernmental and international transfers; subsidies to municipalities and to the Caja de Amortización.

That the level of import subsidies is high is evident from yet another standpoint. (See table 5.) Between 1950 and 1953 the subsidy on the import price rose to more than 34 per cent, as was revealed by a sample of more than 85 per cent of all imports.⁹ The same table shows that the subsidy on imported consumer goods averaged 40 per cent, and was lowest in the case of imported capital goods.

The high proportion of government expenditure and of import prices represented by subsidies is an indirect confirmation of the structural distortion of the Chilean economy which is reflected, as pointed out above, in the striking discrepancy between the productivity of the copper sector

⁹ This does not include the foreign purchases made by the large mining companies with their own exchange availabilities.

and that of the economy as a whole. It can in fact be roughly estimated that more than 15 per cent of available goods and services, as represented by imports, carries a subsidy of more than one-third with respect to the parity exchange rate. This shows the important function both of taxation on copper mining and of the system of import subsidies to ensure that part of this sector's high productivity is absorbed by the rest of the economy.

One last aspect of copper's importance in the economy of Chile is the share of the value of exports of this metal in the total value of exports and in the capacity to import. In the first instance, it can be seen that the role of copper is very significant, its average share during 1950-54 being 42 per cent. The peak figure, reached in 1952, was more than 57 per cent. (See table 6.)

Table 5
CHILE: EXCHANGE-RATE SUBSIDIES AND IMPORTS
(Percentages)

Year	Consumer goods	Raw materials	Fuels	Capital goods	Average
A. SUBSIDY AS A PERCENTAGE OF IMPORT PRICE ^a					
1950.....	52.1	39.8	43.5	29.8	39.3
1951.....	46.9	38.3	37.9	22.9	34.4
1952.....	47.3	38.8	44.0	15.8	34.5
1953.....	42.1	35.6	39.0	28.8	35.2
B. RELATIVE IMPORTANCE OF COMPONENTS					
1950.....	23.1	28.2	11.1	37.6	100
1951.....	25.0	23.1	14.3	37.6	100
1952.....	31.9	22.0	12.6	33.5	100
1953.....	26.7	19.2	15.2	38.9	100

Source: Economic Commission for Latin America, on the basis of data from the Servicio Nacional de Estadística, *Anuarios de Comercio Exterior*, and from the Consejo Nacional de Comercio Exterior.

^a Comprising more than 85 per cent of total imports, after deduction of imports effected by the large copper-mining companies with their own foreign exchange.

Table 6
CHILE: COPPER EXPORTS OF THE LARGE MINING COMPANIES AND TOTAL EXPORTS
(Millions of pesos at 1950 prices)

Year	Value of copper exports	Value of total exports	Copper exports as a percentage of total exports of goods
1950.....	12,920	25,993	49.7
1951.....	13,672	29,748	46.0
1952.....	19,037	33,248	57.3
1953.....	14,542	32,585	44.6
1954.....	13,976	31,816	43.9

Source: Table 7.

But it is also necessary to compare the total value returned from copper sales (includes local expenditures on production and taxes), with Chile's capacity to import, in order to assess the proportion of the value of sales remitted abroad. Throughout the whole of the period under

review, copper's gross share of the capacity to import was more than one third, this contribution rising to more than 40 per cent in 1953 and 1954. (See table 7.)

5. THE ACCELERATION OF THE INFLATIONARY PROCESS IN 1953

Owing to the sharp contraction of copper exports, a new inflationary pressure began to make itself felt in 1953. This was the crisis in the system of exchange-rate subsidies, which was probably the most important factor in accelerating inflation.

As has already been explained, the large copper companies return to Chile a substantial part of their dollar export earnings, which constitutes their gross contribution to the country's capacity to import. If the foreign purchases made by the companies¹⁰ with their own exchange are deducted from the value returned, the net contribution

¹⁰ In recent years, their imports have fluctuated between one fifth and one tenth of the "returned value".

Table 7
CHILE: EXPORTS AND CAPACITY TO IMPORT OF COPPER
(Millions of pesos at 1950 prices)

Year	Exports (tons) (A)	Value of copper exports (B)	Non-returned value (C)	Returned value or gross capacity to import of copper ^a (D)	Total capacity to import (E)	(D) as a percentage of (E) (F)	Imports effected with own exchange (G)	Net capacity to import of copper (H)	(H) as a percentage of (E) (I)
1950.....	322,121	12,920	4,010	8,910	24,888	35.8	1,425	7,485	30.1
1951.....	308,764	13,672	3,694	9,978	29,841	33.4	2,206	7,771	26.0
1952.....	343,884	19,037	3,094	15,943	32,704	48.7	2,040	13,903	42.5
1953.....	282,335 ^b	14,542	2,282	12,260	29,221	42.0	1,586	10,674	36.5
1954.....	336,174	13,976	3,320	10,656	1,117	9,541	..

Sources: Economic Commission for Latin America, on the basis of information from the Banco Central de Chile, *Balanza de Pagos de Chile*; for the 1954 statistics, data from the Departamento de Estudios del Banco Central de Chile.

Note: Col. (D) = Col. (B) - Col. (C)
Col. (F) = Col. (D) / Col. (E)
Col. (H) = Col. (D) - Col. (C)
Col. (I) = Col. (H) / Col. (E)

^a Not including inflow of capital for new investment, as statistics for the whole period are not available.

^b Including stocks of exports held abroad which were sold in 1954. In the value of exports, on the other hand, only actual sales are taken into account.

to the capacity to import is obtained. (See again table 7.) This share provides practically all the Government's foreign exchange availabilities for the granting of subsidies,¹¹ and mainly consists of taxes levied on the large mining companies.¹²

With the drastic reduction of copper exports in 1953, net "values returned" decreased by 23 per cent. (See again table 7.) The resultant 26-per-cent fall in revenue caused a 10-per-cent decline in the Government's total receipts, the tax yield from other sources having remained stable. (See table 8.)

As the decrease in total expenditure was much smaller than this decline in revenue, by 1953 the over-all budget deficit exceeded 7,000 million pesos (at 1950 prices), that is, almost 20 per cent of the total expenditure. The reduction in total expenditure was due to the Government's smaller foreign exchange availabilities and was achieved through a sharp devaluation of the peso, which drastically reduced exchange-rate subsidies. Not only were expenses curtailed by this measure, but it was also possible to increase the income from exchange-rate differentials. In fact, as devaluation implied a high selling rate, and therefore a wider margin between this and the "returned-value" exchange-rate, there was an increase in the exchange-rate differentials flowing into the budget. Thus devaluation prevented the fall in this item of government receipts from being more serious than it actually was.

When account is taken of the events just described and of the institutional characteristics of the system of exchange-rate subsidies, it can be inferred that devaluation possessed great advantages from the standpoint of public financing. On the one hand, it reduced expenditure on transfers, and, on the other, counterbalanced to some extent the decrease in government receipts.

The reasons why devaluation had an immediate and pronounced effect on the general price level are to be found in the dependence of domestic prices and costs on the external prices of imports, in the magnitude of the subsidy on import prices, in the extent of devaluation, and in the special compensatory adjustments of salaries and wages. The structure of imports—consisting mainly of

¹¹ The remainder is obtained from the iron and nitrate companies, and, as has already been pointed out, forms a very small proportion of the total.

¹² Other "returned values", which represent less than 10 per cent of the total, consist of salaries, wages and purchases in Chilean currency.

foodstuffs, raw materials and basic fuels—is largely responsible for the heavy dependence of domestic prices of these commodities, and also of industrial and transport costs, on the external prices of imports. Domestic prices of imported goods are governed to a large extent by the relevant subsidies since the latter represent a high proportion of import prices. Consumer goods, raw materials and fuels are precisely those imports which are the most heavily subsidized (see again table 5), and it is on these categories that the burden of the reduction in subsidies falls: 11 per cent in the case of consumer goods, 8.2 per cent in that of raw materials and 11.4 per cent in that of fuels.

The magnitude of the devaluation also played a part in determining the sharp rise in the cost-of-living index which immediately followed. The official rate of exchange of 31 pesos to the dollar was replaced by a parity of 110 pesos, but devaluation was in fact less than these figures would appear to indicate, owing to the multiplicity of exchange rates for the different import categories. Nevertheless, it amounted to more than 70 per cent. Lastly, the immediate inflationary effects of devaluation were combined with the simultaneous granting of special compensatory adjustments in wages and salaries.

The direct impact of devaluation on prices was later accentuated by an expansionist monetary and fiscal policy. The inflationary effects of both a budget deficit and budgetary policy are involved here. Although the sharp reduction of exchange-rate subsidies caused total governmental expenditure to fall by 5.3 per cent, expenditure on investment and especially on current account increased. Since the subsidy does not constitute effective payments and therefore—unlike investment and current expenditure—has no direct income-generating effect, it may be concluded that the over-all policy was likewise expansionist.

The inflationary impact of the increase in domestic taxation during 1953 is also worthy of examination. Although the tax yields of the large copper companies were considerably reduced, revenue from other economic activities remained stable. Since gross income contracted slightly, the tax burden on the rest of the economy was somewhat heavier. (See again table 8.) Because the variations were so slight it might be considered that this phenomenon is of no importance. However, a glance at other figures (see table 9) will reveal interesting facts. Revenue from indirect taxation increased by 10.8 per cent, while the proportion of these taxes in total governmental income rose from 34.3 per cent in 1952 to 41.1 per cent in 1953.

Table 8
CHILE: DISTRIBUTION OF THE TAX BURDEN
(Thousands of millions of pesos at 1950 prices)

Year	Total taxation			Taxation on copper			Taxation on rest of economy		
	Revenue (A)	Gross income (B)	(A) as a percentage of (B)	Taxation on copper (A)	Gross income of copper (B)	(A) as a percentage of (B)	Taxation (A)	Gross income (B)	(A) as a percentage of (B)
1950.....	23.4	149.4	15.7	6.4	11.2	57.1	17.0	138.2	12.3
1951.....	25.7	157.9	16.3	7.1	11.5	61.7	18.6	146.4	12.7
1952.....	31.6	166.9	18.9	12.3	16.5	74.5	19.3	150.4	12.8
1953.....	28.4	161.5	17.6	9.1	12.5	72.8	19.3	149.0	13.0
1954.....	25.4	165.0	15.4	8.0	12.2	65.6	17.4	152.8	11.4

Source: Tables 2 and 9.

Table 9
CHILE: GOVERNMENT REVENUE
(Millions of pesos at 1950 prices)

Year	Total revenue (A)	Receipts from sources other than taxation (B)	Tax revenue							
			Indirect taxation				Direct taxation		Export duties and taxes and other customs revenue (J)	
			Total (C)	Total (D)	Internal (E)	Import duties and taxes (F)	Total (G)	Internal (H)		Income tax on large mining companies (I)
1950.....	24,644.1	1,261.6	23,382.5	9,453.7	6,092.2	3,361.5	8,726.3	5,539.1	3,187.2	5,202.5
1951.....	26,749.2	1,033.8	25,715.4	10,830.9	6,564.3	4,266.6	10,633.4	5,934.3	4,699.1	4,251.1
1952.....	32,787.6	1,149.0	31,638.6	11,248.0	6,793.3	4,454.7	14,648.0	5,748.8	8,899.2	5,742.6
1953.....	29,452.1	1,091.7	28,360.4	12,118.4	8,408.1	3,710.3	11,863.6	6,194.3	5,669.3	4,378.4
1954.....	26,168.4	804.9	25,363.5	10,213.7	7,672.2	2,541.5	10,833.8	6,000.7	4,833.1	4,316.0
PERCENTAGES										
1950.....	100.0	5.1	94.9	38.4	24.7	13.7	35.4	22.5	12.9	21.1
1951.....	100.0	3.9	96.1	40.5	24.5	16.0	39.8	22.2	17.6	15.8
1952.....	100.0	3.5	96.5	34.3	20.7	13.6	44.7	17.5	27.2	17.5
1953.....	100.0	3.7	96.3	41.1	28.5	12.6	40.3	21.0	19.3	14.9
1954.....	100.0	3.1	96.9	39.0	29.3	9.7	41.4	22.9	18.5	16.5

Source: Economic Commission for Latin America, on the basis of data from the Departamento de Estudios Financieros del Ministerio de Hacienda.

Note: Col. (C) = Col. (D) + Col. (G) + Col. (J); Col. (D) = Col. (E) + Col. (F); Col. (G) = Col. (H) + Col. (I).

This extremely regressive tendency of the additional tax burden, formed by taxes whose impact falls directly on prices, has important inflationary effects, inasmuch as it takes place within the framework of an expansionist monetary and fiscal policy and creates pressures on the credit system for the financing of at least part of the additional taxation. The latter effect is of special importance in the case of direct taxation on the domestic sector, revenue from which also increased by almost 8 per cent in 1953. While indirect taxation, owing to its effect on prices, also aggravated the pressure exerted by claims for higher wages, direct taxes particularly affected the financing capacity of enterprises, which, in order to fulfil their tax commitments, were obliged to have recourse to credit, and in an effort to recover their level of profits raised the prices of their products. It is not surprising that an increase in taxation should have been able to produce an inflationary effect, in view of the considerable monetary expansion which took place in 1953. Under such conditions, the tax burden becomes so much heavier in current values that tax commitments cannot be fulfilled without recourse to credit and a subsequent raising of prices.

One last factor of great importance in the price rise caused by devaluation is the system whereby the salaries of civil servants and private employees are legally adjusted. In practice similar adjustments are also granted, although less automatically, to other wage-earners.¹³ Under these circumstances, the redistribution of income aimed at by devaluation as a means of restricting imports and encouraging exports is nullified over the short term. Increased wages offset the loss in real income, and, combined with the higher prices for raw materials and fuels, raise costs of production of exports. The initial benefit of devaluation is thus dissipated, and pressures are again exerted on the balance of payments at a new exchange-rate level.

¹³ For an analysis of the inflationary effects produced by the various sectors' efforts to defend their share of real income, see *Economic Survey of Latin America, 1954, op. cit.*, p. 34.

6. PERMANENT FACTORS OF THE CRISIS IN THE SYSTEM OF EXCHANGE-RATE SUBSIDIES

The foregoing analysis was exclusively concerned with the short-term crisis in exchange-rate subsidies, which was one of the most important determinants of the 1953 devaluation. It should, however, be mentioned that two factors tended to exert a more permanent influence. Both are related to the contracting capacity of the Government to grant subsidies based on the over-valued rate of exchange at which it receives its dollars from the large copper companies. Increasing inflation has also raised costs in the export sector. As in the case of nitrate at the end of the 1940's, better conditions were granted so that the copper industry might be able to compete more successfully on the world market and expand its capacity. The incentive offered took the form of a progressive devaluation of the "returned-value" exchange rate, which rose by 48 per cent between 1952 and 1953 and by 82 per cent during 1953-54. In the same two periods, the parity rate, by which the subsidies are calculated, increased by 24 per cent and 70 per cent respectively (see table 10), that is, to a lesser degree than the "returned-value" rate. Clearly, therefore, the margin available for import subsidies has been gradually narrowed.

A similar effect was produced by the tendency of the public sector to use a growing proportion of its dollar availabilities to meet its own commitments for imports, external expenditure and the servicing or amortization of foreign debts. In 1953, the Government used up almost 40 per cent of the foreign exchange obtained from the large mining companies in order to meet its dollar requirements. Never before had this proportion exceeded 28 per cent.¹⁴ (See table 11.)

¹⁴ It is important to stress that capital goods imports purchased by the Corporación de Fomento and other quasi-state bodies, as well as the servicing of foreign debts contracted by these institutions, accounted for the increase concerned.

Table 10

CHILE: COST-OF-LIVING INDEX AND PURCHASING POWER PARITY EXCHANGE RATE

Year	Cost-of-living index (1950 = 100)	Percentage variations in the cost-of-living index	Year	Parity exchange rate ^a
1950.....	100.0	15.2	1950	85.0
1951.....	122.3	22.3	1951	96.6
1952.....	149.4	22.2	1952	115.3
January/June 1953.....	161.5	8.1		
July/December 1953.....	213.0	31.9		
January/December 1953.....	187.2	25.3	1953	142.9
January/June 1954.....	276.1	47.5		
July/December 1954.....	368.8	33.6		
January/December 1954.....	322.5	72.3	1954	243.7
January/March 1955.....	436.8	35.4		

Source: For cost-of-living index, Servicio Nacional de Estadística, *Sinopsis Estadística*.

^a The 1937 free exchange rate was selected as base, and the parity exchange rates for the subsequent years were estimated as a function of the base parity, of the relative variations in the cost of living in Chile and of the implicit deflator of United States gross income.

Thus the Government had fewer availabilities with which to subsidize private sector imports, while subsidy requirements continued to grow rapidly with the permanent over-valuation of the preferential exchange rates. The conflict between limited availabilities and subsidy requirements is rendering the preferential exchange-rate system incapable of fulfilling its function of mitigating the effects of the rise in import prices, since further devaluation is becoming more frequent each year and directly affects the level of domestic prices.

7. THE FISCAL PROBLEM IN 1954

During 1954, the index of the cost of living in Chile rose by 72 per cent, implying a trebling of the previous rate of increase. (See again table 10.) This aggravation of the inflationary process was due both to the influence of those factors which had brought about the 1953 crisis in the system of exchange-rate subsidies, and to the large fiscal deficit in 1954.

The total value of copper sales during the latter year was practically equivalent to that of 1953. However, the proportion returned to Chile fell from 84 per cent in 1953 to 76 per cent in 1954, owing to the granting of an exchange rate of 110 pesos for part of the dollars needed to meet production costs. The result was a further decrease in the revenue from the copper exports, this time of nearly 10 per cent. (See again table 8.) The decline would have

Table 11

CHILE: UTILIZATION OF FOREIGN EXCHANGE BY THE PUBLIC SECTOR
(Millions of dollars)

Year	Utilization of foreign exchange by the public sector (A)	Foreign exchange surrendered to the public sector by copper and nitrate (B)	Percentage of (A) to (B)
1950.....	36.5	130.9	28
1951.....	38.5	136.5	28
1952.....	52.2	225.2	23
1953.....	66.8	172.7	39

Source: Economic Commission for Latin America, on the basis of data from the Banco Central de Chile, *Balanza de Pagos de Chile*.

been even greater had not the banking exchange rate—applied to a substantial proportion of imports—been devalued from 110 pesos to 200 to the dollar.

In 1954 the revenue from other sectors of economic activity fell by 15 per cent. The explanation for the low tax yield lies in the rigidity of the taxation system, which inevitably loses some of its efficacy when confronted by a price increase of the magnitude registered in 1954, and by the possibilities for tax evasion.

The 3-per-cent fall in direct domestic taxation (see again table 9) is due to the following phenomena: (a) the tax is assessed on the taxable income of the preceding year; (b) in certain cases, taxable income is calculated on the basis of an official valuation which is not opportunely adjusted to the rise in prices; and (c) tax evasion is encouraged by rapidly-rising prices.

The revenue from indirect taxation has fallen by 15 per cent. The reason for this abrupt decline in the real value of revenue would seem to be that indirect taxes are not of general application and are therefore not susceptible to all but merely to some price rises. This phenomenon is especially pronounced in the case of duties and taxes on imports, which are calculated on the basis of the official import rate of the dollar, which has increased a good deal less than prices as a whole. This potential discrepancy between the rate of increase in the prices of goods and services subject to indirect taxation and the general rate of price increases has reduced the real purchasing power of the tax yield, when this has been deflated by the general price index.

Another important reason for the lower revenue from indirect taxation is to be found in the evasion of taxes on production and the transactions tax, which are assessed from declarations. These taxes, which are the most important form of indirect taxation, are also assessed on a former period, although in this case the lapse is only three months. The effect of rising prices is naturally felt in all its intensity in the real revenue from specific taxes, among which the most important is that applied to gasoline.

In 1954, total governmental expenditure (see again table 4) also underwent a sharp decrease of 14 per cent. This was achieved by curtailing government payments to

social security institutions, as well as by resorting to devaluation as a means of reducing import subsidies and of restricting current expenditure. But since total receipts fell more than total disbursement, the over-all deficit in 1954 amounted to 18 per cent of the latter.

As a result, 1954 witnessed a combination of all the inflationary factors which were mentioned in connexion with the crisis of the preceding year, namely, devaluation, deficit, new tax levies, and the effect of the adjustment of salaries and wages. To this should be added the ever-increasing influence of the permanent factors underlying the critical situation of the exchange-rate system. These are the utilization of foreign exchange by the public sector itself, the progressive devaluation of the "returned-value" exchange rate, as well as certain perennial inflationary characteristics of the monetary and fiscal system.

APPENDIX

THE "NEW DEAL" FOR THE LARGE COPPER COMPANIES

The "New Deal" Act—No. 11828, dated 5 May 1955—was aimed mainly at inducing the large copper companies to increase their production, both by further investment in the enlargement of their installed capacity, and by a fuller utilization of existing capacity. It is expected that the stimulus to additional investment will be supplied by those provisions of the Act which are designed to reduce the companies' burden of taxation.

Among these provisions the following are the most important: (a) the abolition of the special tax on sales or surtax on the difference between prices received and the price of 24.5 cents per pound of copper; (b) the replacement of the former income tax by another at a basic rate of 50 per cent with a 25-per-cent surtax depending upon the level of production;¹⁵ (c) the establishment of the "returned-value" exchange rate¹⁶ at the average rate used

¹⁵ For every 1-per-cent increase in production over and above a basic average (95 per cent of the production of each company between 1949 and 1953), the surtax decreases by one-eighth. When enterprises double their production, the surtax is suspended, and only the basic 50-per-cent rate is applied.

¹⁶ This was originally 19.37 pesos to the dollar, and began to rise in recent years, until in 1954 it reached an average of some 62 pesos to the dollar.

for the majority of Chilean exports; (d) the restoration of sales control to the producers. A Departamento del Cobre was established, however, which is authorized to negotiate sales on behalf of producers in cases where their sales policy is not in conformity with the "national interest".

The "New Deal" Act will give rise to some important changes in the taxation and exchange situation of the large copper companies. Government income accruing from the surtax (equal to the price received over and above 24.5 cents per pound) disappeared under the new legislation. The "returned values" on production costs decreased considerably, because of the application of a higher rate of exchange, which enables expenditure in national currency to be covered with a smaller quantity of foreign exchange. The greater the devaluation of the "returned-value" exchange rate, the greater will be this reduction.

On the other hand, the yield of income tax will increase, both because of the above decrease in production costs and because—within the production levels predictable over the next few years—the average rate of the tax might be somewhat higher than that hitherto in force. Nevertheless, it should be pointed out that, for a given volume of production, the larger receipts on account of income tax in no case offset the loss of revenue on production costs, since on every dollar by which production costs decrease, the Government recovers from 50 to 75 cents, according to the tonnages produced.

The effect of the new legislation on the tax yield in national currency depends on the rate of exchange applied to dollar earnings. These receipts are, however, to be considered in constant values, as the whole of the analysis was made on this basis. Therefore the remarks on dollar receipts apply also to constant values. Nevertheless, one reservation must be made. This is important because it limits the validity of a common opinion, namely, the idea that with the devaluation of the "returned-value" exchange rate the rise in fiscal income would help to reduce the budgetary deficit. This would be true in real terms only if there were a proportionately greater devaluation of the selling rate, that is, of the rate of exchange applied to imports financed with the Government's foreign exchange.

COLOMBIA'S ECONOMIC POLICY IN A YEAR OF BALANCE-OF-PAYMENTS DISEQUILIBRIUM

1. INTRODUCTION

A number of important events took place in Colombia's economy during 1955. Most of these were directly or indirectly associated with the external sector, and led up to a crisis in the balance-of-payments situation. The decline in the price of coffee, which had already begun in the second half of 1954, and the reduction in the volume of total exports, severely restricted the capacity to import; yet purchases abroad, throughout a large part of 1955, were maintained at even higher levels than in the preceding year. The net result was a marked disequilibrium in Colombia's balance of payments. To curtail imports and bring them into line with a decreasing capacity for foreign

payments, various exchange measures were adopted in 1955, which ultimately proved inadequate to achieve their aim. This was mainly due to two factors.

Firstly, the rapid and comprehensive development of Colombia's economy in 1945-54 involved basic structural modifications, whose vital importance for the balance-of-payments position is readily understandable if their nature is recalled. Over the period between the pre-war years and 1954, the trend of changes in occupation was towards the employment of a higher proportion of the active population in industry and services, and the absorption of smaller numbers by the traditional sectors, including those producing for export. A similar move-

ment affected capital formation in the various branches of production, as the result of a re-direction of investment towards the more highly productive activities. The structural alterations to which this process gave rise were reflected in a much more rapid increase in the output of manufactured and other domestic consumer goods than in production primarily for export. Thus the basic sources of national income were gradually dissociated from the external sector, which little by little lost some of its importance as a motive force in Colombia's economy. This is confirmed by the fact that the gross product-export ratio, which was 30 per cent in 1937, fell to 18 per cent in recent years. The relative predominance of domestic factors in the dynamics of Colombia's economic development at present, in combination with the rapid growth of internal income, the differing demand-elasticities of manufactured goods and foodstuffs, and the high import coefficient, mean that the emergence of adverse conditions in the external sector does not nowadays exert so strong an influence on the level of activity, employment and income, and on the demand for imports. In Colombia's new economic circumstances, everything seems to suggest that the evolution of the capacity to import—unfavourable over the short term—merely intensifies the pressure on the balance of payments, as in the special case of the year 1955.

Nevertheless, it should not be forgotten that owing to the rise in export prices which began in 1949, and reached its peak in 1953 and the first half of 1954, the expansion of the capacity to import closely paralleled that of the internal economy, and facilitated a rapid rate of investment. In 1955, on the other hand, it did not keep pace with economic growth. If there were a long-term decline in the capacity to import—if, that is, it were to remain low for a lengthy period—the impossibility of importing enough capital goods to maintain the investment coefficient at suitable levels would inevitably hamper internal economic development. At all events, this is true as long as Colombia is unable to develop domestic production of the necessary capital goods which, at present, it has to purchase abroad.

Moreover, with the adoption of certain official measures, the year 1955 witnessed the introduction of a new element, which in one way tended to aggravate the balance-of-payments situation, although other aims pursued by the measures in question were successfully achieved. A high rate of public expenditure and investment, the compensatory financing of coffee purchases, and monetary and fiscal policy in general, tended to counteract the deflationary influence of external conditions at a time when imports greatly exceeded exports, and helped to keep up the purchasing power of the internal economy. To sum up, this

maintenance of demand, to which official policy contributed, helped to exert continued pressure on the balance of payments, and the resulting situation constitutes one of the outstanding features of Colombia's economic development in 1955.

2. THE BALANCE-OF-PAYMENTS SITUATION IN 1955

Changes in Colombia's foreign trade had a decisive influence on the marked balance-of-payments disequilibrium registered in 1955. The volume of exports remained almost the same, but their average price was 10 per cent lower than in the preceding year, while the terms of trade deteriorated by 9 per cent in relation to 1954. This meant an equivalent reduction in the capacity of exports to finance imports. (See table 1.)

The instability of the world coffee market in 1955 could not fail to leave its mark on the current value of Colombian exports, in view of the heavy proportion of their total (about 80 per cent) represented by this product. During the first half of 1955, coffee exports were less than in the corresponding months of 1953 and 1954, by 600,000 and 900,000 bags respectively. From July onward, a recovery in coffee exports began, but although their volume was greater between July and November than during the same five months in 1954, it was still smaller than over the corresponding period in 1953. Prices, which sank to their lowest level in February 1955, recovered somewhat in the next few months, but even in September, when they were at their best, they remained 10 per cent below the 1954 average.

All these circumstances were reflected in the balance-of-payments situation and in the reserves held by the Banco de la República. The foreign exchange accruing from coffee export earnings was 30 per cent less in the first half of 1955 than during the corresponding period in 1954, but, according to estimates, the difference was reduced to 6 per cent by the end of the year. (See table 2.)

Official foreign exchange resources brought in by other exports seem to have been 45 per cent less in 1955 than in the preceding year, mainly because the unrestricted sale of foreign exchange outside the official market was authorized by the measures adopted in May 1954. There were not, apparently, any substantial quantitative changes in the official supply from sources other than exports. (See again table 2.) In all, government foreign exchange assets decreased from 659 million dollars in 1954 to 571 million dollars in 1955, that is, by more than 13 per cent.

Table 1
COLOMBIA: FOREIGN TRADE INDICES
(1950=100)

	Exports		Imports		Terms of trade	Capacity of exports to pay for imports
	Quantum	Prices	Quantum	Prices		
1953.....	141	138	148	126	109	154
1954 ^a	124	173	178	126	138	170
1955 ^a	125	155	187	124	125	155

Source: Departamento Administrativo Nacional de Estadística.
^a Provisional.

Table 2
COLOMBIA: OFFICIAL EXCHANGE BALANCE
(Millions of dollars)

	1954	1954 1st half	1955 1st half	1952 ^a
<i>Supply</i>				
Coffee.....	523.6	290.8	202.4	490.0
Other exports.....	30.5	16.7	13.4	16.0
Capital.....	61.4	36.6	32.2	50.0
Resources from the IMF.....	25.0	—	—	—
Other purchases.....	18.5	8.6	8.5	15.0
TOTAL	659.0	352.7	256.5	571.0
<i>Demand</i>				
Imports.....	418.7	231.2	300.6	605.0
Official services.....	27.0	13.2	19.0	28.0
Other sales.....	120.1	54.8	86.0	130.0
TOTAL	565.8	299.2	405.6	763.0
Balance.....	93.2	53.5	-149.1	-192.0

Source: Economic Commission for Latin America, on the basis of official statistics.

^a Provisional.

In contrast, the demand for foreign exchange to finance imports negotiated through the official exchange market increased in relation to 1954 by as much as 200 million dollars during the whole of the year. No important modifications were recorded in the other debit items of the official foreign exchange balance.

As a result of the discrepancies between supply and demand, the foreign exchange deficit at the end of 1955 was estimated at 192 million dollars. Of this sum, 149 millions corresponded to the period January-June, when the supply contracted sharply, to a figure 59 million dollars below that recorded for the second half of the year, while demand attained its peak, rising to 47 millions more than in July-December.

To cover this heavy deficit in Colombia's official exchange balance, the monetary reserves of the Banco de la República were drawn upon in 1955 to the amount of approximately 120 million dollars. As only 72 millions remained, a new increment in short-term trade debts may result, so that total arrears, including those carried over from the end of 1954, will presumably amount to 150 million dollars.

But the total balance-of-payments situation is not constituted only by the transactions negotiated through the official market. It is also made up of all the movements of foreign exchange on the free market, legally established in May. Aggregate transactions on this market are estimated to account for 20 per cent of the total external payments transactions in one complete year.

Unfortunately, no statistics for this market are at present available. Everything would seem to suggest, however, that towards the end of the year the pressure of demand for foreign currency was almost as strong here as on the official market. It is highly probable that since October the sale of the foreign exchange accruing from the transfer of various exports from the official to the free market, and the receipts derived from other external movements of funds, have been inadequate to cover those orders for imported machinery and equipment which are now negotiated through the free market.

3. EXCHANGE MEASURES TO STABILIZE THE BALANCE OF PAYMENTS

The modifications in the exchange system introduced during the course of 1955 were perhaps aimed at combating the problem of the balance-of-payments disequilibrium in two different ways: firstly, by encouraging specific exports and stimulating a greater inflow of foreign capital, so as to increase total foreign exchange availabilities, and, secondly, by reducing demand, mainly through the establishment of higher exchange rates for imports. The measures adopted therefore followed traditional lines, inasmuch as a limited system of multiple exchange rates was utilized in the application of a comparatively flexible economic policy, principally aimed at the establishment of correctives for the most elastic debit and credit items in the balance of payments. On the other hand, no attempt was made to impose direct restrictions on the demand for foreign exchange through the arbitrary control and selection of imports by means of licences, quotas and embargos, except in the case of the short list of banned imports which was again brought into force in February.

It was possible to transfer to the newly-created free exchange market the foreign exchange earnings on specific export transactions which had formerly been negotiated on the official market. This was virtually equivalent to a devaluation of the Colombian peso. Again, the exchange rate modifications represented a more obvious devaluation in the case of coffee—for exports of which the dollar rate was changed from 2.38 to 2.50—and in that of the majority of imports to which a stamp duty was applied, varying in amount for each of the official exchange categories to which such foreign purchases were assigned.¹

The exchange incentive granted to various products—bananas, gold, platinum, tanned hides, sugar, tobacco and cotton textiles—in the form of authorization for the sale of foreign exchange on the free market, does not seem to

¹ For the exchange measures adopted in February and May, see *Economic Review of Latin America*, special issue, August 1955, p. 40, "Impact of Coffee Exports on the Economies of Brazil and Colombia".

have produced any very considerable effects on the availabilities of such currencies in 1955. In fact, too little time has elapsed since this step was taken for an appraisal of its results to be possible. The supply of the products concerned, with the exception of textiles and hides, is, for the most part, relatively inelastic over the short term, and, furthermore, no clearly-defined policy to promote investment has hitherto been pursued. The raising of the coffee exchange rate is not really related to the policy for stabilizing the balance of payments; it is part of an endeavour to maintain the coffee sector's purchasing power and to make it possible for minimum internal prices to be fixed at a higher level than that prevailing on the world market. In contrast, under the 1955 reform the free exchange rate applicable to foreign capital entering Colombia is intended as a stimulus to the inflow of external investment. In 1955, *entrepreneurs* outside the country displayed keen interest in investment prospects, the study of various projects was undertaken, and the implementation of some of these was actually begun with foreign capital.

With respect to the demand for foreign currency—mainly to cover imports—the progressive stamp duty established in February was also equivalent to a devaluation of the peso, as the real rate of exchange varies from 2.58 to 6.50 pesos to the dollar, according to the groups of commodities concerned.²

The barter system inaugurated in May was applied only within very narrow limits, as it was put into effect merely for those countries with whom Colombia had a trade deficit. It induced Colombian importers to pay a premium on exports to the countries in question, thus raising the rate of exchange.

The adoption of all these and other less important measures failed to fulfil one of the aims pursued, to judge by the marked disequilibrium in the balance of payments. As has already been shown, the deficit was mainly due to the pressure of demand for foreign exchange to finance imports effected through the official market, which in 1955 amounted to 187 million dollars more than in 1954.

Not only was the exchange reform aimed at restricting purchases abroad; it was also designed to promote, up to a point, a specific import structure. Endeavours to exercise some sort of selective control over imports by means of a system of multiple exchange rates, and at the same time to maintain their total volume at a lower level, imply the basic assumption that price-elasticity of demand for imports is high, and that the various price-elasticities of the demand for each group of imported goods are adjusted to the relative positions of the different exchange rates to which they are subject. But in the case of Colombia, whose economy is in full process of accelerated development, the high income-elasticity of demand for certain import categories is apt to attenuate the possible price-elasticity. The income-elasticity coefficients of demand for non-durable and durable manufactured consumer goods³ are estimated to be about 1.7 and 1.8 respectively. Again, the demand for capital goods imports is closely related to the level of

² A large proportion of the commodities in the first group, which had the advantage of the official exchange rate and a stamp duty of only 10 per cent, were transferred in October to the second group, to which the free exchange rate and a 30-per-cent duty were applicable. In November, however, they were classified as a separate group, subject to a 10-per-cent duty and the free exchange rate.

³ Excluding foodstuffs, fuels, alcoholic beverages, tobacco and clothing.

income, saving and investment. The investment coefficient fluctuated around 19 per cent, so that it played a vital part in determining the high volume of imports of producer goods. At all events, in the specific case of rapidly-expanding economies, it does not seem that the structure of imports can be adapted with precision to the long-term requirements of economic development as the mechanical and automatic consequence of a selective régime based only on the various exchange rates applicable within a multiple system.

In 1955, the composition of imports was apparently quite well adjusted to the country's economic development needs, at least, as far as can be judged from available statistics. This is indicated by the increase in the relative importance of capital goods and raw materials, and the smaller proportion represented by consumer goods, in 1955 as compared with 1954. (See table 3.)

Table 3
COLOMBIA: IMPORT CATEGORIES
(Percentages)

	1953	1954 ^a	1955 ^a
Consumer goods	24.8	26.3	24.9
Raw materials	19.9	19.2	21.9
Fuels	5.8	5.3	4.2
Capital goods	49.5	48.2	49.7
TOTAL	100.0	100.0	100.0

Source: Economic Commission for Latin America, on the basis of official statistics.

^a Provisional.

The structure of imports in 1955 cannot, however, be attributed solely to the interplay of the modifications undergone by the different exchange rate categories. The rapid growth of Colombia's economy, and the high investment coefficient registered in 1954, must have constituted a powerful expansionist force, the impact of which continued to be felt in 1955 and helped to account for the heavy capital goods imports. Again, the greater degree of protection afforded by the exchange reform to the production of consumer goods, which have to compete with imports on the domestic market, must have provided a strong incentive to more energetic import replacement, especially in view of the high income-elasticity of demand to which allusion has already been made. This process called for increased imports of raw materials and capital goods, especially the former.

4. THE RATE OF DEVELOPMENT AND ITS PRESSURE ON THE BALANCE OF PAYMENTS

One of the factors determining the inefficacy of the exchange measures adopted in 1955 to correct the balance-of-payments disequilibrium was the rapid rate of economic development achieved by Colombia in recent years. The resultant structural changes in the economy seem to have increased the pressure of domestic demand on imports and, consequently, on the balance of payments. However, as this accelerated economic growth was also accompanied by a considerable rise in the purchasing power of exports, in consequence of a favourable trend in the terms of trade, such pressure remained more or less unnoticeable during the period under review. It should

be taken into account that, given 1950 as a base year, the purchasing power in question increased from 53 in 1940-44 to 73 in 1945-49, and attained 154 and 170 in 1953 and 1954 respectively. Hence it was possible to import more and more capital goods, until an investment coefficient fluctuating around 19 per cent was reached without detriment to the balance-of-payments situation. Only in years like 1949 and 1955, when external purchasing power appreciably declined, did this pressure on the current account become clearly apparent. If the radical changes in Colombia's economy are considered, it is easy to understand the nature of this factor of disequilibrium, constituted by differing trends in the internal economy and the purchasing power of exports.

During 1945-53, there was a considerable increment in the *per capita* gross product, of which the annual average rate of growth was 4 per cent. An even higher increase of 6 per cent annually was to be observed in the gross income, this time in virtue of the satisfactory course followed by the terms of trade. Simultaneously, important modifications in the country's economic structure took place.

Occupational shifts from one sector of production to another were all in the direction of increased employment in industry, energy, transport and services, while the agricultural labour force declined. The effect of this decrease was extended to exports, which are included in table 4 under "Agriculture". A breakdown of the stock of capital by sectors reveals that the percentage gains of industry and the losses of agriculture were even more pronounced. (See table 4.) Such changes in the composition of capital stock were due to the rechannelling of investment towards the high productivity sectors. This process gave rise to two circumstances which proved to be of great significance for Colombia's economy, and which were reflected in a rapid increase of the *per capita* gross product.

The first was a striking modification in the structure of production by economic activities. The gross product from agriculture—including export commodities—accounted for a smaller share of the total in 1953 than in 1945, the contrast with previous periods, for example 1925, being greater still. On the other hand, the proportion represented by the production of manufacturing industries and the remaining economic activities increased considerably. The second important development was the rise in the product/capital ratio, which was 0.32 in 1945 and 0.37 in 1953 for the economy as a whole. During this period, the greatest increase in productivity—from 0.53 to 0.58—was registered in industry, the figures for agriculture rising only from 0.40 to 0.42.

These radical and far-reaching changes in Colombia's economy had two extremely important consequences: (a) the external sector was replaced as a dynamic factor by the economy's own internal forces, and (b) the structure of domestic demand and the income-elasticity of demand for each type of product were modified.

When exports accounted for more than 30 per cent of the gross product (in 1937), the expansionist factor in the internal economy was the external sector. But the share of exports is now only 18 per cent, on account of the greater relative growth of production for home consumption, and fluctuations in external conditions have ceased of late to exert much influence. In other words, it is nowadays easier for the short-term effects on domestic activity produced by a fall in exports to be neutralized by the motive forces within the Colombian economy itself. Thus, when the value of exports declined, as it did in 1955, the expansionist elements in the internal economy continued to operate as dynamic factors, and will probably maintain demand and, therefore, bring to light the latent pressure on the balance of payments. Whether the capacity to import affects economic development over the long term will depend upon how far import replacement can be continued, so as to permit heavy capital goods imports. But within the short space of one year, its more immediate consequence was an imbalance in the country's foreign current accounts. This came about the more readily because the process of development in Colombia led, through the growth of income and the change in the composition of employment, with the consequent rise in urban population, to a modification in the structure of demand. Income-elasticity coefficients of demand show that every time income rises there is a tendency for imports to exceed purchases of domestically-produced goods. Thus, for foodstuffs as a whole, the elasticity coefficient varied between 0.5 and 0.6, though in the case of processed foodstuffs it reached the high figure of 0.9, and, in that of cereals and pulses, the very low levels of 0.2 and 0.3. For durable and non-durable consumer goods the elasticity coefficients were about 1.8 and 1.7 respectively. If these coefficients are compared with those for imported commodities, especially durable consumer goods, the conclusion is reached that the maintenance of activity and domestic consumption, despite the unfavourable evolution of the export trade, tends to keep the demand for imports higher than is justified by the limited capacity to import. Furthermore, such high income-elasticity coefficients of demand imply that consumer commodities, especially durable goods, compete actively with capital goods and raw materials for a larger share of the capacity to import. At times like this it is easier to see the need for establishing or con-

Table 4

COLOMBIA: GROSS PRODUCT, ACTIVE POPULATION AND CAPITAL STOCK BY SECTORS OF PRODUCTION

(Percentages)

Sectors	Gross product			Active population		Capital stock	
	1925	1945	1953	1945	1953	1945	1953
Agriculture	52.7	45.3	35.6	60.5	54.3	36.4	31.5
Industry	7.1	12.6	16.4	5.2	6.4	9.4	15.2
Others	40.2	42.1	48.0	34.3	39.3	54.2	53.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Economic Commission for Latin America, *The economic development of Colombia*, document E/CN.12/365.

solidating a system of selection whereby the structure of imports may be suitably adjusted to the requirements of economic development, including the maintenance of a high investment coefficient. It has already been shown that in this direction the measures adopted in 1955 were to some extent successful. At the same time, Colombia's need to intensify the already considerable replacement of imported consumer goods by those of domestic manufacture, to make room for capital goods, becomes even more pressing.

5. THE 1955 COMPENSATORY POLICY AND THE MAINTENANCE OF IMPORTS

In view of the events of 1955, the Colombian Government adopted a policy aimed at maintaining coffee purchases from growers and neutralizing, by means of credit and public expenditure, the deflationary effects of the disequilibrium in the balance of payments. This policy was inaugurated in February, with the adoption of a twofold measure. When world prices for coffee were at their lowest level—54 cents per pound for Manizales No. 4—the authorities imposed a minimum internal price higher than the world quotation. At the same time, they raised the coffee dollar differential exchange rate from 2.38 to 2.50. The Federación Nacional de Cafeteros made heavier purchases on the domestic market—especially in the first half of 1955, when there was a severe contraction in exports—drawing upon the Fondo Nacional del Café, which it administers, and on credit from the Banco de la República. All this helped to maintain the purchasing power of coffee growers, while at the same time it prevented a reduction of the money supply by counteracting the deflationary effects of the contraction of foreign sales. In this last connexion, increased credit was also granted by private banks, which resorted to considerable rediscounts in 1955. Between January and November, such rediscounts rose by 154 million pesos.

In the period December 1954—June 1955 the balance-of-payments situation led to a decrease of 221.8 million pesos in the money supply, which was largely offset by expanding commercial bank credit to the amount of 164.2 millions. By September the deficit in the balance of payments had brought about a reduction of 227.5 million pesos, in addition to that of 84.9 millions for which the Banco de la República was responsible. The net result, however, was a decrease in the money supply of only 37.6 millions, since the private banking system granted up to that date a credit expansion of 274.8 millions.

The contraction in the money supply brought about by the Banco de la República had its origin in the liquidation of the debt contracted by the Federación Nacional de Cafeteros during the first half of the year. With the proceeds of its sales abroad, which rose sharply from June onward, the Federación paid off this debt, and the portfolio of the issuing bank was thus reduced from 270 million pesos in August to only 60 millions in November. As the dollars accruing from the exports in question were used to pay off foreign arrears, every sale of coffee meant a further decrease in the money supply. To offset this tendency, the Government increased its own expenditure and public investment in the last quarter of the year. In this connexion, a reduction of 37 per cent in official deposits in the Banco de la República was observable between October and December.

According to estimates, the net result of these movements was the maintenance both of the money supply and of domestic demand, the level of employment and prices. These last showed an apparent trend toward stabilization during 1955, but, as a matter of fact, there was a fairly wide difference between prices of foodstuffs, which declined, especially in the case of meat, and those of manufactured goods, which increased. These disparities in price movements cancelled one another out, and so brought about a relative stabilization of the general price level.

Thus the Government's compensatory policy appears to have been successful in maintaining the over-all level of internal economic activity. But, from another point of view, it led to a continued pressure of demand on the balance of payments, at a time when the country's capacity for external payments had decreased by 20 per cent.

The events of 1955 raise a question by obvious practical interest for Colombia's future, that is, if the deterioration in the capacity to import persists. Furthermore, economic development depends upon a high rate of capital formation, and 40 per cent of the capital goods required must be imported. Again, economic policy and the effects of the development described, together with the growth of income and the structural changes in employment and demand, have forced certain consumer goods to compete with capital goods for a larger relative share in the capacity to import. The selective limitation of imports through a system of multiple exchange rates does not seem capable, in itself alone, of producing the far-reaching results which would be desirable in this connexion in view of the magnitude and importance of the problem.

THE MEAT PROBLEM IN LATIN AMERICA

One of the most noticeable features of the evolution of agriculture in Latin America is the relative stagnation of livestock production in recent years. Although there were encouraging signs of recovery in Argentina during 1955, stock-breeding throughout most of the region has undoubtedly been passing through a crisis of no small dimensions.

¹ *The selective expansion of agricultural production in Latin America and its relation to economic development* (document E/CN.12/378/Rev.1), presented jointly by FAO and ECLA to the Commission's sixth session at Bogotá.

The point was made in a previous study¹ that Latin American meat production during the post-war years has undergone an obvious decline, which is especially noticeable if it is compared with demographic growth and the increase in private income. This situation, which contrasts with conditions prevailing in other regions, acquires special significance for the following reasons: (a) meat figures largely in the exports of certain countries; (b) the part that this commodity plays—or should play—in the diet of the Latin American peoples is a vital one; and (c) stock-

breeding occupies an important place in the agricultural and economic development of Latin America.

Because livestock production is of such importance and because there has been a marked deterioration in its relative position, any analysis of the situation should delve deep into the causes underlying the relative stagnation of Latin American stock-breeding. Although an unequivocal reply to the many questions involved can be obtained only after the problem has been subjected to thorough investigation, the intention of the present article² is to summarize its main features, in order to provide some idea of the lines along which such research should be undertaken.³

The importance of stock-breeding within total agricultural production varies considerably from one country to another. For example, in Mexico this activity accounts for only 11 to 15 per cent of the gross product of the agricultural sector, while in Uruguay its share is more than 65 per cent, and in Argentina and Chile, about 40 per cent. In Brazil, Cuba and Colombia, on the other hand, stock-breeding contributes approximately 20 per cent of the agricultural gross product. From the point of view of foreign trade, in the pre-war period stock-breeding brought in about 16.5 per cent of the total foreign exchange accruing from Latin American exports. During 1952-53, however, this percentage fell to 9.4, for reasons which will be seen later. Nevertheless, if only the main exporters, like Argentina and Uruguay, are considered, it will be seen that the proportion of total exports represented by livestock products is much larger. Thus, in the case of Argentina it reached 47 per cent in 1954, while in that of Uruguay it was 88 per cent in 1953.

CONSUMPTION

With the exception of Argentina, Uruguay and Paraguay, *per capita* meat consumption in Latin America is generally low. Despite the fact that the deficit countries have increased their imports, and that certain traditional exporters have become importers, the supply of meat for domestic consumption has not kept pace with the growth of population, and even less with the increase in income. Thus, notwithstanding the greater purchasing power, *per capita* consumption has fallen. What has brought about this situation? The underlying cause is certainly not a negative income-elasticity coefficient of demand. On the other hand, relative prices are undoubtedly playing a major role. In chart I it can be seen that in certain countries retail prices for meat have risen at a faster rate than the over-all index of the cost of living. In other words, meat has become relatively dearer, and consumption has therefore been curtailed.

The policy of subsidizing consumption by means of fixing retail prices at an artificially low level has had serious repercussions in Argentina and other countries. In Argentina, where *per capita* consumption is among the

² This paper will tackle only those problems connected with the production, marketing and consumption of meat, since limitations of space preclude a full coverage of livestock production. Up to a certain point, however, the meat situation reflects conditions in the livestock sector as a whole.

³ In this connexion, it should be mentioned that, during its sixth session, held at Bogotá, the Economic Commission for Latin America instructed the secretariat to carry out a comprehensive survey, in collaboration with FAO, of the problems affecting the region's livestock development, such a study to be given high priority in the work programme of these two organizations. Preparations have just begun.

highest in the world, the demand for meat, especially beef, has been stimulated at serious risk to export availabilities, as will be seen in a later section of this report. As chart II shows, Argentine beef consumption, which amounted to an annual 70 kilogrammes *per capita* just after the war, began to rise, until in 1949-51 it reached an average of 93 kilogrammes, owing to the fact that during this period the real prices for meat declined appreciably.⁴ In the last four years *per capita* meat consumption has fallen to 84 kilogrammes. The decline began in 1952, when prices rose and the Argentine Government applied restrictions to the sale of the product.

Although the trends to be observed in *per capita* meat consumption may be attributed to the evolution of relative prices, the absolute level of such consumption is closely linked to average purchasing power in the different Latin American countries (see chart III), although for an exact assessment of this relationship, the influence of relative prices would have to be eliminated.

Figures for income and meat consumption in 1950 from many countries in different regions of the world show that where annual *per capita* income is lower than 300 dollars, yearly meat consumption is less than 30 kilogrammes per head. Such is the case in the majority of Latin American countries.

This limitation of purchasing power, a condition which prevails throughout most of the region, is the only explanation of the phenomenon occurring in certain countries, like several of the Central American republics, namely, that, side by side with an extraordinarily low level of *per capita* consumption, exportable surpluses of cattle are produced which find no place on the domestic market.

Undoubtedly a complete picture of meat consumption in Latin America cannot be constructed solely on the basis of the economic factors described so far. A role of paramount importance is played by the dietary patterns of the region which, in turn, are governed by extra-economic elements. In many areas, particularly the tropical countries, the climate appears to exert a great influence on nutritional habits, which, in this instance, display a marked preference for vegetable proteins. It is clear that economic factors must be considered anew, since, in the final instance, perhaps it is the relative price structure which determines consumer preferences. At all events, a thorough examination must inevitably be made of the influence that both economic and non-economic factors exert on the dietary patterns of the Latin American peoples.

The high price of meat in Latin America has been largely governed by deficiencies in the production process, to which detailed reference will be made at a later stage. These shortcomings have certainly been responsible for raising the costs of meat production, due recognition being given to the fact that inflation, which is wide-spread in the region, tends to distort the relative price structure.

The expensiveness of meat may also be attributed to the faulty distribution mechanism. The majority of Latin American countries are clearly backward in the matter of transport; in addition, the methods of marketing and processing livestock products are primitive. Thus, alongside the increase in the costs of distribution due to the

⁴ The redistribution of income in Argentina, which has noticeably benefited the lower-income groups, is another of the factors stimulating increased meat consumption.

Chart I
GENERAL PRICE INDICES OF MEAT AND FOODSTUFFS IN SELECTED COUNTRIES
(1948=100)
 (Natural scale)

— MEAT
 - - - FOODSTUFFS

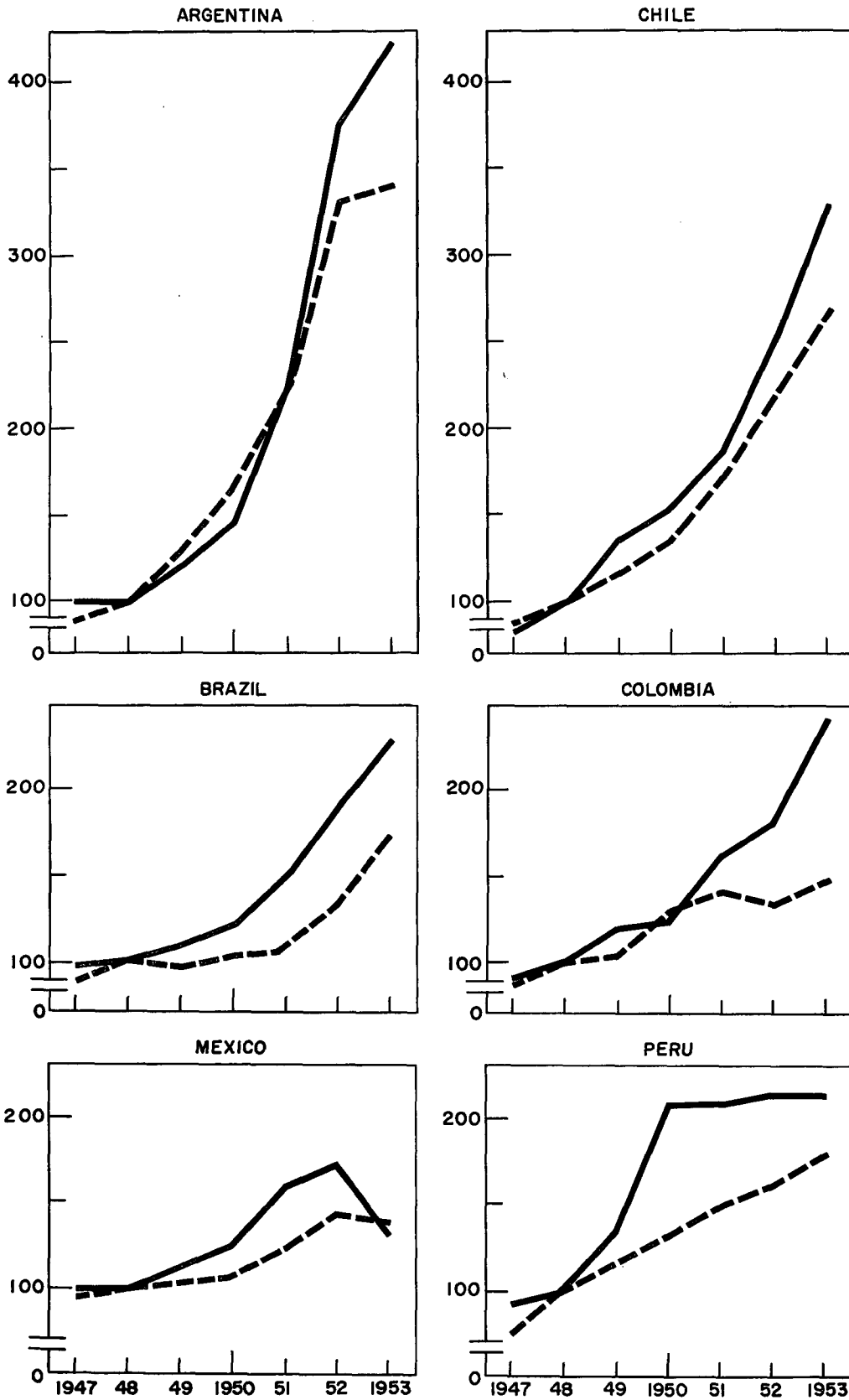
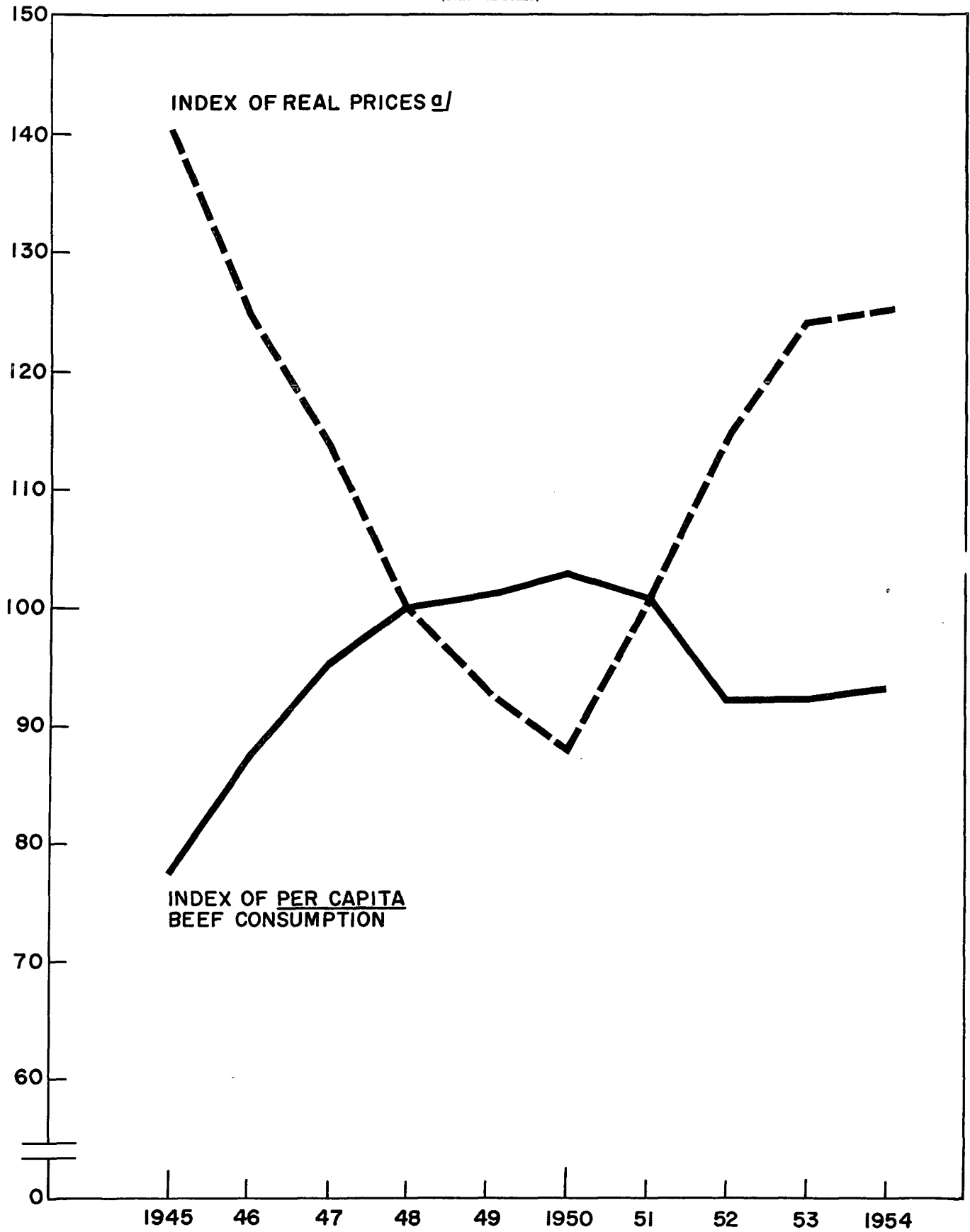


Chart II
ARGENTINA: INDICES OF *PER CAPITA* BEEF CONSUMPTION, INDICES OF REAL RETAIL
PRICES OF MEAT AND FOODSTUFFS IN GENERAL
(1948=100)
 (Natural scale)



^a Index of current prices divided by over-all foodstuffs price index.

Chart III

PER CAPITA INCOME AND MEAT CONSUMPTION IN SELECTED COUNTRIES, 1950

(Logarithmic scale)

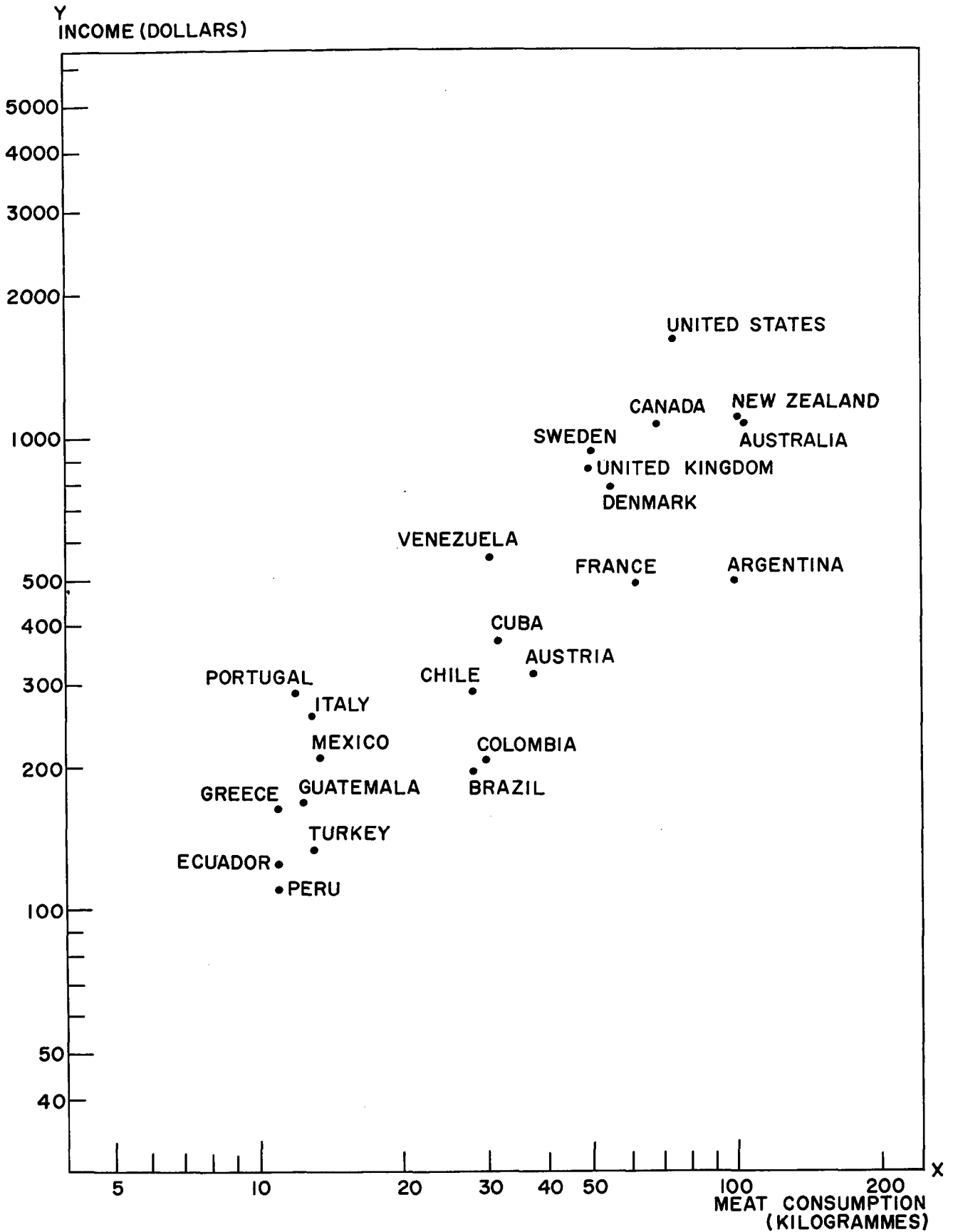


Table 1
LATIN AMERICA: PER CAPITA MEAT CONSUMPTION
(Kilogrammes per annum)

Country	Average 1952-53	Country	Average 1952-53
Uruguay.....	129.2	Panama.....	19.9
Argentina.....	97.0	Mexico.....	16.8
Paraguay.....	58.0	El Salvador.....	15.9
Cuba.....	32.2	Guatemala.....	14.3
Costa Rica.....	32.2	Peru.....	12.5
Colombia.....	29.7	Honduras.....	10.0
Venezuela.....	28.4	Ecuador.....	9.8
Brazil.....	27.6	Dominican Republic.....	8.0
Chile.....	26.7	Haiti.....	5.9
Nicaragua.....	20.9		

Source: Food and Agriculture Organization.

high percentage of loss sustained during the process, a complicated system of intermediaries has grown up, which, apart from being inefficient, also prevents producers from reaping the benefit of a relative rise in prices. In Argentina, for example, where the organization of the meat trade is at its best, in 1953 the producer received only 49 centavos for each peso spent on meat purchases, whereas in 1943 his share had reached 64 centavos.⁵ This situation can be contrasted with conditions prevailing in other countries, like Australia, Canada, the United States and South Africa, where between 62 and 70 per cent of the final price paid by the consumer falls to the producer.⁶

This statement can be verified by reference to chart IV, where a comparison is made between fluctuations in retail prices for meat and for cattle on the hoof in various Latin American countries. It can be seen that the margins of distribution in the countries selected have risen progressively. This contrasts with the situation in the United States, where marketing technique is at an advanced stage. In the latter country, the fluctuations in cattle prices have far less impact on retail meat prices, which, generally speaking, have been subject to much slighter fluctuations, so that the consumer market has acquired greater stability.

Although meat and other livestock marketing in Latin America has not yet been thoroughly studied,⁷ there is much *a priori* evidence upon which to base a preliminary outline of the present situation.

In many countries auction markets for livestock do not exist. The animals go through various stages of fattening prior to slaughtering—a process which generally entails their travelling over long distances with the consequent loss of weight and deterioration of quality. In by far the greater number of cases they are slaughtered in small establishments where neither the equipment nor the buildings themselves are satisfactory, apart from the appallingly insanitary conditions which prevail. With the exception of Argentina and Uruguay, the Latin American countries have very few modern cold-storage plants and these, for the

⁵ *Sociedad Rural Argentina*, Annual report 1954.

⁶ "Marketing Margins for Foodstuffs", *FAO Monthly Bulletin*, November 1954. Estimates for other Latin American countries show that the producers' share barely reaches 25 or 30 per cent of the prices paid by consumers.

⁷ In the study on livestock production to be undertaken jointly by ECLA and FAO (see note 3), high priority has been accorded to the question of the marketing of animal products.

most part, are inconveniently situated in areas remote from the centres of production. As a result, yields are very low, many valuable by-products are wasted, and, as a general rule, the quality of meat and hides is poorer than might be expected. In consequence, the cost of meat rises, and the resulting burden, in the final instance, falls on the consumer. In this connexion, it should be mentioned that in Argentina most of the cold-storage plant profits accrue from the processing of by-products and not from the sale of the meat itself.

Lack of transport facilities and poor communications hamper the incorporation of good potential pastures or the development of grazing lands at present inadequately exploited. In certain areas it is impossible to guarantee consumer centres regular supplies, either because the roads are impassable for mechanized transport, in which case the cattle must be driven on the hoof and lose much weight as a result, or because the railways—if indeed they exist—lack the necessary rolling stock.

PRODUCTION

In recent years, the production of meat in Latin America, which reached 6 million tons in 1949-51, has remained stationary at 5.8-5.9 millions, a figure which is barely 19 per cent above the pre-war level. Meanwhile the population of the region has grown by more than 40 per cent, and thus serious supply problems have arisen, particularly in the foreign trade sector.

This low rate of expansion of meat production is in marked contrast with the situation obtaining in other areas, since world output—including that of Latin America—increased by 34 per cent between the pre-war years and 1954. Moreover, the region's crop and livestock production followed very dissimilar trends. This is evidenced by the indices of total agricultural production, which rose by more than 30 per cent between 1952 and 1954, as compared with the 19 per cent mentioned above in the case of livestock production. (See table 2.)

Table 2
LATIN AMERICA: INDICES OF MEAT PRODUCTION,
TOTAL AGRICULTURAL OUTPUT, POPULATION,
AND WORLD MEAT PRODUCTION
(1934-38=100)

	Total meat production	Total agricultural production	Population	World meat production
1949-51.....	121	120	133.6 ^a	116 ^b
1952.....	118	131	139.9	121
1953.....	119	132	143.5	129
1954.....	120	135	146.9	134

Sources: Economic Commission for Latin America and Food and Agriculture Organization.

^a 1950.

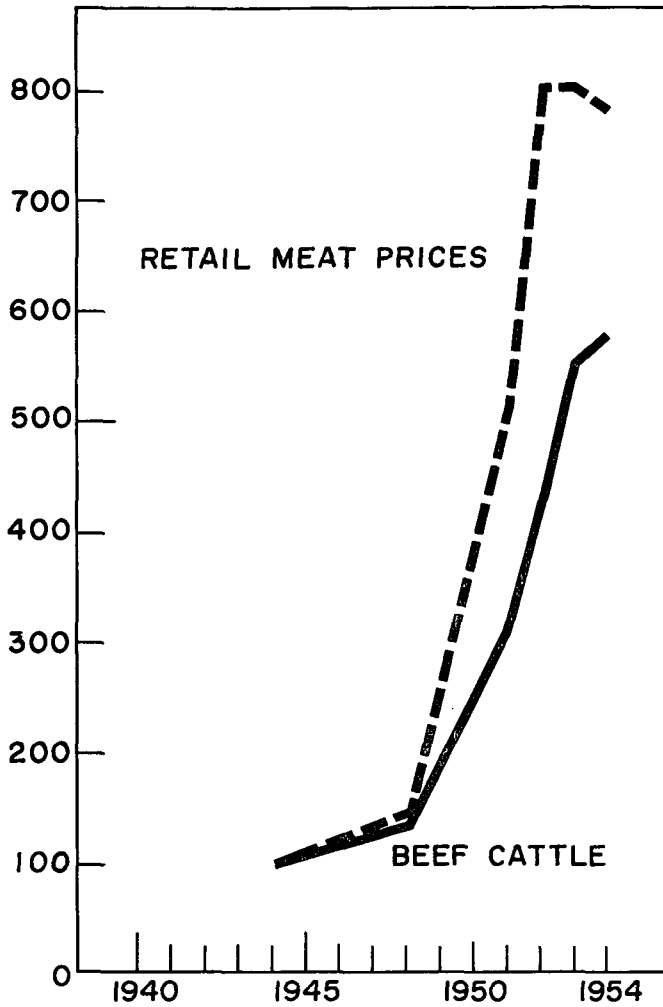
^b 1950-51.

Table 3 illustrates the marked disequilibrium which also exists between the growth of animal stocks and that of meat production, since in 1954 the former were 33 to 44 per cent higher than the pre-war level, while the latter expanded by only 19 per cent.

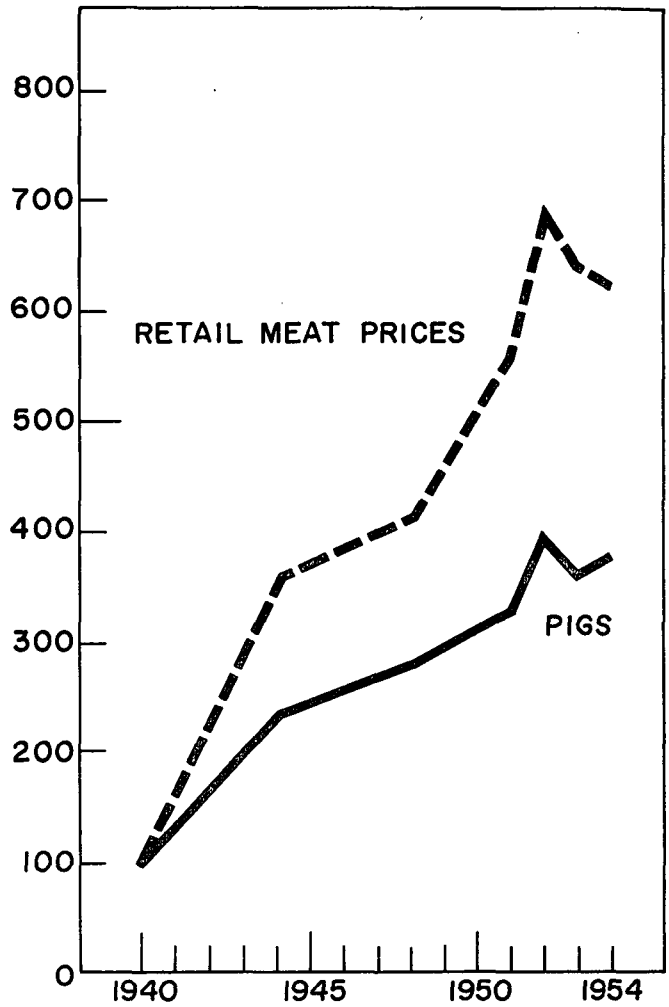
Production of the various kinds of meat has not developed homogeneously. The output of beef, which ac-

Chart IV
INDICES OF RETAIL PRICES OF LIVESTOCK AND MEAT IN SELECTED COUNTRIES
 (Natural scale)

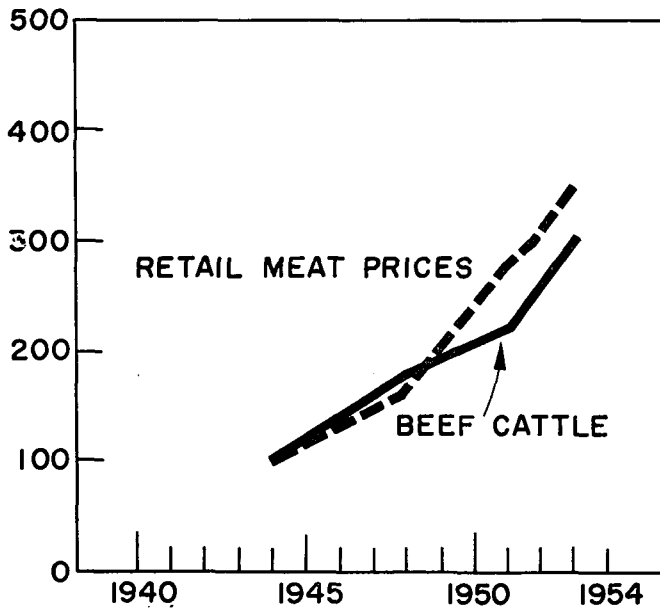
ARGENTINA



MEXICO



COLOMBIA



UNITED STATES

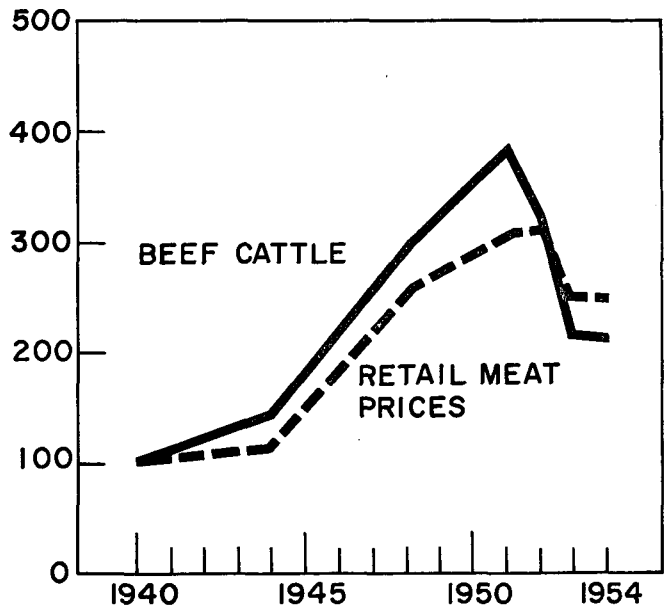


Table 3
LATIN AMERICA: INDICES OF ANIMAL STOCKS AND MEAT PRODUCTION,
BY SPECIES
(1934-38=100)

	<i>Animal stocks</i>			<i>Meat production</i>		
	<i>Beef cattle</i>	<i>Pigs</i>	<i>Sheep</i>	<i>Beef</i>	<i>Mutton</i>	<i>Pork</i>
1949-51.....	127 ^a	118 ^a	123 ^a	120	105	129
1952.....	130	128	127	114	111	135
1953.....	133	141	130	115	116	137
1954.....	134	144	133	116	116	142

Sources: Economic Commission for Latin America and Food and Agriculture Organization.
^a 1950.

counted for some 75 per cent of the total, exceeded the pre-war level by about 20 per cent in 1949-51, but dropped sharply in 1952. Although a recovery was later apparent, the 1949-51 level had not been regained by 1954. It is estimated that in 1955 the previous average has probably been surpassed, thanks to the remarkable expansion in Argentina. Mutton production has grown slowly but steadily, while that of pork has expanded more rapidly, until in 1954 it was 42 per cent higher than in the pre-war period.

An analysis of Latin American meat production reveals that as three countries of the region—Argentina, Brazil and Uruguay—together account for about 70 per cent of Latin America's total output, they have exerted a decisive influence on the over-all indices. Table 4 shows that the production of these three countries has grown at a much slower rate than that recorded for the rest of Latin America. (See table 4.)

Apart from technical problems, some of which will be described later, one of the most important factors that impaired Argentina's livestock development was the prolonged drought which ravaged the country during 1948-51. In this period, the rate of slaughter rose to an extraordinary degree, large numbers of cattle and other animals being killed, to the evident detriment of stocks. This had

a serious effect on slaughtering in subsequent years, and by 1953 the lowest level for the whole decade was reached. Only in 1955, when the renewal of stocks was approaching completion, did a fresh increase in slaughtering become apparent.

The present crisis in Uruguayan meat production is mainly attributable to competition for the country's limited natural resources, not only between stock-breeding and crops, but also, within the livestock sector itself, between sheep and cattle.

In connexion with the first aspect of this competition, it should be pointed out that the area sown to wheat has increased remarkably in the last two years, from 500,000 hectares to 750,000. This expansion was achieved partly at the cost of pastureland, with the result that the resources available for grazing were reduced. As regards the second aspect, the boom in world wool prices meant that sheep increasingly supplanted cattle. While stocks of the former rose from 18 millions in the pre-war period to more than 26 millions in 1954, cattle herds decreased from 8.3 to 7.8 million head. Since, in the case of sheep, the ratio of slaughter to stocks did not rise, owing to the fact that Uruguayan demand showed a preference for beef, production came to a relative standstill. (See again table 4.)

Table 4
LATIN AMERICA: TOTAL MEAT PRODUCTION, BY COUNTRIES
(Thousands of tons)

	<i>1934-38</i>		<i>1949-51</i>		<i>1952</i>		<i>1953</i>		<i>1954</i>	
	<i>(A)</i>	<i>(B)</i>	<i>(A)</i>	<i>(B)</i>	<i>(A)</i>	<i>(B)</i>	<i>(A)</i>	<i>(B)</i>	<i>(A)</i>	<i>(B)</i>
<i>Latin America</i>	4,916	100	5,990	100	5,834	100	5,890	100	5,917	100
Argentina.....	1,929	39	2,310	38	2,117	36	2,113	36	2,117	36
Brazil.....	1,325	27	1,494	25	1,494	26	1,555	27	1,575	26
Uruguay.....	344	7	380	6	382	7	409	7	378	6
Mexico.....	353	7	478	8	524	9	497	8	529	9
Other countries.....	965	20	1,328	23	1,317	22	1,316	22	1,318	23
INDICES										
<i>Latin America</i>	100		121		118		119		120	
Argentina.....	100		120		109		109		109	
Brazil.....	100		113		113		117		119	
Uruguay.....	100		110		110		119		110	
Mexico.....	100		135		148		141		150	
Other countries.....	100		138		136		136		136	

Sources: Economic Commission for Latin America and Food and Agriculture Organization. Figures for Argentina were supplied by the Instituto Nacional de Carnes.

Note: (A) = Volume
 (B) = Percentage.

In Brazil where production has expanded by only 19 per cent in almost twenty years, a similar phenomenon has been observed. Sheep stocks increased substantially, while the rate of slaughter rose more slowly and the situation was further aggravated by the marked decline in the average yield per animal.

Conversely, Mexico was able to achieve great progress in the production of meat—particularly pork—and by 1954 output was about 50 per cent above that of the pre-war period. The remaining countries, taken as a whole, registered a fairly substantial increment, although the expansion did not keep pace with demographic growth.

The reasons why meat production has progressed so slowly vary from one country to another, but generally speaking the principal cause is the low level of productivity in the livestock industry. The large areas covered by the majority of Latin American cattle farms; the lack of modern techniques for livestock management; the low level of investment in this activity; shortcomings in the marketing and transport of livestock products; and, finally, the absence of a consistent development policy, have all conspired to bring about this result.

Table 5
AVERAGE MEAT YIELD PER ANIMAL^a IN SELECTED AREAS, 1953
(Kilogrammes)

	United States and Canada	Europe	Latin America
Beef.....	66.6	48.3	25.9
Pork.....	87.1	69.0	18.1
Mutton.....	10.4	6.7	3.5

Source: Food and Agriculture Organization.

^a Calculated by dividing meat production by stocks.

Table 5, which compares the meat yield per animal in the United States, Canada, Europe and Latin America, offers proof of the technological backwardness of livestock farming in the region. Even on the assumption of a large margin of error, the differences are so great that any modification of the basic data would not invalidate the conclusions to be drawn from the table. The figures show that, in 1953, the average meat yield per head of cattle in Latin America, the statistics for which are, moreover, the most reliable, was barely 40 per cent of that obtained in North America and little more than 50 per cent of the European figure. The differences are still more marked in the case of mutton and pork production. It should, however, be stressed that the relevant estimates may be somewhat conservative, owing to the large proportion of animals slaughtered *in situ*, a percentage which is not registered in the statistics of many countries.

If the previous comparison is indicative of the average level of productivity in Latin America, table 6 provides still clearer evidence of the prevailing situation, by showing the productivity of individual countries. The figures refer only to beef, since it plays such an important role in total output, and production statistics are more reliable than for the other types of meat. The table shows the enormous discrepancy between the productivity of some countries, like Argentina, Uruguay and Chile, where the yields are almost at the European level, and that of others, for

example, Honduras, Venezuela and Nicaragua, where they are frankly negligible, as is probably also the case in those countries which are not listed in the table because the relevant data is incomplete.

Table 6
LATIN AMERICA: AVERAGE BEEF YIELDS PER HEAD OF CATTLE IN SELECTED COUNTRIES, 1952
(Kilogrammes)

Country	Production	Country	Production
Argentina.....	43.1	Brazil.....	20.0
Chile.....	42.7	Ecuador.....	19.2
Uruguay.....	37.0	Paraguay.....	16.9
Cuba.....	28.2	El Salvador.....	16.8
Mexico.....	25.3	Costa Rica.....	14.4
Colombia ^a	22.8	Venezuela.....	13.7
Guatemala.....	20.4	Honduras.....	12.9
Peru.....	20.0	Nicaragua.....	9.1

Source: Food and Agriculture Organization.

^a The figure for Colombia was taken from the relevant ECLA study (document E/CN.12/365).

The figures in table 6 are a direct consequence of the low rate of slaughter prevailing in the majority of Latin American countries. As is shown in table 7, the rate of cattle slaughter in many countries of the region is below 15 per cent of stocks. This implies that the average age at slaughter is seven years or more. Such is clearly the case in Brazil, for example. Here, as has been pointed out before, stocks have expanded sharply while production has remained at virtually the same level. The result of this development has been a gradual increase in the average age at slaughter, which is now about nine years. Apart from the deterioration in the quality of the meat, the fact that slaughter is so long delayed indicates an extremely unsatisfactory utilization of available resources, since the same grazing land could carry a greater number of animals during the same period. It is clear that this situation is largely attributable to the quality of the pasture. In most countries, the animals graze on natural grasslands of a very low nutritive value, so that a longer time must elapse before they are fat enough for slaughter. Moreover, the lack of *abattoirs* and processing plants in the appropriate places prevents the slaughter of animals at the right age, not to mention that weight is lost during transport on the hoof from one pasture ground to another and thence to the slaughterhouse.

Table 7
LATIN AMERICA: AVERAGE RATE OF CATTLE SLAUGHTER IN SELECTED COUNTRIES
(As a percentage of stocks)

Country	Year	Percentage rate
Argentina.....	1952	23.0
Chile.....	1951	21.0
Uruguay.....	1951	16.0
Guatemala.....	1952	15.0
Honduras.....	1952	13.0
El Salvador.....	1952	12.2
Mexico.....	1951	11.9
Colombia.....	1953	11.1
Brazil.....	1952	10.7
Costa Rica.....	1952	10.7
Nicaragua.....	1952	9.3

Sources: Economic Commission for Latin America and Food and Agriculture Organization.

The problem of feeding constitutes one of the most serious obstacles to Latin American livestock development. The failure to apply methods of forage preservation, and the almost complete disregard of food concentrates as supplements to diet, have resulted in many deaths and much loss of weight in times of drought, or—in the case of the southern countries—during rigorous winters. In Central America, for instance, it is estimated that 50 per cent of the fodder is wasted through lack of storage facilities. During the rainy season, grass and fodder crops grow rapidly and soon outstrip the animals' consumption capacity; if the surplus is not harvested and stored in haystacks or silos most of it is lost, since it has very little nutritive value if left standing too long. Not only is there the problem of quantity during certain seasons of the year, but the majority of countries have to face difficulties with regard to the quality of the forage. Artificial pastures form only a very small part of the total grazing area, yet it is well known that they are a decisive factor in speeding up fattening so that animals are ready for slaughter at an earlier age and yield more meat. In this connexion, it should be stressed that practically no experiments on forage have been carried out in Latin America, and that the desire of farmers to improve their grazing-lands is often frustrated by a total lack of knowledge of the most suitable types of fodder crops.

The size of the meadows, and the water supply, are also important factors in determining herd yields. In Latin America, the grazing-lands are usually too extensive, and since water is generally to be found at some distance from the pasture, the animals are obliged to walk long stretches before they find it, losing much weight in the process.

The health standard of the herds is poor as a rule, high morbidity and mortality rates being registered. The various diseases attacking the stock, whether epidemic or endemic, help to bring about the decline in herd yields, by causing a high death rate in young animals and a loss of weight in adult specimens. Although it is true that Governments have recently been trying to raise the standard of health, it appears that, save for isolated cases, the progress achieved has been negligible.

The quality of the breeds, which are mainly indigenous, with great powers of resistance and adaptation to the environment, but low-yielding and slow to mature, is another important determinant of the low productivity. Except in Argentina, Uruguay, Chile and perhaps one or two other countries, where livestock farming, despite the vast

extent of the grazing-lands and the existence of many of the other problems discussed in this article, has achieved the status of an organized industry, the absence of any choice of breeds is also largely responsible for the unsatisfactory situation described.

A careful enumeration and analysis of all the technical factors in each country which have helped to reduce productivity to such a low level falls outside the scope of this study. However, the broad indications already given suffice to illustrate the magnitude of the task which lies ahead, if standards of livestock production are to be improved. An immense burden of responsibility thus falls on national authorities and individual farmers alike, and only if the nature of the task is properly understood can success crown the endeavours to improve livestock production in which all the Latin American countries are engaged.

In addition to strictly technical factors, many other elements have, to some extent, slowed up the expansion of livestock production. Since there is no room here for a detailed analysis covering the whole region, attention will be concentrated on the price policies of certain countries, on the inflation from which many economies are suffering and, generally speaking, on the failure of individual countries to adopt consistent and well-balanced development programmes.

FOREIGN TRADE IN MEAT

In recent years, the world trade in meat has reached the highest level ever recorded, despite the increasing self-sufficiency of importing countries. Latin America is the sole exception to this trend, since its meat exports have declined steadily, until in 1952-54 their volume was less than half that registered before the war. Thus, Latin America's share in total world exports dropped from 41 per cent in the pre-war years to 17 per cent in 1954. (See table 8.)

This sharp decline in Latin American exports is basically a reflection of developments in Argentina, the region's main exporting country. Of the 480,000 tons' decrease in the region's total, 368,000 corresponded to the reduction in Argentine exports. Other important elements which helped to form this pattern were the withdrawal of Brazil from the meat export market and the drastic contraction of Uruguayan sales abroad. While 1955 witnessed a vigorous recovery of Argentina's exports, this development

Table 8
WORLD MEAT EXPORTS^a COMPARED WITH THOSE OF LATIN AMERICA
(Thousands of tons)

	World (A)	Latin America (B)	World total excluding Latin America (C)	Percentage of (B) to (A)	
Average 1934-48.....	2,160	890	1,270	41	70
Average 1949-51.....	2,050	625	1,425	30	44
1952.....	2,020	441	1,579	22	28
1953.....	2,240	389	1,851	17	21
1954.....	2,390	410 ^b	1,980	17	21

Sources: Economic Commission for Latin America and Food and Agriculture Organization.

^a Rounded figures, excluding exports of animals on the hoof.

^b Estimate.

Table 9
LATIN AMERICA: MEAT EXPORTS, BY COUNTRIES
(Thousands of tons)

	Average 1934-38	Average 1949-51	1952	1953	1954 ^a
<i>Meat</i> ^b					
Argentina.....	674 ^c	445	327	295	306
Uruguay.....	130	98	70	71	85
Brazil.....	72	25	5	5	0
Mexico.....	—	40	34	12	13
Other countries.....	14	15	3	5	..
TOTAL	890	625	441	389	410 ^d
<i>Livestock</i> ^e					
Argentina.....	19.0	30.0	24.0	15.0	9.0 ^d
Mexico.....	40.0	—	25.0	27.0	0.9
Honduras.....	2.0	7.0	7.0	7.0	..
El Salvador.....	—	3.0	4.0	6.0	..
Nicaragua.....	—	3.0	4.0	4.0	..
Other countries.....	22.0	2.0	2.0	2.0	..
TOTAL	83.0	45.0	66.0	61.0	30.0 ^d

Sources: For Argentina, Instituto Nacional de Carnes; for Uruguay, *Suplemento Estadístico de la Revista Económica*, Banco de la República Oriental del Uruguay, and Food and Agriculture Organization; for Brazil, Food and Agriculture Organization; for Mexico, Economic Commission for Latin America.

^a Preliminary figures.

^b Including chilled and frozen beef, pork and mutton, processed and tinned meat. Expressed in terms of carcasses, excluding offal.

^c 1935-39.

^d Estimates.

^e Beef cattle, sheep and pigs.

has probably been offset to a large extent by the decline in those of Uruguay, which, during the course of the year in question, are estimated to have totalled not more than 10,000 tons. (See table 9.)

The United Kingdom is still the main purchaser of meat from Latin America. More than 80 per cent of Argentina's exports of chilled beef were absorbed by this market. In the course of 1955, as a result of the abolition of rationing in Britain during the preceding year, a change in consumer demand led to a marked increase in imports of chilled meat, which rose to 115,000 tons. On the other hand, as regards corned beef, the United Kingdom has continued to buy large shipments, but the United States is now the most important purchaser, absorbing about 50 per cent of total exports.

Recently Latin America has begun to trade with the USSR, a development which has significantly affected exports to other countries. In fact, Argentina shipped more than 34,000 tons of meat to the Soviet Union in 1954, as against less than 6,000 in 1953. This export trade did not exist in previous years. Argentina has thus been able to offset the fall in United States purchases from a maximum of 63,000 tons in 1951 to only 29,000 in 1954.

As has already been explained, the contraction of Argentina's exports is a result of the combination of two forces, apparently in opposition. While production has grown slowly—about 18 per cent in the last twenty years—domestic consumption has risen by some 58 per cent, so that exportable surpluses have diminished. Although in 1955 there was a remarkable reversal of this trend, since production increased by more than 200,000 tons, of

which not less than 170,000 were probably available for export, pre-war exportable surpluses are not likely to have been exceeded.

Uruguay's meat export trade faced a serious crisis in 1955. Although, until 1954, exports were almost invariably about 30 per cent lower than during the pre-war period (see table 9), 1955 witnessed a spectacular drop. It is estimated that during the first half of the year not more than 3,200 tons were exported, so that numerous cold-storage plants had to operate below capacity and many of their workers were thrown out of employment. In order to stimulate exports, the Uruguayan Government has established substantial exchange rate subsidies amounting to 50 per cent of the unit value in the case of chilled and frozen meat and 200 per cent in that of tinned meat. Despite this subsidy, however, it seems that Uruguay's total exports in 1955 did not exceed 10,000 tons. The fundamental cause of this decline in exportable surpluses lies in the exceptional expansion of domestic demand. The serious nature of Uruguay's meat crisis is thrown into relief by the recent decision to import 60,000 head of cattle from Argentina to cover the growing needs of domestic consumption.

Exports of meat from Mexico, which hold third place among exporting countries, have undergone a number of vicissitudes in recent years. During the pre-war period, exports to the United States rose to almost 300,000 head of cattle, and in 1940-44 the annual average reached nearly 450,000 head. An outbreak of foot-and-mouth disease in 1947 led to the closing of the frontier until 1952. The disease broke out again in 1953, so that once again the frontier was closed and exports of cattle on the hoof were

discontinued. This time, however, the epidemic took a milder form, and trade in livestock was resumed in December 1954. As a means of compensating for its suspension, Mexico had begun to increase exports of frozen beef during the post-war years, until in 1951 and 1952 they exceeded 30,000 tons. Exports of chilled meat underwent a marked decline in 1953 and 1954, dropping to 12,000 and 13,500 tons respectively; but in 1955 Mexico's exports of meat and livestock to the United States probably expanded once more, and are estimated at not less than 200,000 head, despite the fact that the latter country is reducing its meat purchases.

Brazil's exports of meat were at one time considerable. In the pre-war period they approached 80,000 tons, approximately one fourth of which was tinned meat. Peak volumes of 65,000 tons of tinned and 94,000 tons of chilled and frozen meat were registered in 1940. After that date, the combination of an increase in domestic demand with the stagnation of production led to a gradual decline in the exportable surpluses, which by 1954 were practically non-existent. Moreover, to meet demand it was essential to step up imports—mainly of live weight from Uruguay—so that the figures for 1953 and 1954 exceeded 6,000 tons. Brazil's short-term prospects for a recovery of its share in the meat export trade are not very promising, although it is estimated that over the long term this country may become an important exporter of beef.

Meat is also exported by some of the Central American countries. Most of their trade is in cattle on the hoof and is carried on within that area, though in recent years a tendency to seek new markets has become apparent. Thus, while Honduras and El Salvador mainly supply Guatemala, Nicaragua has dispatched large shipments to Peru and Venezuela. After a long embargo on cattle exports, Costa Rica entered this trade in 1954, its chief market being Colombia. Total exports from Central America are estimated at some 80,000 head of cattle, of which more than 50 per cent is absorbed within the area itself.

Imports of meat have increased substantially since the pre-war period, and in recent years have reached an annual volume of about 75,000 tons, as compared with the 54,000 imported before the war. The principal importer countries are Chile, Peru, Brazil, Venezuela and Cuba, which in the aggregate absorb some 75 per cent of the region's total purchases.

Imports of meat mainly take the form of cattle on the hoof, although in recent years there has been a progressive expansion of the import trade in chilled and frozen as well as in tinned and other processed meat. Thus, whereas in the pre-war period the proportion of the total volume of Latin America's meat imports represented by livestock was 80 per cent, it reached an average of only 50 per cent in 1949-53.

RECENT TRENDS IN THE EXPORTS AND PRICES OF SOME PRODUCTS

I. CACAO

Of all the commodities exported by Latin America, it is perhaps cacao that has experienced the most violent price fluctuations during the post-war years, and that consequently offers one of the best examples of the need for some kind of stabilizing mechanism. The rise and fall in prices have been much steeper than might have been expected from the relative movements of supply and demand. In the three-year period 1953-55, for instance, cacao prices completed a full cycle. Thus, in July 1954 they were twice as high as in March 1953, but by August 1955 they had declined to their previous level of 31 to 33 cents per pound, around which they have since fluctuated. Moreover, a very similar movement had already been apparent during 1947-49. Prices almost doubled between January and November of the former year, only to fall below that level throughout most of 1949.

Post-war cacao prices have, however, fluctuated at a much higher level than that prevailing before and during the war. Quotations in the range of 11 and 19 cents¹ during the years 1910-19, fell to between 8 and 16 cents in the 1920's. Moreover, with the exception of the late 1920's, the period marked by the end of the First World War and the close of the 1930's was characterized by a generally

declining trend in prices. The latter decade, which was notable in that its high level of production² substantially exceeded effective world demand, witnessed the lowest level of prices in over fifty years, ranging between only 4 and 8 cents per pound. Because of the stocks accumulated during the 1930's, and the introduction of rationing and price controls, prices during the Second World War remained at 7-9 cents per pound thus marking a dividing line between the pre-war decade of over-supply and low prices, and the post-war decade of production shortages and generally high prices, particularly in relation to other food prices.

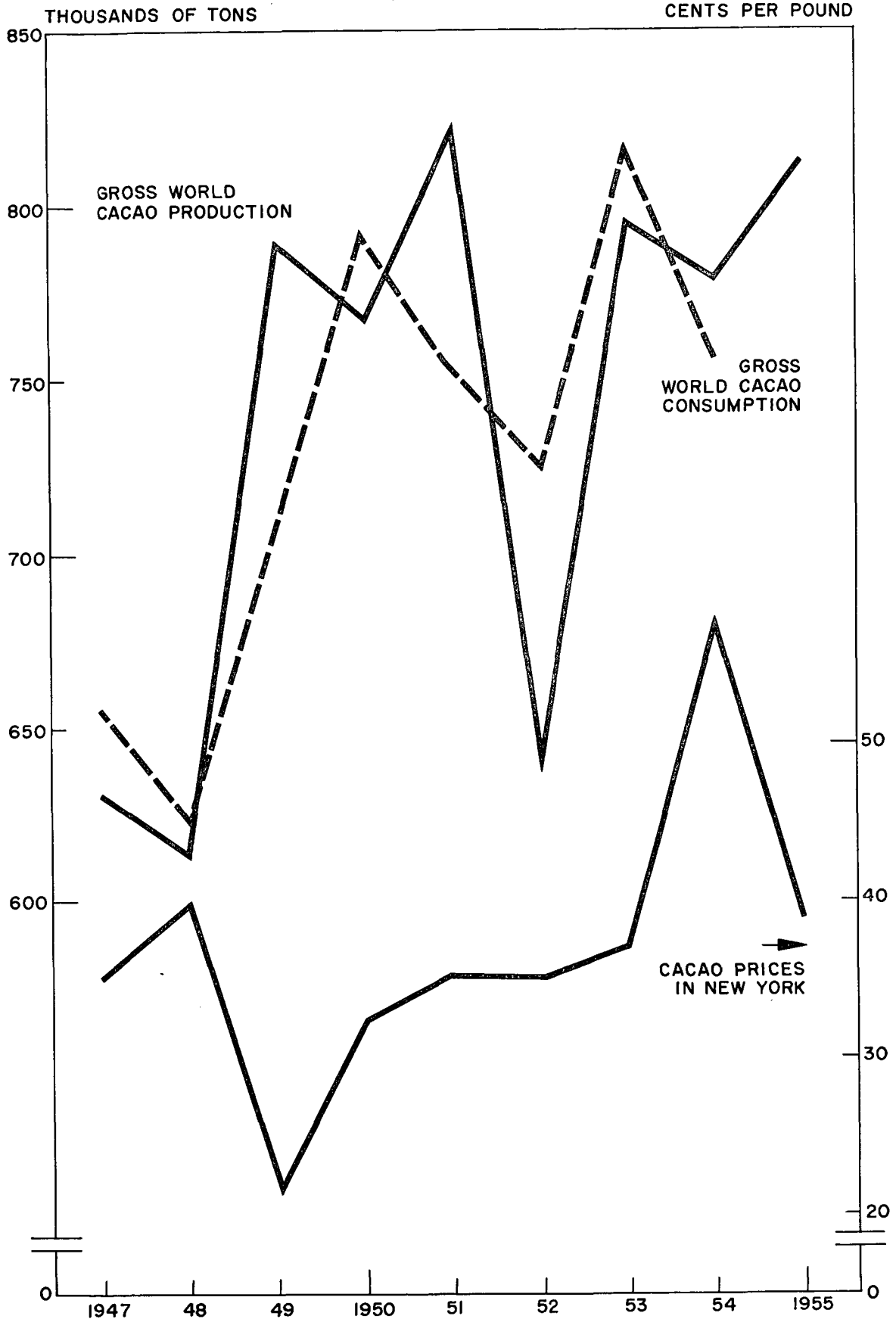
1. THE INSTABILITY OF THE POST-WAR CACAO MARKET

The instability of the post-war cacao market, which is reflected very clearly in charts I and II, has been due to two basic causes. Firstly, as in the case of coffee, the post-war revival in the demand for cacao was faced with a relatively low level of production resulting from surpluses of many years' standing which curtailed new plantings. Thus output could not be increased over the short run, owing to a lag of about five years between the time of planting and the first harvest. A further complicating factor has been the prevalence of numerous plant diseases and inclement weather, both of which have tended to retard the expansion in output expected after 1950. Secondly, post-war cacao stocks—unlike those of coffee—were soon reduced to such a low level that they afforded no buffer between current production and consumption requirements. Chart I shows that, as world production exceeded consumption in only two of the post-war years (1949 and

¹ Annual averages: spot New York; Accra; f.o.b.; cents per pound.

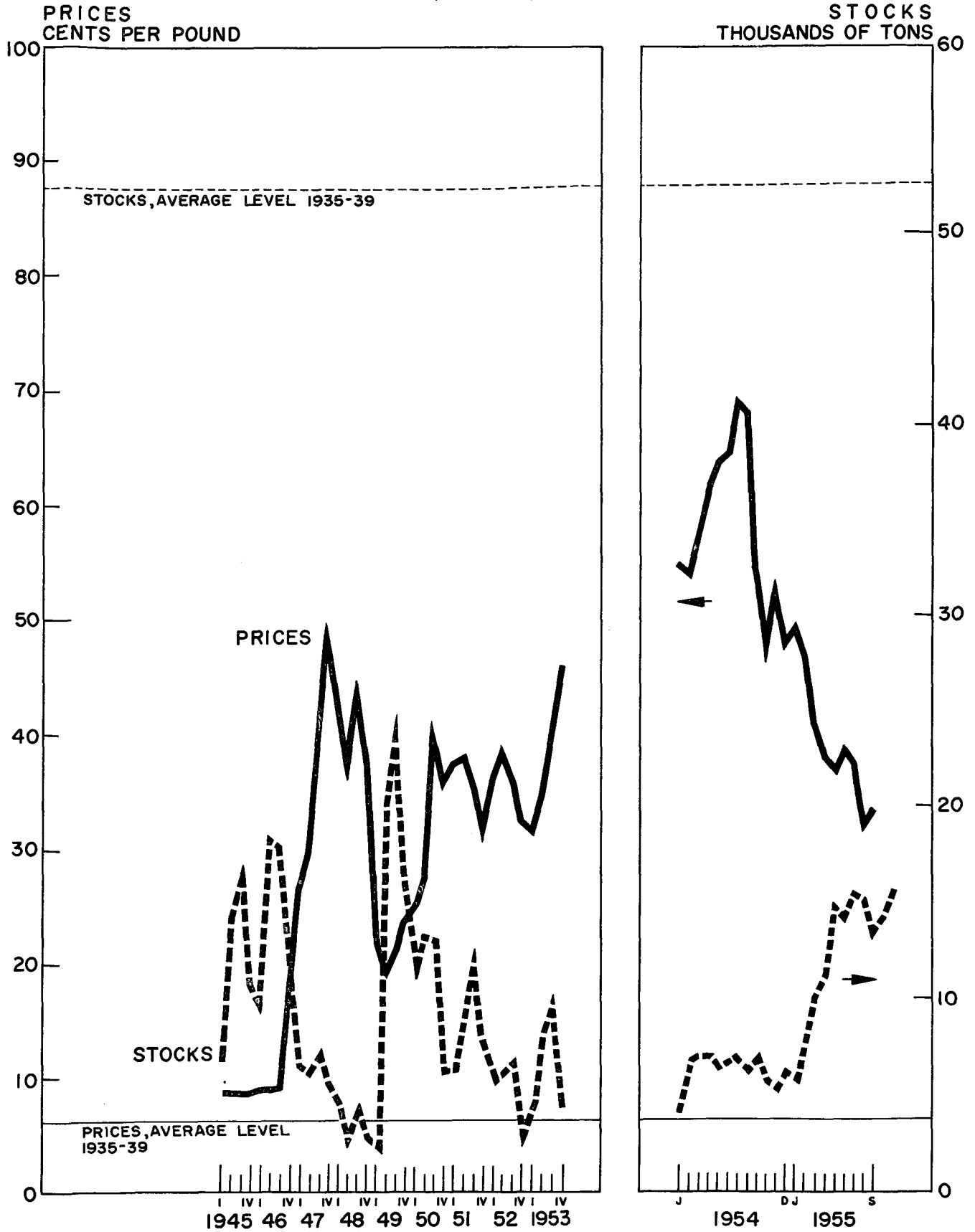
² The fact that Brazilian and West African production continued to expand during the low-price decade of the 1930's was due to output from trees planted in previous periods when prices were more remunerative. In Brazil, moreover, there was the influence of a shift in production centres away from the more unfavourable northern areas towards the fertile cacao-producing zones in Bahia.

Chart I
CACAO: WORLD PRODUCTION AND CONSUMPTION^a
 (Natural scale)



^a Production during the international cacao year (from 1 November to 31 October) is compared with consumption during the calendar year in which the harvest ends, on the assumption that most of the crop is shipped during this year. Figures for Brazilian production have been adjusted on an international cacao crop-year basis.

Chart II
CACAO: SPOT PRICES AND STOCKS IN NEW YORK WAREHOUSES
 (Natural scale)



1951), there has been no opportunity to replenish cacao inventories. Since the end of the war, visible stocks in New York warehouses have never exceeded 50 per cent of the pre-war average and at times have fallen as low as 5 per cent of this average. (See chart II.)³

Under these circumstances, even moderate changes in supply and demand, some of which have been due to the lack of information upon which to base a forecast, have had an extraordinary impact on a generally nervous and apparently thin market. Cacao prices have been extremely sensitive even to such factors as the timing of announcements regarding the sale of new harvests, defaults of cacao merchants and single purchases made by manufacturers. In any free commodity market, price variations greater than those required to balance supply and demand are to be expected, as a result of the momentum of speculation, inventory adjustments, short-selling, etc. But in the case of cacao, at least two economic factors have made a special contribution to price instability, apart from possible defects in the marketing of this commodity.⁴ Firstly, price fluctuations have shown a high inverse correlation to changes in visible stocks in New York warehouses. (See again chart II.) Since information is lacking on manufacturers' inventories, which apparently represent the bulk of total cacao stocks in the United States, price quotations have been related to visible warehouse stocks, which owing to their marginal nature, are highly volatile. Secondly, consumer demand has been very slow to adjust to price changes, because confectionary manufacturers have endeavoured to prevent higher cacao prices from expressing themselves at the retail level. They have been able to do this mainly by drawing on inventories of finished products, by changing the composition of their production so as to place more emphasis on lines of manufacture containing less chocolate, and by using more of the lower-priced ingredients such as milk and sugar in fillings.⁵ Thus, over the short run, demand has tended to respond very slowly to changed supply conditions as reflected in price variations.

It is not surprising, then, that after the Second World War, when trade and price controls were removed in the United States, cacao prices were almost six times greater at the end of 1947 than in September 1946. After this, there was a reaction against this artificially high price level and prices were forced down to less than half the peak attained, a development which was aided by the good 1948-49 harvest. It again became obvious that the price change had been exaggerated, and quotations levelled off at between 30 and 40 cents per pound, from the time when

³ United States manufacturers' inventories, however, are currently estimated as being several times greater than visible warehouse stocks in New York. It is therefore possible that the decline in total stocks is overstated in chart II and that manufacturers now hold a larger proportion of total cacao stocks than before the war.

⁴ In this article, no effort will be made to analyse the organization of the cacao trade; in a future issue of the *Bulletin* it is intended to include a general study of trading in primary commodities. In the cacao market, however, various defects have on occasions been pointed out, such as the control of supplies by a relatively small number of marketing agencies and the concentration of demand in only a few consuming centres.

⁵ The hesitation to pass on higher prices to consumers is probably motivated by the great competitiveness of the confectionery industry in the United States. In Europe, on the other hand, consumption continued to rise in face of higher retail prices due mainly perhaps to a pent-up demand for sweets after many years of rationing and shortages.

the first effects of the Korean War began to diminish until the last three months of 1953. This relative stability of prices was maintained, in spite of the surplus production in 1951 and the large cacao deficit in the following year. (See again chart I.) At this point, as has been seen, there was a repetition of the 1947-49 experience. The factors which contributed to the recent price instability are worthy of analysis in some detail, for changes in supply and demand at this time were much smaller than during the previous period of relative price stability.

The sharp price rise in the last quarter of 1953 was motivated by two main factors. Firstly, the market began to become aware of the fact that consumption was running at a much higher rate than previously estimated, principally as a result of the rise in European demand due to the abolition of rationing in the United Kingdom and to the large expansion in German imports. Secondly, the gradual upward revisions of the rate of consumption coincided with pessimistic forecasts regarding the African crop for 1953/54. At this time nothing was known of the Brazilian mid-crop in 1954, which turned out to be an all-time record and to a great extent offset the decline in African output, which had also been underestimated. Accurate information as to the Brazilian crop was not forthcoming until well after the middle of 1954, even though harvesting begins in May. In the intermediate period, estimates that the gap between the rate of consumption and 1954 output might be as large as 100,000 tons, whereas stocks had been worked down to the lowest level in many years, resulted in a near panic in cacao trading. At this point, speculation and defaults aided the price upsurge, so that in July 1954 spot quotations fluctuated around a level as high as 80 cents per pound.

The first price break occurred between July and September, when the real size of the 1953/54 cacao crop, bolstered by the bumper Brazilian harvest, became known. The 20-per-cent devaluation of the cruzeiro at this time had a further demoralizing effect on the market and resulted in heavy speculation in New York and London, short-selling of futures and actuals over a wide range of prices, and the subsequent disposal of about 6,000 tons of African cacao stocks. Toward the end of 1954 prices again became firmer at a little under 50 cents per pound on the basis of forecasts which again proved false. As late as February 1955, the 1954 rate of consumption was being compared with a 1954/55 crop, forecast to be less than that of the previous year, although it finally worked out at over 40,000 tons greater. In March it became apparent that higher retail prices were restricting demand in both the United States and Europe and that the rate of consumption had been overestimated. Although prices weakened considerably, falling to between 37 and 40 cents per pound, it was still maintained that production and consumption were in balance at prevailing prices and that no margin was available for the creation of buffer stocks. Information as to the substantial underestimation of the 1954/55 harvest, mainly in Africa, and to a lesser extent in Brazil, was not forthcoming until July or August of 1955. With this news, prices slumped to the early 1953 level, around which they have fluctuated ever since. This, then, is the background for the anomalous rise in cacao prices in 1954, in spite of the fact that world production exceeded absorption both in that year and in 1955, and that visible stocks in New York warehouses, after some fluctuations, have been built up to the highest level in five years.

2. IMPACT OF PRICE INCREASES ON THE CONSUMPTION OF CACAO⁶

The post-war rise in cacao prices has obviously been of only short-term benefit to producing countries. Although the volume of United States imports has not risen over the immediate pre-war average, the value of cacao purchases has increased by about eight times, reaching over 250 million dollars in 1954; and the increase in the value of European imports, where import volumes have risen above pre-war levels, has been substantially greater. However, it is doubtful whether a significantly greater volume of cacao can be consumed at the high prices at present prevailing, and the post-war period of price instability has forced manufacturers to invest considerable sums in the search for synthetic substitutes and to change the composition of their production, placing more emphasis on those lines of manufacture which require smaller amounts of cacao. This may be a process which is not easily reversible even if cacao prices are rendered more comparable with other food prices. Furthermore, the market has become so accustomed to a tight supply situation that surplus output sufficient to build up a normal level of buffer stocks may have a very adverse effect on future cacao quotations.

Since the end of the war, world cacao exports have fluctuated around the level prevailing immediately before the war, although some significant changes have recently occurred in the direction of this trade. (See chart III.) According to the statistics of exporting countries, between 1950 and 1954 United States imports declined by over 40 per cent, while European imports (notably from Germany and more recently from the United Kingdom) and those of other countries (principally the Soviet Union) have expanded considerably. The shift of exports to Europe has been due in part to the abolition of sweet rationing, the relaxation of trade controls and a more favourable balance-of-payments situation; but to a considerable extent this shift does not reflect a change in the world distribution of final consumption. What has occurred is that in recent years the United States has received large supplies of cacao re-exports from Europe and has also increased purchases of processed cacao products from this source. In table 1,

⁶ In this section a disproportionate amount of attention is devoted to United States consumption, owing to the lack of detailed information on other consuming countries. However, tendencies in the United States market may be taken as indicative of those elsewhere.

which attempts to quantify these trends, it can be seen that the United States absorption of cacao has declined only moderately since 1950.

Larger re-exports of cacao beans and exports of cacao products to the United States, motivated by high prevailing prices, have been contrary to the interests of exporting countries. Re-exports have mainly consisted of Brazilian cacao, purchased at a discount in the first instance with trade account cruzeiros from Brazil's commercial debt, principally to the United Kingdom and Germany. As a result of the discount and in some cases of dollar bonuses paid for exports to hard currency countries, Europe has been able to under-sell direct Brazilian shipments of cacao to the United States. Consequently, although Brazil has not lost its share of the United States market,⁷ it has suffered a reduction in scarce current dollar income.

The rise in European exports of cacao products is related to the effort in the United States to replace cocoa butter with other products manufactured by mixing cacao solids with coconut oil, palm-kernel oil or other edible fats. These fats are relatively cheap compared with cocoa butter, and are being used to an increasing extent. Cacao powder and cake, the main sources of cacao solids employed in these mixtures, have been among the principal components of increased European re-exports of cacao products, which now exceed 20 per cent of total United States cacao consumption, as compared with only 2 per cent in 1948. If these mixtures find favour among consumers, then the post-war period of high cacao prices may have a permanent impact upon future cacao consumption, although it must be admitted that some doubt exists as to how much cacao is saved by this process.⁸

⁷ Although the share of Brazilian cacao in total United States imports of this commodity fell sharply between 1950 and 1952 as a result of the reduction in total Brazilian exports, by 1954 the post-war average of about 25 per cent had been restored. Most of the other producers have maintained or even increased exports to the United States, except in the case of the Gold Coast and Nigeria, the two largest African producers, which have chiefly supplied the increasing needs of Germany, the United Kingdom and the Soviet Union.

⁸ The doubt as to the net saving of cacao beans which results from the use of these compound mixtures arises from the fact that the latter have been found in some instances to contain even more cacao solids than ordinary chocolate coatings, although their composition varies greatly.

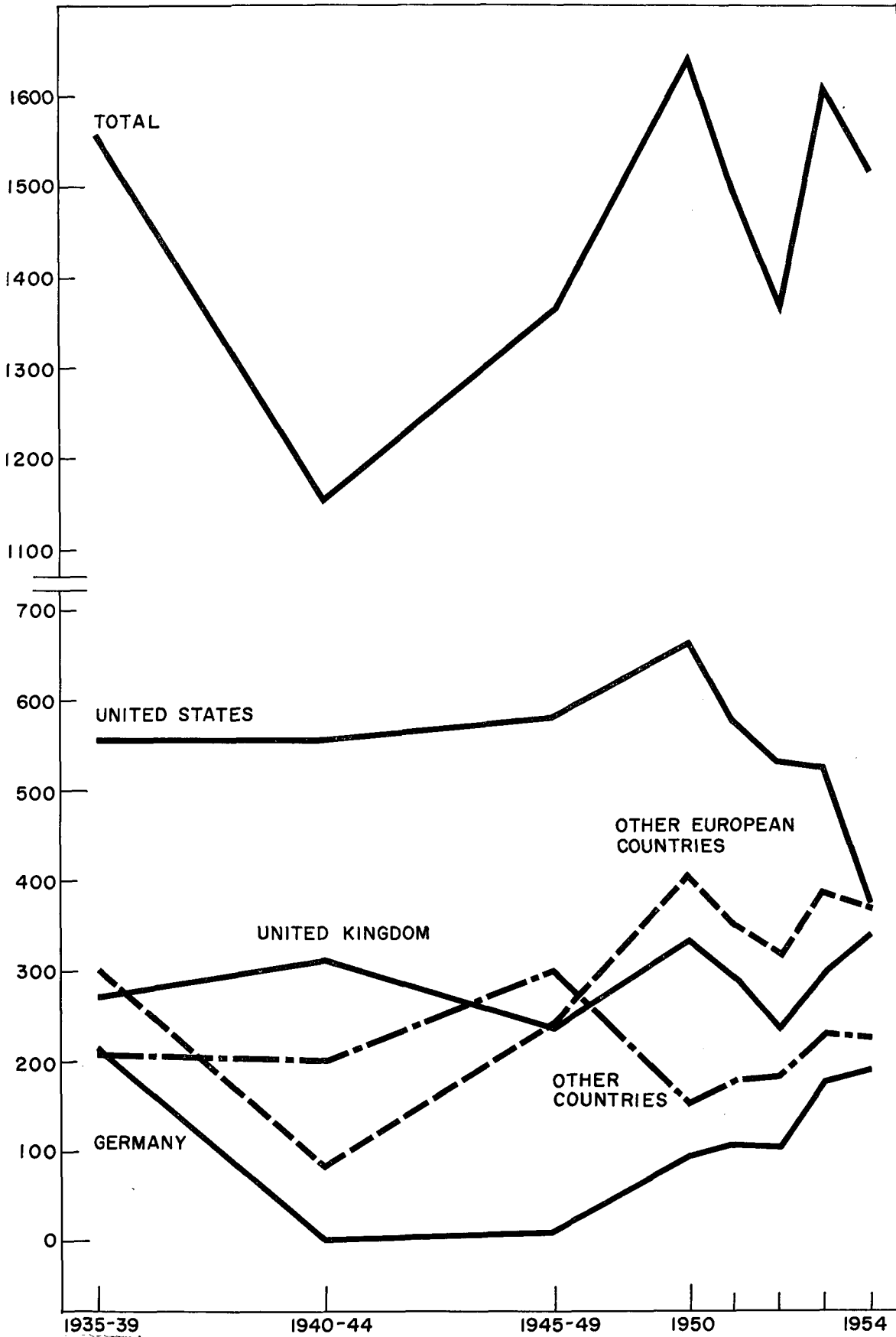
Table 1
UNITED STATES: NET IMPORTS OF CACAO AND CACAO PRODUCTS
(Millions of pounds of cacao or equivalent)

	1950	1951	1952	1953	1954
Direct exports of cacao	660.7	574.3	532.3	523.1	372.6
Apparent re-exports ^a	-1.6	31.9	40.1	42.5	143.2
Imports of cacao products	56.3	57.1	59.0	93.4	117.5
TOTAL	715.4	663.3	631.4	659.0	633.3
Re-exports of cacao beans and cacao products	47.5	64.7	58.6	50.8	62.3
TOTAL NET IMPORTS	642.9	598.6	572.8	608.2	571.0

Source: *The Cocoa Situation*, Business Information Service, published by the United States Trade Department; selected issues.

^a Difference between direct exports to the United States, by exporter countries and U.S. imports of cacao beans. The former are registered according to the first country of destination and the latter according to the country of origin. These figures also reflect the time lag between the date of embarkation and the arrival of the exports, but the discrepancy tends eventually to disappear. Moreover, it is unlikely that this constitutes an important factor in the high figure for 1954, since United States imports declined during the first half of 1955.

Chart III
DISTRIBUTION OF WORLD EXPORTS OF CACAO BEANS
(Thousands of pounds)
 (Natural scale)



Perhaps the main saving of cacao beans in the United States has been accomplished by the change in the composition of confectionery sales. Between 1953 and 1954, for example, the total volume of such sales fell by only 1.2 per cent, but the sales volume of products containing a relatively large amount of cacao, such as moulded chocolate bars and solid chocolate and chocolate-covered bulk goods, declined by between 13 and 25 per cent. Sales of other bulk goods and packaged products retailing under one dollar, on the other hand, increased slightly during the same period. The cause of this tendency has of course been the extraordinary increase in the price of cacao as compared with the costs of other confectionery ingredients. (See table 2.) In 1953 and 1954, cacao products accounted for between 45 and 50 per cent of total confectionery ingredient costs, in contrast with only 26 per cent in 1944.

Table 2
UNITED STATES: INDICES OF THE PRICES OF THE PRINCIPAL INGREDIENTS IN CONFECTIONERY MANUFACTURE
(1945=100)

Year	Cacao beans ^a	Milk ^b	Sugar ^c	Corn syrup ^d	Peanuts ^e
1947.....	393	134	150	150	114
1950.....	361	114	144	145	123
1953.....	417	129	159	184	138
1954.....	648	117	159	184	144

Source: Official publications of the United States Bureau of Labor Statistics.

^a Accra; f.o.b. New York.

^b Wholesale price for manufacturers.

^c Refined cane sugar, wholesale price, New York.

^d Confectionery manufacturers, crystal 42, wholesale price.

^e Unshelled, Spanish 1, wholesale price.

Although the exceptional increase in relative cacao prices and efforts towards substitution have brought about only a moderate reduction in total United States cacao absorption in recent years, on a *per capita* basis the decline has been quite pronounced. (See chart IV.) Between 1950 and 1954, *per capita* cacao consumption fell by approximately 22 per cent, reaching the lowest level since the early depression years. As can be seen in chart IV, this decline has been the result of the rapid increase in *per capita* expenditure on cacao, which in recent years has far exceeded any previous level in over three decades. And the striking growth in *per capita* expenditure on cacao has been due exclusively to the rise in relative cacao prices, since *per capita* consumption has been stagnant or declining since 1935-39.

3. TENDENCIES IN THE PRODUCTION OF CACAO

The post-war period has witnessed the reversal of the two major long-run trends in world cacao production. From 1900 until the beginning of the Second World War, world output is estimated to have expanded impressively by more than 800 per cent. Although the recovery in world production of cacao since the end of the war has been irregular the post-war average is approximately equal to that of the years 1935/36-1939/40. (See table 3.) The main reason for this lag in output has already been mentioned, namely, the existence of chronic world over-production before and during the war, which discouraged further planting and the renewal of old trees.

Table 3
CACAO BEANS: WORLD PRODUCTION BEFORE AND AFTER THE WAR

(Millions of pounds)

	1935/36- 1939/40	1945/46- 1954/55	1945/46- 1949/50	1950/51- 1954/55
Latin America.....	464	512	496	528
Africa.....	1,054	1,034	994	1,074
Total world production...	1,581	1,587	1,525	1,648

Source: United States Department of Agriculture, *Foreign Agriculture Circular*; selected issues.

Note: The Brazilian harvest has not been adjusted to the international cacao year, which ends on 31 October; the production statistics in the table are therefore not comparable with those of chart 1. The figures are averages for the periods shown.

The other long-run production trend which has been reversed during the post-war period concerns the relative shares of the two main producing areas. At the turn of the century, Latin America provided about four-fifths of the world cacao crop, Ecuador being the most important world producer. By 1940, Latin America's share had fallen to less than 30 per cent (less than 3 per cent for Ecuador) and Africa accounted for about two-thirds of world output. In effect, Africa contributed most of the long-run increase in over-all world cacao production to which reference was made in the preceding paragraph. During the last few years, however, the share of Latin America has risen to more than 35 per cent of the world total, reflecting an expansion in output of quite a few of the major and minor producing countries of the region. In Africa, the decline in the crops of the two largest producers, the Gold Coast and Nigeria, was not offset by the almost twofold expansion in the output of the other producing countries of that continent since 1935-39. The main explanation for this trend seems to be the withdrawal from production of old trees at a rate exceeding new plantings, and the serious damage caused by several plagues, especially the swollen-shoot and black-pod diseases.

The rise in Latin America's share of total cacao production, however, has not permitted an increase in the region's share of world exports of this commodity. It appears that the absorption of cacao within the area has increased appreciably since the end of the war, especially in Mexico, Colombia, the Dominican Republic and, more recently, Brazil, after the exchange devaluation. Thus, the region's share of the world cacao trade has continued to fluctuate around the immediate pre-war average of about 27 per cent, with about two-thirds of the trade still corresponding to Africa, in spite of the decline in that continent's share of total production to 60 per cent. As Latin America's *per capita* income rises, it will be interesting to see whether advances in domestic consumption will continue to make inroads into export availabilities.

4. CONCLUSIONS

The basic difficulty in the post-war cacao situation has been the shortage of supplies and the lag in the expansion of output. As a result of current efforts to accelerate production, to improve plant selection and to combat diseases more effectively, a substantial expansion in world supplies can probably be expected over the course of the next few years. The problem that must now be faced is whether larger prospective supplies will have to be sold at steadily

Chart IV
 CACAO: UNITED STATES CONSUMPTION
 (1925-29=100)
 (Semi-logarithmic scale)

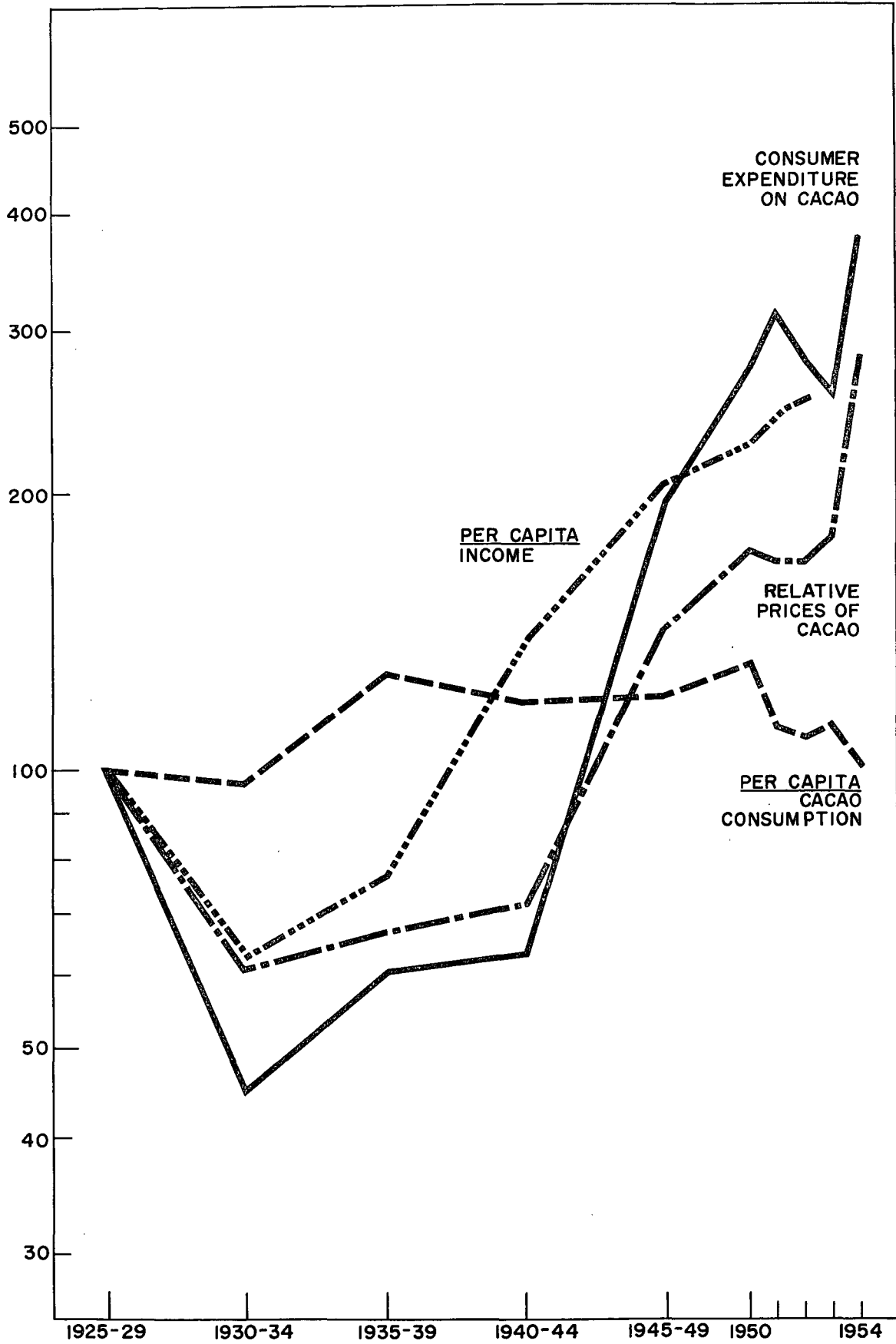


Table 4
CACAO BEANS: WORLD PRODUCTION
(Tons)

	1935-36/ 1939-40	1945-46	1946-47	1947-48	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
											<i>Preliminary estimates</i>	
Total Latin America	210,479	192,663	247,552	202,576	218,885	263,002	247,274	205,997	214,006	239,993	290,286	290,259
Brazil	119,741	111,132	153,317	99,792	125,352	161,935	136,261	104,725	96,901	123,139	168,901	157,989
Colombia	11,340	7,500	11,000	11,204	13,499	11,000	14,550	14,550	15,000	15,000	16,000	16,330
Ecuador	19,220	16,936	15,876	15,960	19,822	21,619	28,123	22,680	25,305	29,906	25,305	32,206
Venezuela	16,753	15,001	17,237	23,791	14,202	14,502	16,874	17,917	16,411	17,000	16,800	17,736
Total South America	167,055	152,805	197,429	150,747	172,876	209,055	195,809	159,873	153,617	185,045	227,006	224,260
Costa Rica	6,512	4,586	3,810	6,600	6,291	4,395	2,903	3,200	5,500	6,100	7,000	7,258
Cuba	3,175	2,268	2,722	2,991	2,948	3,266	2,495	2,722	2,495	3,402	2,530	2,767
Dominican Republic	24,517	24,993	31,525	28,001	23,800	33,113	32,300	26,600	38,000	29,715	38,113	38,556
Haiti	1,519	1,361	1,814	1,996	1,560	1,864	2,204	1,847	1,964	2,268	1,134	2,268
Mexico	1,134	1,134	5,443	7,031	6,500	6,623	8,609	8,609	9,119	9,500	10,350	10,886
Panama	4,725	4,726	2,948	2,987	2,980	2,858	1,043	1,032	1,361	1,814	1,928	2,041
Others	1,841	1,814	1,860	2,223	1,928	1,828	1,986	2,116	1,950	2,148	2,224	2,223
Total Mexico and Central America	43,424	39,858	50,123	51,828	46,009	53,947	51,540	46,124	60,389	54,948	63,280	65,999
Total Africa	478,230	422,757	407,945	401,427	519,463	501,541	518,979	458,644	512,197	466,873	479,330	495,082
Ivory Coast	49,867	35,999	36,000	36,288	50,622	55,430	61,380	47,380	61,001	53,000	65,855	65,772
Gold Coast	276,407	212,738	195,048	212,103	282,661	259,459	267,624	217,728	250,950	219,077	232,207	232,243
Nigeria	98,122	103,874	111,586	77,112	109,726	103,421	112,500	109,622	110,722	98,993	82,762	91,446
Other African countries	53,833	70,144	65,312	75,924	76,454	83,231	77,475	83,913	89,524	95,802	98,506	105,621
Other countries, total	28,306	13,417	15,148	17,820	17,053	18,285	19,947	19,522	22,595	20,070	22,140	24,181
GRAND TOTAL	717,015	628,837	670,645	621,823	755,400	782,827	786,275	684,162	748,797	726,935	791,757	809,068

Source: United States Department of Agriculture, *Foreign Agriculture Circular*; selected issues.

lower prices as a result of changes in the structure of demand arising from many years of scarcity and price instability. Manufacturers have invested large sums in the development of synthetic substitutes and compound mixtures using less cacao, and consumers are becoming more accustomed to non-chocolate confectionery. It may not be easy to reverse this process, even if cacao prices are brought more into line with other food prices, unless manufacturers can be assured of adequate supplies of cacao at reasonable and more stable prices over an extended period of time. The existing cacao market mechanism—

highly sensitive and handicapped by the lack of reasonably accurate information on current stocks, rates of consumption and production—has actually tended to exaggerate the instability of cacao prices, which on numerous occasions during the post-war period have suffered fluctuations much greater than were justified by changes in supply and demand. It would appear that what is needed is a more orderly marketing of cacao, not only to assure a healthy growth in demand, but also to protect the terms of trade of exporting countries from the adverse effects of surplus production.

II. WHEAT

The total volume of Latin American wheat production in 1955 was close on 12 million tons, the highest recorded since the peak reached in 1939.⁹ This level was nearly 19 per cent above that of the previous year, in striking contrast with the 6 per cent expansion in the rest of the world. Thus, in 1955 Latin American production accounted for 5.9 per cent of the world total; this represented an increase over its share in the immediately preceding years, and a still greater improvement on its position before the war.

Table 5

WORLD AND LATIN AMERICAN WHEAT PRODUCTION
(Thousands of tons)

Year	World	Latin America	Latin America (Percentages)
1935-39.....	165,609	8,036	3.9
1945-49.....	160,574	7,580	4.7
1953.....	202,092	10,890	5.3
1954.....	187,215	10,047	5.4
1955.....	200,493	11,895	5.9

Source: Economic Commission for Latin America.

Of this increase in the Latin American harvest, 80 per cent was due to the increment in Argentina's production, which rose from 6.2 to 7.7 million tons between 1954 and 1955. In the latter year Uruguay maintained its high 1954 output, more than doubling that of previous years. The remaining countries, traditionally importers of wheat, continued their efforts to expand production and succeeded in raising it more than 10 per cent above their 1954 level. Within this group, Brazil, Chile and Mexico achieved the greatest increases.

Table 6

LATIN AMERICA: WHEAT PRODUCTION
(Thousands of tons)

Year	Argentina	Uruguay	Rest of Latin America
1934-38.....	6,128	361	1,580
1952.....	2,100	478	2,456
1953.....	7,634	426	2,830
1954.....	6,200	819	3,028
1955.....	7,690	854	3,351

Source: Economic Commission for Latin America.

⁹ In 1939, Latin America's total production approached 12.5 million tons, thanks to exceptional harvests in Argentina.

In the rest of the world some important variations were observable during 1955. While production in the United States was reduced by 5.5 per cent and totalled a little under 25 million tons, Canada regained a high level with a harvest of 13.6 million tons, which was, however, smaller than that of 1953 (16.7 million tons). Australia also substantially increased its output, which amounted to 5.5 million tons, and was thus 20 per cent larger than in 1954. The Soviet Union and the Asiatic countries registered fairly considerable increments, while in some parts of Africa a serious falling-off was noted.

Although in Europe as a whole rather more wheat was produced than in the previous year, the situation varied greatly from country to country. France, Italy, Western Germany and Yugoslavia, for instance, obtained better harvests in 1954/55 than in the preceding season, whereas in Portugal, the Scandinavian countries, Spain and the United Kingdom, severe setbacks were experienced in the course of 1955.

Wheat surpluses, most of which are held by the United States and Canada, slightly increased during 1955, although more slowly than in previous years. On 1 October 1955, the export availabilities and surpluses in these two countries, together with those of Argentina and Australia, totalled 60.7 million tons, as against 57.3 and 53.3 millions on the same date in 1954 and 1953 respectively. Of the 45 million tons which made up these four countries' stocks at the beginning of the last season,¹⁰ 27.8 millions (62 per cent) were held by the United States, 13.1 millions by Canada, 2.5 millions by Australia and the remaining 1.6 millions by Argentina.

The substantial accumulation of surpluses in the United States began in 1953 (see table 7), and resulted from the combination of two excellent harvests, in 1952 and 1953, with a considerable decline both in domestic consumption and in exports. In consequence of these two contrasting developments, stocks began to pile up to an immoderate extent, until in 1955 they were four times larger than in 1952. Despite reductions in the area sown to wheat (which was 25.1 million hectares in 1954 and 22.3 millions in 1955, as compared with 31.6 million hectares in 1953) and in the prices received by producers,¹¹ the greatly increased yields in 1955 prevented United States production from decreasing by more than about 3 per cent.

¹⁰ 1 July in the United States; 1 August in Canada; 1 December in Argentina and Australia.

¹¹ The price received by farmers was 2.03 dollars per bushel in the third quarter of 1954, but fell to 1.93 dollars during the same period in 1955.

Table 7
UNITED STATES: WHEAT CONSUMPTION AND STOCKS
(Thousands of tons)

Years beginning 1 July	Stocks on 1 July (1)	New harvest (2)	Total supply (3)	Total domestic consumption (4)	Net exports (5)	Stocks in the hands of the CCC on 30 June (6)	CCC stocks as percentage of total stocks (7)
1945.....	7,593	30,155	37,749	24,331	10,696	—	—
1946.....	2,722	31,353	34,074	20,847	10,941	885	32.5
1947.....	2,286	36,987	39,273	20,603	13,336	19	0.8
1948.....	5,334	35,245	40,579	18,452	13,771	22	0.4
1949.....	8,355	29,883	38,238	18,480	8,192	6,627	79.3
1950.....	11,567	27,733	39,300	18,888	9,634	9,830	85.0
1951.....	10,778	26,699	37,476	18,452	12,057	5,650	52.4
1952.....	6,967	35,354	42,321	18,942	8,083	4,216	60.5
1953.....	15,295	31,816	47,111	16,819	5,743	13,404	87.6
1954.....	24,549	26,400	50,948	15,812	7,348	21,082	85.8
1955 ^a	27,788	25,529	53,316	16,956	7,376	26,560	95.6
1956 ^a	28,985						

Source: United States Department of Agriculture, *The Wheat Situation*, 31 October 1955.

^a Preliminary figures.

It can be seen that almost the whole of the United States' wheat surpluses are held by the Commodity Credit Corporation (CCC). This gradual enlargement of the stocks handled by the CCC was due not only to the favourable weather conditions that fostered the abundant harvests of 1952 and 1953, but also to the fact that this same organization's price policy encouraged the large-scale production of poor quality wheat, since hitherto the established CCC prices have varied according to quality by only very small amounts. It has been announced, however, that as from 1956 there will be a discount of 20 cents per bushel on twenty-four strains of wheat specified as undesirable. Up to now, this problem of the quality of United States wheat has, to some extent, affected the country's exports, by indirectly favouring those of its competitors. Some buyers, especially among the Latin American countries, have lodged complaints as to the quality of the wheat purchased.¹²

For almost the whole of its exports of wheat and flour, the United States draws upon the stocks held by the CCC, which subsidizes them at rates fluctuating around 30 per cent of the guarantee prices. The last agricultural year witnessed the conclusion of barter agreements involving exports of about 1.25 million tons, or 17 per cent of total sales abroad, while a still larger quantity—approximately 1.45 million tons—was sold against payment in the national currency of the buyer countries, in accordance with the provisions of Public Act 480. An agreement was recently signed with Brazil for the sale of 500,000 tons of wheat, of whose value 70 per cent will be payable in cruzeiros.

This system, whereby part of the sales value is covered with national currency, the sums in question being in their turn loaned to the purchasers for development purposes, has been criticized in Canada and other countries as an unjustifiable interference with normal trade movements.

In view of this situation, Australia and Canada have also begun to consider the possibility of exporting wheat on a basis of loans or credits to importing countries.

The general outlook, as far as surpluses are concerned,

¹² United States Department of Agriculture, *Foreign Agricultural Circular*, 26 January 1955, p. 10.

is obscured by the fact that Europe's imports have sharply declined in the last few years, owing to the marked expansion of its own production. According to the *Economic Survey of Europe 1954*, the total European output of grain suitable for bread rose from 40 million tons yearly over the period 1948-50 to 50.7 millions in 1953, and during the same interval net imports fell from 15 to 9.8 million tons. This decrease took place despite the fact that Europe's wheat imports from Latin America and other regions actually rose, so that the lower figures were entirely due to the abrupt curtailment of purchases from the United States and, up to a point, from Canada.

The continuous piling-up of surpluses in the United States raises a serious problem in connexion with the standard of the wheat. Since some of these stocks have remained in the warehouses for over two years, it may well be asked how far their quality is likely to have deteriorated, and whether a considerable volume may not have become unfit for human consumption. Little is, in fact, known on this point, but merely to touch upon it is enough to give a clearer idea of the pressure that surpluses are exerting on the world market.

Argentina's position in the international wheat trade has been strengthened in the last two years, after having been exceptionally weak throughout 1952 and 1953. In fact, as table 4 shows, in 1954 Argentina's exports totalled a little over 3.5 million tons, that is, almost 14 per cent of total world exports. This rate of increase was maintained in the second half of 1955, during the first ten months of which year the volume exported amounted to almost 3 million tons, as against 2.4 millions over the corresponding period in 1954. It is estimated that Argentina will not have difficulty in placing its exportable surpluses, as a considerable proportion of these has already been sold or contracted. Moreover, the 1955/56 crop is likely to be smaller than the preceding year's, as the area under seed is assessed at not more than 5.2 million hectares, of which only about 4.4-4.5 millions are likely to be harvested. Thus, on the assumption that yields will probably be lower than in previous years, the output, according to estimates, will be some 5 million tons, or approximately 35 per cent, less than that of 1954/55. The effects of the new prices fixed

Table 8
WORLD EXPORTS OF WHEAT AND FLOUR^a (WHEAT EQUIVALENT)
(Thousands of tons)

Year	United States		Canada		Australia		Argentina		Rest of the world		World total
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Average											
1945-49	11,499.8	48.1	6,678.0	28.0	2,264.0	9.5	2,054.1	8.6	1,392.3	5.8	23,888.2
1950/51	10,187.9	40.0	5,778.2	22.7	3,465.4	13.6	2,813.8	11.0	3,251.7	12.7	25,497.0
1951/52	13,061.6	45.0	9,313.1	32.1	2,698.5	9.3	816.0	2.8	3,123.4	10.8	29,012.6
1952/53	8,818.1	32.8	10,487.4	39.0	2,706.4	10.1	796.9	3.0	4,059.6	15.1	26,868.4
1953/54	5,985.3	25.0	7,744.2	32.4	1,932.2	8.1	3,004.6	12.6	5,254.0	21.9	23,920.0
1954/55	7,348.3	28.6	6,940.1	27.0	2,449.4	9.5	3,538.1	13.8	5,384.7	21.1	25,660.6

Source: United States Department of Agriculture, *Foreign Agriculture Circular*, September 1955.

Note: (A) = Total.
(B) = Percentage.

^a Trade year beginning 1 July and ending 30 June.

for Argentine wheat—70 Argentine pesos instead of 50 per 100 kilogrammes—will not be felt until the harvest from the 1954 sowing reaches the market. However, the decline in production will not greatly affect exports, since, as has already been noted, the existing surplus is substantially larger than in previous years. It should be pointed out in this connexion that during the last two years Argentina has managed to maintain the export price of wheat at about 68 dollars per ton.

Uruguay, which formerly exported small quantities of wheat, mainly as flour, has, in the last two years, increased its sales abroad, as a result of the substantial improvement in its production. The area under wheat, which used normally to be about 500,000 hectares, was extended in 1953/54 and 1954/55 to about 750,000, by the exploitation of land which became available through a decline in the cultivation of linseed, or which had formerly been used for pasture.¹³

Throughout the whole of 1954, Uruguay exported 340,000 tons of wheat, while about 337,000 tons, of which approximately 70,000 corresponded to surpluses carried over from the previous agricultural year, had already been shipped abroad in the first seven months of 1955.

Only 21 per cent of these exports, however, took the form of flour, as compared with more than 50 per cent in 1954 and 100 per cent in 1953.

Nevertheless, certain difficulties attended the sale of Uruguay's exportable wheat surpluses. As the basic exchange rate of 1.51 pesos to the dollar proved inadequate, the Uruguayan Government was obliged to establish a preferential rate of 3.50 pesos to the dollar, to enable some 300,000 tons to be exported. Owing to the Government's having to bear such a heavy burden of subsidies, guarantee prices for the 1955/56 crop were reduced from the 16.50 pesos per 100 kilogrammes of wheat formerly established,¹⁴ to 14 pesos.

Brazil is the most important purchaser of Uruguayan wheat. In fact, of the 337,000 tons exported by Uruguay up to 31 July 1955, Brazil bought about 250,000 tons as grain and 40,000 in the form of flour. With an estimated exportable balance from the 1955 harvest of about 460,000 tons, and, on 1 January of the same year, a surplus of approximately 206,000 tons, the amount still available for export on 1 August 1955 was probably in the neighbourhood of 330,000 tons.

III. TIN

1. INTRODUCTION

The importance of tin mining for Bolivia equals or exceeds that of copper mining for Chile. Large-scale exploitation of Bolivia's tin deposits began in the last decade of the nineteenth century, production having fluctuated between 1880 and 1890 around 750 tons yearly (1.3 per cent of the world output). In 1929 it reached its peak level of 47,080 tons (24 per cent of world production). But in the 1930's, as a result of the depression, and, to an even greater degree, of the Chaco War, which considerably reduced the labour force, tin production decreased, until in the closing years of the decade it amounted to some 26,000 tons yearly (about 15 per cent of the world total).

After the outbreak of war in Europe, although demand remained at the annual level of 150,000 tons attained towards the end of the previous decade, the producer countries increased their output so that in 1940 and 1941

a yearly average of 240,000 tons was reached, and production outstripped consumption by almost 60 per cent. Japan's entry into the war, at the end of 1941, abruptly curtailed production in the Far East and rendered this region inaccessible to the Allied Powers. From then until the end of the war, Bolivia, the Belgian Congo and Nigeria, with annual outputs of 40,000, 16,000 and 12,000 tons respectively, constituted almost the sole sources of supply open to the United States and the other allied countries.

No sooner was the war over than Asian producers made as speedy a recovery as possible, raising world production to 170,000 tons in 1951-52 and 175,000 in 1953-54. This figure is estimated to have decreased to 168,000 tons in 1955, on account of a falling-off in production in Bolivia and Indonesia, although slight increases were recorded elsewhere.

¹⁴ This price was one of the most powerful of the incentives which helped to promote the expansion of the area under wheat mentioned previously.

¹³ See "The Latin American Meat Problem", page 58.

2. THE DEMAND FOR TIN

Traditionally, the world's largest tin market has always been the United States. During the period 1927-29 this country consumed, on an average, 77,000 tons yearly, which represented 46 per cent of total world demand. After declining during the depression, demand partially recovered; from 1937 to 1940 it stood at an annual average of 65,000 tons—40 per cent of world consumption—and in 1941 reached the record level of 103,000 tons.

As from 1942, the United States, simultaneously confronted with the impossibility of obtaining tin from the Far East and the imperative need to meet war requirements, made a concentrated effort to reduce its consumption, replacing tin wherever possible by other metals or substitute products. The application of tin coatings by electrodeposition in the manufacture of tin-plate, a system which requires from 33 to 50 per cent less tin than the old immersion process it replaced, was the innovation that produced the most far-reaching effects. Knowledge of the new technique has spread reasonably quickly, and even in countries like Brazil and Mexico, which are only small-scale producers, electrolysis is already being used in coating steel plates for the manufacture of tin-plate.

These innovations, designed to curtail tin consumption and adopted as emergency measures during the war, have not been discarded with the return of more normal conditions. Thus tin is one of the few metals that have not benefited by the strikingly intensive post-war expansion of industrial activity in the United States. From 1950 to 1954, average annual consumption amounted to 52,000 tons, a figure 20 per cent lower than that recorded fifteen years earlier.

Among the limited uses of tin for which the United States is purchasing considerably larger quantities is the manufacture of certain alloys. While in 1935-39 the average consumption of tin in alloys was 7,000 tons, it has risen to some 20,000 in the post-war period. It should be noted, however, that this special demand includes a high percentage of recovered tin, the share of which in total consumption has been almost uninterruptedly increasing ever since the beginning of the century. Nevertheless, in recent years there has been a tendency towards stabilization and even reduction of the proportion of secondary tin used. This is perhaps attributable to the fact that the quantities involved in the manufacture of tin-plate by electrodeposition are so small that recovery is hardly worth while. Probably the new electrolytic process, which over the short term seems to have a negative effect on tin consumption, will in the long run prove advan-

tageous as regards primary tin, since it means that the metal used is destroyed once and for all.

In Europe, there has been no great change in the annual average for the aggregate consumption of fourteen countries¹⁵ between 1926-29, when it amounted to 45,000 tons, and 1951-54, when the corresponding figure was 45,907 tons. On the other hand, as world consumption declined over the same period from 162,000 to 136,200 tons, the European countries' share in this demand rose from 27.8 to 33.7 per cent. Thanks to the new metal-saving techniques, any substantial increase in European tin consumption is unlikely over the short term.

Prevailing trends can be more clearly seen in table 9, which refers to tin-plate, the most important of the products for which tin is used.

The above statistics show how, in the course of the four-year period under review, the consumption of tin per ton of tin-plate was stabilized in the United States, and reduced in the other industrialized countries of the world, by the adoption of processes involving smaller quantities of metal. In other words, whereas world production of tin-plate expanded by 11.7 per cent between 1951 and 1954, the consumption of tin for tin-plate rose by only 5.6 per cent; and the discrepancy between the corresponding percentages in the near future will probably be even wider.¹⁶

To sum up, the current trend is towards increased consumption of products containing tin, and, at the same time, towards a reduction of their tin content. It may be assumed that in consequence of these clearly contradictory tendencies, the expansion of demand will be slow in the next few years. In view of the world's present production capacity, an accumulation of surpluses is to be expected. Hitherto, an outlet for such surpluses has been provided by the purchases of the United States Government for its strategic reserve. Although the present volume of this stockpile is unknown, it has repeatedly been stated that the target proposed has been exceeded, and therefore further stocks will probably be unnecessary.

3. PRICES

Apart from that of aluminium, the prices of the other non-ferrous metals in heavy demand—copper, lead, zinc

¹⁵ Belgium, Denmark, Finland, France, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom and Yugoslavia.

¹⁶ During the first seven months of 1955, world production of tin-plate increased by 19 per cent, while consumption of tin for tin-plate, and specific consumption of tin per ton of tin-plate, decreased by 5 and almost 15 per cent respectively.

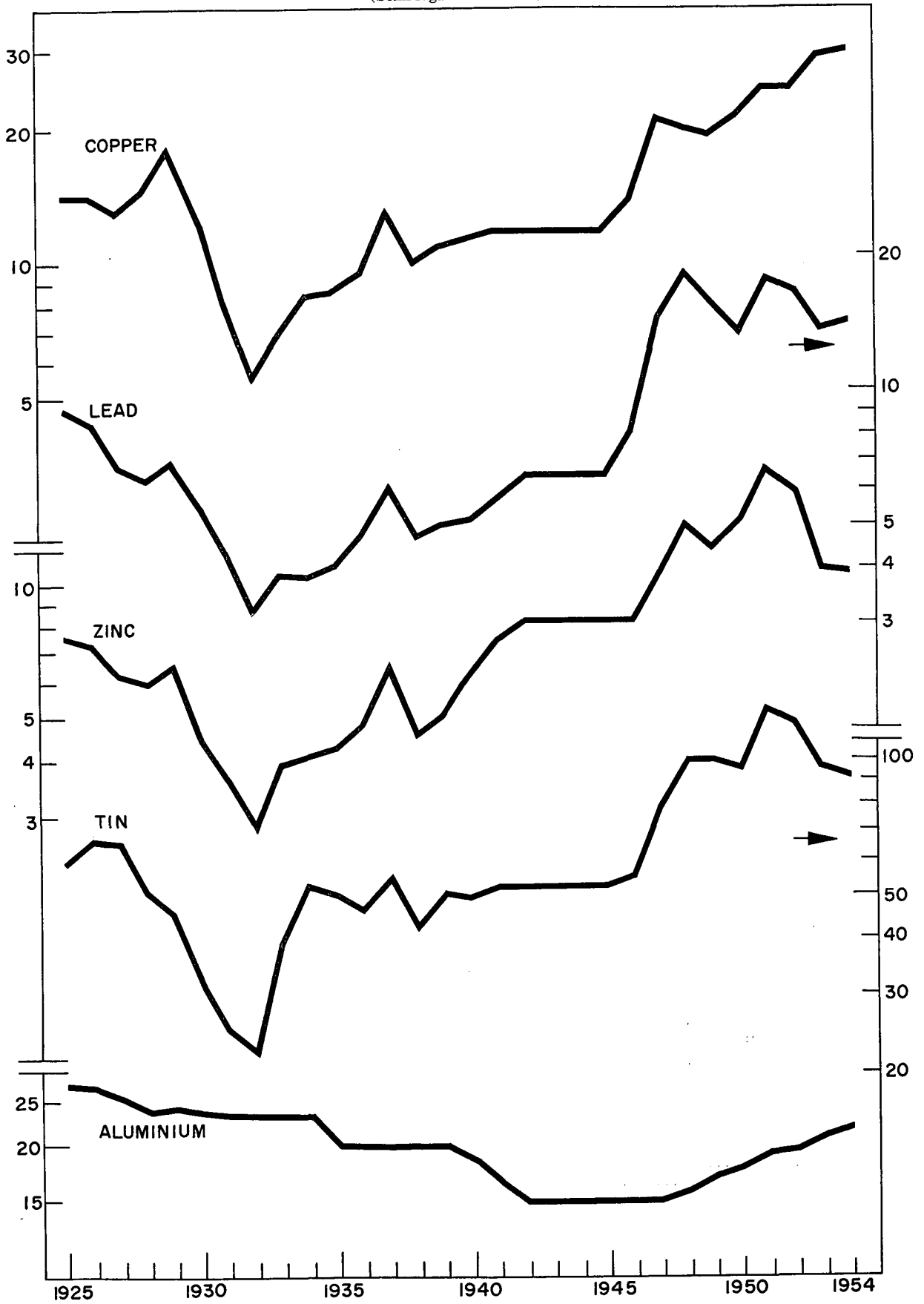
Table 9
PRODUCTION OF TIN-PLATE AND CONSUMPTION OF TIN INVOLVED

	Production of tin-plate (Thousands of tons)		Consumption of tin in manufacture of tin-plate (Thousands of tons)		Consumption of tin per ton of tin-plate (Kilogrammes)	
	1951	1954	1951	1954	1951	1954
United States.....	4,028	4,374	31.0	33.5	7.6	7.6
Rest of the world.....	1,707	2,032	27.0	27.1	15.6	13.1
TOTAL	5,735	6,406	58.0	60.6	9.5 ^a	9.3 ^a

Source: International Tin Study Group, *Statistical Supplement 1955*, p. 15.

^a Weighted average.

Chart V
UNITED STATES: PRICES OF NON-FERROUS METALS
(Cents per pound)
(Semi-logarithmic scale)



and tin have undergone very similar fluctuations. (See chart V.) The trends for lead, zinc and tin resemble one another particularly closely, as the prices of these three metals have tended to fall since 1952, while that of copper has been rising. In 1955 there was a recovery in lead and zinc quotations, while that of tin remained almost stationary, because production, for the reasons described, outstripped demand.

4. THE ROLE OF TIN IN BOLIVIA'S FOREIGN TRADE

The share of tin in Bolivia's foreign trade has declined a little in recent years, but is still of considerable magnitude, as it represents two-thirds of the total value of exports. The perils of so great a degree of dependence upon a single product can be more clearly realized if it is borne in mind that a major proportion of Bolivia's remaining exports is made up of other metals, such as tungsten, lead and zinc, of which only the first shows signs of making a steadily increasing contribution to the total value of exports (15 per cent in 1953 and 18 per cent in 1954). Although in the last two years a remarkable expansion has also been recorded for petroleum—another product of the mining industry—tin is still the most potent factor in Bolivia's economy, and the principal determinant of the country's foreign payments capacity.

Modifications in the volume of tin exported, and fluctuations in the prices it can fetch on world markets, must therefore be regarded as two essential elements in the economic life of Bolivia. During the last ten years exports have shown a clearly-defined tendency to decrease, partly as a result of world market conditions, and partly in consequence of the country's own economic situation. The low grade of Bolivian ores means that the production of tin is a costly process. In addition, the effect of the exchange policy must be taken into account. The export rate of exchange has been kept abnormally low in relation to the internal devaluation of the currency, as a way of preventing the higher cost of imports from intensifying the existing inflation. But if this policy has successfully averted the risk of a sharp rise in the price of imported goods, it has also had a discouraging effect on the mining industry, as is made particularly manifest by the insignificance of the resources devoted to prospecting and the marked decline observable in the output of small- and medium-scale mining.¹⁷

During the first seven months of 1955, Bolivian tin was

¹⁷ The share of small- and medium-scale mining in the production of tin fell from 26.8 per cent in 1951 to 13.5 per cent in 1954.

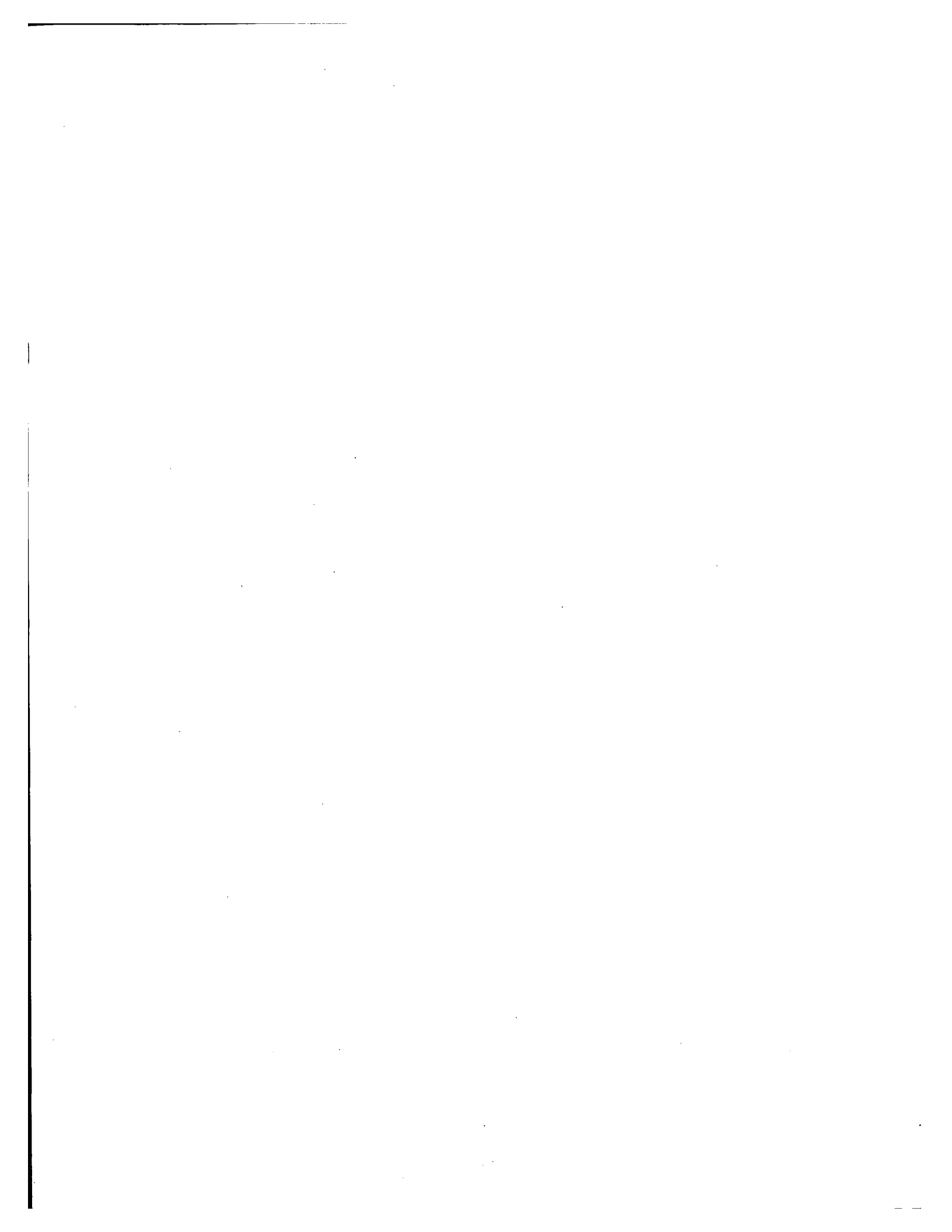
exported at a slightly lower rate than in 1954, when sales abroad had already fallen 17.4 per cent below their 1953 level. This further decline of exports in 1955 took place at a time when there was in reality no serious difficulty in selling tin on the principal foreign markets, as the United States continued to buy up production surpluses for its strategic reserve, and Bolivia itself renewed a contract with a British firm whereby the latter guarantees to purchase 50 per cent of the country's output of tin at world market prices.

The rise in the prices of tin as from the close of 1950 perceptibly improved Bolivia's terms of trade, which, until that year, had remained below the 1945 level, although in 1948 and 1949 world quotations were higher than in the three preceding years. This deterioration between 1946 and 1950 was mainly due to the relatively larger increase in import prices. Although in 1951 the terms of trade attained their peak, they were still only 18 per cent more favourable than in 1945; and from 1952 onwards they once again declined, as a result of the fall in the price of tin on the world market, until by 1954 they were about 5 per cent lower than in 1953 and only 7 per cent higher than in 1945.

Tin-mining in Bolivia is faced with the same problem of the slow expansion of demand that confronts all the producers of this metal, and, in addition, is in a state of uncertainty as to the future attitude of the United States Government with respect to the Texas smelter. This is the only plant currently treating the low-grade Bolivian ores, absorbing approximately 50 per cent of the country's output.¹⁸ In view of this situation, Bolivia has no alternative but to raise as much as possible the productivity of its mining industry, in which costs are higher than in that of most of the other producer countries, and to carry out a programme of technical improvements designed to secure a better reception for its exports on the world market. These improvements will take the following forms: (a) higher ore concentration to reduce the costs of land and sea transport to the smelter; (b) the breaking down of some of the complex ores into simple ores, to facilitate the smelting process; and (c) the establishment of a smelter in Bolivia which will handle, if not all the country's ores, at least those that are the most difficult to treat.¹⁹

¹⁸ The Texas smelter can treat this low-grade ore only in combination with richer ore, which generally comes from Malaya.

¹⁹ The reduction of some of these ores is so difficult a process that they can be treated only in combination with richer ores. The latter Bolivia produces in limited quantities that are at present mainly exported to the United Kingdom.



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