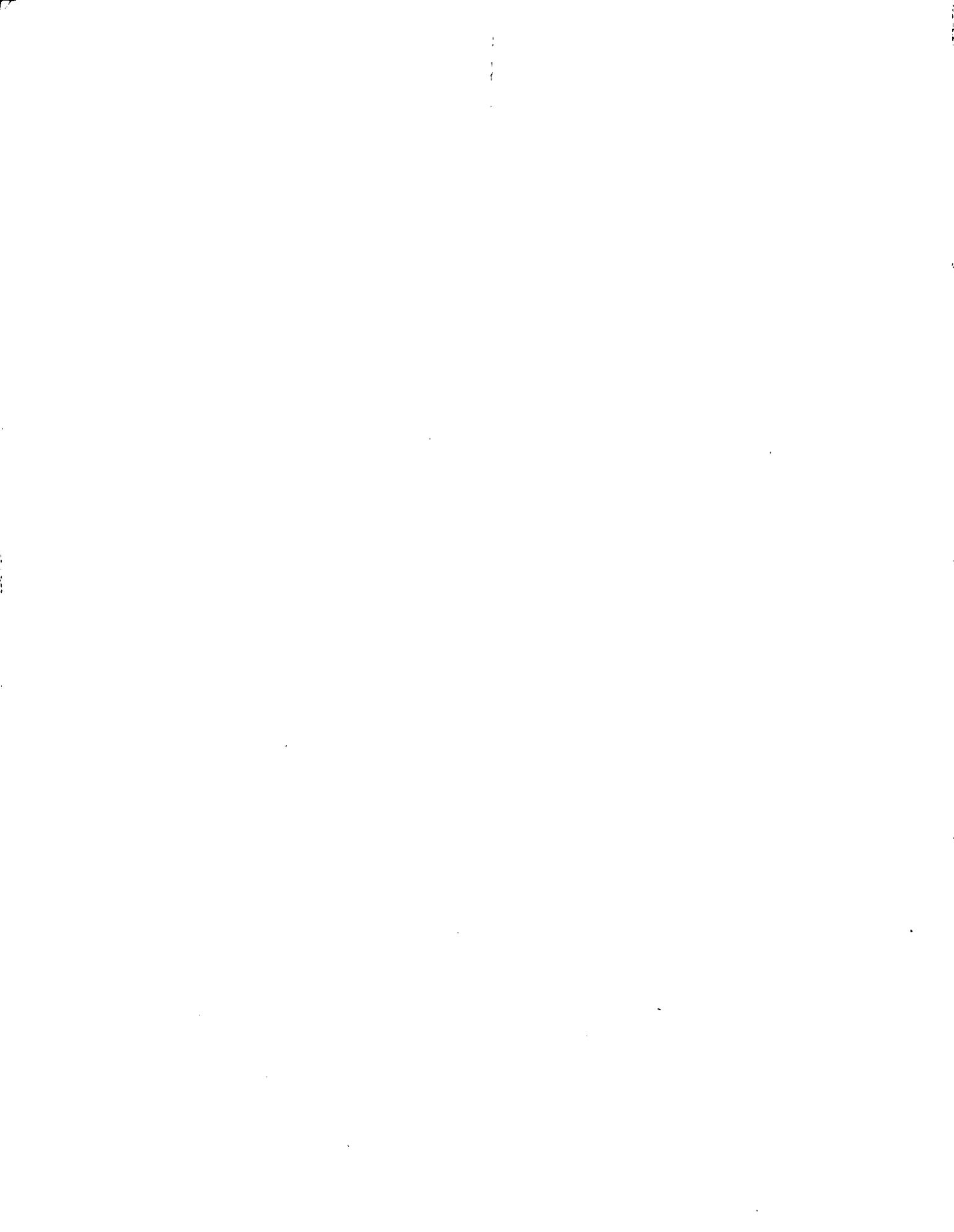


***A STUDY OF TRADE
between LATIN AMERICA
and EUROPE***

UNITED NATIONS



A STUDY OF TRADE between LATIN AMERICA and EUROPE

*Prepared by the secretariats of the Economic Commission for Latin America,
the Economic Commission for Europe and
the Food and Agriculture Organization of the United Nations*



*UNITED NATIONS
DEPARTMENT OF ECONOMIC AFFAIRS
Geneva, January 1953*

E/CN.12/225
January 1953

S
N118

UNITED NATIONS PUBLICATION
Sales No.: 1952.II.G.2

Price: \$1.25 (U.S.); 9/- stg.; Swiss francs 5.00
(or equivalent in other currencies)

TABLE OF CONTENTS

	Page
<i>Letter of Transmittal</i>	IX
<i>Chapter 1.—INTRODUCTION</i>	
The Period preceding the First World War	1
The 'Twenties	2
The 'Thirties	5
Post-war Problems	8
<i>Chapter 2.—LATIN AMERICA'S EXPORTS TO EUROPE</i>	
The Latin American Exporters	14
The European Importers	15
The General Competitive Position of Latin American Exports in European Markets	17
The General Competitive Position of Latin American Exports in European Markets	19
Commercial Policies of European Countries :	
1. Inter-war Period	19
2. Post-war Period	21
Price Fluctuations and the Search for Stability	22
Europe's Demand for Latin America's Exports	24
The Implications of Industrialization	25
<i>Chapter 3.—LATIN AMERICA'S IMPORTS</i>	
Factors determining the General Level of Latin American Imports	33
The General Impact of Industrialization	36
The Commodity Composition of Latin American Imports	39
The Relative Position of Europe and the United States in Latin American Markets	44
Competitive Factors in the Latin American Market	49
<i>Chapter 4.—THE CONDITIONS FOR AN EXPANSION OF TRADE</i>	
Promotion of European Exports	52
The Encouragement of Primary Production	53
Improvement of Payments Arrangements	54
Improvement of Payments Arrangements	55
* * *	
APPENDICES	
<i>Appendix I.—COFFEE</i>	
Coffee Policies in Brazil	58
Importance of Coffee in Brazil and in Other Latin American Countries	60
Europe's Demand for Coffee	61
Europe's Imports of Coffee	63
Prospects	64
<i>Appendix II.—SUGAR</i>	
Sugar Production in Latin America and the World	67
Cuba : Pre-war Experience	67

	Page
Cuba : Post-war Developments	70
Other Exporting Countries	70
European Consumption	71
Sources of European Supplies	71
Sugar Production in Europe	73
Imperial Preferences	74
The Free Market with Special Reference to Latin America	74

Appendix III.—COTTON

Latin American Production	76
Brazil	76
Peru	78
Mexico	78
Argentina	79
Production, Exports and Domestic Consumption	80
Cotton Consumption in Europe	81
Cotton Exports from Latin America to Europe	81

Appendix IV.—LINSEED AND LINSEED OIL

The Inter-War Period :	
World Production and Exports	84
Consumption	85
Post-war Changes in Production and Trade	85
Prospects :	
Production and Trade	85

Appendix V.—WOOL

Factors affecting Trade :	
Latin American Production, Consumption and Export Surplus	88
Distribution of Latin American Exports	89
European Consumption and Imports	89
Commercial Policies in Argentina and Uruguay	90
Prospects :	
Production in Latin America	90
Availability of Latin American Wool for Europe	90
European Demand for Latin American Wool	91
The European Market for Tops	91

Appendix VI.—MEAT

Europe's Demand for Meat	92
European Production	94
European Import Demand	95
Non-Latin-American Meat Exports	96
Latin American Export Supplies	97
Possibilities for increasing Meat Production in Latin America	98
Reduction in Domestic Consumption	98
Possibilities for increasing Latin America's Meat Exports	98
Alternative Outlets for Latin American Meat	100
Latin American Exports to Europe	100

<i>Appendix VII.—EXPORTS OF TEXTILE MACHINERY FROM EUROPE TO LATIN AMERICA</i>		Page
Main Producing and Exporting Areas		101
Latin American Markets		102
Preferences of Latin American Textile Manufacturers for American or European Machinery		103
Importance of Latin America as a Market for European Textile Machinery		104
Difficulties encountered by European Exports to Latin America		104
Prospects for Trade in Textile Machinery with Latin America		104
Conclusions		106

Appendix VIII.—LATIN AMERICAN MARKETS FOR TRACTORS

Mechanization of Agriculture in Latin America	107
Latin American Imports of Tractors	108
Europe as a Supplier of Tractors	109

INDEX OF TABLES

Table	<i>Chapter 1.—Introduction</i>	
1. Production of Selected Commodities		2
2. Total Foreign Investments in 1913-14, Geographic Distribution		2
3. Latin America's Imports		3
4. Latin America's Exports		3
5. Estimated Balance of Payments of Latin America, 1925-1929 and 1934-1938		6
6. Change in the Purchasing Power for Imports in Latin America		6
7. Balance of Payments of Latin American Republics, 1948 and 1949		9
8. Principal Exports from Latin America		10
9. Exports from Europe and the United States to Latin America		12
10. Dollar Receipts and Dollar Expenditure of Latin America, June 1950-December 1951		13
<i>Chapter 2.—Latin America's Exports to Europe</i>		
11. European Countries' Imports from Latin America, 1925 to 1951		15
12. Principal Relations between Importing Countries of Europe and Exporting Countries of Latin America		17
13. Latin America's Exports to Europe and to the United States as Percentage of Total Exports of Each Group		18
14. Share of the French Colonies in Total Imports of France		20
15. Europe's Overseas Imports of Coffee, Copper and Wool, by Region of Origin		21
16. Price Changes of Selected Primary Products 1928 to 1952		23
17. Ratio of United States Total Imports of Raw Materials and Semi-manufactures to its Total Manufacturing Production		24
Appendix Table I. Europe's Imports from Latin America by Commodities		28
Appendix Table II. Latin America's Share, by Commodities, in European Countries' Total Imports		28
Appendix Table III. Latin America's Exports to Europe by Exporting Countries		29
Appendix Table IV. European Imports from Latin America by Importing Countries		29
Appendix Table V. Trade of Latin America with Europe and the United States		30-31
<i>Chapter 3.—Latin America's Imports</i>		
18. Imports of Latin American Countries as Percentage of the Value of Latin America's Total Imports		35
19. Imports of Selected Latin American Countries from Main European Sources and from the United States		36
20. Index Numbers of Total Supplies available for Home Use and Proportion derived from Imports		37

Table	Page
21. Imports of Crude Rubber and Rubber Manufactures	39
22. Latin America's Imports from Main European Sources and the United States, by Commodity Groups	40-41
23. Changes in Composition of Imports into Selected Latin American Countries from Europe and the United States	42
24. Imports of Selected Latin American Countries from Europe and the United States	45
25. Share of Europe and the United States in Latin America's Imports, by Commodity Groups	46
26. Share of Commodity Groups in Latin America's Imports from Europe and the United States	46
27. Latin America's Imports of Transport Equipment from the United States and the United Kingdom	47
28. Exports from Selected European Countries to Selected Latin American Countries, by Commodity Groups	48
29. Western Germany's Exports to Latin America in 1949, 1950 and 1951	49
30. Exports from Europe and the United States to Latin America before and after Devaluation	51

Chapter 4.—The Conditions for an Expansion of Trade

31. Trade of Latin American Republics with Europe, by Type of Settlement	55
32. Europe's Balance of Trade with Latin American Republics and Imports financed by E.C.A.	56

Appendix I.—Coffee

1. World Production of Coffee	58
2. Brazil : Index of Ratio of Coffee Prices to Prices of Other Products	60
3. Share of Coffee in Value of Total Exports of Major Latin American Producers	60
4. Relative Prices and Exports of Brazilian and Colombian Coffee	60
5. Exports of Coffee from Selected Latin American Countries	61
6. <i>Per Capita</i> Consumption of Coffee in Selected European Countries, the United States and Canada	62
7. Retail Price of Roasted Coffee in Selected European Countries and the United States	62
8. Consumption of Tea and Coffee in the United Kingdom and Denmark	62
9. European Imports of Coffee	63
10. Coffee Exports from European Possessions in Africa	63
11. Percentage Distribution of Sources of Coffee Imports in Europe and the United States	64
Appendix Table A. World Imports of Coffee from Latin America and Other Regions	66

Appendix II.—Sugar

1. World Sugar Production	67
2. Exports of Sugar from Latin America	68
3. Percentage Distribution of Sugar Exports from Cuba	68
4. Price of Raw Cuban Sugar in London and New York	69
5. Europe : <i>Per Capita</i> Sugar Consumption by Countries	72
6. Sources of Supply of Five Major Sugar-importing Countries	72
7. Sugar Production in Europe	73

Appendix III.—Cotton

1. Cotton Production in Latin America and in Other Major Producing Areas	76
2. Development of Cotton Production in Major Latin American Producing Countries	77
3. Consumption and Exports of Raw Cotton	79
4. Available Supplies of Cotton Textiles in Latin America	80
5. <i>Per Capita</i> Consumption of Cotton Textiles	80
6. Mill Consumption of Raw Cotton in Six European Countries	81
7. Cotton Consumption and Exports in Five European Countries	82
8. Share of Europe in Total Exports of Cotton from Four Major Latin American Producers	82
9. Share of Major Producers in Cotton Imports of Selected European Countries and Japan	83
10. Cotton Prices : 1949 to 1952	83

Table	<i>Appendix IV.—Linseed and Linseed Oil</i>	Page
1. Production, Exports and Consumption of Linseed and Linseed Oil		84

Appendix V.—Wool

1. World Trade in Wool	87
2. European and World Imports and Consumption of Wool	88
3. Wool Production in Argentina and Uruguay	88
4. Wool Exports from Latin American Countries	89

Appendix VI.—Meat

1. <i>Per Capita</i> Meat Consumption in Selected European Countries	92
2. Production and Imports of Meat by Major Producing Areas	93
3. Production Percentages of Meat in Selected European Countries	94
4. United Kingdom Meat Supplies	95
5. Latin American Exports of Meat	97
6. Latin American Exports of Certain Kinds of Meat and Approximate Percentage exported to Europe	98
7. United Kingdom Imports of Carcase Meat and Offal	99

Appendix VII.—Exports of Textile Machinery from Europe to Latin America

1. Exports of Textile Machinery from Main Producing Countries	101
2. Production and Exports of Textile Machinery by Selected European Countries and the United States	101
3. Exports of Textile Machinery in 1948	102
4. Equipment installed in Selected Latin American Countries	103
5. Exports of Textile Machinery from Western European Countries, the United States and Japan to Latin America	105

Appendix VIII.—Latin American Markets for Tractors

1. Tractor Park of Latin American Countries	107
2. Imports of Tractors into Latin America by Country of Origin	108
3. Production of Agricultural Tractors in Europe	110

* * *

INDEX OF CHARTS

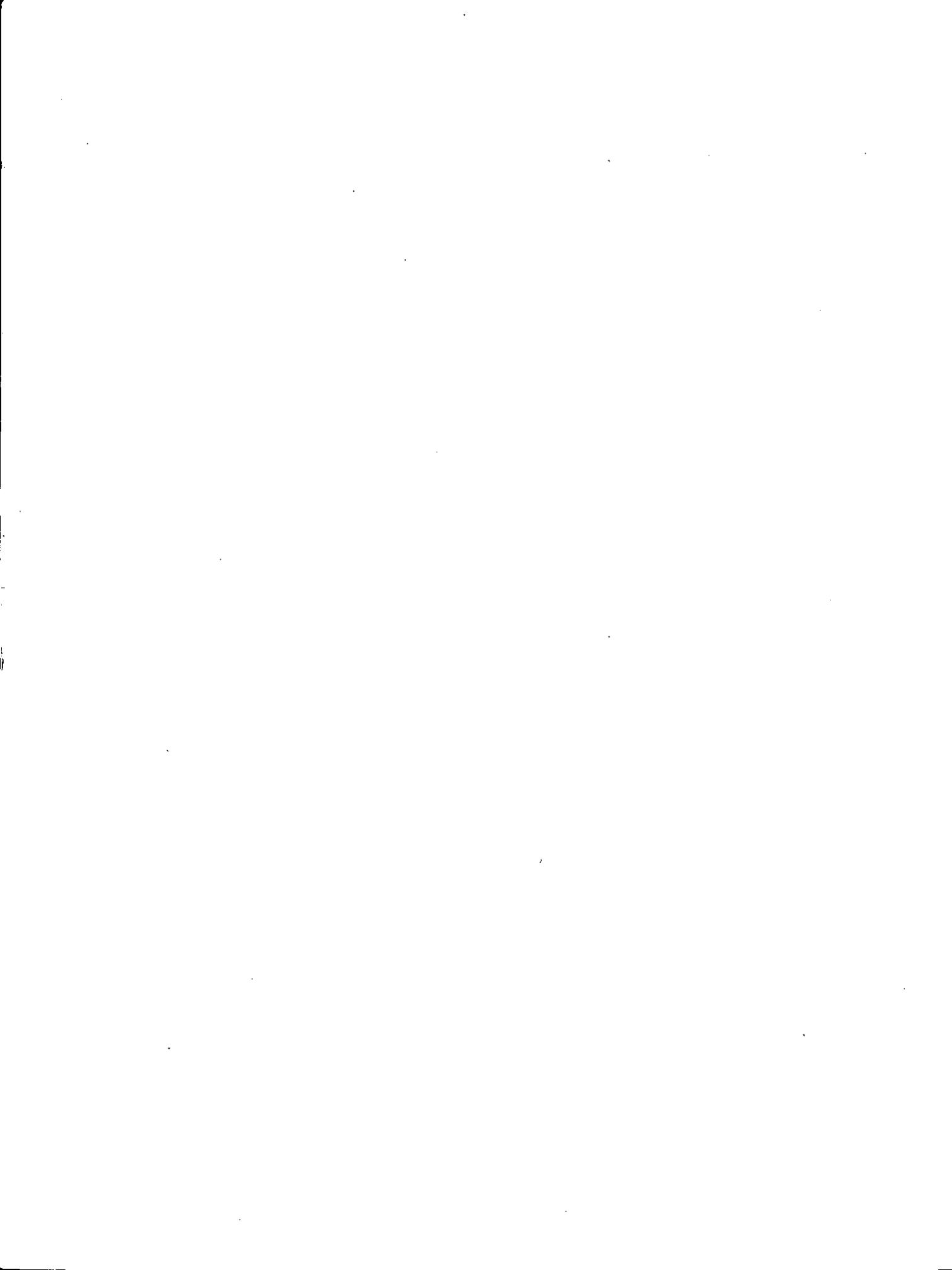
Chart		
1. Unit Value Indices and Terms of Trade of Latin America with Europe and the United States		7
2. Volume Indices of Exports from Latin American Countries to Europe		16
3. Trade of Latin America with Europe and the United States		33
4. Latin America's Imports by Area or Country of Origin		34

Appendix I.—Coffee

1. Relative Movements of Prices and Export Quantities of Brazilian and Colombian Coffee, 1926 to 1938	61
-----------------------------------------------------------------------------------------------------------------	----

* * *

Notes on Sources and Methods	113
----------------------------------------	-----



LETTER OF TRANSMITTAL

Santiago de Chile,
January 1953

Sir,

The Third Session of the Economic Commission for Latin America at Montevideo adopted a resolution (E/CN.12/200) requesting the Executive Secretary "to prepare, in agreement with the Executive Secretary of the Economic Commission for Europe, a study to be undertaken jointly by both secretariats, on ways and means to expand trade between Latin America and Europe on bases which are practicable and equitable to the interests of both groups of countries".

After consultation with the Executive Secretary of the Economic Commission for Europe, a joint study was undertaken. Because of its special interest in agricultural commodities, the Food and Agriculture Organization of the United Nations has collaborated in the preparation and drafting of the study. The International Monetary Fund has co-operated in providing information on balances of payments.

A provisional edition of the study was issued in May 1951, but the present edition incorporates a number of major additions to and revisions in the material.

I have the honour to be, Sir,
Your obedient servant,

(Signed) RAUL PREBISCH,
Executive Secretary
Economic Commission for Latin America

The Hon. Trygve Lie,
Secretary-General,
United Nations,
New York, N.Y.

SYMBOLS EMPLOYED

The following symbols have been used throughout this SURVEY :

- .. = not available or not pertinent
- = nil or negligible
- * = revised figure

In referring to combinations of years, the use of an oblique stroke—*e.g.*, 1949/50—signifies a 12-month period (say from 1 July 1949 to 30 June 1950). The use of a hyphen—*e.g.*, 1948-1950—signifies an average of the full period of calendar years covered (including the end years indicated).

Unless the contrary is stated, the standard unit of weight used throughout is the metric ton. The term "dollar" refers to the United States dollar. The definition of "billion" used throughout is one thousand millions. Minor discrepancies in totals and percentages are due to rounding.

Chapter 1

INTRODUCTION

Trade between Europe and Latin America has in the last fifty years suffered the three heavy setbacks of two world wars and a major depression. These setbacks, together with the difficulties they left in their wake, prevented the volume of trade between the two areas from rising in a way which would correspond to the rate of economic development in Latin America, or even to the much slower growth of the European economy. Some recovery occurred after each setback, but the rapid rate of expansion which characterized trade at the beginning of the century was never regained. In 1951, the volume of Latin America's exports to Europe and the volume of Europe's exports¹ to Latin America were still well below the corresponding levels in 1913.

The two world wars were of special significance in that they retarded the development of the European economy while they accelerated the growth of other areas, in particular those of the United States and Latin America. On the one hand, the two wars gave an enormous impetus to the manufacturing production and import requirements of the United States, while, on the other, the rapidly expanding Latin American economy could not find in war-time Europe adequate outlets for its growing production. Each war therefore resulted in a loosening of the ties of Latin America with Europe and in an increase of the importance of the United States in its trade. In sharp contrast to the decline of Latin America's trade with Europe, its trade with the United States in recent years has been far greater than the 1913 volume.

These contrasting developments were not solely the result of war and depression. The trend towards industrialization in Latin America, which increased its demand for capital goods and reduced its demand for textiles—thus favouring imports in a field where United States manufacturers had been predominant, while violently reducing a European staple—was a process which was accelerated rather than caused by war, although in the case of the second World War, the acceleration was so extreme as to be almost equivalent to a cause. After the second World War, Government industrialization policy caused Argentina—which is by far the most important supplier of primary products to Europe—drastically to reduce

the quantities available for export, thus contributing a major element in the contraction of trade.

These various factors, and others, which lay behind the development of trade between Latin America and Europe, both in the recent and in the more distant past, are analysed in the following chapters of this study; the particular effects of industrialization are discussed twice, first for their effect on Latin America's export capacity (Chapter 2) and second for their effect on Latin America's import demand (Chapter 3). This introductory chapter is intended to provide a short review of the general history of Latin America's trade with Europe and the United States, as a background for the more detailed discussion in the later chapters.

The Period preceding the First World War

The beginning of the twentieth century was a period of particularly rapid development in the Latin American Republics. While total demand both in Europe and in the United States was expanding steadily, Latin American production and exports increased even faster, and the importance of the areas as a supplier of primary products grew rapidly. In the period 1895 to 1899, imports from Latin America accounted for 5 per cent of total British imports; in the last five years before the first World War they accounted for 10 per cent of a considerably enlarged British import trade. While production in Europe increased by some 45 per cent during the fifteen years preceding the first World War, imports from Latin America nearly doubled in volume.

This rapid development was due to the opening up of new areas in Latin America and the emergence of the continent as a highly efficient producer of foodstuffs and raw materials. The River Plate area was coming into full production and, thanks to its competitive advantages, found ready markets for its export products. For wheat and meat, for instance, it made rapid inroads on United States exports, which had earlier gained a preponderance in these fields. Table I shows the impressive progress made for a number of major commodities, with the exception of coffee, where over-production already threatened.

The expansion in production was itself to a large extent made possible by the inflow of foreign capital, chiefly of European origin. The United Kingdom had in earlier times been the main source of investments in Latin America and the period preceding the first World War was again one of particularly active

¹ It should be remembered that much of the analysis of this study is based on the results for the period 1945 to 1951—that is, before the recovery of western Germany's very important export trade to the area was complete.

Table 1

PRODUCTION OF SELECTED COMMODITIES

Thousands of tons, annual averages

Commodity	Producing country	1900-1904	1910-1914	1925-1929
Wheat	Argentina	2,550	4,000	6,750
Nitrates	Chile	1,450	2,550	2,500
Tin	Bolivia	12	23	38
Sugar	Cuba	788	2,200	4,900
Copper	Chile	30	40	250
Coffee	Brazil	684	720	1,240

Source: National statistics.

foreign lending. At the beginning of the twentieth century, France, Germany and the United States were also investing on a substantial scale. On the eve of the first World War, British investments in Latin America have been estimated at \$5 billion, French investments at \$1.2 billion, German investments at \$900 million and United States investments at \$1.3 billion,¹ and, as Table 2 shows, Latin America accounted for about one-fifth of the total foreign investments of these countries.

Table 2

TOTAL FOREIGN INVESTMENTS IN 1913-14,
GEOGRAPHIC DISTRIBUTION

Billions of dollars

Investing country	Location of investment
United Kingdom 18.0	Africa 4.7
France 9.0	Asia 6.0
Germany 5.8	Europe 12.0
United States 3.5	North America 10.5
Belgium, Netherlands and Switzerland 5.5	Latin America 8.5
Japan, Portugal and Sweden 2.2	Oceania 2.3
44.0	44.0

Source: *International Capital Movements during the Inter-war Period*, United Nations Publications, Sales No. 1949.II.D.2, page 2.

It is believed that most of the United States and German investments in Latin America and two-thirds of the French were made during the period

¹ The British figures are a computation of the *South American Journal*. However, Feis, in *Europe, the World's Banker, 1870-1914*, Yale University Press, 1930, gives a figure of \$3.8 billion. The French and German figures are from Feis, the American figures from Dunn, *American Foreign Investment*, New York, 1926.

1900 to 1914, but during this period also the United Kingdom remained the major lender, playing a particularly important role in the development of railways.

The combination of favourable factors—expanding exports, profitable prices and the inflow of capital—permitted a very rapid rise in the volume of imports, which, as Table 3 shows, doubled between 1900 and 1913. The greatest increases were registered in the countries which had been the main recipients of European capital—Argentina, Brazil and Chile. Europe was also the most important trading partner, taking 60 per cent of Latin American exports, and supplying 65 per cent of Latin American imports.

The 'Twenties

The first World War brought about a sharp interruption of the rising trend in world demand for primary products. Industrial production in Europe was slow to recover and substantial improvement did not begin until 1925. Total European imports of primary products recovered even more slowly than industrial production and at the end of the 'twenties had hardly reached the pre-war level. By contrast, in the United States the growth trend was almost unbroken and manufacturing production, which had doubled in the fifteen years preceding the war, increased by a further 80 per cent by 1929. The result was that, in the first five years after the war, Latin American exports to the United States rose steadily, and at about the same rate as total United States imports of primary products and United States manufacturing production. Table 4 shows that by 1925 the volume of Latin American exports to the United States had reached a level nearly three-fourths above that of 1913, while the volume of exports to Europe was still 10 per cent down.

After 1925, Latin American exports to Europe began to recover more rapidly and certainly did not fare as badly as the slow recovery of total European primary imports would suggest; by 1928, the

Table 3

LATIN AMERICA'S IMPORTS

Millions of dollars, f.o.b., and index numbers — 1938 = 100

	1901-1905	1913	1925	1928	1937	1938	1948	1949	1950	1951
VALUES AT CURRENT PRICES										
Total imports (including intra-trade)	515	1,226	2,066	2,083	1,396	1,309	5,101	4,429	..	..
Imports from Europe	347	793	908	973	702	635	1,323	1,378	1,450	2,095
Imports from the United States	126	317	844	831	577	494	3,205	2,750	2,743	3,773
Ratio = $\frac{\text{Europe} \times 100}{\text{United States}}$	275	250	108	117	122	129	41	50	53	56
VOLUME INDEX										
Total imports	58	111	111	123	103	100	183	170	..	..
Imports from Europe	89	163	108	128	108	100	91	100	129	155
Imports from the United States	30	65	120	129	112	100	329	301	314	380

See "Notes on Sources and Methods".

volume index in Table 4 stood 30 points above 1913. There were a number of special reasons for this development, among which the heavy reduction of cereal exports from the Soviet Union and the Danubian Basin were particularly important. Argentina inherited a major part of these markets, and in the later 'twenties again improved its position at the expense of the United States, which had been shipping particularly large quantities of food to Europe in the immediate post-war years. In the middle 'twenties, much the same happened to Chilean

copper, which tended to conquer markets previously held by North America.

In total, Latin America's share of world exports of primary products rose from 13 per cent in 1913 to 15½ per cent in 1928. The direction of exports had changed and while in 1913 Europe took more than twice as much as the United States, in 1925 it took only 35 per cent more. The relative recovery of trade with Europe after 1925 raised the percentage again, but without coming near to the pre-war distribution.

Table 4

LATIN AMERICA'S EXPORTS

Millions of dollars, f.o.b., and index numbers — 1938 = 100

	1901-1905	1913	1925	1928	1937	1938	1948	1949	1950	1951
VALUES AT CURRENT PRICES										
Total exports (including intra-trade)	823	1,590	2,741	3,005	2,360	1,771	6,535	5,543	..	..
Exports to Europe	523	963	1,361	1,600	1,207	922	2,329	1,655	1,775	2,283
Exports to the United States	234	441	1,005	947	672	453	2,356	2,304	2,912	3,350
Ratio = $\frac{\text{Europe} \times 100}{\text{United States}}$	224	218	135	169	180	204	99	72	61	68
VOLUME INDEX										
Total exports	48	75	86	105	121	100	124	109	..	..
Exports to Europe	62	92	83	113	125	100	81	65	73	74
Exports to the United States	47	70	121	118	121	100	179	175	189	178

See "Notes on Sources and Methods".

Although the first World War had already given a considerable impetus to industrialization in Latin America, the rate of increase of production of primary products for export was not reduced. Grain and meat production in Argentina, copper in Chile, sugar in Cuba, all showed tremendous gains over pre-war production levels. Production of primary goods in Latin America as well as elsewhere continued to increase during the middle and later 'twenties, indeed so rapidly that despite relatively high and rising economic activity in Europe and the United States, commodity prices fell: between 1925 and 1929 the unit value index of Europe's imports from Latin America fell by 16 per cent and the corresponding index for the United States by 11 per cent. Throughout the 'twenties the price ratio between primary products and manufactures remained less favourable to primary producers than it had been during the period preceding the first World War, and the United Kingdom, for instance, was able to obtain in the 'twenties a volume of primary imports which was 25 per cent greater than before the war in exchange for the same volume of exported manufactures. The United Kingdom case was, however, an extreme one, influenced by the over-valuation of sterling; the improvement in the United States terms of trade was more moderate.

The shift in the relative importance of Europe and the United States as buyers of Latin American produce was accompanied by changes in the same direction for exports to Latin America of both goods and capital. In the immediate post-war years, Europe's export capacity was reduced and later its competitive position was eaten into by North American manufacturers. As a result, never in the 'twenties, nor indeed in any year since, were European exports to Latin America to recover the volume achieved in 1913.

The improved competitive position of the United States was very much the product of a shift in the commodity composition of Latin American demand. Previously, Latin American countries had concentrated their imports largely on textiles, other light consumer goods and railway equipment, in all of which European manufacturers held a strong position. After 1920, with the progress of industrialization, the demand was directed more to machinery, durable consumer goods and road transport equipment, for which types of goods the United States had developed a strong competitive advantage owing to its mass production techniques based on an extensive and wealthy home market. Thus, Argentina and Brazil in 1928 took only one-quarter of their total imports from the United States, but in the field of machinery and vehicles the proportion was considerably more than half, and it was for these goods that demand was increasing most rapidly.

As the direction of Latin American exports had changed at the same time, the transfer from one

source of supply to another took place without difficulty, and no large-scale multilateral settlements occurred between Europe, Latin America and the United States.

The United States also took over Europe's role as a supplier of capital. The nominal value of British investments increased by only \$40 million between 1923 and 1929 and the other two main pre-war capital exporters from Europe—France and Germany—virtually abandoned that function, while on the other side of the picture the net capital flow from the United States to Latin America rose rapidly, reaching a maximum of \$350 million in 1926. There can be little doubt that this change in the source of capital, especially that going into investments, had an important indirect influence on the pattern of trade.

The flow of capital into Latin America from the United States in the 1920's was as much the product of boom conditions and the speculative atmosphere in the world at large as of the existence of sound economic development prospects in the Latin American countries. In the giddy period before 1930, many municipal bond issues were floated on the New York market at high rates of interest and extremely high underwriting costs, and there is evidence that much of this borrowing was not used in ways which would materially contribute to the development of productive capacity.¹ All this was made possible by the willingness of the American investing public to subscribe to these dubious issues at rates of interest which they found attractive—rates which, though high, were lower than the rates prevailing internally in Latin America. Fortunately, not all the investment out of loan capital was of such a doubtful nature, and throughout the period before the second World War and again in the post-war years there was a considerable flow of funds for direct investment in specific industries. This type of investment usually takes some years to mature, and for this and other reasons the eventual yield for the foreign owner is considerably greater, but the payments of profits and dividends present much less of a balance-of-payments problem to the paying countries since the level of profits tends to be correlated with that of export earnings² and represents in effect a payment in kind of investment income.

¹ The case of Peru can be quoted as an example, where half the domestic debt was repaid through borrowing in New York. For other examples, see *Sale of Foreign Bonds or Securities in the United States*, Hearings before the Senate Committee on Finance, 1932.

² This is illustrated, for instance, by the trend of oil exports and investment income received by oil companies operating in Venezuela:

	1946	1947	1948	1949
	<i>Millions of dollars</i>			
Oil exports . . .	485	665	1,069	926
Investment income	158	273	430	251

Source: See *Balance of Payments Yearbook, 1949-1950*, International Monetary Fund.

The 'Thirties

The depression of the 'thirties completely undermined the pattern of international trade and payments which had developed during the decade following the first World War. In the 'twenties, the United States had maintained a large trade surplus with Europe, usually exceeding \$1 billion a year, which was essentially accounted for by exports of foodstuffs and raw materials; the United States was also exporting slightly more manufactures to Europe than it received from that area. From the rest of the world, the United States had net imports of foodstuffs and raw materials which exceeded its exports of manufactures by only some \$250 million a year. The other current account items in the United States balance of payments tended to cancel out, large receipts on income account being offset by payments for other services, such as travel expenditure and remittances. The United States trade surplus was essentially offset by capital exports.

Europe balanced its trade deficit with the United States partly through direct capital imports, the bulk of which went to Germany, and partly through its surplus with primary producers (other than Latin America), which themselves were either net dollar earners or the recipients of United States capital.

The pattern of world trade in the late 'twenties, which appeared relatively stable at the time (the United States was on balance a small net exporter of gold between 1925 and 1929) thus depended not only on a high level of United States imports, but also on a flow of United States capital for investments, and both these foundations proved extremely vulnerable to the depression.

When the depression began in the United States, the value of imports dropped sharply not only for primary products but also for manufactures imported from Europe, since many of the latter were of a marginal character, being high-cost specialities particularly sensitive to income fluctuations.¹ Disbursements for travel expenditure and personal remittances were halved, and capital exports stopped altogether. The world outside the United States, which had become accustomed to spending \$7.4 billion annually on United States goods and services, had to adjust itself to a supply of dollars which fell to \$2.7 billion in 1932-1933, and the adjustment was made all the more difficult by the strong position which United States manufactures had won during the period of prosperity.

European countries were hit by the sharp fall in their exports to the United States, by the cessation of North American capital exports (essentially in the case of Germany) and also by the drop in their

dollar earnings from primary producers. They were thus compelled to reduce their import surplus from the United States to less than \$400 million a year.

Primary producing countries in Latin America suffered simultaneously from the cessation of United States lending, from a decline in the volume of their exports and, most important, from a violent deterioration in their terms of trade. The deterioration in Latin America's terms of trade, the movements of which from 1925 onwards are shown in Chart 1, was the result of the well-known phenomenon that price elasticities of supply and demand for primary products were considerably lower than those for manufactured goods. In Latin America the production of most foodstuffs and agricultural raw materials was in fact higher in the 'thirties than in the 'twenties, with the exception of wheat, which declined in Argentina, and sugar, which fell off severely in Cuba; yet the value of Latin American exports to the United States fell from over \$1 billion in the late 'twenties to less than \$350 million in 1932-1933. These developments put an intolerable strain on Latin America's balance of payments, estimates for which are given in Table 5 below. As is usual in the case of developing countries, the inflow of capital had played a dual role, providing a major part of the resources needed for internal development, and at the same time relieving part of the pressure placed on the current balance of payments by the need to service past debts and to pay for foreign shipping services. When, after 1929, the flow of capital suddenly reversed,² the balance of merchandise trade had to bear the whole burden of the invisible deficit. At the same time, as already seen, the terms of trade deteriorated violently (by some 30 per cent between 1929 and 1931), so that Latin America's power to purchase imports was sharply reduced.³ Table 6 shows that the total reduction from these causes between the periods 1925-1929 and 1934-1938 reached over one billion dollars at 1925-1929 prices. Between the same two periods there was also a slight decline in the volume of exports, so that, had there been no other way out, Latin America would have had to cut down the 1925-1929 volume of its imports by no less than 60 per cent. Escape was found by defaulting on debt service obligations; by September 1935, 77 per cent of the outstanding United States loans to Latin America were in default as to interest,⁴ and repatriation of earnings from direct investments was made

² There appears to have been a net capital outflow during the period 1934-1938, as indicated in Table 5.

³ The situation was further aggravated by the existence of substantial short-term commercial debts which had been piled up during the boom. There is no direct statistical evidence of these, however, and Table 5 shows only the officially recorded changes in Latin American balances in United States banks.

⁴ Among the major debtors, only Argentina continued to service its foreign debt.

¹ The increase in the United States tariff in 1930 also contributed to the decline in imports of manufactures.

Table 5

ESTIMATED BALANCE OF PAYMENTS OF LATIN AMERICA, 1925-1929 AND 1934-1938

Millions of current dollars, annual averages

Item	Period	United Kingdom	Other European countries	United States	Total of areas listed
A. Merchandise trade					
Imports, f.o.b.	1925-1929	- 330	- 580	- 840	- 1,750
	1934-1938	- 170	- 380	- 420	- 970
Exports, f.o.b.	1925-1929	+ 520	+ 940	+ 990	+ 2,450
	1934-1938	+ 350	+ 590	+ 490	+ 1,430
Silver exports (net) to United States	1925-1929	—	—	+ 50	+ 50
	1934-1938	—	—	+ 40	+ 40
Balance on trade account	1925-1929	+ 190	+ 360	+ 200	+ 750
	1934-1938	+ 180	+ 210	+ 110	+ 500
B. Services ^a					
Investment income	1925-1929	- 250	- 110	- 300	- 660
	1934-1938	- 110	- 40	- 160	- 310
Other services, including non-monetary gold	1925-1929	- 180	- 90	+ 10	- 230 ^b
	1934-1938	- 90	- 60	+ 40	- 30 ^b
C. Balance on goods and services	1925-1929	- 240	+ 160	- 90	- 140
	1934-1938	- 20	+ 110	- 10	+ 160
D. Capital movements ^a					
Long term (including amortization and redemption)	1925-1929	+ 30	—	+ 200	+ 230
	1934-1938	- 60	- 10	- 30	- 100
Short term	1925-1929	..	..	- 10	- 10
	1934-1938	..	..	- 40	- 40
E. Monetary gold and foreign exchange ^c	1925-1929	..	..	..	- 30
	1934-1938	..	..	..	- 10
F. Total of items listed	1925-1929	- 210	+ 160	+ 100	+ 50
	1934-1938	- 80	+ 100	- 80	+ 10

Source: Research and Planning Division, Economic Commission for Europe.

NOTE. — Several items in the table are based on incomplete data or rough estimates; the figures given should be taken only as indicating broad orders of magnitude.

^a Incomplete or partially estimated items.

^b The total includes, while the area break-down excludes, transactions in non-monetary gold.

^c Figures given indicate the changes in total gold and foreign exchange reserves, thus also including transactions with other areas than those listed in the table.

Table 6

CHANGE IN THE PURCHASING POWER FOR IMPORTS IN LATIN AMERICA

Millions of dollars, annual averages

Item	1925-1929	1934-1938
	to 1934-1938	to 1948-1949
	At 1925-1929 prices	At 1934-1938 prices
Change in purchasing power for imports due to :		
Change in the volume of exports	- 60	+ 150
Change in the price of exports relatively to the price of imports	- 525	+ 800
Change in the current invisible deficit	+ 515	- 250
Extraordinary repatriation of European investments	—	- 150
Change in net movement of other types of capital	- 440	+ 350
Total of above changes	- 510	+ 900
Actual change in imports (at constant prices indicated)	- 480	+ 1,150

Source: Research and Planning Division, Economic Commission for Europe.

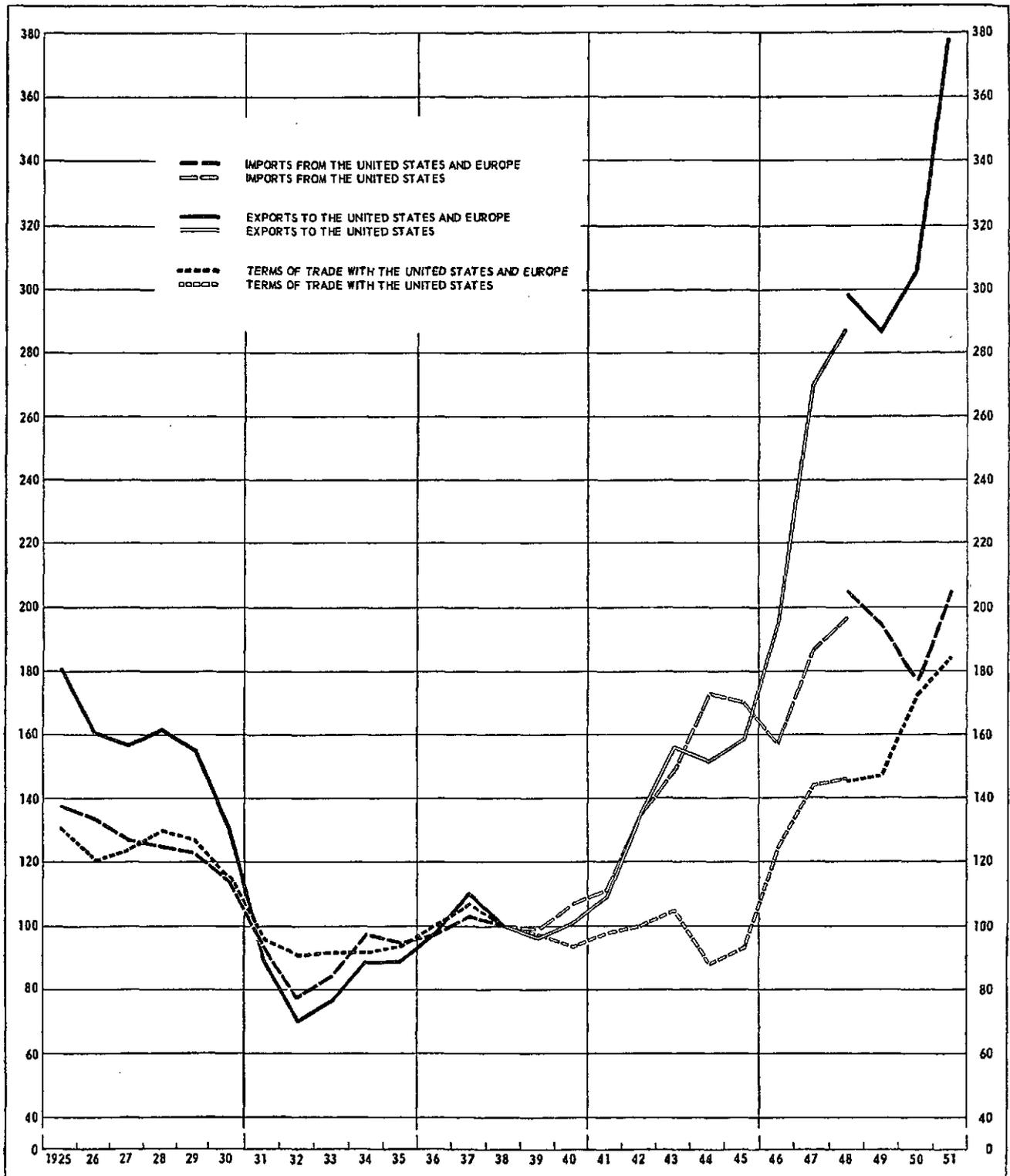
NOTE. — The table has been derived from Tables 5 and 7 and Chart 1 by : (i) correcting the value of exports for the change in export prices ; (ii) applying

the percentage change in the terms of trade to the value of exports in the base period ; (iii) adjusting the change in the invisible deficit, the net capital flow and the value of imports for changes in import prices. The estimates are necessarily only approximate and contain a large margin of error.

Chart 1

UNIT VALUE INDICES, AND TERMS OF TRADE ^a
OF LATIN AMERICA WITH EUROPE AND THE UNITED STATES

1938 = 100



Sources: See "Notes on Sources and Methods". ^a Ratio of the export unit value index to the import unit value index.

increasingly difficult by exchange controls. Table 5 shows how, between 1925-1929 and 1934-1938, net payments of interest, profits and dividends fell by \$340 million, which, together with certain other fortuitous improvements¹ in the invisible balance, enabled Latin America to avoid having to reduce the volume of its imports by more than one-third (Table 6).

Thus, by defaulting on debt contracts in the 1930's, the Latin American countries avoided the catastrophic reduction in income and welfare which would have resulted had they been forced to cut their imports by the full equivalent of the decline in the terms of trade and the reduction in the capital inflow, but the inevitable loss of confidence by foreign investors had permanent and serious consequences.

Post-war Problems

At the end of the second World War, Latin America faced the outside world from a position of considerable strength. The demand for its exports was high; it could trade on much improved terms, new merchant fleets had been constructed,² reserves of foreign exchange had been accumulated, and there were good prospects of a resumption of large-scale foreign investment. In the event, as Table 7 shows for the years 1948 and 1949, the area as a whole did succeed in achieving what was for all practical purposes a balance in its external payments on current account; on the current account and the private capital account combined there was a substantial surplus. During the export boom of 1950, when exports rose by more than \$1 billion while imports still remained stable, the twenty Latin American republics achieved a surplus of \$535 million even on the current account.³

But this over-all picture is deceptive. Cuba, Venezuela, Mexico and Peru were, for a variety of reasons, in balance or in surplus throughout most of the period, while most of the other countries were in continuous balance-of-payments difficulties from the end of the war onwards. This was true not only in years, such as 1949 and 1951, when their export

prices were softening, but in some cases also in the years when world prices for their primary products were high and rising. Two main factors lay behind these difficulties.

In the first place, foreign investors did not in any general sense recover their confidence or interest in the Latin American area. Although the post-war period has been one of generally high and rising economic activity in Europe and the United States, the conditions in which high savings generated by high incomes actively searched the overseas world for profitable but risky outlets were not repeated: post-war investors in the United States have generally preferred to place their money at home at perhaps lower but still remunerative and apparently safer yields, while balance-of-payments difficulties of their own inhibited large-scale investment from European countries. In addition, of course, the effects of the war and post-war economic policies in many European countries had been to create an acute scarcity of resources available for investment either at home or abroad. Finally few Latin American Governments pursued active policies designed to create the conditions required to attract foreign investors on a large scale: exchange controls restricted repatriation of current earnings and compulsory re-purchase of earlier investments created fears of future "nationalization". For these reasons, although the annual rate of foreign investment in Latin America as a whole in 1948-1949 probably slightly exceeded in real terms⁴ the corresponding figures for 1925-1929, it was of a very specialized character. Post-war foreign investment in Latin America has been heavily concentrated in one or two countries and on one or two rapidly expanding industries, notably petroleum, and in fact during the years 1946-1949, as much as 72 per cent of the direct investment capital moving from the United States to Latin America went to the expansion of the petroleum industry of Venezuela. If Venezuela were excluded, the volume of foreign investment in 1948-1949 would work out at substantially less than in 1925-1929.

In the second place, internal inflation in Latin America has been severe and continuous from the end of the war onwards. Among the seven major countries⁵ for which figures are available, the cost of living rose in the five years after 1945 at an average annual rate which was in only one case less than 10 per cent and in the extreme case (Peru) reached over 20 per cent. The soaring internal price structures were no doubt in part the result of external factors—although it is evident that the dollar cost

¹ An upward trend in tourist earnings was combined with an increase in sales of non-monetary gold. In Table 6, the total net change (+ \$515 million) on invisible account between 1925-1929 and 1934-1938 is made up partly of these changes, together with the cut in payments of interest, profits and dividends, and partly of the fall in freight payments resulting from the fall in the volume of imports which itself resulted from the decline in import purchasing power.

² The total merchant fleet of the eight most important Latin American countries, excluding Panama, more than doubled from 1938 to 1949. See *United Nations Statistical Yearbook, 1949-1950*, page 302. The Panamanian fleet increased by about five times during the period, largely from new registrations by owners outside Latin America.

³ For 1950 figures, see *Balance of Payments Yearbook, 1950-1951*, International Monetary Fund.

⁴ It appears that in 1925-1929 the long-term capital inflow was equivalent to 13 per cent of imports at current f.o.b. prices, whereas the 1948-1949 inflow would have paid for 16 per cent of the 1925-1929 imports at 1948-1949 prices.

⁵ Argentina, Brazil, Chile, Colombia, Mexico, Peru and Uruguay.

Table 7

BALANCE OF PAYMENTS OF LATIN AMERICAN REPUBLICS, 1948 AND 1949

Millions of current dollars

Item	1948				1949			
	Total	United States (incl. I.M.F. and I.B.R.D.)	Europe	Other (residual)	Total	United States (incl. I.M.F. and I.B.R.D.)	Europe	Other (residual)
A. Goods and services								
Exports, f.o.b.	6,032	2,644	2,260	1,128	5,095	2,503	1,586	1,006
Imports, f.o.b.	-4,911	-3,124	-1,318	-469	-4,469	-2,624	-1,342	-503
Trade balance	1,121	-480	942	659	626	-121	244	503
Travel	72	61	10	21	104	62	10	51
Transportation and insurance ^a	450	164	250	36	324	83	200	42
Investment income ^b	-829	-742	87	—	-597	-550	47	—
Other services (including non-monetary gold)	3	41	4	40	71	66	47	42
Total	-83	-1,366	599	684	-262	-758	60	556
B. Private donations and capital								
Donations	-29	22	51	—	23	16	39	—
Long-term capital ^b	448	449	1	—	497	546	49	—
Short-term capital	-9	2	7	—	87	53	34	—
Total	410	469	59	—	387	509	122	—
C. Special official financing								
Donations	9	14	5	—	26	26	—	—
Loans	60	60	—	—	122	122	—	—
Amortization, other repayments	-96	80	16	—	84	70	14	—
Gold and dollar subscriptions to I.M.F. and I.B.R.D.	-39	39	—	—	1	1	—	—
Total	-66	45	21	—	63	77	14	—
D. Total (A through C)	261	-942	519	684	188	-172	-196	556
E. Errors, omissions, multilateral settlements								
Offshore purchases	—	142	142	—	—	325	325	—
Other	-178	784	214	748	61	249	215	525
F. Compensatory official financing								
Repurchase of foreign debt ^c	-673	—	673	—	51	10	41	—
Loans received, extended (—) ^d	5	5	—	—	1	1	—	—
I.M.F. advances	2	2	—	—	36	36	—	—
U.S. Stabilization Fund loans	-3	3	—	—	82	82	—	—
Other exchange liabilities	36	21	57	—	14	26	12	—
Foreign exchange holdings ^d	351	102	453	—	145	190	335	—
Monetary gold	199	135	—	64	162	131	—	31
Total	-83	16	163	64	-127	-402	306	31

Sources: Balance of Payments Yearbook, 1949-50, International Monetary Fund. Data for Europe have been estimated by the Research and Planning Division, Economic Commission for Europe.

^a The figures in the "total" and "other" columns include freight paid to foreign-operated fleets of Panama and Honduras by the Latin American Republics. All figures, however, exclude receipts by these fleets from outside Latin America.

^b Including undistributed profits of subsidiaries. The net outflow of long-term capital to Europe includes an inflow of British oil investment and,

apparently, outflows on other accounts. These implied outflows may be only the reflection of an underestimate of the total inflow or, possibly, an overestimate of the inflow from the United States.

^c Repurchases of public debt and direct investment liabilities, mainly to the United Kingdom, and debt settlements by Argentina, Brazil, Dominican Republic, and Uruguay.

^d Loans extended by Latin America, mainly Argentine loans, are not available separately and are included in the movement in foreign exchange liabilities.

of imports rose much less than internal prices¹— but were mainly caused by an excess of total internal demand over total supply in the countries concerned. Where a high proportion of marginal national expenditure inevitably goes on imports, such an excess puts a particularly severe pressure on the balance of payments.

The result of the balance-of-payments difficulties in post-war Latin America was the emergence of widespread systems of import control affecting not only trade with the United States but also trade with Europe, although Europe itself had difficulty in balancing its payments with Latin America. Indeed, ever since the end of the war, European and Latin American countries have both been applying quantitative restrictions to one another's imports, and both — sometimes at the same moment — have been treating each other's currencies as "hard". But unlike

the controls imposed in Europe, those imposed in Latin America did not arise from structural weaknesses caused by the war but from internal inflation, as seen above, and from a particular tendency to overspend income in dollar exchange, as will be seen below.

The second World War caused an even greater increase in the importance of the United States as a trading partner of Latin America than had the first, and the fact that the United States, together with Canada, was alone in a position to supply the needs of other areas, while these other areas had generally lost part of their export potential, led to a generalized shortage of dollars in a more acute and certainly much more overt form than was experienced during the pre-war depression. In addition, the impact of the war in Latin America reinforced the trend towards industrialization, and home consumption of many export commodities rose steeply with the increase in national income. Table 8 shows how on the one hand exports of most commodities which could find a ready sale on the United States market expanded, while on the other, exports of commodities which had normally found their outlet in Europe declined. This applies particularly to grains, meat, cotton and linseed. These declines in production were heavily concentrated in Argentina, which is the main supplier of most of the commodities in question except cotton.

¹ It is significant that, after the Government of Mexico adopted a deflationary policy in 1949, the cost of living rose very much more modestly. The policy consisted in obtaining a budget surplus by reducing the public works programme and substantially increasing revenue by means of a 15 per cent surcharge on the export tax and a new excess profits tax. The Government also initiated measures of credit control. At the same time, however, the peso was devalued to strengthen the balance of payments, and hence the slowing-down in the rate of increase of internal prices was a difficult achievement.

Table 8

PRINCIPAL EXPORTS FROM LATIN AMERICA

Thousands of tons

Commodity	To Europe				To the United States			
	1935-1938	1948	1949	1950	1935-1938	1948	1949	1950
<i>Commodities sold predominantly to Europe</i>								
Wheat and flour ^a	1,817	1,243	837	817	2	—	—	—
Maize	5,555	2,286	1,060	1,016	590	—	—	—
Meat ^b	664 ^c	434	396	307	39 ^c	83	32	47
Linseed and linseed oil ^d	262 ^c	57	82	141	..	..	..	..
Raw cotton	214	257	175	186	8	12	9	8
<i>Commodities sold predominantly to the United States</i>								
Raw sugar	1,250	3,035	2,134	1,899	1,875	2,650	2,886	2,895
Coffee	451	241	324	293	724	1,040	1,236	971
Raw wool	136	72	50	75	10	90	83	102
Copper and ore ^e	192	116	102	53	92	340	320	306
Lead and ore ^e	105	28	21	8	1	115	166	250
Tin and ore ^e	25 ^c	17	14	18	— ^c	21	20	15
Nitrate	340 ^e	160	183	267	522 ^e	642	612	559

Sources: Europe: See "Notes on Sources and Methods". United States: Foreign Commerce and Navigation of the United States, Imports for Consumption, F.T.110.

^a Flour in grain equivalent.
^b Beef, mutton and lamb.
^c 1938.

^d Oil content.
^e Metal content.

Even had production for export to Europe not declined, European countries would have been in considerable difficulty to export enough goods to pay for their normal requirements of Latin American commodities ; nor could they readily supply from their own resources convertible currencies to settle adverse balances. However, up to 1948, Europe's capacity to import from Latin America had been materially assisted by credits extended by Argentina in particular, and in 1948 and 1949 Marshall Aid was available for substantial " off-shore " purchases. Nevertheless, over wide areas where Latin American countries required dollar settlement, Europe's imports were curtailed by payments difficulties, while in other cases, and in particular in Argentina, the decline in production or increase in home consumption limited the quantities available for export to Europe. (As a result, when improved supplies for export from Europe and more liberal Government policies enabled Argentine importers to resume purchases on a substantial scale, Argentina in turn ran up against a shortage of European currencies ; the balances it had earned in the earlier period had been largely used to re-purchase European investments and its imports had to be cut down to the low level of current exports.)

Eventually, in 1949, an approach to over-all equilibrium was achieved in balance of payments between Latin America and Europe, although with the change in the terms of trade and the loss of investment income, it was an equilibrium in which the volume of Europe's exports to Latin America had regained the 1938 level, but its imports were only 65 per cent of that level.^{1 2} Even so, part of Europe's imports was still being financed through dollar transfers made possible under ECA aid, while, on the other hand, as noted above, some Latin American countries continued to restrict imports from Europe.

Against a background of downward balancing in Latin America's post-war trade with Europe was the fact of the very favourable market for Latin American exports in the United States. The volume of these exports fell off slightly in 1949, during the short-lived business recession, but throughout most of the post-war years the high level of industrial production in the United States kept the volume of imports from Latin America very much higher than

¹ It should be noted that a large part of the shift from a surplus with Europe in 1948, to equilibrium in 1949, was due to drought superimposed on the downward trend of agricultural production in Argentina. If Argentina had had more to sell, trade might have been balanced at a higher level. There were, however, substantial reductions also in the exports to Europe of the tropical agricultural countries and the mineral-producing countries.

² By 1951, the " gross barter " terms of trade moved still further : for the first time, the ratio of the volume of Latin America's imports from Europe to that of its exports to Europe had regained the 1913 level.

before the war ; in this respect, in the post-war years, Latin American products have fared better in the United States than those of all other areas except Canada, as is illustrated by the following index numbers :

	<i>Index numbers</i> 1936-1938 = 100 <u>1948-1949</u>
United States industrial production	177
United States total imports of crude and semi-finished materials	139
of which from Latin America	206

Thus, since the end of the second World War, the Latin American continent has been enjoying a dollar income greatly increased both in value and in purchasing power : as just seen, the volume of the exports to the United States had risen ; also the terms of trade with the United States had improved. In addition, several Latin American countries were in a position to supply goods for which European countries, *in extremis*, were prepared to pay dollars.

Nevertheless, except in the " dollar account " countries (of which Cuba, Colombia, Venezuela and Mexico are the most important), there has been, as in the rest of the world, a chronic " dollar shortage " in the sense that currencies were not convertible, dollar imports had to be restricted in quantity and strict exchange controls applied. For although dollar earnings compared to pre-war were high, dollar imports, when unrestricted, were much higher still : in 1947, before most countries brought their controls into operation, total dollar imports into Latin America reached approximately four times the 1938 volume. The cause was undoubtedly the very strong preference for United States goods which had again been enhanced as a result of a major world war. The preference was of course fed during the early post-war years by production limitations on supplies from Europe, by the more competitive prices of United States goods prior to the currency devaluations of 1949 and by a further shift of demand in favour of durable consumer goods and industrial equipment. Thus, ever since their war-time accumulations of gold and dollars were used up in 1947, most Latin American countries have been continuously short of dollar reserves, anxious to acquire dollars from European countries and particularly unanxious to agree to trading arrangements which might involve them in dollar settlements ; throughout the period, the Latin American region as a whole was substantially dependent on dollar settlements which it in fact succeeded in obtaining from Europe. Therefore the events of the second half of 1950 and the first half of 1951, when Latin American dollar earnings, and indeed their total foreign earnings, reached a record level, are particularly significant for the future.

Most of the republics reacted fairly quickly to the post-Korean boom by lifting or relaxing restrictions

on imports, including restrictions on dollar imports, and after a certain time-lag total imports from the United States and Europe rose considerably; they went on rising through the second half of 1951 and the first quarter of 1952, long after primary prices had started downwards; in the second half of 1951 their value was 60 per cent greater than in the first half of 1950. These developments were, as might have been expected, accompanied by an increase in the share of the United States in Latin America's imports. The new purchases were spread between the two areas in more or less the same proportions as had been the existing imports; in fact Table 9 shows that, in the second half of 1951, the United States' share of the trade slightly fell in favour of Germany and other Continental European exporters. Moreover, it is known that even the "dollar" Latin American countries substantially increased their imports from Europe of goods of all types, including goods now traditionally supplied by the United States. For example, Cuba took large consignments of motor-cars and Colombia of tractors from Great Britain; Cuba also increased very substantially its imports of finished steel, and partly finished manufactures made of steel, from all four major European exporters as well as from the United States, where it had previously satisfied most of its requirements for these products.¹

¹ Throughout the period under discussion, Cuba maintained tariff discrimination in favour of the United States. This was later to be removed by agreement with the United States Government.

But record dollar earnings, and liberal imports from Europe, were not sufficient to reduce the precariousness of Latin America's dollar balance or to create a situation where Europe could trade with Latin America without the fear that marginal imports would cost dollars. Table 10 shows that, although Latin American dollar assets increased substantially in the twelve months following the outbreak of the Korean war, this increase was no greater than the total of the item "net gold and dollars received from other countries and unexplained sources". By the second half of 1951, Latin American countries were again drawing heavily on their gold and dollar assets, in addition to spending in the United States both the dollars received directly from that country and those obtained indirectly through multilateral settlements. Developments during 1950 and 1951 in payments relations between Latin America and the United States appear to illustrate the rapidity with which inflationary demand can send imports from the United States soaring to press against the available supply of dollars. This experience suggests that Latin America can hardly rely on being able to pay, out of its direct receipts, for the quantity of dollar goods and services it would like to buy, even in times when primary prices are at extremely high levels and when United States capital is flowing in freely. In more normal periods, Latin America must either restrict its total imports to a substantially lower level, or import more from Europe, or endeavour to continue to obtain dollar settlements from European countries. The last-mentioned "solution" makes further downward

Table 9

EXPORTS FROM EUROPE AND THE UNITED STATES TO LATIN AMERICA

Percentages (based on figures in current dollars)

Exporting country or area	1938 Year	1949 Jan.-Sept.	1950 Jan.-June	1950 July-Dec.	1951 Jan.-June	1951 July-Dec.
Western Germany ^a	19	1	2	5	6	7
United Kingdom	15	13	11	10	8	8
Other European countries	23	18	22	20	21	23
Total European countries	57	32	35	35	35	38
United States ^b	43	68	65	65	65	62
Total (per cent)	100	100	100	100	100	100
Total in millions of current dollars, f.o.b. (annual rates)	1,129	4,138	3,650	4,100	5,390	5,733

NOTE: In interpreting these figures, account must be taken of the great change in the relative prices of exports from the various areas following the devaluations of September 1949.

Sources: National trade statistics.

^a For 1938, total Germany.

^b Excluding United States exports of special category commodities for 1950 and 1951 which amounted respectively to \$93 million and \$135 million.

Table 10

DOLLAR RECEIPTS AND DOLLAR EXPENDITURE OF LATIN AMERICA,
JUNE 1950 — DECEMBER 1951

Millions of current dollars^a

	1950 Second half	1951 First half	1951 Second half
<i>Dollar receipts</i>			
Exports of goods to the United States, f.o.b.	1,735	1,985	1,545
Other current earnings in the United States	245	280	290
Private long-term capital from the United States	95	120	15
Private short-term capital from the United States	95	15	125
Private gifts, and Government grants and loans	25	115	90
Net gold and dollars received from other countries and unexplained sources ^b	400	195	405
Total earnings	2,595	2,710	2,470
<i>Dollar expenditure</i>			
Imports of goods from the United States, f.o.b.	1,480	1,805	2,000
Payment of interest, profits and dividends to the United States	450	325	440
Other current expenditure in the United States	270	290	320
Total expenditure	2,200	2,420	2,760
<i>Net change in gold and dollar assets^c (increase = +)</i>	+ 395	+ 290	- 290

Sources: *Survey of Current Business*, United States Department of Commerce, June 1951, March and June 1952. *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, April 1952, and *International Financial Statistics*, International Monetary Fund.

^a Rounded to the nearest \$5 million.

^b This item consists of the item "transfer of funds between foreign areas and errors and omissions" from the United States balance-of-payments statement, plus an estimate (based on a comparison of the movements of the

official gold reserves in individual Latin American countries, with these countries' purchases or sales of gold in the United States) of the net receipts from, or payments of gold to, other countries. No account is taken of indigenous gold production.

^c This item comprises purchases or sales of gold in the United States and other countries (see ^b above), changes in short-term Latin American balances in the United States, and long-term Latin American investment in the United States.

balancing of trade with Europe inevitable and means that suspicious and uneasy payment relations would inhibit trade which would otherwise benefit both sides. Moreover, whenever for any reason the world "dollar shortage" is exacerbated, say by a recession in the United States, trade between Europe and Latin America, instead of increasing, as would be logical, will be reduced because both sides fear losing more or gaining fewer precious dollars.

If the Latin American preference for United States goods were absolute, in the sense that (at

any set of relative prices which could reasonably be foreseen as possible) Latin America would rather forgo United States goods entirely than take European goods in substitute, there would, tautologically, be no solution. That, however, is a pessimistically extreme case. What is completely unpredictable is the extent to which European exporters will be able further to improve their competitive position so as to reduce substantially the existing degree of preference. For, in this fundamental aspect of the problem, it is of course on European exporters that the burden of the solution lies.

Chapter 2

LATIN AMERICA'S EXPORTS TO EUROPE

Latin America has always supplied a significant part of Europe's total overseas imports. Even in the recent post-war period, when, as already described in Chapter 1, production of goods for export to Europe has been at a relatively low level, the share of Latin American countries in Europe's total imports from non-European countries stood at about one-seventh. In the immediate pre-war period the proportion was nearer one-fifth. European countries in the 'thirties were accustomed to obtain from Latin America very substantial proportions—over 40 per cent in each case—of their total imports of meat, sugar, coffee, crude petroleum, linseed products, Quebracho, sodium nitrate and, in good years, both coarse grain and bread grain. In addition, useful quantities (at least 10 per cent of total imports in each case) were found in Latin America of cotton, wool, hides, skins, cocoa and lard. In 1937-1938 the total volume of Europe's imports of these and other products from Latin America had increased by some 80 per cent since the turn of the century. In 1949-1951, four-fifths of this increase had been lost.

Latin America's importance to Europe as a supplier of primary products had increased steadily from the end of the nineteenth century until the period just before the great slump of the twentieth; after that, Latin America's share of Europe's imports seemed to decline slightly—although in 1936-1938 Europe's imports from Latin America were a little higher than in 1926-1929, Europe's total imports of primary products had risen more. However, if Argentina is excluded, the share of Latin America in the volume of Europe's imports showed a significant increase in the late 'thirties, for reasons which will be discussed later.

On the other side of the picture, while Latin America's importance to Europe increased or was stable, Europe's importance to Latin America has been falling ever since 1900, the major part of the increasing output of primary products being sold in the rapidly expanding markets of Canada and the United States. (Another factor was, of course, the substantial expansion of trade inside Latin America.)

The following indices illustrate these divergent trends :

	1896- 1908	1911- 1913	1926- 1929	1936- 1938	1948	1949	1950
Europe's imports from Latin America/ total European imports of primary products	76	88	100	93	72	55	. . .
			1926-1929 = 100				
Latin American exports to Europe/total Latin American exports ^a	120	114	100	93	58	55	. .
Latin American exports to U.S.A./total Latin American exports ^a	87	82	100	97	121	130	. .
			1928 = 100				

^a Including exports to other Latin American countries.

Sources: Tables 3 and 4, and *Industrialization and Foreign Trade*, League of Nations, Geneva, 1945.

In value terms at the beginning of the present century (see Table 4, Chapter 1), Europe was taking some 65 per cent of total Latin American exports (including intra-trade), and the United States 25 to 30 per cent. Fifty years later, Europe was taking 35 per cent and the United States 40 per cent. Of total exports to Europe and the United States (which cover the greater part of the total overseas exports of Latin American countries), Europe in 1901-

1905 took 70 per cent and the United States the remaining 30 per cent. By 1950, these proportions had been nearly reversed—the United States was taking 60 per cent.

Table 11 gives a summary history of Latin America's exports to Europe from 1925 to 1951 and Tables I and II in the Appendix provide a detailed commodity analysis, while Tables III and IV show the break-down by importing and exporting countries.

All these tables merit careful perusal as they provide a much better picture than can be obtained alone from a descriptive text.

Table 11

EUROPEAN COUNTRIES' IMPORTS FROM LATIN AMERICA, 1925 TO 1951

Millions of current dollars, c.i.f., and index numbers

Year	Value at current prices	Index numbers — 1938 = 100		
		Value at current prices	Unit value	Volume
1925	1,555	148	177	83
1926	1,424	135	149	91
1927	1,741	165	148	112
1928	1,828	173	153	113
1929	1,770	168	149	113
1930	1,220	116	126	92
1931	965	92	82	112
1932	713	68	63	107
1933	746	70	73	97
1934	995	94	86	110
1935	988	94	85	110
1936	1,012	96	93	103
1937	1,379	131	105	125
1938	1,054	100	100	100
1948	2,662	253	310	81
1949	1,891	179	278	65
1950	2,028	192	262	73
1951	2,609	248	335	74

Source: Trade statistics of European countries. For further details, see "Notes on Sources and Methods".

The most significant feature of Table 11 is its demonstration of the very different effects of the world depression of the 1930's on a primary producing area such as Latin America from those which were experienced in the highly industrialized countries of North America and Europe. In the latter group, the reduction of effective demand showed up partly as a fall in real output and employment, and partly as a fall in wages and prices. In the Latin American region—as far as can be seen from the statistics of its foreign trade—the major part of the fall in real income came via a violent decline in the terms of trade; the area was forced to produce and sell nearly the same volume of goods at much reduced prices.¹

The Latin American Exporters

The twenty Latin American Republics may be classified into three groups for discussions of international trade. These are: (I) the tropical agri-

¹ This phenomenon is discussed further on page 20, footnote 2, and page 22.

cultural countries, comprising Brazil, Colombia, Ecuador, the Central American Republics and the Caribbean Island Republics; (II) the mineral-producing countries, comprising Bolivia, Chile, Mexico, Peru and Venezuela; (III) the temperate agricultural countries comprising Argentina, Paraguay and Uruguay.²

The exports of the tropical agricultural countries were traditionally sugar, followed later by coffee and bananas, and more recently by cocoa, cotton and rice. These countries depend heavily on one or two products for their foreign exchange earnings. Thus, sugar provides 88 per cent of Cuba's total exports and coffee 87 per cent of El Salvador's; coffee and bananas 87 per cent of Guatemala's exports; coffee and cotton 74 per cent of Brazil's exports; coffee and petroleum over 90 per cent of Colombia's exports.³

This group of countries has always depended more on the United States market than on Europe and the dependence has been increasing. Thus, the Central American Republics during the inter-war period considerably expanded their exports of bananas and coffee to the United States, but lost ground with both these products in Europe. Cuba, which, after each of the two World Wars, became a major supplier of sugar to Europe for a brief period, has had on each occasion to adjust its economy again to the quantities of sugar which the United States is willing to import. Brazil presents something of an exception to this general trend; during the inter-war period its exports to Europe, measured in current values, recovered by the late 'thirties (after a short-lived depression) to the level of the mid-'twenties, while its exports to the United States fell substantially. This partly reflects a considerable expansion in Brazil's exports of sugar and cotton, which were sold primarily in Europe, while the value of coffee exports, mainly to the United States, was declining because prices never recovered after the depression. During the past five years, however, Brazil has been able to sell coffee in large quantities and at favourable prices in the United States; on the other hand, sugar exports have ceased, cotton exports have been reduced, and consequently total trade with Europe is much diminished.

The mineral-exporting countries have been likewise dependent on one or two products for almost all their exports. For example, tin constitutes 65 per cent of Bolivia's exports; petroleum 97 per cent of Venezuela's; copper and nitrates together 74 per cent of Chile's.³ Only Mexico and Peru had more diversified economies, with agricultural exports of cotton and sugar running side by side with petroleum and metals. The importance of the European market

² See *Network of World Trade*, League of Nations, Geneva, 1942.

³ Data refer to 1949.

varied with the product. In the case of tin, during the second World War, a large smelter was constructed in Texas, so that in 1948-1950 half of Bolivia's exports of ore and concentrates went to the United States ; all the remaining half still went to the United Kingdom. Chilean copper went predominantly and increasingly to Europe until just before the second World War, when Europe was taking three-quarters of the exports. (Since the war, the proportion has fallen to one-third.) Mexican copper has always been marketed in the United States. Mexican zinc, on the other hand, was mostly sold to Europe until the second World War, but now it almost all goes to the United States. Venezuelan petroleum, drilled in Venezuela and to a large extent refined in Aruba and Curaçao, is marketed all over the world, the United States taking over 40 per cent and Europe more than one-fourth.¹ Mexico and Colombia export more than half their oil to the United States and very little to Europe.

These commodities have shown themselves particularly vulnerable to cyclical fluctuations in economic activity, and consequently the mineral-exporting countries suffered particularly severely during the early 'thirties. For example, Bolivia's exports to Europe declined from \$41 million in 1928 to \$8 million in 1933. Chile's exports declined from \$161 million in 1929 to \$27 million in 1932.

Quite different is the character of the export trade of the major temperate agricultural or River Plate countries—namely, Argentina and Uruguay. These have specialized in the production and export of foodstuffs and other agricultural products for the European market, and have enjoyed the advantage of a much wider range of commodities and a much more diversified trade. On the other hand, they have faced severe competition, not only from other exporters of like products in the British Commonwealth and elsewhere, but also from the indigenous production of the European countries themselves. Argentina's exports (85 per cent of which in 1928 went to Europe²), after enjoying a remarkable expansion during the first three decades of the century subject to an interruption during the first World War, were hit in the 'thirties by the autarchic policies of Continental European countries and by the imperial preference of the United Kingdom.³

Argentina has such a predominant position in the exports of Latin America to Europe (it provided between the wars more than half of all Latin American exports to that destination) that it is

¹ Data refer to 1949 and are from the *Memoria* of the Banco Central de Venezuela.

² *Network of World Trade*, League of Nations, Geneva, 1942.

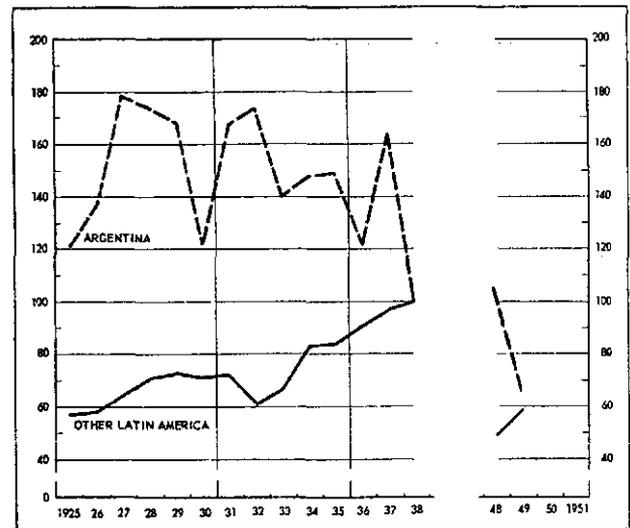
³ See Tables I and II in the Appendix. The movements of the figures for meat and linseed demonstrate the influence of imperial preference.

deceptive to look at the trend of total trade without distinguishing between Argentina and the rest : Chart 2 shows the opposite trends of the two series : the net effect was a relative stability in the total. It can also be seen how important a factor has been the low level of Argentine exports in the post-war period.

Chart 2

VOLUME INDICES OF EXPORTS FROM
LATIN AMERICAN COUNTRIES TO EUROPE

1938 = 100



In order to illustrate in more detail the country-to-country relationships, Table 12 shows the value of trade between pairs of countries where this total is a significant amount. By far the most important trade was and is that between Argentina and the United Kingdom, followed at some distance by Argentina's trade with Germany, Italy, France, the Netherlands and Belgium. Brazil exported important quantities to Germany and France, and since the last war to the United Kingdom ; Cuba to the United Kingdom ; Chile and Bolivia to the United Kingdom in the inter-war period, and Uruguay more particularly to the United Kingdom in the post-war period. Table 13 shows the percentage of exports by groups of countries corresponding broadly to the three groups, temperate agricultural, tropical agricultural and mineral, distinguished at the beginning of this section, but with Venezuela treated separately. It shows the decreasing importance of Europe in all the groups over the period as a whole ; but, historically considered, the decrease was concentrated in the two war periods, whereas between 1928 and 1937 Europe's share of the trade remained rather stable in each of the groups.

Table 12
PRINCIPAL RELATIONS BETWEEN IMPORTING
COUNTRIES OF EUROPE AND EXPORTING COUNTRIES
OF LATIN AMERICA

Millions of current dollars, c.i.f.

Exporting country	Importing country	1928	1932	1937	1949
Argentina . .	United Kingdom	361	171	284	258
Argentina . .	Germany	223	46	89	45
Argentina . .	Italy	100	25	55	77
Argentina . .	France	88	42	38	40
Argentina . .	Netherlands	84	40	57	61
Argentina . .	Belgium-Luxembourg	62	29	58	49
Brazil	Germany	52	19	65	25
Cuba	United Kingdom	49	19	22	83
Brazil	France	45	21	24	32
Chile	United Kingdom	36	11	40	28
Bolivia	United Kingdom	35	7	17	31
Uruguay	United Kingdom	33	10	19	52
Argentina . . .	Spain	32	11	7	61
Peru	United Kingdom	30	15	24	32
Chile	France	28	2	15	28
Chile	Germany	25	6	28	5
Brazil	United Kingdom	20	13	40	86
Brazil	Italy	19	8	9	27
Mexico	Germany	18	6	23	9
Guatemala . . .	Germany	17	7	5	—
Argentina . . .	Switzerland	16	14	21	21
Argentina . . .	Denmark	14	9	9	9
Argentina . . .	Sweden	14	7	17	31
Uruguay	Germany	12	5	7	20
Brazil	Sweden	12	5	10	31
Mexico	United Kingdom	11	8	18	15
Cuba	Netherlands	10	1	1	23
Brazil	Belgium-Luxembourg	10	4	12	42
Cuba	France	8	2	3	19
Colombia	Germany	7	2	16	2
Venezuela . . .	France	4	8	13	40
Brazil	Spain	4	2	1	39
Peru	Germany	3	2	17	3
Cuba	Germany	3	1	3	29
Venezuela . . .	United Kingdom	1	1	5	22
Argentina . . .	Finland	1	1	6	22
Total relations listed ^a		1,487	580	1,078	1,397
Total imports (total Europe from total Latin America)		1,828	713	1,379	1,891

^a Each of the relations listed represents, in the case of at least one of the four years selected, 1 per cent or more of Europe's total imports from Latin America.

The European Importers

Within Europe, the United Kingdom was the earliest and still is by far the largest importer of primary products. In the latter part of the nineteenth century, its imports of these goods were more than those of all the rest of Europe put together, but Germany and other countries were emerging as important centres of manufacture, and in consequence were becoming significant importers of raw materials. In 1913, the United Kingdom was taking just under 40 per cent of Europe's imports from Latin America,

but during the inter-war years its share seemed to show some tendency to decline. During this period the United Kingdom was, however, taking increasing quantities of oil from Venezuela and Mexico, cotton from Brazil, maize and wool from Argentina and Uruguay, and meat and wheat in more or less stable quantities. Since the second World War, the United Kingdom has taken the same share of the much reduced volume of imports from Latin America.

Germany has been a more fluctuating customer, whose share has varied between 15 and 25 per cent of Europe's imports from Latin America: Germany's purchases were particularly high in the late 'twenties and then again in the years 1937 and 1938. During the late 'thirties, Germany reduced its imports from Argentina in a drive for agricultural self-sufficiency and also because of payments difficulties; in the same period, imports from other Latin American Republics were increased, notably petroleum and zinc from Mexico, bananas from Colombia, cotton from Brazil and Peru and coffee from Brazil, Colombia and others. After the war, German purchases in Latin America shrank even more than total German imports, and only in 1951, with the general recovery of German trade, did Latin America regain its position as a supplier.

France, before 1914, was becoming an important customer for the products of the Latin American Republics, but during the inter-war period its share in Europe's imports from Latin America declined from between 12 and 14 per cent to less than 10 per cent. This decline was but one aspect of the general decline in France's foreign commerce with all countries other than its own dependent territories. It affected French imports from all Latin American countries except that of petroleum from Colombia and Peru (shifted to Venezuela after the second World War), cotton from Brazil, and zinc (up to 1938) from Mexico. Since the war, France has taken an interest in re-establishing trade connections with Latin America and has sought in some commodities to develop an *entrepôt* trade between certain Latin American countries and other European importers.

Table 13

LATIN AMERICA'S EXPORTS TO EUROPE AND TO THE UNITED STATES AS PERCENTAGE OF TOTAL EXPORTS OF EACH GROUP

Exporting country	Importing country	Year	United States	Europe	United Kingdom	Germany	France	Italy	Other European countries	Total exports of group (Millions of current dollars, f.o.b.)	Group exports as percentage of total Latin American exports	Volume of total exports of group (Last preceding year indicated = 100)
Argentina	{	1913	5	85 ^a	23	13	9	4	14	592	37	
		1928	8	79	28	14	6	8	23	1,148	38	153
		1937	13	77	29	7	4	6	31	848	36	95
		1949	13	62	22	5	5	8	22	1,200	22	59
Brazil	{	1913	48	43	12	10	9	1	11	529	33	
		1928	58	30	8	7	6	3	7	900	30	134
		1937	52	36	8	12	5	2	10	634	27	122
		1949	59	27	8	2	2	2	12	1,992	36	170
Chile	{	1913	43	53	32	12	4	—	5	370	23	
		1928	46	40	24	8	4	1	4	687	23	193
		1937	35	42	20	10	4	2	7	532	23	131
		1949	60	22	9	1	3	1	7	983	18	93
Mexico	{	1913	..	..	..	..	..	..	..	29	2	
		1928	..	..	..	..	..	..	..	117	4	393
		1937	..	..	..	..	..	..	..	254	11	223
		1949	..	..	..	..	..	..	..	1,078	19	176
Peru	{	1913	..	..	..	..	..	..	..	..	..
		1928	..	..	..	..	..	..	..	..	..
		1937	..	..	..	..	..	..	..	..	..
		1949	..	..	..	..	..	..	..	..	..
Bolivia	{	1913	..	..	..	..	..	..	..	..	..
		1928	..	..	..	..	..	..	..	..	..
		1937	..	..	..	..	..	..	..	..	..
		1949	..	..	..	..	..	..	..	..	..
Venezuela ^b	{	1913	..	..	..	..	..	..	..	..	..
		1928	..	..	..	..	..	..	..	..	..
		1937	..	..	..	..	..	..	..	..	..
		1949	..	..	..	..	..	..	..	..	..

Source: Trade statistics of Latin American countries.

^a Including "shipments of orders".

^b Venezuela exports an increasing part of its crude petroleum to the Netherlands Antilles for processing. Thus, final destination of this petroleum being unknown, it is not possible to show the importance of Europe and the United States in Venezuelan exports.

Other European importers have been of minor significance ; Belgium took zinc from Mexico and Peru, copper from Chile, maize and some wheat from Argentina, and petroleum from Venezuela. The Netherlands took maize and wheat from Argentina, coffee and tobacco from Brazil, and, especially since 1945, petroleum from Venezuela via Curacao ; Italy took coffee, copper and petroleum and, in recent years, wheat from Argentina. Sweden has always been a heavy importer of coffee, and now imports petroleum from Venezuela. The eastern European countries, whose purchases had considerably increased in importance in the inter-war period, have not maintained this expansion in recent years.

The General Competitive Position of Latin American Exports in European Markets

Latin America's exports to Europe compete with those of other primary producing areas and, for certain items, with commodities produced inside Europe itself. Broadly speaking, the tropical products compete with exports from Africa and South-East Asia, while the temperate zone products have competed with those of Oceania and North America (and of course Europe). The exporting capacity of these other continents, with the exception of the United States, which began earlier, was being developed during the same period as the development of Latin America—namely, between 1880 and 1914. This was the period when Canada and Australia were opened up as large-scale exporters of wheat, livestock products and metals, when South-East Asia was becoming a large-scale exporter of tin, oilseeds, cotton, sugar and rubber, and when Africa was developing exports of oilseeds, cocoa and wool. African copper and Middle-Eastern oil are more recent competitors which may not yet have reached their full possibilities.

The relative stability in the volume of total Latin American exports to Europe in the inter-war period, as may be seen in Appendix Table I, concealed very varying fortunes for different commodities : the quantities exported increased in the case of only five—namely, cotton, cocoa, petroleum, copper and lead—while there was an absolute decline in beef, linseed, mutton and butter, all the latter significantly being commodities mainly supplied by Argentina. Latin America's share in total imports of European countries increased in respect of wheat, cotton, cocoa and petroleum, and decreased in respect of linseed, coffee, mutton, butter and tin.

The most spectacular expansion was undoubtedly that of the Venezuelan petroleum industry, shared to a minor extent by Colombia and Peru. Rapid also was the growth of cotton and cocoa exports from Brazil, the former competing successfully with United States cotton and the latter with West-African cocoa. Sugar was faced with particular

difficulties caused by the self-sufficiency policies of European countries, the preference granted to the dependent territories of European Powers and the competition from low cost sugar-cane production in other continents. In coffee, although the Latin American countries taken together used to have a virtual monopoly in world exports, they gradually came to lose a certain portion of the market to colonial producers, who by the end of the 'thirties were supplying some 10 per cent of Europe's requirements. Copper production, expanding in Chile but not in Mexico, faced serious competition from the very rapidly expanding production in the Belgian Congo and Northern Rhodesia. In tin mining, up to the 'twenties Bolivia maintained its position of supplying about 20 per cent of world production, all of which went to Europe for smelting, along with part of the production from South-East Asia ; and its position was safeguarded in the various international tin agreements. However, when the tin export quotas were raised in the later 'thirties, Bolivian production did not take advantage of the opportunities for expansion, and remained static while output rose rapidly in other producing areas.¹

Commercial Policies of European Countries

1. Inter-war Period

The United Kingdom introduced imperial preference in March 1932 and this had an immediate effect on its imports of food and raw materials. In the case of sugar, imports from " foreign " as distinct from " Empire " sources fell from 65 per cent over the period 1925 to 1932 down to 45 per cent over the period 1936 to 1939. In the case of linseed, for example, Argentina had been overwhelmingly the most important supplier, with India exporting on a modest basis, both to the United Kingdom and to Continental Europe ; the introduction of imperial preference had the result of switching India's continental trade entirely to the United Kingdom, while Argentina lost some of its trade with the United Kingdom, but made up part—though only part—of the loss by increased exports to Continental Europe.

France introduced in 1928 a schedule of import duties which provided many different types of treatment for different categories of territories. Moreover, in the case of territories where France was bound by treaty not to introduce preferential arrangements—such as, for example, French Morocco, the Cameroons, Togoland, Syria and the Lebanon—duty-free import quotas were established which had a similar effect, and these quotas were in most cases increased as a relief measure during the depression. Furthermore, a system was developed of special taxes on imports from all sources, the proceeds of

¹ *Statistical Yearbook, 1938, International Tin Council.*

which were used to give financial support to producers in French colonial territories. Table 14 indicates the results of these various measures in increasing the share of French overseas territories in the total imports of France.

Table 14
SHARE OF THE FRENCH COLONIES IN TOTAL IMPORTS OF FRANCE
Percentages

Year	Wheat	Maize	Coffee	Cocoa	Sugar	Bananas	Total imports from French colonies
1929 . . .	19	21	3	69	11	4	12.4
1930 . . .	42	14	3	74	26	4	12.7
1931 . . .	16	10	6	78	32	6	14.9
1932 . . .	31	12	9	84	33	12	20.9
1933 . . .	52	45	9	84	37	19	23.7
1934 . . .	61	68	10	88	39	30	25.3
1935 . . .	67	81	10	88	42	54	25.8
1936 . . .	68	75	17	89	52	70	28.5
1937 . . .	52	80	22	89	53	99	24.4
1938 . . .	57	96	32	91	61	100	27.1

Source: French trade statistics.

NOTE. — The commodity percentages have been computed from quantities, while those for total imports were calculated from values.

In addition to making preferential arrangements, most European countries attempted to fight the difficulties of the depression years by encouraging domestic agricultural production. In some countries, an additional motive was to provide safe supplies in the event of war. For example, during this period, Germany, France and Italy, by encouraging domestic wheat production, managed to reduce their combined imports by 4½ million tons. Germany greatly restricted its imports of maize and other animal feeding-stuffs, while tropical products were imported under quotas which were from time to time reduced.

The combined effect of European autarchy plus colonial preference was not so serious for Latin America as might have been expected, for a number of reasons. One was that Germany pursued a deliberate policy of encouraging trade with such of the smaller Latin American Republics as were prepared to trade with her on a barter basis. Thus, comparing the period 1929-1933 with the period 1934-1938, Germany's imports of fourteen commodities from Latin America measured in 1938 prices rose by 25 per cent, while its imports of these commodities from all other non-European countries declined by nearly 40 per cent.¹ Another reason was

¹ It should be noted that this comparison covers only the fourteen main commodities which Germany imported from Latin America, and not Germany's total imports.

the fact that total quantities of Latin American products sold to the United Kingdom remained fairly high, largely because of the very change in price relationships which brought about the adverse movement in Latin America's terms of trade described in Chapter 1.² Yet another reason was the two very serious droughts experienced in the United States which gravely reduced that country's capacity to export, and indeed in the case of wheat turned it into a temporary net importer. Thus, despite the commercial and agricultural production policies pursued by the European importers during the inter-war period, the volume of Latin America's export to Europe was not to any extent diminished, nor the share of Latin America in Europe's imports from overseas. In fact, if Argentina is excluded, in the three years following 1932, the Latin American countries clearly displaced other exporters in the European market and held these gains up to 1937. The United States took the major loss; its exports of grain and other foods were depressed by drought, and price support policies reduced its exports of cotton. In addition, Brazilian cocoa exports were favoured by the

undervaluation of the cruzeiro and in lead and petroleum, Latin American producers, unlike others, were able to expand output to meet rising European demand.³

It may of course be argued that, in the absence of preferences and subsidies, imports from Latin America might have increased more and that the effect was to prevent Latin America from enjoying the fruits of the competitive advantage which it would have held in the absence of these policies.

² World prices of foodstuffs fell much more than the money incomes of British wage-earners, thus sustaining their power to purchase the usual large quantities of imported food. At a rough calculation, it appears that when the volume of the United Kingdom imports from Latin America reached its lowest depression level in 1933, it was then only about one-tenth below 1929, although the value of imports was down by nearly one-half. In 1934, the general level of Latin American export prices was still over 40 per cent below 1929; these low prices, combined with recovering industrial activity in the United Kingdom, led to a volume of imports from Latin America which was well above the 1929 peak. In effect, Latin America, in its trade with the United Kingdom, was avoiding a drastic fall in the volume of exports at the expense of a severe fall in its terms of trade. The United Kingdom, unable to maintain internal full employment in the face of the world slump, was passing on to its trading partners part of the consequent loss of real income. See also page 15 above and page 22 below.

³ See figures for these commodities in Appendix Tables I and II.

2. Post-war Period

The experiences of the second World War have reinforced the arguments advanced in Europe in favour of maintaining a high level of domestic agricultural production as a security measure, and the experience of dollar shortages and payments

difficulties after the war has reinforced the arguments favouring the encouragement of production within homogeneous political or monetary areas such as the French Union or the British Commonwealth. This latter influence is illustrated by Table 15, which shows shifts in sources of supply of three important raw materials.

Table 15

EUROPE'S OVERSEAS IMPORTS OF COFFEE, COPPER AND WOOL, BY REGION OF ORIGIN

Percentages (based on quantities)

Commodity	Period	Latin America	AREA OF ORIGIN			
			Europe's dependent territories and overseas sterling area	United States and Canada	Unspecified countries ^a	All overseas countries
Coffee	1935-1938	76.1	18.6	—	5.3	100
	1948-1949	65.3	34.6	—	0.1	100
Copper	1935-1938	22.8	34.2	37.0	6.0	100
	1948-1949	9.7	50.9	29.2	10.3	100
Wool	1935-1938	20.2	75.3	0.3	4.2	100
	1948-1949	8.6	90.4	1.0	—	100

Source: Trade statistics of European countries.

^a Imports from "Unspecified countries" include imports from overseas countries other than those specified and also imports from the specified

countries which cannot be separately identified in the available data according to country of origin.

It will be seen how significantly the sources of supply have been changed to dependent territories and the overseas sterling area. On the other hand, in the case of sugar, where up to 1951 production had not expanded sufficiently in the soft-currency sources of supply, Latin America—and in particular Cuba—was able greatly to expand its exports to Europe, especially during the emergency period. There were indeed limits, especially in the short run, to the extent to which European countries could arrange to obtain supplies from soft-currency countries or from territories within their own currency areas. However, the switch in Europe's imports to other sources than Latin America has been in part encouraged by the policies pursued by Latin American Governments.¹ In fact, on balance it seems fair to say that commercial policy in some Latin American countries has been more important in restricting trade than the policies pursued in Europe.² Argentina obtained prices in excess of world market prices, particularly for grain,³ up to 1948; as soon as European countries could

find other suppliers, which happened after the 1948 harvest, they diverted their purchases away from Argentina. In other areas, while Latin American prices were no higher (and in the case of sugar and Peruvian cotton, distinctly lower) than in soft-currency areas, purchases had to be settled in dollars, which prevented many European buyers from entering the market.

While these policies certainly served the short-run interests of the Latin American producers—and it must be remembered that in the depression they suffered the full impact of the price falls—they could only reinforce, in the long run, the attempts of European countries to strengthen their ties with their affiliated areas, where currency problems did not arise and price fluctuations could be more readily smoothed by long-term arrangements.

Throughout most of the post-war period, Latin America, for one reason or another, had escaped ill effects from the reduction of its exports to Europe: if the special case of Argentina is left out, the volume of Latin American total exports in the period 1949 to 1951 averaged above the pre-war peak and the

¹ The decline in the Latin American share of Europe's imports of maize and wheat to the benefit of the United States was purely due to the low level of production and exports forthcoming from Argentina.

² See also Chapter 4.

³ Data derived from unit values of European imports were published in Table 6 of the article in "Europe's Trade with Latin America", *Economic Bulletin for Europe*, Vol. 2, No. 3.

terms of trade were extremely favourable. Industrial activity in the United States and Canada was running at a high level throughout most of the period, while many pre-war competitors of Latin America in Asia were out of the picture. Latin American producers were in the fortunate position of facing a world containing fewer competitors, while demands for their products were unusually great. It would be most unsafe for them to assume that this situation will continue indefinitely.

Price Fluctuations and the Search for Stability

The notorious instability in the price of primary products, particularly of raw materials, is due partly to the technical conditions under which they are produced, but mainly to the way in which their production and marketing are economically organized. In the short period, for technical reasons, supply is insensitive to rises in price; it is also often insensitive to price reductions because of the relatively competitive conditions which prevail on primary markets. Short-period demand is also price-inelastic because raw materials form a small part of manufacturing costs¹ and food is a basic necessity. Thus, in face of a change in demand—for example, owing to a change in world income—primary prices fall rather than primary production.² In the longer period, supply and demand are much more elastic. Primary producers have been prepared in the past to invest in expanded production under the stimulus of temporary high prices, and technical substitution of one raw material for another in the manufacturing process can often be achieved after a few years' experiment. This conflict between the long- and the short-term elasticities is of course common to all economic commodities, but in the case of primary products is particularly marked, and often unfortunate in effect. An extremely high or extremely low (short-term) level of prices may create an exaggerated impression of investment prospects, which, if acted upon, only enhances the general instability.

The experience of Latin America provides, *par excellence*, a demonstration of these causes of instability. When world income fell in the inter-war slump and recovered in the later 'thirties, a large number of the basic exports of Latin America fell

violently in price and almost equally violently rose again (see Table 16 below), as a result of the short-period price-inelasticity of supply and demand. Examples of the longer-term investment effect are to be found in the cases of particular commodities such as sugar, coffee, copper and certain other mining products: sugar growers in Cuba invested heavily in expanded production after the first World War, and consequently sugar experienced a particularly heavy fall in price during the slump; coffee producers expanded their plantations under the stimulus of profitable prices in the 1920's and the new shrubs came into production just as the slump was about to begin.

It is therefore not surprising that Latin American exports to Europe fell by more than 60 per cent in current values between 1928 and 1932, although their volume hardly declined. As already seen in section 2 above, the metal-exporting countries were particularly hard hit. Despite some fall in demand, production of foodstuffs in the world actually continued to rise, while that of raw materials declined, but less than industrial production, so that in both cases stocks accumulated, exerting a strong pressure on prices. Production in Latin America showed a comparable trend, foodstuffs remaining steady while raw materials declined by over 30 per cent between 1929 and 1932, the fall in metals production being as great as 60 per cent. Prices continued low over most of the 'thirties and Table 16 shows that, even at the cyclical peak of 1937, they had not, with a few exceptions, regained their 1928 level. The continued depression of the prices of coffee, cotton and cocoa affected particularly Brazil, where these three commodities accounted together for 66 per cent of total exports in 1937, and the terms of trade of the other coffee-growing republics were no better.

Since the war, price changes have been no less violent than in the 'thirties. The factors behind the post-war instability are, however, rather different; the forces of the trade cycle have been replaced by the interventions of Governments, which on the one side have yielded sudden changes in the level of demand and on the other have attempted to increase the downward and reduce the upward price-elasticity of supply.

The incidence of price fluctuations on the economies of the primary producers was so damaging in the inter-war period that all manner of efforts were made both by individual countries and by groups of countries to devise means of dealing with the problem. The forms which price stabilization attempts took include direct restriction of output, limitations on export quantities, control of export prices, governmental purchases for destruction purposes and price subsidies. More indirect measures include tax reductions or exemptions, currency devaluations, multiple exchange rates favouring specific commodities and so on. In the cases of coffee, sugar and

¹ In addition, in the case of a general fall in primary prices, the derived elasticity of demand for primary products will be further reduced by limitation of the scope of the effect of the price change in final products to cases of substitution of goods of high raw material content for goods and services of low or no raw material content.

² Thus: *Index numbers — 1927 = 100* 1932

World trade in foodstuffs	90
World food prices	57
World trade in raw materials	80
World raw material prices	44
World primary production	92
World industrial production	63

Table 16

PRICE CHANGES OF SELECTED PRIMARY PRODUCTS 1928 to 1952

In terms of U.S. dollars

Commodity	Specification	Index numbers—average 1928 = 100				
		Average 1932	Average 1937	Average 1946	February or March 1951	August 1952
Wheat	No. 2 hard winter, Chicago	45	101	179	222	197
Maize	No. 3 yellow, Chicago	38	60	198	196	186
Meat	Argentine beef, chilled, London	61	93	108	133	209
Sugar	Cuban raws, Manila	33	78	161	249	184
Cocoa	Brazilian, New York	32	63	87	287	264
Coffee	Santos No. 4, New York	46	48	79	238	235
Cotton	Type 5, Sao Paulo	70	56	128	351	240
Wool ^a	Territory 64-80's, Boston	41	88	89	323	143
Henequen	Mexican, New York	31	77	99	280	153
Hides	Heavy packers, Chicago	26	72	77	153	69
Linseed ^a	No. 1, Minneapolis	38	67	155	156	129
Tin	Straits, London	43	109	118	373	240
Copper	Electrolytic, New York	39	90	95	167	237
Lead	Soft, St. Louis	50	95	130	277	252
Zinc	Prime Western, St. Louis	48	108	145	299	242
Petroleum ^a	At well, Oklahoma-Kansas	68	93	105	220	206
Nitrate	Chilean, New York	71	63	86	114	120

Sources: See "Notes on Sources and Methods"

^a Base 1929.

NOTE: This table covers Latin America's most important export commodities.

nitrate the following measures were used at one time or another:

Examples of Commodity Defence Measures

	Coffee	Sugar	Nitrates
Reduction of annual output through quota systems		×	×
Prohibition on new plantings	×	×	
Limitation on shipments to ports	×		
Floor prices on exports	×	×	
Government price support purchases	×	×	
Purchases for destruction	×		
Price subsidies			×
Tax reductions	×		×
Currency devaluation	×		
Multiple exchange rates			×

Source: Research Centre of the Economic Commission for Latin America.

As is well known, the history of these schemes is not a record of success; in general, they were unable to create stability because they were unable to attack the basic economic causes of instability; they succeeded only where they were faced with relatively small disturbances.

A major cause of failure, particularly of schemes which were limited to one country, was a tendency

to try to use the scheme not so much to reduce the violence of necessary long-term adjustments, as to avoid those adjustments altogether. Prices were often kept so high as to encourage increased production and at the same time reduce consumption. "Coffee defence" ¹ in the 'twenties tried to maintain a price for coffee which was too high in the long run and caused excessive investment; restriction of domestic sugar production in Cuba and Brazil merely led other exporters to move into part of the Cuban and Brazilian markets; United States price support for cotton encouraged increased plantation elsewhere (especially in Latin America), and international price control of tin encouraged the use of aluminium and alloy substitutes.

The failure of national schemes led a number of countries, in the later 'thirties, to negotiate international agreements with the general intention of reducing world production and raising world prices of particular commodities. As most of these schemes began to operate on a rising market, it is difficult to pronounce on their success or failure; in tin, however, the month-to-month fluctuations in export quotas were nearly as violent as the previous fluctuations in prices, although, later, the operation of a buffer

¹ The earlier coffee valorization scheme was successful in evening out fluctuations in prices between years of good and years of bad harvest.

stock met with some success. None of the schemes involved official representatives of consumers or consuming interest, except that in two important cases the United Kingdom Government happened to be able to look after consumers and producers at the same time (rubber and tin in Malaya).

After the second World War great efforts were made in the drafting of the Havana Trade Charter to formulate the principles which should govern international commodity agreements. These principles included not only consumer representation, but the proviso that restrictive practices should be adopted only in the event of the threat of burdensome surpluses. These principles, although no longer destined to be ratified formally by Governments, still pervade international commodity discussions, and particularly those of the several international commodity study groups which have been established. The only actual commodity agreement that has been negotiated is the International Wheat Agreement, which has taken the form of a multilateral long-term contract, something quite different in character from what had been expected during the Charter discussions.

Europe's Demand for Latin America's Exports

The demand for primary products in general depends on the level of industrial output and real income in the consuming areas, and on technical and social factors which determine respectively the raw material content of manufacturing production and the proportion of their real income which consumers spend on food. In addition, for a particular area, the total demand for its primary products depends on the particular fortunes of the basic commodities it is favoured by comparative advantage to produce. Also of crucial importance are the commercial and general economic policies pursued by Governments in both areas. When the field is narrowed to consideration of an individual commodity, special factors may well outweigh the influence of changes in the general level of demand. However, when cyclical fluctuations in total demand are very strong and when the area—as is the case with Latin America—produces a fairly diversified group of commodities, the fluctuations in total demand tend to outweigh the sum of the effects of factors special to particular commodities in determining the volume of total exports.

For some time past, and particularly since the second World War, there has been a tendency for both Europe and the United States to import reduced quantities of raw materials in relation to manufacturing output. This tendency, whose operation in the United States is illustrated in Table 17, is due as much as anything else to the substantial increase in the output of the steel-using industries relatively to output in general, which is due in turn to the higher

Table 17

RATIO OF UNITED STATES TOTAL IMPORTS OF RAW MATERIALS AND SEMI-MANUFACTURES TO ITS TOTAL MANUFACTURING PRODUCTION

Percentages

Period	Ratio of imports of crude materials to total manufacturing production	Ratio of imports of semi-manufactures to total manufacturing production
1926-1929	7.12	4.13
1930-1933	8.57	4.10
1934-1936	7.02	3.73
1937	6.60	3.80
1938	5.81	3.31
1948	4.13	2.47
1949	3.81	2.43
1950 First half	3.10	2.90

Source: United States Department of Commerce. Survey of Current Business and Statistical Abstract of the United States cited in World Economic Report 1949-50, page 146.

relative level of post-war investment.¹ In addition, technical progress has led to economies in the use of raw materials analogous to economies in the direct use of manpower, and science has found synthetic substitutes for agricultural commodities such as cotton, silk and rubber. All these trends go to increase world income and to modify the old basis of the international division of labour, and they imply that world trade in the future will take a more sophisticated form—the exchange of manufactured products of different types rather in the manner of intra-European trade and trade within the United States. All this, however, is no more than a very long-term trend which may be taken as a background for considering more immediate questions about trade between Latin America and Europe. In the foreseeable future, Europe will have great need for nearly all of Latin America's primary products, but, as violent relapses from world full employment are less to be expected, the level of Europe's total demand will largely be determined by the slow and steady annual increase in industrial productivity. Hence, in the future, the general factor of total demand will most probably be less important than the special circumstances surrounding individual commodities. For this reason, the greater part of the forward-looking material to be found in this *Study* is concentrated in the commodity appendices, but a brief review of the long-term prospects for individual commodities may be useful here before this chapter is concluded with a discussion of the long-term implications of industrialization.

¹ Another factor is the rapid relative expansion of the chemical industries.

Briefly speaking, Latin America's "strong" commodities are coffee, maize, linseed, meat and, if the present recession in textiles is regarded as temporary, probably wool. All these are commodities for which demand, at present prices, is likely to rise above present supplies so long as a reasonable level of economic activity is maintained in the United States and the world at large. In the case of coffee, world consumption in recent years has exceeded world production, and would continue to do so if stocks had not been exhausted; there is no reason to suppose the decline in the present high level of United States consumption, and consumption in Europe is still below pre-war. In the case of maize, linseed and meat, Europe would certainly be prepared to take larger quantities than are available at present prices. There are, moreover, no evident prospects of production of these commodities being expanded rapidly in other exporting areas of the world.

Demand should also increase substantially for petroleum and the important non-ferrous metals, copper, lead and zinc. For all these commodities, a substantial change has occurred on the world markets since the United States, faced with insufficient domestic resources in the face of expanding requirements, has become a net importer on an increasing scale. For petroleum, the impressive development of new resources in the Middle East must be set off against the rapidly growing world requirements. While European needs may be increasingly satisfied by these new and cheaper sources, high transport costs would seem to keep the United States market for Latin American producers. While the demand for non-ferrous metals is highly susceptible to cyclical movements, requirements should continue to grow, although, in the case of copper, perhaps at a slightly slower rate than the growth in industrial production.

The prospects are much more uncertain for other commodities such as wheat, cotton and tin. Wheat is vulnerable to declining European consumption and increasing European production. Economies in the use of tin, due to technical improvements, have lowered tin consumption in relation to manufacturing output, and the low-cost producers in South-East Asia might be in a position to meet a substantial part of world requirements. The prospects for cotton are equally unclear. For it is an open question whether the whole increase in world demand may not be met through a growth of production of synthetic fibres. On the other hand, given what was said at the end of Chapter I about the need for greater trade between Latin America and Europe to help reduce each other's dollar shortage, it would obviously be desirable for Latin American exports of cotton to Europe to be increased, and this could certainly be arranged if payment did not have to be made in dollars.

There remains a final group of commodities—represented by sugar, bananas and nitrates—in

which little expansion of exports can reasonably be anticipated. On the contrary, the prospects are rather for a decline below present levels. With the recovery of European sugar production and the stimulus given to production in colonial and preferential areas, the recent high level of exports to Europe from Latin America certainly cannot be maintained. Bananas are marketed almost exclusively in the United States and, like cocoa, are vulnerable to changes in consumer purchasing power. Consumption is believed to have a tendency to decline rather than to increase at the present time. The export of nitrates to Europe may be expected to continue on a modest scale, but not to gain ground at the expense of synthetic nitrogenous fertilizers, production of which has been greatly expanded since the war. However, exports to other Latin American countries, which do not have any synthetic production of their own, may well expand, provided that prices can be kept within a range which makes larger use of fertilizers profitable in those countries.

The Implications of Industrialization

Many primary producing countries have come to deplore their own economic structure; they have found that the system of international division of labour in which they participated has not passed on to them its benefits: over the long period the terms of trade have gone against them;¹ they have remained poor and technical progress has passed them by. In addition, they have experienced all the sufferings which result from the volatility of primary prices. Since the war there has been some improvement and a more general appreciation of these countries' problems, but primary prices have still fluctuated violently, albeit round a higher relative level. The terms of trade of Latin America in the period 1946 to 1951 have averaged higher than those in any single year in the period between 1930 and 1938, but they have certainly not regained the level obtaining in the earlier part of the century. Little effective action has been taken since the end of the war to promote greater stability of prices in international commodity markets, and particularly little in matters which would affect trade between Europe and Latin America. The outstanding positive contributions are the International Wheat Agreement and a number of long-term contracts negotiated on a bilateral basis, principally between the United Kingdom and certain British Commonwealth countries. The principal Latin American wheat exporter is not a member of the Wheat Agreement, and Latin American countries have not as yet made use of the technique of long-term contracts with any of their customers.

¹ "Post-war Price Relations in Trade between Underdeveloped and Industrialized Countries", United Nations document E/CN.1/Sub.3/W.5.

The reasons for this are various ; one certainly has been the desire to avoid extensive commitments with countries having inconvertible currencies, since so large a proportion of Latin America's obligations carries the dollar sign. A second reason was the obvious unwillingness of any country to enter into price stabilization agreements during periods when the prices of its principal exports were rising very handsomely and were expected to rise further. But it must be remembered that consuming countries will on their part be loath to enter into negotiations in the opposite phase of the cycle when the expectations are for falling prices. Both groups of interests need to recognize that they can derive substantial advantages from stabilization though they do not both benefit at the same time, and that it is not necessary or even desirable to wait for an exact balance between "bullish" and "bearish" opinion before consummating an agreement. Another reason is the obvious impossibility of creating for manufactured goods any arrangements comparable to those which can be made for primary products. But primary producers are entitled to protection against the possibility of an adverse drift in their terms of trade which might ensue if primary prices were stabilized, while manufactured prices were left free. Since stabilization of the relative prices of different manufactured export products is not only impossible, but manifestly undesirable, a solution might be found by incorporating into primary price stabilization agreements a clause providing for upward or downward revision of the price of the primary product in the event of wide movements in the general level of export prices of manufactures.¹ It is generally agreed that one of the most important prerequisites to a further expansion of production of primary products is the creation of a greater measure of confidence in the future prospects of international trade which can be achieved only by the development of an increasing number of stabilization measures.

Against this background it is not surprising that Governments of Latin American countries have initiated ambitious plans for industrial development. Implementing these plans may have the effect of reducing primary production for export. For one thing, the growth of urban employment with higher levels of money incomes increases the domestic consumption of food. During the last ten years there have been notable rises in *per capita* consumption of sugar in Peru, Brazil and Colombia, of wheat in Colombia and Uruguay, and of milk in Chile and Colombia.² This trend may be expected to continue

¹ Evidently, a fixed-weight export price index would need to be used, preferably derived from data more subtle than average unit values per ton.

² *Current Development of and Prospects for Agriculture in Latin America*, Appendix, Food and Agriculture Organization of the United Nations, 1950.

and, in the lower-income countries of the region, consumption of meat, fats and oils, sugar and dairy products will undoubtedly rise. This will leave less available for export unless production can be expanded.

In the second place, the growth of new industries involves a diversion of labour and capital to these new enterprises and to the services ancillary to them. Thus, in Argentina, the rapid industrial development of the last few years has created a labour scarcity in agriculture and forced a rapid rise in agricultural wages, capital finds more remunerative openings in city business than in, for example, the mechanization of an agricultural estate. In Argentina more than any other country, industrialization has been allowed to bring with it declining availabilities for export : in no one of the post-war years 1946 to 1951 was the volume of Argentine exports to Europe as high as the average of 1936-1938, although in that period only 1937 was a really good year for the crops. In Brazil, the development of industry in São Paulo and of Government services, with its attendant house-building industry in Rio-de-Janeiro, has drawn labour away from agricultural districts and created difficulties for cotton and coffee growers. These difficulties can of course be overcome by investment to mechanize agriculture, but during the transition period, until the mechanization is accomplished, the agricultural section may be placed at a disadvantage.

Hence, although industrialization is now a major objective for Latin American countries, it has certain limits which, if forgotten by the Governments concerned, can lead only to a loss of welfare through loss of potentially advantageous trade with the outside world. These limits have been described as follows in an earlier report³ published by the Economic Commission for Latin America :

"... If industrialization is considered to be the means of attaining an autarchic ideal in which economic considerations are of secondary importance, any industry that can produce substitutes for imports is justifiable. If, however, the aim is to increase the measurable well-being of the masses, the limits beyond which more intensive industrialization might mean a decrease in productivity must be borne in mind. ...

"... Industrialization has become the most important means of expansion. This does not mean, however, that primary exports must be sacrificed to further industrial development. Exports not only provide the foreign exchange with which to buy the imports necessary for economic development, but their value usually includes a high proportion of land rent, which does not involve

³ *The Economic Development of Latin America and Its Principal Problems*, Professor Raul Prebisch, Economic Commission for Latin America, 27 April 1950, United Nations, Sales No. 1950.II.G.2.

any collective cost. If productivity in agriculture can be increased by technical progress and if, at the same time, real wages can be raised by industrialization and adequate social legislation, the disequilibrium between incomes at the centres and the periphery can gradually be corrected without detriment to that essential economic activity.

“ This is one of the limits of industrialization which must be carefully considered in plans of development. Another concerns the optimum size of industrial enterprises. It is generally found in Latin American countries that the same industries are being attempted on both sides of the same frontier. This tends to diminish productive efficiency and so militates against fulfilling the social task to be accomplished. . . . ”

It is a condition for the future success of Latin American exports that Governments recognize both of the limits described in the above quotation the second no less than the first. If industrialization is inefficiently done—for example, by too great diversification—productivity will be low and substantial “ resources ” will in fact be diverted from primary production. It is therefore essential that investment in new industry should go hand-in-hand with further investment in primary production. There are encouraging signs that long-term plans are being made which will have this effect.

In the field of agriculture, considerable irrigation programmes have been planned and some are under construction or recently completed. An FAO report¹ indicates that, in addition to the 5.7 million hectares previously irrigated, there were in 1950 planned projects involving 3.6 million hectares, and this apart altogether from further large areas at present only under study. Of these planned projects,

¹ “ Current Development of and Prospects for Agriculture in Latin America ”, Food and Agriculture Organization of the United Nations, December 1950.

the great part are in Mexico and Argentina, but they also include large projects in the Dominican Republic, Ecuador, Peru and Chile. Beyond this, and sometimes in association with such projects, several Governments have programmes for agricultural settlement and mechanization as two means of alleviating the present shortage of agricultural labour. In addition, there are the longer-term programmes for promoting wider use of fertilizers and increasing the financial assistance to research stations engaged in work on plant and livestock improvement.

Mining, agricultural and industrial development may in some instances be combined in a single plan for opening up a whole new area. Such, for instance, is the São Francisco Valley Development Project in Brazil, where a region ten times the area of that covered by the Tennessee Valley Authority is being intensively surveyed with a view to simultaneous development of its resources. Most of these programmes involve investment not only in the branch of production under consideration, but also in the general facilities of the country. The most obvious need is for investment in railways and roads to open up new areas which would be highly productive if their products could be brought to market. There are, for example, areas in the Parana State of Brazil which could grow large quantities of coffee and areas farther south which could support a substantial beef cattle industry, if in each case transport facilities could be provided. Investment is also needed in several of these countries which are receiving immigrants. Investment requirements for the absorption of immigrants would include not only outlay in “ non-productive ” investments such as housing and public services, but also that in productive equipment to match the increase in the labour force. In recent years, many Governments of Latin America have shown a new interest in, and desire to speed up, immigration programmes, and have discussed these problems with officials of interested international organizations.

Appendix Table I

EUROPE'S IMPORTS FROM LATIN AMERICA BY COMMODITIES ^a

Thousands of tons

Commodity	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
1. Wheat	1,668	1,546	2,431	3,313	4,554	1,732	1,793	2,117	2,086	2,801	2,196	283	2,582	641
2. Maize	2,070	2,893	6,033	4,685	3,925	3,365	6,286	5,851	3,683	4,694	4,550	5,502	6,489	2,173
3. Barley	62	96	86	50	44	55	67	48	188	285	161	68	135	65
4. Oats	183	292	336	206	214	153	255	173	153	45	66	14	54	159
5. Linseed (actual weight)	634	1,060	1,202	1,409	1,085	729	1,446	1,624	1,121	996	1,243	971	998	800
6. Raw cotton	65	65	69	48	73	77	54	35	48	129	79	143	128	142
7. Raw sugar	1,143	973	1,015	1,433	1,383	1,368	1,030	1,515	1,296	1,168	1,338	1,345	1,021	1,060
8. Coffee	331	307	334	325	344	380	393	327	346	339	334	311	323	347
9. Cocoa	21	14	14	17	14	13	11	10	8	13	19	24	16	29
10. Beef	514	595	643	549	515	495	472	447	408	407	407	437	444	455
11. Lamb	46	32	49	56	61	63	72	66	61	53	51	52	53	53
12. Mutton	67	62	59	60	54	52	34	27	20	12	13	12	11	11
13. Lard	—	1	1	1	1	1	3	2	2	2	6	11	11	3
14. Butter	25	26	21	19	15	21	19	20	10	6	4	7	7	5
15. Raw wool	105	145	177	127	140	141	152	128	158	117	124	107	102	135
16. Hides and skins	66	56	49	34	30	37	36	48	41	48	35	28	39	31
17. Quebracho	57	51	61	61	34	40	49	67	69	85	59	39	55	43
18. Copper, metal	38	37	64	77	70	48	48	41	58	54	56	59	69	118
19. Lead, metal	32	46	58	39	41	40	71	30	24	50	40	111	106	124
20. Crude petroleum	297	217	284	180	392	506	541	846	936	1,182	1,293	1,217	1,340	1,399
21. Sodium nitrate	398	288	233	483	526	323	345	103	65	253	211	233	250	312

Source: Trade statistics of European countries.

^a Only the main bilateral exchanges have been taken into consideration. Moreover, these data cannot be compared with those published in Table 8 because of a different country coverage. See in "Notes on Sources and

Methods" a synoptic table showing the bilateral relations covered by this table.

Appendix Table II

LATIN AMERICA'S SHARE, BY COMMODITIES, ^a IN EUROPEAN COUNTRIES' TOTAL IMPORTS

Percentages

Commodity ^b	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
1. Wheat	16	14	20	27	40	15	17	25	24	35	30	4	27	8
2. Maize	52	58	79	74	70	60	85	75	65	78	78	84	76	31
3. Barley	7	12	8	5	5	5	5	5	15	25	13	5	10	5
4. Oats	21	43	57	38	46	30	52	52	50	21	18	11	44	59
5. Linseed	56	79	82	87	81	71	91	94	82	83	92	76	80	70
6. Raw cotton	3	4	4	3	4	5	4	2	3	9	6	9	8	10
7. Raw sugar	62	64	59	63	56	59	52	54	51	48	56	50	38	39
8. Coffee	76	73	73	70	72	74	73	66	70	70	69	65	64	64
9. Cocoa	15	11	11	12	10	10	7	8	6	8	12	16	12	18
10, 11, 12. Meat (beef, lamb and mutton)	78	78	80	78	77	73	69	68	65	63	61	63	60	60
13. Lard	—	—	1	—	—	—	1	1	1	1	5	11	11	3
14. Butter	8	9	7	6	5	6	5	5	2	1	1	2	1	1
15. Raw wool	24	21	23	16	17	17	20	16	18	17	18	16	14	18
16. Hides and skins	43	41	32	27	27	27	26	34	28	31	23	20	24	24
18. Copper, metal	10	11	15	16	15	11	13	13	17	13	10	12	10	15
19. Lead, metal	8	12	13	9	9	9	17	9	7	13	10	24	22	24
20. Crude petroleum	13	10	11	9	20	24	33	49	49	50	47	43	44	42

Source: Trade statistics of European countries.

^a Imports into the main European countries from the main Latin American countries (see Appendix Table I) as percentage of total imports into the same European countries.

^b Quebracho (17) and sodium nitrate (21) are supposed to be imported entirely from Latin American countries.

Appendix Table III

LATIN AMERICA'S EXPORTS TO EUROPE BY EXPORTING COUNTRIES

Millions of current dollars, c.i.f.

Year	Temperate Agricultural Countries			Tropical Agricultural Countries					Mineral Producing Countries					Total Latin America's exports to Europe	
	Argentina	Uruguay and Paraguay	Total	Brazil	Colombia and Ecuador	Cuba	Central American Republics ^a	Total	Chile	Bolivia	Peru	Venezuela	Mexico		Total
1925.	826	57	883	216	25	75	80	396	128	27	43	25	53	276	1,555
1926.	781	51	832	186	26	50	86	348	93	35	37	22	57	244	1,424
1927.	1,022	64	1,086	194	29	59	89	371	110	38	43	27	66	284	1,741
1928.	1,045	69	1,114	208	33	81	94	416	138	41	38	26	55	298	1,828
1929.	984	57	1,041	215	28	63	96	402	161	32	35	38	61	327	1,770
1930.	602	66	668	178	26	50	87	341	88	19	29	26	49	211	1,220
1931.	511	44	555	134	19	28	74	255	65	13	24	18	35	155	965
1932.	413	26	439	92	10	28	50	180	27	9	21	15	22	94	713
1933.	382	33	415	106	15	28	56	205	47	8	27	17	27	126	746
1934.	495	37	532	150	29	34	51	264	63	24	43	26	43	199	995
1935.	473	40	513	179	29	30	48	286	60	24	39	19	47	189	988
1936.	445	41	486	177	35	38	49	299	76	27	48	22	54	227	1,012
1937.	708	47	755	199	37	32	47	315	116	29	60	30	74	309	1,379
1938.	431	49	480	196	39	40	43	318	100	27	41	32	56	256	1,054
1948.	1,360	98	1,458	436	23	271	62	792	104	41	57	133	77	412	2,662
1949.	732	122	854	375	30	183	74	662	103	34	54	109	75	375	1,891
1950.	712	118	830	427	45	229	93	794	90	37	68	128	81	404	2,028
1951.	731	130	861	628	77	258	138	1,101	107	55	131	172	182	647	2,609

Source: Trade statistics of the European countries.

^a Costa Rica, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Nicaragua and Panama.

Appendix Table IV

EUROPEAN IMPORTS FROM LATIN AMERICA BY IMPORTING COUNTRIES

Millions of current dollars, c.i.f.

Year	United Kingdom	Germany ^a	France	Netherlands	Belgium-Luxembourg	Switzerland	Italy	Spain	Scandinavian countries ^b	Eastern European countries ^c	Other countries ^d	Total
1925.	597	263	231	87	97	25	90	53	59	15	38	1,555
1926.	528	266	194	101	79	23	94	43	60	14	22	1,424
1927.	590	416	223	130	89	26	96	49	64	21	37	1,741
1928.	616	402	217	127	89	26	143	63	71	34	40	1,828
1929.	633	366	238	107	90	28	117	60	59	34	38	1,770
1930.	479	229	152	71	65	24	68	39	46	23	24	1,220
1931.	372	148	142	66	54	23	54	21	46	16	23	965
1932.	268	105	95	56	38	24	42	23	35	12	15	713
1933.	288	117	102	51	46	22	38	13	36	18	15	746
1934.	400	139	119	72	70	30	49	23	44	27	22	995
1935.	361	180	98	74	68	28	52	23	49	25	30	988
1936.	402	182	108	65	71	18	38	17	64	31	16	1,012
1937.	481	281	129	80	95	31	87	13	93	46	43	1,379
1938.	347	271	98	62	65	22	39	7	71	38	34	1,054
1948.	901	117	258	195	191	160	270	177	218	58	117	2,662
1949.	654	150	188	135	143	65	152	119	157	69	59	1,891
1950.	701	185	247	131	141	102	159	49	188	64	61	2,028
1951.	934	332	337	160	155	100	199	32	261	25	74	2,609

Source: Trade statistics of European countries.

^a Western Germany for post-war years.

^b Denmark, Finland, Norway and Sweden.

^c Czechoslovakia, Hungary, Poland and Yugoslavia.

^d Austria, Greece, Ireland, Portugal and Turkey.

Appendix Table V

TRADE OF LATIN AMERICA WITH EUROPE AND THE UNITED STATES

Millions of current dollars

Area of origin for imports and area of destination for exports ↓	Year	Argentina		Paraguay and Uruguay		Brazil		Colombia and Ecuador		Cuba		Central American Republics ^a		Chile		Bolivia		Peru		Venezuela		Mexico		TOTAL		
		Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	
United Kingdom	1928	152	361	16	33	78	20	20	12	8	49	13	28	25	36	2	35	10	30	11	1	14	11	349	616	
	1935	75	207	7	17	23	33	11	3	4	18	7	12	10	20	1	17	5	17	5	2	7	15	155	361	
	1938	95	181	11	20	25	36	10	2	4	23	6	11	8	26	1	15	5	16	7	7	4	10	176	347	
	1948	212	491	27	31	104	96	21	3	8	118	14	30	16	32	4	38	8	31	56	12	15	19	485	901	
	1949	187	258	41	57	126	86	17	1	6	83	14	41	20	28	3	31	16	32	55	22	9	15	494	654	
	1950	107	250	40	38	120	114	21	2	10	107	25	44	17	16	3	31	29	38	40	45	14	16	426	701	
1951	79	241	35	50	153	185	23	2	21	136	23	75	21	24	5	47	26	71	46	54	18	49	450	934		
France	1928	44	88	8	12	21	45	7	4	4	8	4	14	7	28	—	1	2	2	3	4	6	11	106	217	
	1935	21	26	2	4	7	23	2	8	2	4	2	9	1	6	—	—	2	7	3	7	4	4	46	98	
	1938	21	27	1	3	9	21	3	8	2	2	1	5	2	12	—	—	1	7	3	9	4	4	47	98	
	1948	28	88	5	5	24	32	5	1	3	28	2	3	2	25	—	—	1	5	9	56	3	14	81	258	
	1949	112	40	7	4	20	32	5	6	2	19	4	3	5	28	—	—	2	1	3	13	40	5	11	174	188
	1950	95	89	14	11	49	53	7	6	4	21	4	2	5	22	—	—	4	2	12	35	8	6	202	247	
1951	103	96	16	9	89	89	11	18	6	12	6	3	7	20	1	1	4	9	16	38	20	42	279	337		
Netherlands	1928	12	83	1	1	2	11	1	3	2	10	1	4	1	9	—	—	—	1	2	1	1	4	23	127	
	1935	5	50	1	1	2	7	—	2	1	2	—	3	—	2	—	—	4	1	—	1	—	1	3	11	74
	1938	6	35	1	2	4	9	1	1	1	1	—	2	1	2	—	—	6	1	1	4	—	1	3	20	62
	1948	12	99	2	14	7	26	1	2	1	20	1	3	1	5	—	—	—	3	5	13	2	10	32	195	
	1949	14	61	3	5	7	17	1	1	1	23	—	3	1	3	—	—	—	1	2	7	11	1	9	36	135
	1950	16	45	3	8	15	19	2	1	2	26	2	8	1	2	—	—	—	4	2	7	15	2	5	54	131
1951	35	45	4	5	30	29	2	5	4	39	3	5	1	2	1	1	4	10	12	15	3	4	99	160		
Belgium-Luxembourg	1928	31	62	2	3	11	10	2	—	2	2	—	1	4	8	—	—	1	1	1	—	2	2	56	89	
	1935	22	46	2	1	6	10	1	1	1	1	—	1	1	2	—	—	1	1	1	1	1	3	36	68	
	1938	23	32	1	1	9	11	2	1	1	5	1	1	1	3	—	—	2	1	1	2	2	1	6	42	65
	1948	88	84	10	15	25	51	8	5	4	11	3	5	3	3	1	2	2	6	8	4	2	5	154	191	
	1949	46	49	13	8	43	42	7	5	4	4	4	7	4	5	1	1	3	7	12	5	2	10	139	143	
	1950	10	29	11	16	47	41	11	4	7	4	6	12	2	2	1	1	3	11	10	4	4	17	112	141	
1951	37	27	14	15	55	39	15	5	11	8	9	19	2	4	2	1	6	14	14	4	8	16	173	155		
Switzerland	1928	7	15	1	1	5	5	2	—	1	1	1	1	1	1	—	—	1	—	1	1	2	1	22	26	
	1935	5	17	—	—	3	4	—	1	1	—	2	1	2	—	—	—	—	—	—	1	1	1	11	28	
	1938	8	13	—	1	4	3	1	—	1	1	1	2	—	—	—	—	1	—	1	—	2	1	19	22	
	1948	27	89	5	9	32	22	9	2	5	15	6	6	3	6	1	—	3	6	10	2	8	3	109	160	
	1949	18	21	5	5	31	11	6	2	6	5	3	5	5	4	2	—	3	4	11	3	8	5	98	65	
	1950	16	29	6	8	31	18	8	3	5	14	5	9	4	2	2	—	4	6	9	2	8	11	98	102	
1951	24	18	6	13	47	20	8	4	5	5	4	9	6	7	—	—	5	10	8	3	12	11	127	100		
Italy	1928	52	100	5	3	15	19	5	2	1	2	1	3	4	12	—	—	2	—	2	1	1	1	88	143	
	1935	13	24	2	7	5	9	2	2	1	—	—	2	1	4	—	—	2	1	2	1	2	2	29	52	
	1938	21	14	4	4	5	7	2	3	1	—	—	1	—	9	—	—	1	—	2	1	2	1	43	39	
	1948	157	180	6	8	20	34	5	3	2	14	5	6	3	14	1	—	1	2	12	3	9	6	221	270	
	1949	133	77	7	10	21	27	4	4	1	2	5	6	3	10	—	—	1	2	10	5	4	9	189	152	
	1950	65	77	8	8	15	28	8	5	2	1	10	10	2	11	—	—	2	1	11	6	10	12	133	159	
1951	42	99	14	10	40	30	8	5	3	4	8	11	3	15	1	—	3	4	12	10	7	11	141	199		
Portugal and Spain	1928	23	37	6	1	8	6	1	2	13	6	3	1	1	9	—	—	—	—	1	3	2	5	58	70	
	1935	10	8	1	1	3	4	1	1	5	3	1	1	1	4	—	—	—	—	1	2	2	3	25	27	
	1938	3	4	—	—	3	2	—	—	2	3	—	—	—	1	—	—	—	—	—	—	—	—	8	10	
	1948	11	136	1	2	17	45	—	—	9	13	—	1	4	8	—	—	—	—	4	12	3	8	49	225	
	1949	9	65	1	1	11	47	1	—	7	7	—	2	4	10	1	—	—	—	3	9	3	2	40	143	
	1950	13	16	1	2	12	18	2	—	9	6	—	4	7	14	1	2	—	1	4	3	3	—	52	66	
1951	6	12	1	1	16	15	1	—	13	8	1	2	7	4	—	—	1	—	3	5	6	4	55	51		

Sweden	1928	6	1	1	1	2	7	1	1	1	1	3	2	1	1	—	—	2	1	—	15	32				
	1935	5	6	—	—	4	9	—	—	—	—	—	—	—	—	—	—	—	—	10	17					
	1938	9	13	1	1	4	9	1	1	1	1	3	—	—	—	—	—	—	2	3	21	40				
	1948	43	30	4	3	22	31	7	4	4	3	2	3	5	7	1	1	1	1	5	17	8	4	102	99	
	1949	22	32	5	3	30	31	6	4	1	—	3	—	4	4	1	—	3	—	5	5	5	1	85	80	
	1950	21	29	7	9	44	39	8	5	3	—	3	—	4	3	—	—	3	—	4	7	7	5	104	98	
1951	78	27	11	8	66	54	7	7	5	1	3	—	8	6	—	—	4	1	4	19	11	13	197	136		
Other Scandinavian countries ^b	1928	7	25	—	—	6	9	2	—	4	—	—	1	1	—	—	—	1	—	2	—	—	—	20	39	
	1935	5	17	—	—	3	8	—	—	1	—	—	—	3	—	—	—	—	—	—	—	—	—	10	32	
	1938	7	13	1	1	5	9	—	1	1	—	—	—	3	—	—	—	—	—	1	2	1	1	18	31	
	1948	17	51	—	3	13	39	1	3	3	7	2	4	1	2	—	—	—	—	2	3	6	3	2	43	119
	1949	17	35	2	3	16	22	1	5	3	3	3	3	2	1	—	—	—	—	2	1	1	1	3	45	77
	1950	18	30	3	—	23	46	2	3	2	5	5	3	3	1	—	—	—	—	1	1	4	3	2	1	61	90
1951	59	40	2	4	50	60	4	4	5	5	25	2	3	1	—	—	—	—	2	1	4	6	2	5	157	125
Germany ^c	1928	83	223	9	13	47	52	17	9	6	3	9	38	14	25	2	5	5	3	5	13	14	18	211	402	
	1935	29	43	4	6	42	62	11	8	4	2	8	11	11	18	1	2	6	12	5	3	12	13	133	180	
	1938	44	65	12	12	56	75	16	19	4	3	10	15	21	32	3	3	11	14	13	11	16	22	206	271	
	1948	1	39	1	3	2	25	1	—	—	37	—	—	—	2	—	—	—	1	1	7	1	3	7	117	
	1949	2	45	2	2	10	25	3	2	1	29	2	3	2	5	1	—	—	1	3	6	8	2	9	32	150
	1950	25	65	16	15	35	21	21	16	7	28	10	3	7	14	1	3	6	6	17	8	9	6	154	185	
1951	83	100	27	13	113	75	35	29	10	31	18	10	22	19	5	5	13	11	24	15	20	24	370	332		
Other western European countries ^d	1928	3	23	—	1	1	8	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	6	33
	1935	1	18	—	—	2	5	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	1	3	26
	1938	3	18	—	1	2	6	—	—	—	1	—	—	—	2	—	—	—	—	—	—	—	3	2	8	31
	1948	3	44	—	1	3	12	1	—	—	5	1	1	—	4	—	—	—	—	—	—	—	—	—	8	69
	1949	3	6	—	2	2	17	1	—	—	7	—	—	—	—	—	—	—	—	—	—	—	—	—	9	35
	1950	7	9	2	1	6	16	3	—	—	14	—	—	—	2	—	—	—	1	—	—	—	1	1	21	44
1951	11	13	—	2	9	21	3	1	—	9	—	—	2	1	5	—	—	—	1	—	1	2	26	55		
Eastern European countries ^e	1928	7	14	1	—	4	10	4	1	1	—	—	—	8	—	—	—	—	1	—	1	1	1	19	34	
	1935	8	11	—	2	3	7	2	2	1	—	1	1	—	—	—	—	—	1	—	—	—	1	1	16	25
	1938	12	16	4	3	4	8	1	3	—	—	1	1	—	4	—	—	—	1	1	1	—	2	2	27	38
	1948	14	29	2	4	10	23	1	—	—	—	1	—	—	—	—	—	—	—	2	1	1	1	1	32	58
	1949	17	43	1	3	14	18	—	—	—	1	—	—	—	3	—	—	—	1	—	2	—	1	1	37	69
	1950	16	44	2	2	9	14	1	—	—	2	—	—	—	1	—	—	—	1	—	2	—	1	1	33	64
1951	4	13	1	—	10	11	—	—	1	—	1	—	—	—	—	—	—	2	—	1	—	1	1	21	25	
TOTAL EUROPE	1928	427	1,045	50	69	201	208	63	33	43	81	32	94	59	138	4	41	21	38	27	26	46	55	973	1,828	
	1935	199	473	19	40	101	179	31	29	21	30	19	48	27	60	4	24	16	39	16	19	32	47	485	988	
	1938	252	431	36	49	130	196	37	39	18	40	20	43	42	100	5	27	23	41	34	32	38	56	635	1,054	
	1948	613	1,360	63	98	279	436	60	23	39	271	37	62	38	104	8	41	16	57	115	133	55	77	1,323	2,662	
	1949	580	732	87	122	331	375	52	30	34	183	37	74	50	103	9	34	31	54	126	109	41	75	1,378	1,891	
	1950	409	712	113	118	406	427	94	45	52	229	68	93	52	90	8	37	58	68	121	128	69	81	1,450	2,028	
1951	561	731	131	130	678	628	117	77	84	258	101	138	82	107	17	55	70	131	145	172	109	182	2,095	2,609		
United States ^f	1928	179	99	27	12	100	221	65	100	128	203	110	52	40	75	5	—	23	21	38	39	116	125	831	947	
	1935	49	65	7	8	44	100	24	54	60	104	46	34	15	24	3	—	12	7	19	21	66	42	345	459	
	1938	87	41	6	6	62	98	44	51	76	106	58	40	25	28	5	1	17	13	52	20	62	49	494	453	
	1948	381	180	66	62	497	514	228	255	441	375	345	190	105	179	36	49	67	35	517	271	522	246	3,205	2,356	
	1949	124	98	41	60	364	552	198	258	374	388	346	186	138	152	35	48	82	40	502	278	454	243	2,658	2,303	
	1950	142	206	43	112	343	715	257	348	456	406	344	242	70	160	20	35	71	49	392	324	512	315	2,650	2,912	
1951	233	220	88	142	699	910	261	398	540	418	329	297	166	203	40	51	115	61	456	324	711	326	3,638	3,350		

Source: Trade statistics of the European countries and the United States. Import figures are f.o.b. and export figures are c.i.f.

a Costa Rica, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Nicaragua and Panama.

b Denmark, Finland and Norway.

c Western Germany for post-war years.

d Austria, Greece, Ireland and Turkey.

e Czechoslovakia, Hungary, Poland and Yugoslavia.

f All figures f.o.b. Imports exclude United States "Special Category" commodities for the years 1949 to 1951 which amounted respectively to million \$: 92, 93 and 135.



Chapter 3

LATIN AMERICA'S IMPORTS

Factors determining the General Level of Latin American Imports

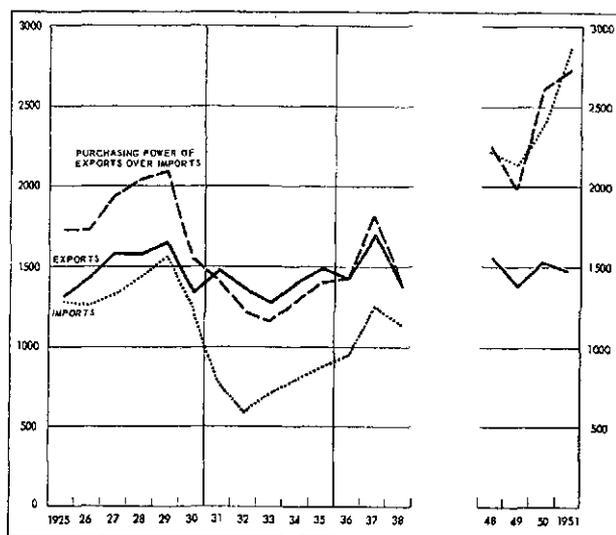
In the past, the general level of Latin America's imports from the rest of the world seems to have been governed largely by the general level of its exports, together with the complex of factors which determined the terms of trade. In Chart 3 are shown movements of the volume of Latin America's exports and imports to and from Europe and the United States and also the movements of exports in terms of their purchasing power over imports. The correlation between the volume of imports and the unadjusted volume of exports is, as usual, rather weak but, as might be expected, there is a close correlation between imports

and the import-purchasing power of exports. In Latin American countries, particularly in the earlier years of the period covered, the export industries were responsible for a very high proportion of national income, so that a change in their real earnings had a big influence on the level of total real income and hence on demand for imported manufactures. In the depression years, the curve of the volume of imports fell much more than that of the unadjusted volume of exports because, as already described in Chapters 1 and 2, Latin America's fall in real income at this time came largely in the form of a decline in the terms of trade, rather than a decline in the total volume of production; domestic production and the volume of exports were fairly well maintained.

Chart 3

TRADE OF LATIN AMERICA WITH EUROPE AND THE UNITED STATES

Imports and exports at 1938 prices, f.o.b. and purchasing power of exports over imports ^a



Sources: See "Notes on Sources and Methods".

^a Current values of exports deflated by import unit value index.

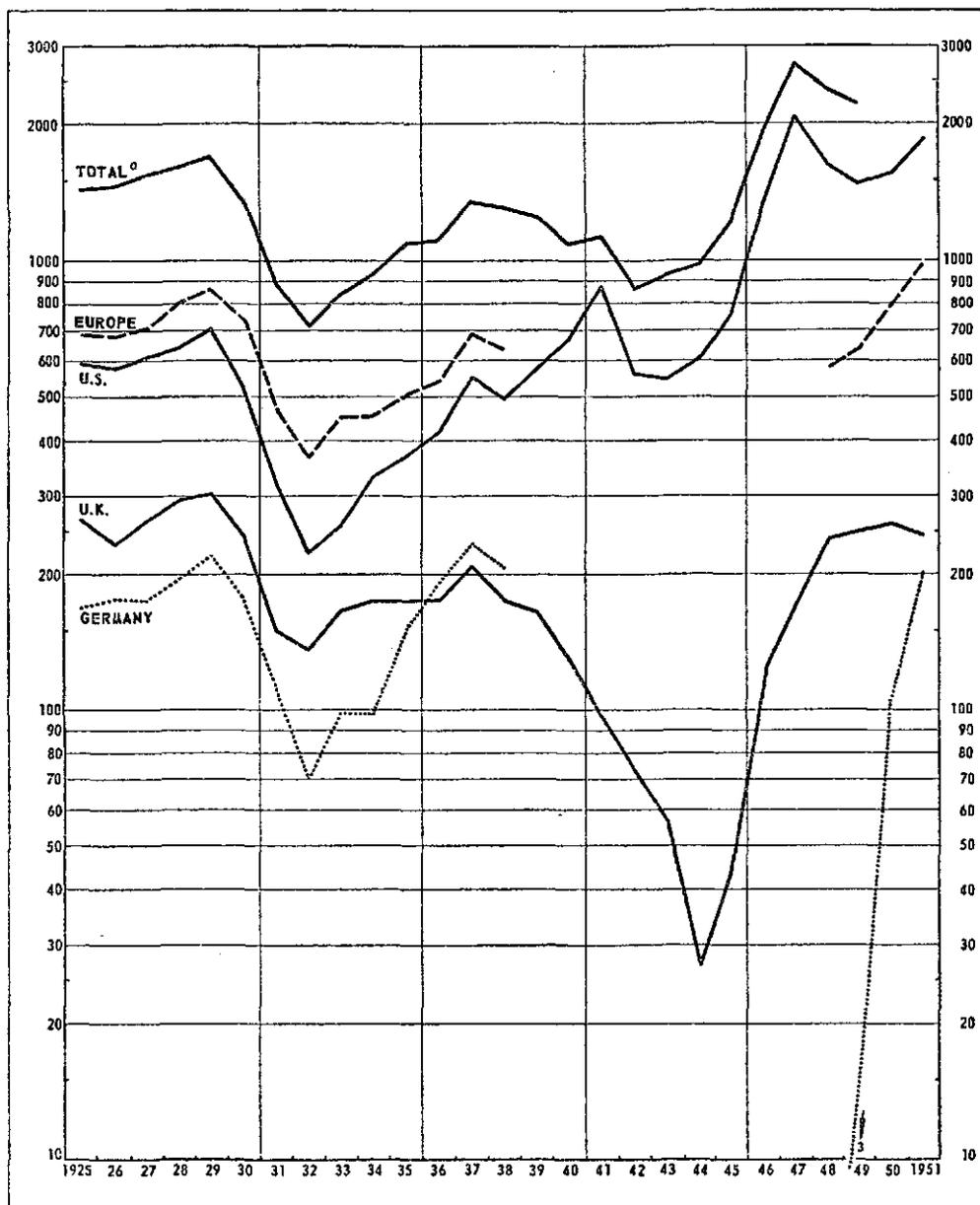
The close connection between imports and the purchasing power of exports was also partly due of course to the fact that Latin American countries possessed little in the way of gold or liquid foreign currency reserves with which to cover year-to-year deficits on the balance of payments; they were forced to apply measures—some of which were described in Chapter 1—designed to keep their current account in balance. However, in point of fact, the ratio of Latin America's export surplus to the value of imports did vary substantially from time to time, for reasons, also described in Chapter 1, such as variations in the rate of capital inflow and changes in the value of invisible outpayments effected by defaulting on debt-service obligations in time of crisis.

Thus, in the past, Latin America's demand for imports from the outside world can best be regarded as largely determined by the income-effects of the outside world's demand for the products of Latin America's primary industries: but in the latter part of the period and particularly since the last war, increasing industrialization gradually reduced the importance of the export industries in national income. In the post-war period, balance-of-payments factors, deriving largely from supply limitations on the volume of exports, became more important in determining imports; after war-time accumulations of foreign currency had been exhausted, room for manoeuvre on the current balance of payments was even more restricted than in pre-war days.

Chart 4

LATIN AMERICA'S IMPORTS BY AREA OR COUNTRY OF ORIGIN

Millions of dollars at 1938 prices, f.o.b.



Sources: See "Notes on Sources and Methods".

^a Total imports from all sources including countries not shown.

Chart 4 depicts the movements in the volume of Latin America's imports from all sources, and separately from the United States, the United Kingdom, Germany and total Europe over the whole period from 1925 to 1951. Total imports showed a slight upward trend from 1925 to 1929 and then of course collapsed. Recovery after the depression was fairly steady but slow; then, after the war, the year

1948 saw imports reach a peak which was substantially higher than in any previous year in history. Thus there appears a long-term upward trend, interrupted by the contractions of imports during the two World Wars and by the depression; the latter's impact was so severe that it produced profound changes, which will be described later, in the economic policies of the Latin American countries.

During and after both World Wars the sharp fluctuations in total imports were accompanied by wide shifts in the source of those imports away from Europe towards the United States. In 1913, imports from Europe amounted to nearly two and a half times the value of those derived from the United States, with one single supplier, the United Kingdom, exceeding the United States in importance. But by 1925, owing to both a sharp rise in imports from the United States and a sharp drop in European supplies, the ratio (imports from Europe : imports from the United States at current prices) had dropped to just under 1.1 : 1.¹

Throughout the inter-war period, imports from Europe continued just to exceed those from the United States ; during the depression, the volume of imports from the United States fell more than that from Europe, paralleling the similar movement which occurred in the case of exports² already described in Chapter 2. After 1932, on the other hand, United States exports recovered faster, so that by 1937 the relative positions of the United States and Europe in Latin American markets had returned to those of 1925.

In the post-depression period, both the United Kingdom and France failed to register any substantial recovery in Latin American markets, partly because imperial preference in the United Kingdom and similar policies adopted by France had reorientated their foreign trade to affiliated areas, but Germany succeeded in achieving a striking increase in her

¹ See Table 3, Chapter 1.

² The deterioration of Latin American terms of trade affected its purchasing power for imports from both areas about equally.

exports, even exceeding the volume supplied by the United Kingdom to Latin America between 1935 and 1938. The expansion in Germany's exports to Latin America was due to its increased purchases from Latin America combined with bilateral trading methods which provided that earnings from exports to Germany had to be spent on purchases from that country. After the war, both France and—later—Germany staged a remarkable come-back, whereas the increase in British exports remained relatively more modest, largely because of the restrictions applied to imports from the United Kingdom by countries which were short of sterling : in 1950, the volume of British exports to Latin America did not reach the level of 1929, let alone that of 1913.

The behaviour of imports of individual Latin American countries has varied a great deal in relation to the movement of imports into Latin America as a whole, depending, to a large extent, on the way in which their export commodities fared in overseas markets. A computation of the share of the major Latin American trading countries in the current value of total Latin American imports has been made in four- and five-year annual averages for the period from 1906 to 1939 and for 1948 and 1949, and the fluctuations in this share shown in Table 18 will be analysed in conjunction with the behaviour of the volume of imports in 1928, 1938 and 1949 to 1951 shown in Table 19.

The share of the imports of the River Plate countries, predominantly determined by that of Argentina, in the imports of the whole of Latin America, which was roughly maintained until 1933 around 38 per cent, declined very sharply thereafter to only 26 per cent by 1949 ; the absolute volume of their imports from Europe declined throughout the period,

Table 18

IMPORTS OF LATIN AMERICAN COUNTRIES
AS PERCENTAGE OF THE VALUE OF LATIN AMERICA'S TOTAL IMPORTS

Period	Argentina, Uruguay and Paraguay	Brazil	Chile	Colombia	Cuba	Mexico	Venezuela	Others ^a	All Latin American countries
1906-1910 . .	36.7	19.9	10.3	1.3	10.1	10.7	1.1	9.9	100
1913 . .	39.5	23.1	8.6	2.0	10.0	6.7	1.3	8.8	100
1921-1924 . .	39.5	14.0	6.1	2.6	15.7	10.1	1.5	10.5	100
1925-1929 . .	38.3	17.4	6.6	5.5	10.6	7.6	3.2	10.8	100
1930-1934 . .	39.1	16.8	6.8	4.9	7.9	8.3	4.0	12.2	100
1935-1939 . .	31.8	20.5	6.0	6.1	8.0	9.0	5.9	12.7	100
1948 . .	30.5	19.5	4.6	4.7	9.0	8.7	11.8	11.2	100
1949 . .	25.7	21.3	6.0	4.2	8.9	8.7	13.2	12.0	100

Source: Trade statistics of Latin American countries.

^a Bolivia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Nicaragua, Panama, Peru and El Salvador.

Table 19

IMPORTS OF SELECTED LATIN AMERICAN COUNTRIES FROM MAIN EUROPEAN SOURCES ^a
AND FROM THE UNITED STATES

Millions of dollars, f.o.b. at constant post-war prices ^b

Importing country	1928	1938	1949 ^c	1950	1951
Argentina and Uruguay	1,290	782	746	801	964
Brazil	570	377	748	843	1,309
Chile	168	127	180	120	216
Colombia	203	139	209	322	294
Cuba	297	197	379	543	561
Mexico	263	168	477	582	705
Venezuela	109	165	657	541	542
Peru	70	63	109	123	149
Total of countries listed	2,970	2,018	3,505	3,875	4,740

Source: Trade statistics of European countries and the United States.

^a For countries included, see "Notes on Sources and Methods". Owing to insufficient information, the coverage of bilateral relations varies with each importing country.

^b Pre-war years at 1948 prices and post-war years at January–September 1949 prices.

^c January–September at annual rate.

reaching in 1949 a level only about 60 per cent of the 1928 volume. The continuous decline in the River Plate countries' share of the imports was caused by falling export receipts due, before the war, to European protection and severe droughts in Argentina in the late 'thirties, and, after the war, to further droughts and to Government policy.¹

One other country—Chile—found both its share in total Latin American imports and the total volume of its imports lower in 1950 than in 1928; here again the contraction was due to the drop in its export earnings; sales of Chilean nitrate had declined considerably following the increase in world synthetic production.

Colombia, on the other hand, substantially increased its share in total Latin American imports throughout the period and the peak volume of its imports in 1950 far exceeded the 1928 level. Fluctuations in imports were largely determined by price movements for coffee, the largest single item in Colombia's exports. Brazil's experience, also, is largely bound up with the history of coffee: before the first World War, Brazil took nearly one-fourth of Latin America's total imports, but the coffee slump of the inter-war years reduced Brazil's purchasing power to such an extent that its share in Latin American imports fell to one-fifth. Since the second World War, coffee has been booming and Brazil has been able to afford imports far greater in volume than in 1928 and has nearly regained the share of imports it held around 1913.

¹ See Chapter 2, pages 26 and 27.

Of the remaining countries shown in the table, Cuba and Mexico held their share in total Latin American imports in the post-war period, by far exceeded the 1928 volume of their imports by 1949, and registered a further increase between 1949 and 1951. While the behaviour of Cuban imports is generally determined by the demand for Cuban sugar in the United States and United States investments in that country, it benefited after the war by rather exceptional exports to Europe. Mexico, with a much wider range of export commodities, is less vulnerable to fluctuations in demand for individual products than most other Latin American countries; the large increase in its imports after 1949 was due to the high prices obtained for mineral and coffee exports, the stepping-up of production in mining and petroleum in response to higher prices, and the large increase in tourist earnings.

The behaviour of Venezuelan imports is exceptional: the volume of its imports increased nearly fivefold between 1928 and 1950-1951² owing to the enormous expansion in output and demand for its main export commodity, petroleum.

The General Impact of Industrialization

A priori reasoning cannot predict how industrial development will affect the volume of imports of manufactures into a particular group of primary

² The decline in the volume of imports registered between 1949 and 1950 was due to a curtailment in new investment by the oil companies.

producing countries. The widely different histories of Argentina and Brazil, to take two countries which are industrially among the most advanced in Latin America, illustrate opposite consequences of industrialization.

The effect of industrialization on the total volume of imports will much depend on its impact on production of export commodities and, consequently, on export receipts. It was suggested in the previous chapter that industrialization will tend to shift resources (and manpower in particular) away from the export trades; that it will increase domestic consumption of export commodities; and that, by offering alternative employment, it may raise the costs of primary production. On the other hand, it does tend to increase productivity in these occupations, and its net effect on exports will depend on the balance of the different forces,¹ which varied greatly from country to country.² In addition, in many

Latin American countries there probably still remains a large amount of labour under-employed in agriculture, which could be drawn off to industry without reducing primary production.

If industrialization did not affect exports uniformly, the reverse relationship appears to have had more general validity; in the Latin American experience, declines in the volume of imports have been a cause rather than a consequence of industrialization. Thus, the fall in imports during the first World War started industrial development. Later, high prices and a high volume of exports in the 'twenties, and therefore abundant purchasing power for imports, then tended to slow down the pace of industrialization despite general prosperity, whereas the drastic decline in export receipts during the depression provided another stimulus and finally the absence of foreign supplies during the last war yet another.

Table 20 shows how in Argentina, Brazil and Chile the 1930's achieved a drastic reduction in the proportion of total supplies available at home which they derived from imports. The figures for the 'thirties are of course influenced more by the decline in imports than by the rise in production, but they are nevertheless significant in revealing the efforts that were made to prevent the fall in foreign trade from crippling the economies of these countries. The impact of the depression on their economies was so severe as to strengthen the determination to reduce dependence upon the exports of a few primary commodities, the prices of which had collapsed in world markets, and to provide more stable and diversified employment for an increasing population. Despite the loss of export income, these countries

¹ Depending on the particular circumstances of individual countries, industrialization may also succeed in raising the supply price of export commodities relatively to world prices in general and thus improving the terms of trade. This is an additional force to be added in the balance of forces determining the results of industrialization.

² The rapid industrial development in Argentina in the last few years created a labour scarcity in agriculture. Furthermore, prices paid to farmers by the Government were below world market prices. The result was a decrease of 14 per cent in the area sown in the crop year 1949/50 as compared with the five-year average from 1934/35 to 1938/39. In Brazil, while the development of industry in the big cities has diverted labour away from agricultural districts and has created difficulties for cotton and coffee growers, production for export has nevertheless increased substantially over the last twenty years for most commodities.

Table 20

INDEX NUMBERS OF TOTAL SUPPLIES AVAILABLE FOR HOME USE AND PROPORTION DERIVED FROM IMPORTS

Country	Period	Total supplies available at home (1928-1929 = 100)	Of which from:		Percentage derived from imports ^a
			Home Production	Imports	
Argentina	1928-1929	100	48	52	52
	1936-1938	102	64	38	37
	1947-1948	173	113	60	35
Brazil	1928-1929	100	57	43	43
	1936-1938	102	71	31	30
	1948-1949	166	116	50	30
Chile	1928-1929	100	51	49	49
	1936/1938	92	70	22	24
	1948-1949	138	102	36	26

Source: Economic Commission for Latin America.

^a I.e., Third column as percentage of first column.

succeeded in making up through their home production for the loss on the terms of trade. Between the 'thirties and the recent post-war period, far less change has occurred in the proportion of imports to total available supplies, in spite of the great rise in industrial production fostered by the war. This has been due to favourable export conditions prevailing immediately after the war which allowed Latin American countries with purchasing power sufficient to pay for a high level of imports, although, as will be shown later, this was inadequate in most countries to meet the increased demand for imports.

Since the aim of industrialization in Latin America has usually been to replace imports, its growth has usually been protected from foreign competition by heavy import duties or quantitative restrictions. When an industry was established, it was generally the policy of Governments to allow imports only to the extent that the domestic industry was unable to supply the full requirements of the home market. Owing to the necessity, which has prevailed over most of the last twenty years, to conserve foreign exchange, domestic manufacturing has thus received first priority even when its prices were not competitive with foreign products. In a number of cases, import restrictions have been maintained as a purely protective measure even in the absence of balance-of-payments pressure.

With this network of restrictions, it is not surprising that little industrial specialization has occurred in Latin America: most countries started their industrialization process by developing the same types of production and little trade in manufactures has developed amongst the republics. In the absence of foreign competition either from other Latin American countries or from overseas, the new local industries have lacked a powerful stimulus to increased efficiency. Thus, the Brazilian textile industry, after its development during the first World War, could make no progress on the home market in the 'twenties, when foreign competition was allowed, but made enormous strides in the 'thirties, when imports of cotton cloth were cut from 83 million metres in 1928 to less than 5 million metres in 1938, while consumption had increased from 668 million to 912 million metres. During the last war, when no other supplies were forthcoming, Brazil even succeeded in exporting textiles to other Latin American countries, but these exports fell off when imports could be obtained again from Europe and the United States.

Industrialization in Latin America has had wide effects on the commodity pattern of its demands for imports. The requirements for raw materials, which have grown with industry, were largely satisfied by trade inside the region, or by purchases from other primary producers: it will be shown later that they hardly affected imports from Europe or the United States. At the same time, the requirements

for capital goods, and for machinery in particular, have grown tremendously, and these were obtained in increasing quantities from the older industrial countries. On the other hand, since light industries were the first to be developed in most of the countries, the greatest progress in replacing imports was made in light consumer goods. Food, beverages and tobacco products, textiles¹ and clothing constitute from 55 to 60 per cent of the total production of manufactures in Argentina, Brazil, Chile and Mexico, and from 70 to 80 per cent in other Latin American countries. Almost comparable progress was made in building materials and household furnishing and accessories.

The great rise in incomes attendant upon industrialization has resulted in increasing demand for many industrial commodities, faster than home production could expand, while for many others imports hardly declined. Thus, the production of iron and steel products, rubber, wood-pulp, cellulose and pharmaceutical products has expanded rapidly in a number of countries, but imports were not reduced substantially. Table 21 shows that imports of raw rubber in Argentina, Chile and Mexico have increased at a very high rate during the past twenty to thirty years, indicating the development in the production of rubber manufactures. Nevertheless, imports of tyres and other rubber manufactures have tended to be maintained.

The same tendency for imports to continue at a fairly high level while domestic production was increasing rapidly may also be seen in the chemical and paper industries. For example, production of caustic soda in Argentina increased from 1,790 tons in 1938 to 9,800 tons in 1946, while imports increased from 18,140 to 19,270 tons. Chile produced 47,000 tons and imported 16,000 tons of paper in 1949, as compared with 28,000 tons and 12,000 tons respectively in 1938.

In other cases, the rise in income has shifted demand to higher-quality goods. Thus, in Brazil, where cotton textile imports have fallen sharply, as has already been pointed out, the demand for high-quality textiles, especially woollen and linen, brought about a steep increase in these imports during the last few years, until severe restrictions were imposed.

The progress of industrialization has thus been attended by a shift in the structure of imports, owing partly to a change in consumer demand and partly to the deliberate policy of the Government. Also, where countries have been faced with balance-of-payments difficulties because of unfavourable export developments or domestic inflation, the import

¹ The extent of the expansion of the textile industry, even in the countries with a relatively limited industrial development, is illustrated by the establishment of the first cotton textile mill in Bolivia in 1927, which now covers over two-thirds of the cotton textile consumption in that country.

Table 21

IMPORTS OF CRUDE RUBBER AND RUBBER MANUFACTURES

Year or yearly averages

	Argentina ^a			Mexico ^a			Chile ^b		
	1925- 1929	1940- 1944	1947	1925- 1929	1945- 1948	1948	1925- 1929	1945- 1949	1949
Crude rubber	1.3	17.8	102.9	0.5	12.2	18.3	0.9	4.3	5.8
Tyres	25.1	0.6	58.6	4.4	3.3	2.2	3.1	2.8	6.8
Other rubber manufactures	4.7	1.3	3.2	5.8	1.3	1.0	2.8	1.8	1.3
Total	31.1	19.7	164.7	10.7	16.8	21.5	6.8	8.9	13.9

Source: *Economic Survey for Latin America, 1949*, Economic Commission for Latin America.

^a Millions of national pesos at 1937 prices.

^b Millions of gold pesos at 1937 prices.

restrictions applied have fallen more heavily on consumer goods. Thus the subsequent analysis will show that some countries, where industrialization has been slow and exchange earnings adequate, have maintained the structure of their imports almost unchanged, while, at the other extreme, in countries where a rapid industrialization has been combined with unfavourable export developments, multiple exchange rates, import prohibitions, the allocation of foreign exchange and other restrictive measures strongly influenced the composition of imports and accelerated the shift away from "non-essential" consumer goods to the commodities urgently required for the pursuit of industrialization.

The Commodity Composition of Latin American Imports

Table 22 shows in some detail how, since 1928, there has been a radical shift in the pattern of Latin America's total imports, away from consumer goods towards finished capital equipment and to a lesser extent towards chemicals. The sharpest decline in consumer goods occurred in the imports of textiles, which fell to about one-third of their 1928 volume in 1950-1951. The largest increase in capital goods was registered in the imports of machinery, which nearly trebled in the same period. These changes in the composition of imports of all Latin American countries taken together conceal the varying behaviour of individual countries, which was determined not only by the degree and diversity of their industrialization, but also by the commercial policies that they followed and their capacity to pay for imports. Thus, countries which have industrialized rapidly in recent years have seen striking changes in the composition of their imports, whereas countries with a more limited development tended to maintain

the general structure of their imports relatively unchanged. Moreover, within the group of countries with a high rate of industrial development, the total volume of imports which they could afford has, in turn, affected their composition. As seen in Table 23, Argentina and Chile, together with Brazil and Mexico, have had a continuous and considerable industrial development during the past twenty-five years, but, whereas the former two countries have had to reduce their total imports, Brazil and Mexico have increased theirs. The table further shows that, for these four countries, the lower the level of imports, the greater has been the shift from consumer goods to capital goods, metal goods and chemicals. Argentina's imports of consumer goods decreased from 51 to 20 per cent of its total imports between 1928 and 1950-1951, while its capital goods imports rose from 19 to 37 per cent and metal goods and chemicals from 20 to 35 per cent. Chile also sharply curtailed the share of consumer goods in its total imports from Europe and the United States and at the same time nearly doubled the share of capital goods in the total.¹ By contrast, in Mexico, whose total imports rose most, the proportion of imports of capital goods in the total increased least.

Altogether, these four countries, which account for approximately 60 per cent of Latin America's total imports, have transferred a very large share of their purchases from Europe and the United States from foodstuffs, passenger cars, textiles and other

¹ A spectacular example of a shift from one category to another may be given for Chile, which, in 1927, imported over 10,000 tons of textiles and 250 tons of textile machinery; in 1948, the corresponding quantities were less than 2,000 tons and more than 5,000 tons. It should, however, be noted that 1948 was a year of abnormally high machinery imports.

LATIN AMERICA'S IMPORTS FROM MAIN EUROPEAN SOURCE COUNTRIES

Millions of dollars, per annum

Commodity	Year	Argentina	Brazil	Chile	Mexico	SUB-TOTAL	Colombia
1. Food, drink and tobacco	1928	51.6	47.8	4.4	35.8	139.6	21.1
	1938	20.7	15.4	2.2	17.0	55.3	8.3
	1950	2.2	61.4	1.0	63.6	128.2	18.1
	1951	3.8	82.7	15.3	74.8	176.6	15.1
2. Passenger cars	1928	45.6	25.4	5.1	12.9	89.0	4.3
	1938	21.7	8.2	1.8	3.8	35.5	3.0
	1950	17.8	95.5	8.5	64.9	186.7	42.1
	1951	56.3	233.4	26.1	102.6	418.4	27.1
3. Textiles	1928	358.0	121.4	41.4	39.8	560.6	64.1
	1938	164.6	23.0	25.2	11.6	224.4	19.1
	1950	28.8	33.9	6.9	25.6	95.2	31.1
	1951	29.5	46.4	10.2	25.1	111.2	25.1
4. Other consumer goods, manufactured	1928	126.2	63.8	20.6	30.2	240.8	23.1
	1938	63.4	31.3	8.9	17.8	121.4	14.1
	1950	48.6	47.4	7.1	33.4	136.5	28.1
	1951	85.1	70.7	13.3	39.6	208.7	25.1
Total, groups 1 to 4	1928	581.4	258.4	71.5	118.7	1,030.0	113.1
	1938	270.4	77.9	38.1	50.2	436.6	45.1
	1950	97.4	238.2	23.5	187.5	546.6	120.1
	1951	174.7	433.2	64.9	242.1	914.9	94.1
5. Raw materials and articles mainly unmanufactured	1928	112.7	81.3	25.5	31.1	250.6	7.1
	1938	88.1	66.2	16.9	16.0	187.2	6.1
	1950	44.3	56.5	14.0	48.9	163.7	23.1
	1951	70.7	80.5	29.3	55.4	235.9	19.1
6. Machinery	1928	155.4	68.1	24.4	42.4	290.3	25.1
	1938	121.0	90.7	24.5	36.5	272.7	26.1
	1950	167.2	239.3	36.6	143.4	586.5	64.1
	1951	144.8	363.3	61.1	183.4	752.6	70.1
7. Transport vehicles other than passenger cars	1928	67.5	36.1	7.8	10.6	122.0	12.1
	1938	62.0	33.8	10.7	7.5	114.0	7.1
	1950	99.4	68.0	6.5	33.5	207.4	9.1
	1951	98.5	94.7	10.8	34.7	238.7	16.1
Total, groups 6 and 7	1928	222.9	104.2	32.2	53.0	412.3	37.1
	1938	183.0	124.5	35.2	44.0	386.7	33.1
	1950	266.6	307.3	43.1	176.9	793.9	74.1
	1951	243.3	458.0	71.9	218.1	991.3	86.1
8. Metals and manufactures	1928	196.1	94.4	29.4	37.7	357.6	30.1
	1938	109.1	59.9	20.9	24.7	214.6	23.1
	1950	165.0	116.9	21.8	72.6	376.3	56.1
	1951	181.3	173.9	28.3	86.2	469.7	48.1
9. Chemicals and related products	1928	34.8	25.7	8.7	16.6	85.8	9.1
	1938	34.1	34.2	9.4	18.7	96.4	12.1
	1950	52.5	99.7	13.7	68.4	234.3	37.1
	1951	86.7	148.0	19.6	78.6	332.9	37.1
Total, groups 8 and 9	1928	230.9	120.1	38.1	54.3	443.4	39.1
	1938	143.2	94.1	30.3	43.4	311.0	36.1
	1950	217.5	216.6	35.5	141.0	610.6	94.1
	1951	268.0	321.9	47.9	164.8	802.6	86.1
10. Unspecified	1928	8.7	6.0	1.3	5.6	21.6	5.1
	1938	25.2	14.5	6.7	14.6	61.0	17.1
	1950	11.1	24.5	3.4	27.8	66.8	9.1
	1951	10.8	16.0	1.6	25.1	53.2	6.1
TOTAL, groups 1 to 10	1928	1,156.6	570.0	168.6	262.7	2,157.9	203.1
	1938	709.9	377.2	127.2	168.2	1,382.5	139.1
	1950	636.9	843.1	119.5	582.1	2,181.6	322.1
	1951	767.5	1,309.6	215.6	705.5	2,998.2	293.1

Sources: Trade statistics of European countries and the United States. See "Notes on Sources and Methods".

AND THE UNITED STATES, BY COMMODITY GROUPS

constant prices ^a

Cuba	Peru	Uruguay	Venezuela	SUB-TOTAL	GRAND TOTAL	Per cent of total	Year	Commodity
90.5	8.9	7.3	12.6	140.5	280.1	9.4	1928	1. Food, drink and tobacco
53.5	1.8	1.8	23.3	88.5	143.8	7.1	1938	
166.1	15.1	6.4	96.0	301.7	429.9	11.1	1950	
162.7	13.7	4.6	92.5	289.1	465.7	9.8	1951	
6.6	1.9	6.3	2.6	21.9	110.9	3.7	1928	2. Passenger cars
3.6	2.3	1.3	4.1	14.5	50.0	2.5	1938	
44.7	17.2	16.4	61.3	182.0	368.7	9.5	1950	
58.2	24.5	32.5	59.5	202.4	620.8	13.1	1951	
51.5	14.1	43.1	22.3	195.2	755.8	25.5	1928	3. Textiles
30.1	6.9	15.4	19.1	90.9	315.3	15.6	1938	
72.7	9.6	21.6	53.5	188.4	283.6	7.3	1950	
57.8	11.4	22.6	43.1	160.4	271.6	5.7	1951	
42.0	8.2	16.5	10.3	100.7	341.5	11.5	1928	4. Other consumer goods, manufactured
19.9	6.1	6.5	18.2	65.2	186.6	9.3	1938	
49.2	7.9	13.6	51.4	150.9	287.4	7.4	1950	
47.3	11.9	17.4	46.3	148.6	357.3	7.5	1951	
190.6	33.1	73.2	47.8	458.3	1,488.3	50.1	1928	Total, groups 1 to 4
107.1	17.1	25.0	64.7	259.1	695.7	34.5	1938	
332.7	49.8	58.0	262.2	823.0	1,396.6	35.3	1950	
326.0	61.5	77.1	241.4	800.5	1,715.4	36.1	1951	
37.7	6.6	21.0	9.0	81.8	332.4	11.2	1928	5. Raw materials and articles mainly unmanufactured
26.2	4.8	9.0	7.2	53.9	241.1	11.9	1938	
40.5	4.3	6.0	15.6	90.1	253.8	6.6	1950	
42.4	5.7	8.9	15.3	91.9	327.8	6.9	1951	
17.9	9.6	11.5	17.8	81.8	372.1	12.5	1928	6. Machinery
11.9	12.4	10.0	39.0	99.3	372.0	18.4	1938	
54.5	25.8	42.8	106.9	294.7	881.2	22.7	1950	
74.1	35.9	48.9	116.6	345.8	1,098.4	23.2	1951	
5.8	3.3	4.4	4.9	31.1	153.1	5.2	1928	7. Transport vehicles other than passenger cars
2.3	5.7	3.4	11.4	29.9	143.9	7.1	1938	
9.6	7.8	14.2	18.2	59.4	266.8	6.9	1950	
14.0	7.3	15.3	19.9	72.8	311.5	6.6	1951	
23.7	12.9	15.9	22.7	112.9	525.2	17.7	1928	Total, groups 6 and 7
14.2	18.1	13.4	50.4	129.2	515.9	25.5	1938	
64.1	33.6	57.0	125.1	354.1	1,148.0	29.6	1950	
88.1	43.2	64.2	136.5	418.6	1,409.9	29.8	1951	
25.3	11.6	19.0	25.1	111.1	468.7	15.8	1928	8. Metals and manufactures
15.6	9.3	11.1	31.7	91.0	305.6	15.1	1938	
47.5	17.6	26.2	82.8	230.4	606.7	15.7	1950	
54.5	21.4	29.6	102.1	256.0	725.7	15.3	1951	
16.4	4.7	3.6	3.9	37.9	123.7	4.1	1928	9. Chemicals and related products
9.5	6.4	3.8	9.1	41.6	138.0	6.9	1938	
38.2	11.0	12.0	36.0	134.9	369.2	9.5	1950	
35.4	13.6	13.3	34.8	134.9	467.8	9.9	1951	
41.7	16.3	22.6	29.0	149.0	592.4	19.9	1928	Total, groups 8 and 9
25.1	15.7	14.9	40.8	132.6	443.6	22.0	1938	
85.7	28.6	38.2	118.8	365.3	975.9	25.2	1950	
89.9	35.0	42.9	136.9	390.9	1,193.5	25.2	1951	
3.1	1.0	1.0	1.2	11.6	33.2	1.1	1928	10. Unspecified
24.1	7.6	9.7	2.1	61.4	122.4	6.1	1938	
19.8	6.9	4.9	19.0	60.5	127.3	3.3	1950	
14.6	3.5	3.0	12.3	40.3	93.8	2.0	1951	
296.8	69.9	133.7	109.7	813.6	2,971.5	100.0	1928	TOTAL, groups 1 to 10
196.7	63.3	72.0	165.2	636.2	2,018.7	100.0	1938	
542.8	123.2	164.1	540.7	1,693.0	3,874.6	100.0	1950	
561.0	148.9	196.1	542.4	1,742.2	4,740.4	100.0	1951	

^a 1928 and 1938 at 1948 prices ; 1950 and 1951 at January-September 1949 prices.

Table 23

CHANGES IN COMPOSITION OF IMPORTS INTO SELECTED LATIN AMERICAN COUNTRIES
FROM EUROPE^a AND THE UNITED STATES

	Argentina		Chile		Brazil		Mexico		Colombia		Cuba		Peru		Uruguay		Venezuela	
	1928	1950-1951	1928	1950-1951	1928	1950-1951	1928	1950-1951	1928	1950-1951	1928	1950-1951	1928	1950-1951	1928	1950-1951	1928	1950-1951
<i>Index of industrial production 1935 = 100</i>	..	206	73 ^b	199	75 ^b	218 ^c	78	182 ^d	..	..	..	..	..	..	..	..	..	..
<i>Imports from Europe^a and the United States: Volume index — 1928 = 100</i>	100	61	100	99	100	189	100	245	100	151	100	186	100	195	100	135	100	494
<i>Percentage distribution^e</i>																		
A. Food, drink and tobacco	5	1	3	5	9	7	14	11	11	6	31	31	13	11	5	3	12	18
B. Other consumer goods . .	46	19	40	22	37	25	32	24	46	30	34	31	35	32	50	35	32	30
C. Capital goods	19	37	19	35	18	36	21	32	19	27	8	14	19	29	12	35	21	25
D. Metals and chemicals . .	20	35	23	25	21	25	21	25	20	30	14	16	24	24	17	23	27	24
E. Raw materials	10	8	15	13	15	7	12	8	4	7	13	8	9	4	16	4	8	3
Total A-E	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Sources: Trade figures are derived from data given in Table 22.

^a For European countries included, see "Notes on Sources and Methods".

^b Average 1928-1929.

^c 1949.

^d 1950.

^e Each commodity group as percentage of total of groups specified.

consumer goods to machinery, transport equipment and chemicals, the largest decline occurring for textiles, which dropped from \$560 million to about \$100 million at constant prices between 1928 and 1950-1951. On the other hand, imports of machinery more than doubled and chemicals more than tripled in the same period. Imports of metal goods into these four countries also increased significantly despite a 350 per cent rise in their combined steel capacity since 1937.

The second group of countries is one for which general indices of industrial production are not available, but where it is generally known that industrialization, although making rapid progress in recent years, still lags behind the progress made in the first group; they are Cuba, Uruguay, Peru and Colombia. These countries show considerable variations in the composition of imports. Cuba has the highest percentage of consumer goods in relation to total imports, with only a relatively small change since the late 'twenties despite the growth of a number of industries such as textiles, pharmaceuticals, rubber and paper.¹

Uruguay follows the general pattern, having greatly diminished its dependence on imports of consumer goods.² In 1950-1951, Peru's purchases of mining and farm machinery and transport and communication equipment were three times the 1928 level and constituted 29 per cent of its total imports from all sources. Over the same period, textile imports had declined to three-quarters of the amount purchased in the earlier period, but imports of chemicals more than doubled. Changes in Colombia's imports reflect the high rate of industrial and agricultural production since before the war. Imports of consumer goods were reduced from 36 to 57 per cent, although its total imports from Europe and the United States increased by 51 per cent above the 1928 level. Passenger-car imports rose to eight times the 1928 volume, but those of other vehicles and transport equipment failed to increase.³ Imports of

¹ Cuba is one of the Latin American countries most dependent on foreign trade, having the highest *per capita* exports and imports, next to Venezuela.

² Uruguay is the least dependent of the countries shown on imports from Europe and the United States, securing only a little over two-thirds of its total imports from them.

³ An interesting feature of Colombia's imports in recent years has been the behaviour of the series for passenger cars. Exports of cars from Europe and the United States to Colombia totalled \$7.9 million in 1948, almost twice the amount of 1928. After having been reduced to a negligible figure in 1949, car imports rose to the record of \$35 million in 1950-1951. The reason for this extraordinary movement was that Colombia maintained some import restrictions in 1948 which were sharply reinforced in 1949 against imports of non-essentials, including cars. The rise in coffee prices in the autumn of 1949 provided Colombia with an unexpected dollar surplus, with the result that import restrictions were relaxed again.

machinery, which had declined between 1948 and 1950-1951, nevertheless reached more than double the 1928 level in that year. Since Colombia produces only a small quantity of her steel and other metals requirements, its imports of the group "metals and chemicals" give some indication of industrial and construction activity. Imports of "metals and manufactures" had nearly doubled and those of chemicals quadrupled between 1928 and 1950-1951.

Venezuela does not fit the pattern of the other countries, because its fivefold increase in total imports between 1928 and 1950-1951 represented the more direct consequences of a spectacular increase in wealth and income. Hence, imports of consumer goods rose as much as, or more than, total imports: food—despite a very extensive home production—by eight times, passenger cars by twenty-five times and textiles by more than twice. While imports of chemicals rose by more than nine times, those of other raw materials (Group 5) less than doubled, underlining the unique importance of the oil industry in Venezuela's new-found wealth. Imports of machinery, transport equipment and industrial vehicles also rose by eleven times.

The above analysis of the composition of Latin American imports considered imports from Europe and the United States only. While these two areas account for over 80 per cent of Latin America's total imports, their share differs widely for Latin American countries taken individually. Thus, whereas the northern Latin American countries take over 90 per cent of their total imports from these sources so that the composition of those imports is fairly representative, the southern Latin American countries derive only from 64 to 84 per cent of their total imports from the two areas. Since all imports of capital goods are derived from Europe and the United States, the weight of that group of commodities in total imports is exaggerated if only these sources of supply are considered. On the other hand, the remainder of imports consists, with very few exceptions, of food and raw materials, and increased needs for these types of commodities brought about by the process of industrialization have been met essentially through trade with other primary producers, and intra-regional trade in particular. For some countries, notably Argentina, Chile and Uruguay, the increasing importance of their food and raw materials requirements even explains in part the decline of their purchases from Europe and the United States and the shift from these sources of supply to other areas.

Complete data for all Latin American countries comparable to those given for imports from Europe and the United States are not available, but an impression of the importance of the remaining trade can be derived on the basis of a fairly large sample which shows that foodstuffs and raw materials constitute roughly one-third of Latin America's

total imports. Of total food and raw material imports, Europe and the United States¹ supply from 50 to 45 per cent, as contrasted with 90 to 95 per cent of all manufactures imported. Another 30 to 35 per cent of food and raw material imports originates within the region and the great bulk of intra-regional trade (which represents 10 to 12 per cent of total imports) is in foodstuffs and raw materials.

The importance of intra-regional trade varies for individual Latin American countries. Argentina, Brazil and Chile account for 80 per cent of total imports from within the region, and Bolivia, Peru and Uruguay take another 8 per cent of the total.

The most important items in intra-regional trade are petroleum,² wheat, nitrates, cotton, sugar, coffee, livestock and tropical fruit. However, the importance of these commodities differs from country to country. Chile, for example, imports large quantities of sugar and livestock which, together with coffee and other food items, make up 12 per cent of its total imports from all sources. Cotton and petroleum products represent another 12 to 15 per cent. Argentina is a large importer of petroleum products, since only 40 per cent of its total requirements are derived from domestic production. Argentina also imports textiles, coffee, timber and tobacco from Brazil and relatively small quantities of nitrates, coal, copper and some food products from Chile. Brazil imports on an average close to a million tons of wheat each year and these imports traditionally come from Argentina making up in value over 10 per cent of total imports. Its petroleum imports have risen much more rapidly than any other single important item and Brazil is the largest Latin American customer of Venezuelan petroleum products.

In the long run, it is not likely that European and United States exports of food and raw materials to Latin America will increase. A number of countries, notably Cuba, Colombia, Mexico and Venezuela, have broad programmes for raising agricultural production not only of foodstuffs but also of agricultural and other raw materials. It may therefore be expected that, as development proceeds and becomes more extensive throughout the region, imports from Europe and the United States will continue to follow the pattern described—namely, that of an increasing concentration on imports of capital goods, “metals and manufactures” and industrial chemicals.

¹ Foodstuffs and raw materials have been reduced from one-third of total United States exports to Latin America in 1928 to 20 per cent in 1950-1951.

² Venezuelan petroleum exports to Latin America in 1949 amounted to 60 million barrels, accounting for 15 per cent of exports to all areas.

The Relative Position of Europe and the United States in Latin American Markets

The change in the commodity composition of Latin American import demand analysed in the preceding section has, of itself, brought about a shift in the sources of supply of Latin American imports. Under conditions of multilateral trade and payments prevailing until the depression, when export receipts from any country could be used to pay for purchases in any part of the world, the shift occurred in the direction of those countries which were in a better competitive position to supply the types of goods for which Latin American demand was increasing. When currency inconvertibility and bilateral trading predominated in most countries after the last war, with the exception of some northern Latin American countries which experienced no dollar shortage, the balance-of-payments position with individual trading partners often became the overriding factor in the selection of suppliers. Consequently, the dollar difficulties from which a large number of Latin American countries were suffering contributed to some diversion away from the United States towards Europe in the more recent post-war years. This was a movement in the opposite direction to that which occurred immediately after both world wars, when the United States, on account of its stronger competitive position in a wide range of products, had conquered a larger share of the Latin American market.

The changing importance of the United States and Europe in individual Latin American countries' trade is shown in Table 24, giving the volume of imports from Europe and the United States of the major Latin American trading countries for 1928 and 1950-1951 and the share of Europe and the United States in the total imports of these countries in 1913, 1928 and 1949. Between 1913 and 1928, the decline in Europe's share was fairly evenly distributed among the Latin American countries listed, but in the period from 1928 to 1949 the decline in Europe's share was much more marked for the northern Latin American countries. For the southern countries, Europe's share was by comparison better maintained, especially in the case of the River Plate group. As Europe was by far the most important outlet for the exports of these countries, and as bilateral trading methods were already practised in the 1930s, they could less readily make use of their export receipts earned in Europe for increased purchases in the United States; between 1928 and 1949 the share of the United States in their imports actually declined. But these countries represented an exception to the general rule for the southern group: for the group as a whole, the share of

Table 24

IMPORTS OF SELECTED LATIN AMERICAN COUNTRIES FROM EUROPE AND THE UNITED STATES

Year or yearly averages

Importing country	Millions of dollars, f.o.b., at constant ^a post-war prices						Volume index ^a 1928 = 100			Imports from Europe and the United States as percentages of imports from the World ^b (Current values)					
	Europe ^c		United States		Europe ^c and United States		Europe ^c	United States	Europe and United States	Total Europe			United States		
	1928	1950-1951	1928	1950-1951	1928	1950-1951	1950-1951	1950-1951	1950-1951	1913	1928	1949	1913	1928	1949
Argentina . . .	847	525	309	177	1,156	702	62	57	61	78	59	57	15	25	15
Brazil	395	581	175	495	570	1,076	147	283	189	72	56	32	16	27	42
Chile	97	58	71	110	168	168	60	155	100	69	50	19	17	31	54
Peru	29	47	41	89	70	136	162	217	194	60	44	21	29	41	63
Uruguay	88	122	46	58	134	180	139	126	134	68	49	47	13	30	21
Sub-total . . .	1,456	1,333	642	929	2,098	2,262	92	145	108	74	56	41	16	27	33
Colombia	105	92	98	216	203	308	88	220	152	57	49	14	27	45	78
Cuba	75	66	222	486	297	552	88	219	186	30	21	7	53	61	83
Mexico	66	68	197	576	263	644	103	292	245	43	26	5	51	68	87
Venezuela . . .	45	129	64	413	109	542	287	645	497	60	40	17	39	57	74
Sub-total . . .	291	355	581	1,691	872	2,046	122	291	235	39	32	11	49	58	80
Total	1,747	1,688	1,223	2,620	2,970	4,308	97	214	145	66	49	29	23	36	51

^a The data are derived from Table 22; 1928 at 1948 prices and 1950-51 at January-September 1949 prices.

^b Figures taken from trade statistics of Latin American countries.

^c Main European countries only.

imports from the United States was in 1949 substantially above the 1928 level. The increased share of United States supplies in the northern group of countries did not represent a displacement of European products by those from North America, but was due to the threefold rise (between 1928 and 1950-1951) in the volume of United States exports to that area. This spectacular increase is explained largely by the rising demand in the United States for the export products of the northern Latin American countries, large-scale United States investment in the area and the fact that the countries concerned were able to ensure that their trade surplus with Europe in the post-war period was settled in dollars.

The way in which the change in the commodity composition of the Latin American demand for imports benefited the United States is brought out by Tables 25 and 26, which show the share of Europe and the United States in the imports of Latin America by commodity groups and the share of those groups in total exports from Europe and the United States to Latin America. In 1928, the United States had an overwhelming predominance in passenger cars while Europe was leading in

textiles.¹ Other consumer goods, metal goods and chemicals represented not only a considerable part of Europe's total exports to Latin America but also a major portion of the area's imports of these products. In capital goods, the field was roughly equally divided, but within the group the United States had a distinct advantage in trucks, buses, farm machinery, mining equipment and certain types of factory machinery, while Europe was leading in railroad equipment, textile machinery, power equipment, diesel and marine engines and printing equipment.

A comparison between the 1928 and 1950-1951 figures shows the extent to which Europe, since the war, has made adjustments to the changed pattern of Latin American demand. Although Europe lost ground to the United States after 1928 in every export item except passenger cars and raw materials, the commodity composition of Europe's exports shifted in the direction of those goods for which Latin American demand increased. Textiles and "other consumer goods" were reduced from 50 to 19

¹ 75 per cent of Latin America's imports of textiles came from Europe in 1928, when textiles represented nearly 40 per cent of Europe's total exports to Latin America.

Table 25
SHARE OF EUROPE ^a AND THE UNITED STATES IN LATIN AMERICA'S ^b IMPORTS,
BY COMMODITY GROUPS
Percentages ^c

Commodity group	1928		1950-1951		1950-1951 as percentage of 1928 — Europe and United States
	Europe	United States	Europe	United States	
Textile and "other consumer goods" ^d	79	21	53	47	55
Passenger cars	6	94	14	86	446
Metals and manufactures, chemicals	67	33	49	51	183
Capital goods	47	53	43	57	244
Food, drink and tobacco	39	61	17	83	160
Raw materials	31	69	33	67	87

Source: Figures are derived from Table 22 and relate to values at constant prices.

^a For European countries included, see "Notes on Sources and Methods".
^b Argentina, Brazil, Chile, Colombia, Cuba, Mexico, Peru, Uruguay and Venezuela.

^c Europe and United States as percentage of Europe plus United States. Latin America's imports from those sources represent more than 90 per cent of total Latin America's imports.

^d "Other consumer goods" relate to Group 4 in Table 22.

Table 26
SHARE OF COMMODITY GROUPS IN LATIN AMERICA'S ^a IMPORTS FROM EUROPE ^b
AND THE UNITED STATES
Percentages

Commodity group	1928		1950-1951	
	Europe	United States	Europe	United States
Textile and "other consumer goods" ^c	50	19	19	11
Passenger cars	1	9	4	16
Metals and manufactures, chemicals	23	16	33	21
Capital goods ^d	14	23	33	29
Food, drink and tobacco	6	14	5	15
Raw materials	6	19	6	8
Total of commodities listed ^e	100	100	100	100

Source: The figures are derived from Table 22 and relate to values at constant prices.

^a Argentina, Brazil, Chile, Colombia, Cuba, Mexico, Peru, Uruguay and Venezuela.

^b For European countries included, see "Notes on Sources and Methods".

^c "Other consumer goods" relates to Group 4 in Table 22.

^d Groups 6 and 7 in Table 22.

^e Excluding unspecified commodities.

per cent of Europe's total exports to Latin America. Metal goods and chemicals more than maintained their relative position, while capital goods went up from 14 to 33 per cent. The change that took place in the composition of Europe's exports in response to changes in demand is apparent from the fact that exports of capital goods and metals and chemicals made up 66 per cent of Europe's total exports to

Latin America in 1950-1951 as compared with 37 per cent in the late 'twenties.

A more specific instance of European progress in the expanding commodity groups is given by an analysis of Latin American imports of motor vehicles on the one hand and railroad vehicles and equipment on the other, from the United States and the United Kingdom, as shown in Table 27. Vehicles and

Table 27

LATIN AMERICA'S IMPORTS OF TRANSPORT EQUIPMENT FROM THE UNITED STATES
AND THE UNITED KINGDOM

Number, and value in millions of dollars, f.o.b., at 1938 prices

Commodity	United States			United Kingdom		
	1928	1938	1948	1928	1938	1948
<i>Number of vehicles:</i>						
Passenger cars	101,573	41,739	85,768	195	433	9,830
Commercial vehicles	42,182	28,403	93,744	680	518	4,460
<i>Value at 1938 prices:</i>						
Passenger and commercial vehicles, including spare parts	110.7	63.8	209.0	1.4	1.5	14.6
Railroad vehicles and equipment, including spare parts .	6.5	5.9	14.3	10.6	5.1	5.6

Sources: Trade statistics of the United States and the United Kingdom.

transport equipment of all kinds made up 16 per cent of Latin America's total imports from Europe and the United States in 1949, and, of this amount, over 80 per cent consisted of motor vehicles and spare parts. While there is no doubt that Latin Americans had a marked preference for United States motor vehicles, particularly up to the last war, sales of European and, in particular, of British cars have increased greatly since the war. Because of their lower petrol consumption, European cars would appear to have an advantage in those countries where petrol is imported and expensive.¹ Within the group of motor vehicles, while passenger-car imports decreased owing to restrictions of imports of non-essentials, those of commercial vehicles rose substantially. Thus, in 1928, the United States exported over 100,000 cars and 42,000 trucks and buses to Latin America; in 1948, the position was reversed and the corresponding figures were 86,000 and 94,000. While imports of passenger cars from the United States had declined, the United Kingdom succeeded in raising its exports from a negligible figure to over one-tenth of the United States total and at the same time multiplying sixfold its exports of commercial vehicles. On the other hand, the United Kingdom, which had been the largest supplier of railroad equipment in the late 'twenties, had to reduce its exports by 50 per cent after 1928, while by 1949 the United States was selling about twice the volume of these items it had sold in 1928. Thus, British exports increased in the fields for which the Latin American market was expanding rapidly and contracted in those in which the demand had risen less steeply. Europe, which had been a large supplier of non-mechanical farm implements before the first World War, lost the market for agricultural equipment and did not start to develop exports of modern farm

¹ France also increased its sales of passenger cars, while Italy completely lost the preponderance it had among European suppliers in 1928.

machinery until the 'thirties.² However, since the last war it has developed a brisk trade in these items, with the result that it now provides about 20 to 25 per cent of Latin America's tractor imports.³

Among individual European countries, all have made efforts at adjusting their supplies to the changing needs of Latin America, although with varying success. As shown in Table 28, in 1950-1951, the United Kingdom was still, among the European countries, the most important supplier of machinery—one of the commodity groups of which imports into Latin America have increased most—and has almost doubled the amount of machinery delivered. Other countries responsible for the large increase of machinery in the share of Europe's exports to Latin America were Italy, Switzerland and France. In transport equipment, the United Kingdom is responsible for most of the increase in imports from Europe, with Italy and the Netherlands coming next in importance. Imports of metals and manufactures, which have declined from Europe as a whole, show, however, very substantial increases from France, Belgium and Italy. For chemicals, the most important increase in supply was derived from the United Kingdom.

All countries suffered a decline in textiles exports, British exports falling to one-sixth of their 1928 level, while the decline in Latin American imports of "other consumer goods" has affected Belgium and the United Kingdom most. The United States, on the other hand, increased exports of textiles and other manufactures, owing to rising imports in those countries of northern Latin America where the dollar situation remained relatively easy and where, therefore, fewer import restrictions had been imposed.

² It is estimated that in the late 'thirties Europe was supplying only 2 per cent of Latin America's total imports of agricultural machinery.

³ See Commodity Appendix No. VIII.

Table 28

EXPORTS FROM SELECTED EUROPEAN COUNTRIES TO SELECTED LATIN AMERICAN^a COUNTRIES,
BY COMMODITY GROUPS

Millions of dollars, f.o.b., at constant prices^b

Commodity group	United Kingdom		France		Netherlands		Belgium-Luxembourg		Switzerland		Italy	
	1928	1950-1951	1928	1950-1951	1928	1950-1951	1928	1950-1951	1928	1950-1951	1928	1950-1951
1. Food, drink and tobacco	14.0	11.0	12.1	14.7	5.3	9.1	0.5	0.6	2.7	0.4	37.6	9.8
2. Passenger cars	—	38.1	—	13.9	—	—	—	0.2	—	—	5.1	2.4
3. Textiles	304.9	54.4	92.9	26.0	4.9	1.5	37.9	16.4	15.7	11.0	135.3	19.5
4. Other consumer goods, manufactured	52.6	43.7	25.1	23.7	6.4	2.4	25.2	6.3	11.6	26.7	8.2	4.3
5. Raw materials and articles mainly unmanufactured	34.8	18.7	4.9	4.3	4.2	4.0	8.6	4.8	0.2	0.3	17.3	4.4
6. Machinery	68.5	129.6	6.1	25.2	8.8	11.0	5.2	11.8	7.2	33.9	10.3	45.4
7. Transport vehicles (other than passenger cars)	36.1	90.4	6.4	7.4	1.0	21.3	6.1	3.1	1.0	0.3	1.1	22.7
8. Metals and manufactures	106.8	74.8	33.1	84.8	2.8	11.3	48.7	64.2	1.2	3.5	1.2	15.6
9. Chemicals and related products	17.9	47.8	8.9	17.4	2.1	4.2	3.3	9.9	4.3	26.8	5.1	3.1
10. Unspecified	2.7	14.9	7.4	18.7	1.2	5.5	0.2	4.7	—	0.8	2.6	1.4
Total	638.3	523.4	196.9	236.1	36.7	70.3	135.7	122.0	43.9	103.7	223.8	128.6

Commodity group	Portugal and Spain		Norway, Sweden and Finland		Germany		TOTAL		United States	
	1928	1950-1951	1928	1950-1951	1928	1950-1951	1928	1950-1951	1928	1950-1951
1. Food, drink and tobacco	29.9	15.8	1.4	13.8	6.1	1.8	109.6	77.0	170.5	370.8
2. Passenger cars	—	—	—	—	1.1	16.2	6.2	70.8	104.7	423.9
3. Textiles	2.6	0.3	—	1.6	41.6	4.8	635.8	135.5	120.0	142.1
4. Other consumer goods, manufactured	7.8	3.4	7.7	50.3	83.6	20.2	228.2	181.0	113.3	141.3
5. Raw materials and articles mainly unmanufactured	0.3	0.5	17.1	46.0	15.3	12.7	102.7	95.7	229.7	195.1
6. Machinery	0.2	0.5	10.0	33.5	71.7	75.2	188.0	366.1	184.1	623.7
7. Transport vehicles (other than passenger cars)	—	0.1	0.6	20.9	4.5	13.4	56.8	179.6	96.3	109.4
8. Metals and manufactures	0.5	0.2	5.5	33.0	125.7	96.5	325.5	383.9	143.2	282.4
9. Chemicals and related products	1.0	0.2	2.0	3.5	28.2	39.2	72.8	152.1	50.9	266.4
10. Unspecified	0.1	0.1	—	—	8.3	—	22.5	46.1	10.7	64.4
Total	42.4	21.1	44.3	202.6	386.1	280.0	1,748.1	1,687.8	1,223.4	2,619.5

^a These countries are: Argentina, Brazil, Chile, Cuba, Colombia, Mexico, Peru, Uruguay and Venezuela, but data of exports to these nine countries are available only for the United Kingdom, Germany and the United

States. For the other European countries, figures relate to main Latin American countries. See "Notes on Sources and Methods".
^b 1928 at 1948 prices and 1950-1951 at January-September 1949 prices.

In the earlier post-war period, the gains secured by most European countries in exports of metals, machinery and chemicals were largely offset by the decline in the exports of Germany, which had been the largest supplier of these commodity groups before the war. Table 29 gives some idea of the spectacular increase in German exports to Latin America in the last few years.

In current values, exports in the last quarter of 1951

were over two and a-half times the average rate for 1950, and above the rate for 1951 itself, the increases being general to the whole range of products shown in the table. The total volume of exports from western Germany still appears to be well below the 1928 level for total Germany, but this is not the case for some of the industrial products groups (such as transport equipment, chemicals, machinery and passenger cars).

Table 29
WESTERN GERMANY'S EXPORTS
TO LATIN AMERICA^a IN 1949, 1950 AND 1951
Millions of current dollars, f.o.b.

Commodity group	1949 ^b	1950	1951
Food, drink and tobacco	0.2	0.7	2.6
Raw materials and articles mainly unmanufactured	4.1	7.4	15.8
Metals and manufactures	14.3	59.6	124.8
Machinery	6.4	38.5	95.1
Passenger cars and transport equipment	0.6	11.3	46.5
Chemicals and related products	3.2	21.3	47.1
Textiles	0.6	3.8	8.1
All other manufactures	1.6	10.9	30.1
Total	31.0	153.5	370.1

Source: Trade statistics of Western Germany.

^a Twenty Latin American Republics.

^b Bizone only. French Zone's exports to Latin America amounted to one million dollars.

Competitive Factors in the Latin American Market

The preceding section has stressed the growing demand in Latin America during the inter-war period for the typical United States exports, and the weakening position of European and in particular of British manufactures.

Research has shown¹ that, in a sample of thirty-three industries, average productivity per worker in the United States was 2.2 times British productivity. This American advantage was, however, offset by a comparable difference in money wages at the then prevailing rates of exchange. However, while wage rates were fairly uniform between different industries in each country, the American productivity advantage varied widely from industry to industry, ranging from more than three times for wireless apparatus and motor-cars, and 2.7 for machinery, to only 1.5 or even less for the branches of the textile industries which were covered.² Although relative labour costs are by no means to be identified with relative total costs, it would still be expected that American goods would be cheaper in those branches where their productivity advantage was greatest and more expensive where the differential was greater for wages than for productivity. Furthermore, the industries in either country which suffer from a lower productivity would normally concentrate their sales on the protected home market, while the

industries with comparative advantages would also be active on the foreign markets.³

The British and United States industries can therefore be classified on a scale where at one end some United States branches would enjoy an almost overwhelming advantage, while at the other end a similar advantage would belong to the United Kingdom. In between there would be a whole range of products where the advantage of physical productivity is approximately offset by differences in wages or in other elements in the cost of production. The field of effective competition would be to a large extent confined to these products, and a change in the price level in one country, due for instance to currency depreciation, would affect essentially those industries in the centre of the scale, but without necessarily changing the position of those at either end.

Thus, equilibrium on a market between competing export industries of different countries can be reached at different levels. For instance, it seems that in the late 'twenties an approximate equilibrium had been attained between United States and United Kingdom exports to Latin America, with no clear trend in favour of either country. On the other hand, the United Kingdom had lost to the United States part of its markets in Latin America between 1913 and the 'twenties, and this may have been due to an "over-valuation" of sterling in the 'twenties. This situation would imply that the United Kingdom in the 'twenties had kept a clear advantage in some export industries, but that their number had declined since 1913, as, with a relative rise in British costs, certain industries had meanwhile lost their competitive advantage.

Price advantages, however, do not tell the whole story, even when distribution costs are taken into consideration. Other factors are speed of delivery, terms of payment and credit facilities, availability of technical services and spare parts, ease of replacement, standardization of product, commercial ties and sales techniques, such as the use of advertising and representation in the field. There is some reason to believe that these factors have been as important as price advantages in stimulating demand for United States goods in the Latin American market. Lack of standardization of some European products, such

¹ L. Rostas, "International Comparisons of Productivity", *International Labour Review*, September 1948.

² Wages were in fact lower in textiles than in the engineering industries.

³ Mr. G. D. A. MacDougall has in fact found that, with very few exceptions, the export prices for the sample of British and United States industries in 1937 reflected the comparative advantage calculated by Rostas, and that their export volumes in 1937 also corresponded to the price differentials. Since Mr. MacDougall's figures refer to total exports, including those to protected markets, it is possible that much greater differences in the volume of exports would be found if such a calculation were made only for markets which were freely competitive. (See *The Economic Journal*, December 1951, "British and American Exports: A Study suggested by the Theory of Comparative Costs", Part I, by G. D. A. MacDougall.)

as tractors and some types of industrial machinery, has restricted sales, while United States advertising, extensive representation of its firms abroad, and readily available servicing and replacement facilities have unquestionably stimulated the country's exports. The growth of United States direct investment at a time when European investments were static or declining must have contributed to the same effect. Furthermore, although the European countries taken together can probably offer as wide a range of manufactures as the United States, the types of goods they offer are different in a number of fields, such as machine tools, motor-cars and many household appliances. Strong preferences may thus develop for the types of goods of one country, not only in the industrial field, where a change-over from one type of machinery to another will normally involve considerable investment, but also in the field of durable consumption goods. These rigidities of the market, which helped to sustain European exports in the 'twenties, are now playing in favour of the United States, which in the last ten years has occupied a preponderant position on Latin American markets.

It has already been suggested that, since the war, the European exporters and the United Kingdom in particular seem to have had some success in adapting their exports to the modern requirements of the Latin American market, while considerable efforts are being made by the principal European exporters to make their products known to the Latin American buyers. Since the devaluation of most European currencies in 1949, increased wage differentials may well offset the United States productivity advantage over a wider field and Europe will be in a better position to offer competition to the United States in many lines of manufactures.¹

Unfortunately, the conditions under which trade has been carried on over most of the period since the end of the war would impair the validity of the type of analysis which has been attempted earlier for the inter-war period. For one thing, Europe had an enormous current account deficit at the beginning of the period and its imports of primary products were not the governing factor of the trade. On the other hand, during part of this period, the dollar reserves of Latin American countries played as

important a role as current earnings. Furthermore, the absence of many former European suppliers had left the United States in firm possession of certain markets where it is likely that Europe has maintained its competitive advantage. Finally, the much more complete control exercised over imports in a number of Latin American countries makes the direction and composition of imports less dependent on competitive factors than on import licensing policies, which are apt to change at short notice.

Although in 1949 and 1950 the situation gave greater play to normal economic forces, any appraisal of the post-war competitive position of Europe, and in particular of the effects of devaluation, must be made with these reservations in mind. Table 30, which attempts to throw some light on post-devaluation developments, is based on the exports of the principal European suppliers and of the United States to nine Latin American Republics in the first nine months of 1949 at an annual rate and in the year 1950. It shows the relative gains of Europe as a whole at the expense of the United States in the various branches of manufacturing and distinguishes between the European countries which devalued by 20 per cent or more and those which devalued by less or not at all.

While this distinction is to some extent arbitrary, since the declines in export prices from various European countries did not necessarily correspond to their degree of devaluation, a marked shift in the competitive position of the European countries among themselves is nevertheless brought out clearly in the table. Whereas Europe as a whole increased its share by seven percentage points at the expense of the United States, the devaluing countries gained as much as ten points, while the non-devaluing countries lost three. For the devaluing countries the ten point gain represented an increase of one-third in their own share of the market, but even this understates the true measure of their gain in the critical field of manufactures because the changed totals conceal the fact that, whereas the total imports of these nine Latin American Republics remained practically constant, they increased their imports of foodstuffs considerably, and the latter are essentially obtained in the United States.

The textile group of manufactures is the only one where Europe lost ground to the United States. This, at first sight, surprising movement is due to a combination of two factors. On the one hand, Cuba, where the textile market is held almost exclusively by the United States, expanded its imports by over \$20 million. On the other hand, Argentina, where United States textile exports are insignificant (amounting to only 3 per cent of the combined total of Europe and the United States), curtailed its textile imports by \$80 million, and the reduction fell essentially on Italy, the United Kingdom and Belgium, which were the principal suppliers.

¹ One of the post-war estimates of comparative productivity between United States and British products refers to grey-iron founding. The estimates show that physical productivity per worker (on a yearly basis) is not quite twice as high in the United States as in the United Kingdom, which approximately corresponded to the wage differential in 1949. Since devaluation, however, United States wages in that industry have become nearly 2.8 times as high as in the United Kingdom. See *Grey Iron Founding*, Anglo-American Council of Productivity, September 1950. The 1946 Board of Trade Report of the Working Party on the Heavy Clothing Industry (H.M.S.O. 1947) indicates that the British industry has maintained its relative advantage in this branch of textile manufacture.

Table 30

EXPORTS FROM EUROPE ^a AND THE UNITED STATES TO LATIN AMERICA ^b
BEFORE AND AFTER DEVALUATION

Millions of dollars at January–September 1949 prices and percentages

Commodity group	Total volume from Europe and the United States		Europe's share in Latin America's imports from Europe and the United States (Percentages based on volume)					
			Total Europe		Devaluing countries ^d		Non-devaluing countries ^e	
	1949 ^c	1950	1949 ^c	1950	1949 ^c	1950	1949 ^c	1950
Metals and manufactures	621	607	39	58	22	45	17	13
Machinery	864	881	28	37	17	27	11	10
Vehicles and transportation equipment (including motor-cars)	524	636	27	34	23	30	4	4
Chemicals and related products	263	369	26	35	15	25	11	10
Textiles	326	284	59	47	30	30	29	17
Other consumer goods	233	287	41	51	21	39	20	12
All exports (including food, raw materials and unspecified)	3,505	3,875	32	39	20	30	12	9

Sources: Trade statistics of European countries and the United States.

^c January–September at annual rate.

^a For countries included, see "Notes on Sources and Methods".

^d Finland, France, Germany, the Netherlands, Norway, Sweden and the United Kingdom.

^b Argentina, Brazil, Chile, Colombia, Cuba, Mexico, Peru, Uruguay and Venezuela.

^e Belgium-Luxembourg, Italy, Portugal, Spain and Switzerland.

The gains achieved by the devaluing countries in other groups are impressive, particularly in metals and manufactures, where their share doubled, and in chemicals, where it increased by more than 50 per cent. These movements, however, largely reflect the resumption of German export trade and cannot therefore be explained entirely in terms of improved price competition. While some Latin American

countries have been short of European currencies (for instance, Argentina and Brazil were restricting their imports from the United Kingdom and also from Belgium), most of them still maintained restrictions on imports from the United States, which were markedly more severe than those imposed on goods from Europe.

Chapter 4

THE CONDITIONS FOR AN EXPANSION OF TRADE

Since the second World War, both Europe and Latin America have experienced, in common, great difficulty in paying their way in dollars. The preceding chapters have shown that, as part of a long-standing process of development accelerated, but not occasioned, by the war, Latin America has increased its dependence on trade with the United States and Canada to a point where it cannot safely, year in year out, rely on earning sufficient dollars from its exports to pay for the level of dollar imports to which it has become accustomed. Ever since the war, Latin America has been dependent on dollars received in multilateral settlements from Europe.

Western Europe, as a direct result of the war and of many other well-known factors widely discussed in other contexts, has almost throughout the period been running a severe and continuing current account dollar deficit, which has had to be financed by loans, United States Government grants and loss of reserves: the dollars paid out to Latin America have been provided either by United States "off-shore aid" or by free dollars which would not have been available had European countries not been able to finance their direct purchases in the United States and Canada by means of economic or military aid. Hence the level of the multilateral earnings of Latin American countries has been highly dependent, directly or indirectly, on the dollar aid extended by the United States to European countries. Just as western Europe must, in keeping with the original objectives of the Marshall Plan, eliminate its need for "extraordinary external financial assistance", so also is it necessary for Latin American countries to adjust to a pattern of trade and payments less dependent on multilateral dollar transfers from such temporary sources. While in some instances the main difficulty appears to lie, and the remedies need to be sought, in the field of domestic monetary and economic policies, Europe and Latin America are thus faced with a common problem; both need to find ways of importing more from each other and less from areas in which they have trouble in paying their way.

It suffices to recall two of the most salient points made in the preceding chapters to see why the post-war level of trade between Europe and Latin America has remained inadequate in relation to the problems of both areas and also why solutions are likely to require more energetic action and closer international co-operation than have so far been evidenced.

(1) On the side of Europe, perhaps the one most important source of difficulty, apart from the war itself, has been the heavy share in its exports of goods for which Latin American import demand has well-nigh collapsed. As seen in the preceding chapter, textiles alone made up more than 35 per cent and, together with other consumer goods, about one-half of total European exports to Latin America in 1928. In 1950, the volume of Europe's textile sales in Latin America was only one-sixth as great as twenty years earlier, and the share of these goods in total European exports to the area had fallen to 8 per cent. United States exports to Latin America, on the other hand, have been more concentrated in capital goods and other products for which demand has greatly expanded.

(2) A second factor of great importance in the historical development of relations between the three areas is that, before the war, Europe's trading position was relatively weak and that of the United States relatively strong in those countries—chiefly the Northern Latin American Republics—whose foreign trade during and since the war has shown the most spectacular development, whereas the one great Latin American trading country, Argentina, where Europe predominated and which alone accounted for some 40 per cent of the total trade in both directions between the two areas, has since the war greatly reduced its production for export and therewith its capacity to import.

It is relevant to both these points to note that the situation was greatly aggravated in the immediate post-war years by the virtual absence of Germany from the Latin American market, especially as an exporter, since the commodity composition of its exports before the war was more like that of the United States and since its trade had been mainly developed with the northern and central countries and less with the River Plate group.

The weakness of Europe's competitive position, residing in the historical composition of its exports, constituted an inevitable problem, already manifested long before the war, although doubtless accentuated and accelerated by it because of the stimulus given to domestic textile and other consumer goods industries in Latin American countries cut off from normal trading relationships with Europe. But the weaknesses residing in the geographic distribution of Europe's trade with Latin America were more the direct result of the war: it inevitably brought a great expansion in trade with the United States by

those countries which, by virtue of location and structure of production, were largely oriented towards the American market and no less inevitably caused a profound disorganization in the foreign trade of those countries whose principal ties had been with Europe.

The strengthening of Europe's trading position with respect to both the goods it has to offer and the countries in which it sells depends mainly on the export efforts of Governments and manufacturers in individual European countries. On the other hand, the problem of raising production in Latin America for export to Europe, as typified by Argentina, bears on a fundamental question of world-wide scope for which co-operative action seems necessary—that of creating the conditions under which the production of foodstuffs and raw materials can be raised to meet the needs of growing population and industry and also alleviate the present one-sided dependence of other areas on North America.

Promotion of European Exports

Over much of the Latin American market the opportunities for an expansion of European exports are closely dependent on the increase of primary production in the area for sale to Europe, further discussed below. The expansion of European exports to many of these countries, especially those which, because of internal inflation or other reasons, are chronically short of foreign exchange of all kinds, is rendered difficult by the excess of demand for imports over that part which can be satisfied out of export receipts or foreign loans. Under such conditions, priority inevitably tends to be given to goods regarded as most essential, especially capital equipment, for which strong ties and preferences for American products have been built up. With the demand for dollar imports thus always pressing against current dollar availabilities, both dollar trade and other trade tend to be bilaterally balanced, and European suppliers face extraordinary difficulties in making inroads against American products. This further means that the European export effort has to be concentrated on capital equipment and that many of the goods formerly important in European exports are now denied entry. However, in important individual cases, European exports of capital goods have in fact increased substantially, and, as was seen in Chapter 3, the general pattern of European exports has shifted markedly away from the consumer goods groups as compared with the position at the outbreak of war. In some cases, exports of capital goods have no doubt been temporarily held down by the internal pressure of western European rearmament programmes following the outbreak of the Korean war, and reductions in these programmes may yield a further improvement in exports to Latin America.

The European record seems poorest in the case of its exports to the "dollar account" countries of

northern Latin America, where every extra sale would have helped reduce Europe's dollar problem. The smaller northern republics¹ are of special importance to European exporters for an additional reason: in these countries the potentialities are less limited by the difficulties described in the preceding paragraph. Compared with their southern neighbours, a much larger part of the export receipts of these countries is in dollars, which, combined with the great expansion of their exports over the past decade, makes for an easier foreign-exchange position and a more competitive market. Some of them, especially Cuba and Venezuela, continue to import relatively large quantities of consumer goods as well as metals and engineering products. As seen in the preceding chapter, however, Europe has as yet scarcely regained its pre-war volume of sales in these markets, which meantime have doubled, trebled, and quadrupled in real terms and now represent a total annual import trade in the order of \$2 billion. Indeed, during most of the post-war period, Europe has been unable to cover from its export receipts its own heavy imports of sugar, petroleum, cotton and other products from the area, leaving a large dollar deficit financed mainly by multilateral settlements, as already described. Unless Europe's dollar position in other respects improves to an extent which now seems improbable, it will surely have to try to eliminate this dollar deficit and, indeed, strive to attain a surplus, either by expanding its exports or by curtailing its imports.

Even though individual European countries have made some headway in these northern Latin American markets during the post-war period—and German exports in particular have made a substantial recovery during the last few years—it would not appear that the effort expended and the results achieved are commensurate with their importance in relation to the dollar problem as seen from the European side. The very fact that Europe's foothold in these markets has been so small has doubtless served to discourage export promotion efforts, which inevitably entail considerable initial outlay in establishing trading connections and creating a market demand. Given the scarcity of metals and engineering products during most of the post-war period, it is understandable that individual exporters have tended to concentrate their attention on their traditional markets, even though their private interest did not necessarily correspond to the public need.

It may well be that one element in the situation which European Governments need to reconsider is the granting of credit terms to Latin American importers. Naturally, at times of severe strain on the current balance of payments, European Govern-

¹ Including Colombia, Venezuela, the Central American Republics, Mexico, Cuba, Haiti, and the Dominican Republic.

ments do not like to see their earnings of hard or semi-hard currencies temporarily tied up in credits or loans and thus made unavailable for the financing of urgently needed current imports, but it is in fact a nice judgment as to whether in many cases the eventual gain may not be worth the immediate loss. By definition, this must be so in all cases where a potential sale fails for lack of credit, unless it is certain that the goods in question could be sold in some market which is also a ready supplier of essential imports. In the cases of the United Kingdom and France, there is a strong supposition that capital goods which cannot be sold in, say, the smaller northern republics of Latin America will end either as exports to the sterling or franc areas, or as home investment or, in extreme cases, not be produced at all. Viewed in this light, there appears to be a sharp contrast between, for example, the complete freedom with which capital can and does move from the United Kingdom into the sterling area without necessarily contributing to the solution of the United Kingdom's pressing payments problem and the restrictions placed on the granting of private credit for specifically export-promotional purposes in important non-sterling areas, such as Latin America. If the means for doing so had existed, the diversion into export credits of only a relatively small part of the capital that has flowed from the United Kingdom to the sterling area, or from France to the franc area, might by this time have yielded substantial dollar returns and greatly strengthened the export position of these countries in Latin America. The recent experience of Germany, unfettered by preferential ties with particular overseas countries and pursuing a bolder programme of export financing, is indicative of the results that might have been obtained, although at the same time providing a warning against over-extension of credit in particular countries.

The conclusion is that the successful expansion of European exports, especially in those little-cultivated markets of the northern part of the area where substantial dollar returns would appear possible, depends not only on the efforts of individual exporters aided and encouraged by the usual trade promotion activities of their Governments, but also on the creation of a set of trade and financial conditions providing a more powerful counterpoise to the pull of Europe's traditional markets.

The Encouragement of Primary Production

The increase in the production of raw materials and foodstuffs in Latin America as a necessary condition for the recovery and growth of trade with Europe is handicapped by the extreme disturbances in the markets for these goods over the last several decades, which have been reviewed in Chapter 2. Not only have private producers and investors become wary of the violent price fluctuations and

market uncertainties characteristic of internationally traded primary products, but in some countries internal conditions and policies have discouraged this type of production, and in the case of Argentina resources have been shifted from agriculture to services and industry for domestic consumption.

The present situation carries serious disadvantages and risks for both importing and exporting countries. This is most apparent with respect to the large trading nations of western Europe, which have found their supplies of foodstuffs and raw materials from eastern Europe reduced to a fraction of their former volume and are unable to cover their needs from overseas sources except by incurring heavy deficits with North America. But a number of the primary producing countries themselves, through a failure of their main exports to expand, experience great difficulty in covering their imports of capital equipment and materials required for their industrial development and, at the same time, run the risk that import restrictions on less essential goods lead to the spreading of their resources over too wide and varied a field.

So far, relatively little has been done to meet these problems. The net effect of international co-operation since the war may, in fact, have been to delay the action needed to stimulate primary production in areas where it has lagged. Specifically, the large amounts of American financial assistance since the war have made it possible for European countries to cover their essential requirements of dollar goods and spared them the extreme disturbances to production and consumption which would otherwise have been experienced, but at the same time this aid has tended to hide or postpone the need for more energetic measures to increase supplies from non-dollar sources.

It would therefore appear to be in the common interest of Latin American and European countries to examine their problems together, to endeavour to achieve some co-ordination in their objectives and programmes with respect to production, investments and foreign trade, and to create stronger inducements and more stable conditions for the development of primary production. This implies that Latin American countries will find it a help rather than a handicap in their industrial growth to follow price and other policies conducive to the production and sale of their main export products. And European countries, if they could receive reasonable assurance of expanding the outlets for their own exports, would find that money now spent in developing certain types of agricultural production at home at relatively high cost could be better invested in Latin American countries where natural conditions are more favourable.

The approach to these problems, including long-term contracts designed to give assurance of greater market stability for primary products, may remain

largely bilateral in the form of agreements between individual producing and consuming countries. In some instances, multilateral commodity agreements concluded between a number of producing and consuming countries with the object of providing price stability and assured outlets and sources of supply may be possible, but they do not appear to offer any easy and readily acceptable solutions. Difficulties arise because of strong differences in the views of Governments as to the principles on which trade should be conducted, and still greater difficulties are met in reconciling the interests of producers and consumers in the actual negotiation of agreements. These difficulties are attested to by the fact that only one international commodity agreement, that for wheat, has been consummated since the war, and it is especially relevant in the present context to note that the leading Latin American producer, Argentina, is not a party to it.

Unless, through the ways suggested above, action can be taken to stimulate primary production, the risk is that the foreign trade of the primary producing countries will languish and that importing countries will find their average import costs higher than need be under more stable market conditions and yet remain dependent on North American supplies beyond their capacity to pay.

Improvement of Payments Arrangements

The strengthening of the inducements to European exporters to expand their sales in Latin America and the development of a firmer basis for the increase in the production of primary products in Latin America for export to Europe are manifestly the major requisites for an increase in trade between the two areas. As has been seen, however, any considerable expansion

on either side would appear to require some rather far-reaching changes in policies and institutions which may be slow and difficult to bring about. In the meantime, it would be worth considering whether or not a more favourable basis for the expansion of trade could be provided through the development of more flexible payments arrangements than those which have grown up since the war in the absence of general currency convertibility.

As seen in Chapter 1, in the years immediately following the war, most European countries had large deficits in their trade with Latin America because of their urgent need of food and raw materials, on the one hand, and limitations on their production and export capacity, on the other. The deficits were financed in various ways; some Latin American countries—in particular, Argentina—established credits in favour of their European trading partners, while others simply allowed their holdings of European currencies to rise. In addition, several Latin American countries, of which Argentina was again the most important, took the opportunity to buy back European investments. Finally, of course, Europe paid over substantial amounts of dollars.

It might have been expected that, when this generalized deficit of Europe with Latin America was largely eliminated in 1949, payments difficulties would have ceased to inhibit trade between the two areas. Unfortunately, this was far from the case: some Latin American countries continued to run substantial surpluses in trade with Europe and to receive dollars in settlement, while others found themselves seriously short of European currencies and began to impose restrictions on non-dollar as well as dollar imports.

Table 31

TRADE OF LATIN AMERICAN REPUBLICS WITH EUROPE, BY TYPE OF SETTLEMENT

Millions of current dollars, f. o. b.

Country group	Year	TRADE TURNOVER			Trade with Europe as per cent of group's total foreign trade
		Dollar trade	Bilateral trade	Total	
I. Exchanges in dollars less than 10 per cent :					
Argentina, Uruguay and Paraguay	1948	186	1,747	1,933	57
	1949	91	1,258	1,349	58
II. Exchanges in dollars 40 to 50 per cent :					
Brazil, Chile, Peru and Bolivia	1948	442	458	900	28
	1949	368	525	893	29
III. Exchanges in dollars more than 90 per cent :					
Other Latin American Republics (excluding Vene- zuela) ^a	1948	548	9	557	17
	1949	443	19	462	16
Total Latin American Republics (excluding Vene- zuela)					
	1948	1,176	2,214	3,390	34
	1949	902	1,802	2,704	33

SOURCE: The value figures have been taken from European statistics, while the percentages are derived from the statistics of the Latin American Republics.

^a Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama and El Salvador.

For the purpose of illustrating these developments, it is useful to divide the Latin American countries into those which conducted most of their trade with Europe on a dollar basis, those which conducted it essentially on a bilateral basis, and those where both systems were of roughly equal importance. Table 31 shows that countries which had their closest trading links with the United States and depended heavily on imports from that country insisted on conducting their trade with Europe on a dollar basis. At the other extreme, Argentina, most of whose trade was with Europe, was prepared, at least initially, to hold large amounts of European currencies and, although it sought dollar settlements when it could obtain them, did not make it an absolute condition. In intermediary positions between the insistence on dollar payments and the willingness to accumulate balances of European currencies were countries like Brazil, Chile and Peru, whose trade with Europe represented a substantial proportion of their total trade and where bilateral agreements providing for credit margins were in force with some European countries. It thus happened that some of the Latin American countries which more recently have experienced deficits with Europe, such as Argentina and Brazil, decreased their holdings of European currencies and tightened their import restrictions on European goods, while European countries were

still making large dollar payments to other Latin American countries. Table 32 shows the breakdown of the European trade deficit with these three groups of countries, together with the share of the deficit which was covered by off-shore purchases under the American aid programme. Such data are of course incomplete, since it must be remembered that Europe had, with Latin America as a whole, a surplus on service account of approximately \$400 million. It is, however, impossible to break down this amount among the groups of Latin American countries, although it is known that a substantial proportion came from Brazil and from the profits of the oil companies in Venezuela.

It must be noted that, under the present pattern of trade and existing payments arrangements, a given European country is not free to settle its adverse balances in one Latin American country with its surplus in another. An upper limit to such transfers would, in the absence of general convertibility, tend to be set by the amounts, if any, required for settlement among the Latin American countries concerned, and such possibilities are restricted by the relatively low level of trade among most Latin American countries.

It is also generally true (with the principal exception of transactions in transferable sterling) that

Table 32

EUROPE'S BALANCE OF TRADE WITH LATIN AMERICAN REPUBLICS
AND IMPORTS FINANCED BY E.C.A.

Millions of current dollars, f.o.b. and percentages

Country group	Year	Balance of trade	Percentage of imports financed by E.C.A	Share of deficit covered by E.C.A. financing
I. Argentina, Uruguay and Paraguay	1948	— 583	—	1
	1949	— 57	3	57
	1950	— 183	2	6
II. Brazil, Chile, Peru and Bolivia	1948	— 220	8	21
	1949	— 59	17	115
	1950	— 8	11	305
III. Other Latin American Republics ^a (excluding Venezuela)	1948	— 175	12	25
	1949	— 154	56	116
	1950	— 91	20	73
Total Latin American Republics (excluding Venezuela) .	1948	— 978	4	10
	1949	— 270	18	93
	1950	— 282	9	46

SOURCES: Trade balances have been derived from European statistics and data on E.C.A.-financed imports from *Paid Shipments*, Economic Co-operation Administration, Washington, D.C., December 1949, 1950 and 1951 and *Third Report* to the Congress of the E.C.A.

NOTE. — Percentages given indicate only orders of magnitude and are not necessarily accurate, because E.C.A. statistics used refer to actual disburse-

ments made during each period and usually lag slightly behind the recording of corresponding commodity shipments in European import statistics. Furthermore, certain E.C.A. disbursements made for imports from Latin America have not been identified by country of origin.

^a Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama and El Salvador.

individual Latin American countries are not free to use credit balances in one European country to settle debts due to another. From the European side, the possibilities of developing such multilateral settlements are, however, greater, both because of the greater intensity of trade and financial relations within Europe and because the European Payments Union already provides a clearing system whereby bilateral credits and debits among western European countries are automatically offset and reduced to a single net creditor or debtor position for each member with the Union.

Experience would be necessary to judge how significant a contribution could be made to the further development of trade between Latin America and Europe, through the extension and adaptation of such payments mechanisms to cover trade between the two regions. It would probably be wrong to expect that, within the limits that could now be envisaged, payments arrangements alone are likely

to bring a great flourishing of this trade. Certainly it is not the present payments conditions which have prevented European countries from making a more vigorous effort to expand their exports to those Latin American countries where they have had to make dollar settlements for their trade deficits. And in other Latin American countries, especially Europe's leading trade partner, Argentina, the chief limitation on trade in the last few years seems to have been set by the amount produced for export rather than by difficulties from the European side in paying for it.

However, there can be no doubt that the present pattern of payments, wherein each country seeks to avoid or minimize bilateral deficits requiring dollar settlements, provides no adequate basis on which to appraise the potential development of trade that might be permitted by more flexible payments arrangements and encouraged by closer consultation and collaboration.

Appendix I

COFFEE

Latin America produces over 80 per cent of the world's coffee, and of total Latin American production one country, Brazil, accounts for about 60 per cent. The share of Latin American production

in the world's coffee output has been relatively stable over the last quarter of a century, although there has been a slightly downward tendency since the mid-thirties (Table 1).

Table 1

WORLD PRODUCTION OF COFFEE

Thousands of tons and percentages

	1924-1929	1930-1934	1935-1939	1948	1949	1950
Total Latin America	1,613	2,120	2,031	1,834	1,822	1,743
Brazil	1,114	1,565	1,397	1,037	1,031	1,020
Colombia	163	213	251	368	347	320
Other Latin America	336	342	383	429	444	403
Africa	55	84	132	248	245	295
Other areas	135	145	154	99	128	82
Total world	1,803	2,349	2,317	2,181	2,195	2,120
Percentage share of Latin America	89	90	88	84	83	82
of which: Brazil	62	67	60	48	47	48
Percentage share of Brazil in Latin American production	69	74	69	57	57	59

Source: International Institute of Agriculture, Rome, and Food and Agriculture Organization of the United Nations.

The stability in Latin America's share is due to several conditions which impose limits on the economic production of coffee. First, the coffee tree or bush grows best in tropical regions, on volcanic soil, and at high altitudes. Secondly, since it is primarily an export crop, it requires easy access to ports, and it is dependent, therefore, on good transportation systems. Thirdly, the cultivation of coffee cannot be easily mechanized and is therefore very labour-intensive. Only a few countries meet all these tests and, even when the general conditions for coffee-growing are present, disease in the trees may be a serious check to expansion, as was the case in South-East Asia, for instance.

In addition to these factors tending to limit output in the longer run, two natural factors act as strong deterrents to any control of short-term fluctuations in production. The first is the close dependence of the crop on the weather; with favourable weather, good and bad crops tend to alternate, but a particularly good crop so exhausts the tree's productivity that it may yield a light crop the following two or three years. The effects of these wide fluctuations in yields are aggravated by another natural factor—namely, the perennial nature of the coffee tree: it

takes about five years before newly planted coffee trees begin to bear. They then remain in production for thirty or even forty years, although beyond the age of twenty the crops begin to diminish. Consequently, production cannot be rapidly expanded. For this reason, the present high level of production in areas outside Brazil dates only from the first post-war years, although the original stimulus came in the early 'thirties. Conversely, a reduction of output in the short run is extremely difficult to bring about since normally only a very small percentage of the coffee area comes up for re-planting each year. Thus, the price elasticity of production is extremely low and it is no wonder that such attempts at regulating supplies to the market as have been made have taken the form of destruction of coffee rather than a reduction of output.

Coffee Policies in Brazil

In countries where coffee is grown in small holdings, the use of "inter-planting" with other crops tends to mitigate the effects of market fluctuations for coffee. In Brazil, however, coffee is grown in large estates and "inter-planting", which tends to exhaust

the coffee tree, was not allowed to any great extent before 1928. It was only in the 'thirties, when the cultivation of cotton, rice and beans was especially encouraged, that "inter-planting" became general.

Closely connected with the organization of coffee-growing in large estates is the relative shortage of labour which affects the quality and thereby the market price of Brazilian coffee: instead of careful selection, all berries are stripped from the trees at one time, whatever their degree of ripeness, and rather than being prepared by the wet process which gives higher quality coffee, they are left to dry in the sun and then milled.¹ Furthermore, the shortage of labour makes for extensive use of the land, with little or no fertilization or soil conservation. When the soil became exhausted and yields declined, coffee land was turned to other uses (especially cotton) and coffee production moved inland from the more accessible areas close to the coast, with the result that transport costs increased.

These characteristics of Brazilian coffee production have greatly strengthened the tendency to Government intervention in the coffee market, which in any case was strong in view of the importance of coffee in Brazil's export economy: the existence of a hired labour force of over one million men with no alternative means of livelihood meant that fluctuations in the coffee market had immediate social effects which could not easily be ignored. In addition, the estate owners formed a powerful lobby to promote their interests through Government intervention.

The Brazilian restriction schemes date as far back as 1906. In their early days, these schemes were in fact accompanied by a relative stabilization of prices, but it is difficult to distinguish their specific effects from those of other developments at the time. Thus, after the bumper crop of 1906 (resulting from the vastly expanded planting in 1900), the State of Sao Paulo launched its first valorization scheme, which consisted in buying up coffee for stock for gradual liquidation. In the same period, however, there was an upward trend in world demand for coffee, and the prohibition of new planting in the State since 1902 helped to maintain prices. Similarly, the valorization scheme of 1917 was helped to success first by the great frost of 1918, which ruined the crop of that year and affected the trees for several years, and secondly, by the world boom of 1919/20 during which the surplus stock could be unloaded at great profit. Both planters and Government, however, tended to minimize the importance of these extraneous factors. A steadily rising, although inelastic, world demand was considered as certain and the problem was seen mainly as one of

¹ This is partly the reason for the distinction in world coffee markets between "brazils" and "milds". The latter include mainly the coffees which are grown elsewhere in Latin America and which, as will be seen, command a high-quality premium.

preventing an inordinate increase of supply to the market rather than restricting output below normal levels. In 1922, the Government launched a permanent scheme including the building of warehouses to store the stocks, and prescription of the amounts of coffee to be released from these warehouses and sent to Santos for export.

The experience of this valorization scheme illustrates the conditions for a successful market regulation through buffer stocks. For its success the scheme depended on two essential factors: the availability of sufficient financial resources, and at least some control of supply. The financial resources proved adequate in the early 'twenties when demand was high and the need to hold stocks was, therefore, relatively small. In addition, the coffee crops of those years were moderate. However, new planting was not prohibited, and the favourable prices encouraged farmers to extend the coffee area with the result that two bumper crops arrived in 1929 and 1930, unhappily coinciding with the onset of the world depression. The Coffee Institute's funds were insufficient to buy the huge stocks which were accumulating, and the market collapsed. Only in 1931 was it forbidden to increase the area under coffee, and in the same year the policy of destroying about one-third of each year's output was initiated.

In the eight years preceding the second World War, Brazil continued the destruction of coffee, with minor interruptions. In 1931 and in 1937, it attempted to improve its competitive position by bringing other Latin American producers into the restriction scheme. These producers had expanded their exports behind the shelter provided by the Brazilian valorization while Brazil's own exports were continuously falling. It was precisely because they were conscious of the lead they were gaining that these other Latin American countries refused to co-operate. In this situation, Brazil had to retreat from the restriction policy. In 1938 the export tax, the proceeds of which were being used for coffee defence, was drastically reduced and destruction of coffee was practically stopped. The coffee price reacted so violently that total proceeds from Brazilian coffee exports fell even lower than before.

The price of Brazilian coffee fell, in the 'thirties, not only absolutely but also in relation to other agricultural products (Table 2).

As a result, not only was inter-planting encouraged but large areas were turned to cotton or grass. This pre-war reduction in the coffee area is reflected in the post-war fall in production which has already been mentioned. It also appears from Table 2 that, with the post-war fall in coffee production, the coffee price has risen in comparison with that of cotton. The relation of coffee prices to prices of rice and maize, both commodities in very short supply, remained unfavourable until the 1949 coffee boom.

Table 2

BRAZIL : INDEX OF RATIO OF COFFEE PRICES TO PRICES OF OTHER PRODUCTS ^a

1929 = 100

Period	Coffee cotton	Coffee rice	Coffee maize	Coffee meat
1929	100	100	100	100
1929-1933	65	80	78	69
1934-1938	53	56	67	56
1948 ^b	81	66	68	..
1949 ^b	93	68	68	..

Source: Economic Commission for Latin America: *Economic Survey of Latin America, 1949*, Annex B, "Agricultural Development in Brazil" Table 10.

^a The figures refer to the harvest years 1947/48 and 1948/49.

^b Average prices paid to producers in the State of Sao Paulo.

Importance of Coffee in Brazil and in Other Latin American Countries

The Latin American coffee-producing countries (other than Brazil) taken together account for some 40 per cent of total coffee production in Latin America and their share in exports is about the same (see Appendix Table A). Although none of these countries comes near to Brazil in the absolute size of its coffee exports, the importance of the coffee trade is in several instances even higher than that of Brazil (Table 3).

Table 3

SHARE OF COFFEE IN VALUE OF TOTAL EXPORTS OF MAJOR LATIN AMERICAN PRODUCERS

Percentages

Country	1929	1930- 1933	1934- 1938	1948	1949	1950
Brazil	71	68	61	42	59	64
Colombia	61	57	55	78	79	76
El Salvador	93	92	87	79	87	89
Guatemala	77	72	67	61	72	78
Nicaragua	54	43	45	45	27	65

Sources: Pre-war: *The World Coffee Economy*, Food and Agriculture Organization of the United Nations. Post-war: *International Financial Statistics*, International Monetary Fund.

It is seen that during the 'thirties the relative importance of coffee declined considerably more in Brazil than in the smaller coffee-producing countries. This reflects the advantage the latter countries gained from the Brazilian coffee policy. The post-war rise in the share of coffee in the exports of each of the countries shown is due mainly to the rise in the prices of coffee compared with that of other products, although some of the smaller countries did increase their exports above the pre-war level.

Next to Brazil, Colombia is by far the most important coffee-producing country. Its share in world production rose from 9 per cent in 1924-1928 to 15 per cent in 1950. Colombian coffee is produced under favourable natural conditions and it is the prototype of "mild" coffee, which is highly valued in world markets. As in other Latin American countries outside Brazil, production in Colombia is carried on in small holdings managed by the planter and his family, and the coffee is often in mixed cultivation with maize, bananas, manioc and other crops, so that the country is not faced with a social problem like that of Brazil, where a large mass of hired labourers is dependent for its livelihood on the fluctuations of a single crop.

The increase in production and exports from the smaller coffee countries in the 'thirties was accompanied by a decrease in the premium of the better quality "mild" coffee over the price of Brazilian coffee. But later a marked shift in consumer attitude in favour of "mild" coffees appears to have taken place (Table 4).

Table 4

RELATIVE PRICES AND EXPORTS OF BRAZILIAN AND COLOMBIAN ^a COFFEE

Year	Price of Colombian coffee as percentage of price of Brazilian coffee.	Coffee exports of Colombia as percentage of coffee exports of Brazil
1926	128	18
1927	135	15
1928	119	19
1929	104	20
1930	133	20
1931	178	17
1932	107	27
1933	115	22
1934	123	21
1935	115	24
1936	119	28
1937	105	34
1938	143	24

Source: Data from the International Institute of Agriculture.

^a Prices of green coffee Santos 43 and Colombia (Maizales) in New York.

The table shows the sensitivity of the relative prices of the two countries to the relative magnitude of their exports. With the exception of 1929/30 and 1935/36, a movement in the relative importance of the export volume is each time accompanied by a movement in the opposite direction in the price ratio. This is only what was to be expected. More important, the table also shows that there has been a shift in the consuming habits of the importing countries towards "mild" coffees. Thus, in 1928, Colombian exports amounted to only 19 per

Table 5

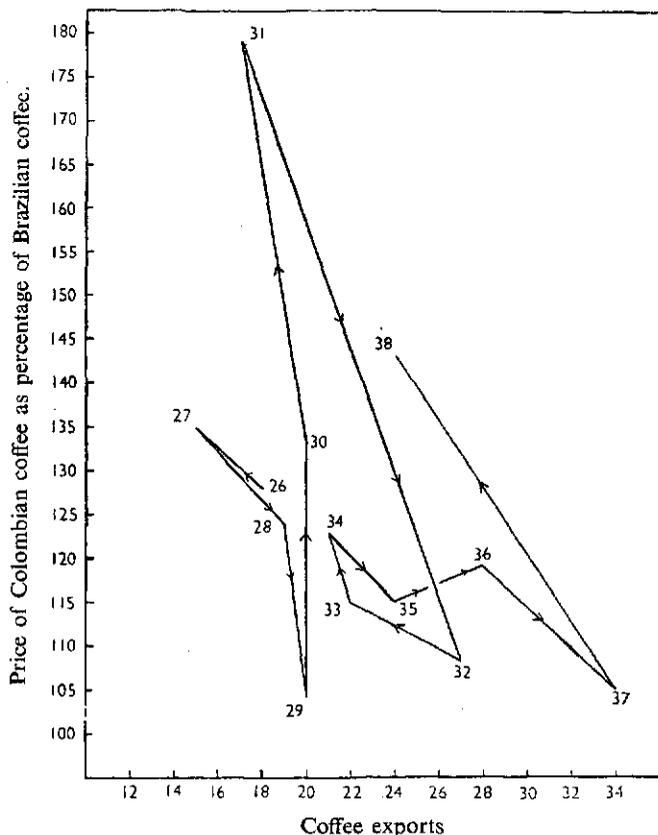
EXPORTS OF COFFEE FROM SELECTED LATIN AMERICAN COUNTRIES

Country	Thousands of tons				Percentage of production			
	1924-1928	1934-1938	1949	1950	1924-1928	1934-1938	1949	1950
Brazil	846	875	1,162	890	91	65	91	87
Colombia	139	230	329	268	85	91	93	80
El Salvador	44	54	75	66	88	84	111	97
Guatemala	45	47	55	45	92	68	87	67
Mexico	24	37	49	46	59	66	83	72
Venezuela	52	48	22	21	87	83	42	60

Source: Food and Agriculture Organization of the United Nations.

Chart I

RELATIVE MOVEMENTS OF PRICES AND EXPORT QUANTITIES OF BRAZILIAN AND COLOMBIAN COFFEE, 1926 TO 1938



cent of the exports of Brazil and the price of Colombian coffee was 19 per cent higher than the price of Brazilian coffee. In 1936, Colombian exports had risen to 28 per cent of Brazilian exports, but this was compatible with a premium for Colombian

coffee no smaller than that of 1928. This shift is further illustrated in Chart I.¹

In the post-war period, the quantities exported from the smaller coffee-producing countries have increased further (Table 5). Venezuela, where labour was diverted to the oil industry, is a notable exception to this rule.

The present high prices for coffee, the continuing preference for milder types, and the importance of coffee for the foreign balance of these countries have induced Governments to promote production, especially on smaller farms. Some of this stimulus has been tempered somewhat in countries where the rate of development is more rapid and other branches of production tend to attract manpower. By and large, however, it may be expected that export availabilities will increase in the years to come.

Europe's Demand for Coffee

Table 6 shows *per capita* consumption of coffee in a number of European countries and in the United States and Canada, before and after the war. The post-war figures are subject to particular caution, since stock changes, which are often considerable, have not been taken into account, and also because the severity of rationing or taxation in some European countries has been mitigated by black market supplies smuggled from abroad. However, certain broad trends and features of the consumption pattern appear clearly from the table. Three main factors are important for explaining the differences in consumption: the level of income, the price of coffee and—much less ponderable—the national predilections favouring one kind of stimulating drink rather than another.

¹ The inverse correlation of year-to-year movements in the relative magnitude of Colombia's exports and in its relative price appears in the chart as year-to-year lines all indicating a downward slope (with the exceptions already mentioned). However, over the whole period, there is a distinct and fairly continuous shift of the lines towards the right, indicating an increase in the relative prices of Colombian coffee corresponding to a given relative amount of exports from Colombia.

Table 6
PER CAPITA CONSUMPTION OF COFFEE
IN SELECTED EUROPEAN COUNTRIES,
THE UNITED STATES AND CANADA
Kilogrammes (unroasted) per head per year

Country	1924-1928	1934-1937	1948	1949	1950
Denmark	6.9	7.5	2.3	3.8	3.7
Sweden	6.8	7.6	5.0	4.9	4.8
Norway	5.8	6.0	5.0	5.2	4.5
Finland	4.6	5.5	2.3	2.8	3.7
Belgium-Luxemb.	4.9	6.0	10.0 ^a	9.3 ^a	6.9 ^a
France	4.0	4.5	1.7 ^b	2.1 ^b	3.6 ^b
Netherlands	4.8	4.7	2.1 ^b	2.4 ^b	2.2
Switzerland	3.2	3.7	5.5	4.0	5.4
Italy	6.1	0.9	0.9	1.0	..
Western Germany ^c	1.6	2.4	0.2	0.5	0.5
United Kingdom.	0.3	0.3	0.8	0.8	0.8
United States	5.4	6.1	8.6	8.8	8.1
Canada	1.1	1.5	3.0	3.3	2.8

Source: Food and Agriculture Organization of the United Nations.

- a Owing to smuggling from Belgium, the *per capita* consumption figure shown is too high.
- b Owing to smuggling into France, the Netherlands and western Germany, the consumption figures shown for these countries are somewhat under-rated.
- c Pre-war figures refer to the whole of Germany.

Differences in income levels can largely explain the contrast between coffee consumption in France and Italy, where food habits are broadly similar, and the increase in the United States consumption in the post-war period. Differences in the retail price of coffee as between countries can be seen from Table 7.¹

Table 7
RETAIL PRICE OF ROASTED COFFEE
IN SELECTED EUROPEAN COUNTRIES AND
THE UNITED STATES^a
United States cents per kilogramme

Country	1938	1951
Belgium	66	214
Norway	67	120
Sweden	79	224
Netherlands	79	202
Denmark	89	221
France	68	247
Switzerland	69	189
United Kingdom	92	...
Germany	189 ^b	773 ^c
Italy	162	260
Finland . . . . .	...	560
United States	46	191

Source: *International Labour Review*, I.L.O., April 1940 and July 1952.

- ^a Prices are mostly as of 1 October and apply to the capital.
- ^b 1937.
- ^c Western Germany.

¹ Differences in the average quality of coffee consumed are not taken into account.

In the absence of reliable and comparative data on the price relations between coffee and other beverages, only the absolute prices of coffee are given. In the two countries (apart from the United Kingdom) where consumption was lowest before the war—Italy and Germany—prices were high, owing to heavy taxation. In the post-war period the relative pre-war price position of different countries seems to have been maintained with the exception that the German price has been raised by exceptionally high taxation, that the price in Norway (where coffee is rationed) is held at an extraordinarily low level by subsidies, and that the Italian price has fallen more into line with those of other countries.² In general, the discrepancies between coffee prices in different countries have narrowed down.

Coffee is exposed to competition both from alternative beverages (most directly tea and cocoa) and from cheaper substitutes (mostly of chicory) which are meant to be mixed with coffee. However, in this field national habits are rather inflexible and changes in the price of coffee relatively to that of other beverages are unlikely to affect consumption appreciably. The degree of rigidity in established consumption habits can be illustrated by recent experience in the United Kingdom and Denmark. In both of these countries, one of the two beverages coffee and tea is definitely preferred: tea in the United Kingdom and coffee in Denmark. In both countries the beverage in popular demand has been rationed during recent years while the other has been freely obtainable. The figures in Table 8 show that the reduction of the consumption of the preferred beverage to far below normal levels has produced an increase in consumption of the alternative stimulant, which, although considerable in relation to the very small normal consumption, fills only a small fraction of the gap left by the reduced consumption of the rationed drink. It may

Table 8
CONSUMPTION OF TEA AND COFFEE
IN THE UNITED KINGDOM AND DENMARK

		United Kingdom		Denmark	
		Tea	Coffee	Tea	Coffee
Kg. per head	1935-37	4.2	0.25	0.15	7.45
	1950 ^a	3.6	0.77	0.20	3.87
"Cups" per head ^b	1935-37	1,900	25	70	560
	1950 ^a	1,625	60	90	290

- ^a 1951 for the United Kingdom.
- ^b The figures have been calculated on the rough assumption that one pound equals 40 cups of coffee and 200 cups of tea. 16 per cent was deducted from the weight of green coffee to allow for roasting.

² This is partly because duties on coffee in most countries are specific rather than *ad valorem*. Therefore, under the high import prices prevailing in recent years, the relative importance of the duties is smaller.

Table 9
EUROPEAN IMPORTS OF COFFEE
Thousands of tons and index numbers

Country	1925-1929	1934-1938	1949	1950	1951	<i>Index numbers — 1951 (1934-1938 = 100)</i>
France	162.5	184.6	87.5	149.7	151.3	82
Germany ^a	120.5	165.8	26.3	26.6	40.4	..
Belgium	40.0	50.3	90.4	60.0	55.0	109
Netherlands	35.2	35.8	24.1	22.3	17.0	47
Italy	45.2	37.0	40.7	46.1	45.9	124
United Kingdom	30.8	22.5	44.7	40.4	43.3	192
Scandinavian countries	100.3	104.1	78.8	79.7	73.6	71
Switzerland	12.7	15.7	18.3	25.3	19.8	126
Spain	21.8	22.5	7.0	6.4	5.3	24
Other European countries	73.0	69.7	52.2	33.5	33.6	48
Total of countries listed (including Germany)	642.0	708.0	470.0	490.0	485.2	69
Total (excluding Germany)	521.5	542.2	443.7	463.4	444.8	82

Sources: International Institute of Agriculture and Food and Agriculture Organization of the United Nations.
^a Post-war figures refer to western Germany.

be concluded, therefore, that the deprivation of coffee in many European countries during and after the war has not produced any lasting weakening of consumer demand for coffee. The recent great expansion of the sale of cola products may to some extent have been at the expense of coffee, although beer and other cold drinks may have been more directly affected.

Europe's Imports of Coffee

In the later 'thirties, Europe's imports of coffee had increased even beyond the pre-depression volume. In the post-war years this level was far from being regained. In 1950 and 1951, total imports into Europe still remained 30 per cent lower than before the war and some 15 to 20 per cent lower if the particularly small imports of Germany are excluded from the comparison (Table 9).

The major reason for the decline of European imports and for the consequent fall in consumption is to be found in the balance-of-payments difficulties experienced by most European countries. Among the countries whose imports, contrary to the general

trend, have increased since the war, are Belgium and Switzerland,¹ where balance-of-payments problems have not been paramount, the United Kingdom, which is only a minor importer, and Italy, whose imports were very severely restricted in the 'thirties. Generally speaking, import policies for coffee have discriminated against coffee from Latin American countries and, among these, against the smaller exporters where coffee has mostly had to be paid for in dollars, while Brazil has, at least to some extent, accepted payment in non-dollar currency. European countries with coffee-growing overseas territories have greatly encouraged production within their dependencies. Such encouragement was already given in the 'thirties, but, because of the long period of production, it is only in recent years that the increased supplies have been coming on to the market. Table 10 shows the great post-war increase in exports from European possessions in Africa.

¹ The Swiss import figures, especially for 1950, are affected by the officially sponsored stocking policy and do not, therefore, reflect a corresponding increase in actual consumption.

Table 10
COFFEE EXPORTS FROM EUROPEAN POSSESSIONS IN AFRICA
Thousands of tons and index numbers

	1924-1929	1934-1938	1949	1950	<i>Index numbers — 1950 (1934-1938 = 100)</i>
British territories	17.9	29.6	44.4	58.0	196
French territories	3.7	35.4	100.2	114.8	324
Belgian Congo	0.3	15.5	31.4	33.2	214
Angola	10.0	14.9	46.4	37.5	252
Total	31.9	95.4	222.4	243.5	255

Source: Food and Agriculture Organization of the United Nations.

Table 11
PERCENTAGE DISTRIBUTION OF SOURCES OF COFFEE IMPORTS IN EUROPE
AND THE UNITED STATES

	Brazil		Other Latin America		Total Latin America		Africa		Asia	
	1934-38	1949-50	1934-38	1949-50	1934-38	1949-50	1934-38	1949-50	1934-38	1949-50
Total Europe	46	48	25	11	71	59	16	40	14	1
of which :										
France	45	26	24	—	69	26	19	73	12	1
United Kingdom	2	35	49	1	51	37	39	63	10	—
Switzerland	52	47	32	30	84	77	7	22	9	1
Scandinavian countries	59	73	29	19	88	92	3	8	9	—
Belgium	43	69	11	19	54	87	31	12	15	1
Netherlands	39	40	20	10	59	50	5	45	36	5
United States	61	55	36	42	97	97	2	3	2	—
Other countries	48	55	32	12	80	68	12	25	8	7
Total world	54	54	32	31	86	85	8	14	6	1

Source: Appendix Table A.

The rapid development of production in the colonies and the need to restrict dollar imports have thus brought about a shift in the sources of European imports in favour of Africa. The implications of this shift for Latin America's position in European import markets have been mitigated, however, by the great reduction in imports from Asia. The relevant figures are given in Table 11. It will be seen that the share of the minor Latin American producers has declined steeply in all European countries with the exception of Belgium. The shift from "mild" to Brazilian coffee is particularly striking in the case of the United Kingdom. For Latin America as a whole, the share in European imports has declined from 79 per cent before the war to 57 per cent in 1950.

The reliance on colonial supplies has been most complete for France, whose imports from Africa have risen from one-fifth before the war to three-quarters in 1950. The United Kingdom now imports, at preferential rates of duty and under long-term contracts, over 60 per cent of its coffee supply from its affiliated territories in Africa. The shift to Africa as a source of coffee supplies is not confined to colonial Powers alone: the Netherlands' imports of African coffee are now about as large as were its pre-war supplies from Java.

Even for the United States there has been a slight increase in the share of African coffee. But otherwise, the shift away from Latin American sources on the part of Europe has its counterpart in an increase in the share of the United States in Latin American exports (see Appendix Table A). Here again, the shift has been most marked for the producers of "mild" coffee, for whom an expanding United States market has more than compensated the decline due to dollar restrictions in Europe.

Prospects

The future of Latin American coffee exports to Europe depends, of course, not only on consumer preference but also, and (in the immediate future) mainly, on the import policies of European Governments. As regards total coffee imports, a considerable increase can be expected in connection with the recent lifting of coffee rationing in Norway and Denmark, where, as has been seen, coffee consumption in recent years has been far below normal levels. For these countries, as well as for other countries of high coffee consumption, it may be expected that *per capita* consumption will become stabilized at a level about or slightly lower than before the war. The particularly drastic reduction of western Germany's coffee imports is mainly the result of heavy taxation and with the reduction of the rate of taxation, which is under consideration, German coffee consumption may increase considerably beyond the level of 1951, which was less than half the average of the years 1934-1938.

But whatever may be the level of total coffee imports into Europe, it may be foreseen that the dollar problem will be with most European countries for some years and coffee imports from Latin American countries are likely to continue to be restricted by this factor. There are, however, some recent indications of increased sales of Latin American coffee in Europe within the framework of bilateral trade agreements. Germany has made heavy purchases in Colombia since 1951 and the Brazilian Government has recently become more inclined to sell coffee against payment in sterling. Furthermore, it is possible that, as far as balance-of-payments considerations permit, the pronounced consumer preference for Latin American coffee rather than colonial will make European Governments, in particular the French, refrain from further stimulating production in their overseas territories.

With respect to coffee, the need for an international stabilization arrangement appears to be particularly great, but so are the difficulties which stand in the way of an international agreement. First, the financial commitments would have to be very great. Since coffee production is subject to particularly wide crop fluctuations with no great possibility of adjusting output in the short run, it is clear that an international arrangement which was effectively to bridge over an eventual period of surplus would require very large funds for holding stocks. Secondly, the geographical distribution of coffee production, with one very big producer and a number of smaller producers, makes it difficult for the producing countries to arrive at an agreement. The smaller producers are likely to count on the big producer's bearing the burden of supply restrictions, thus providing a shelter behind which the smaller producers can maintain or even expand their output. In this respect, it is significant that Brazil never succeeded in bringing the smaller Latin American producers—let alone the producers in other continents—to take part in a marketing scheme. The difficulty in bringing together the producers is enhanced to the extent that some of the smaller producers can rely on sheltered markets in

the metropolitan "mother" countries. This last consideration will, of course, also make some of the major consuming countries hesitate to take part in an international stabilization scheme, and even those consuming countries for which no such considerations apply are likely to feel the need for long-term market stability less urgently in the case of a non-essential consumer article like coffee than in the case of industrial materials or essential foodstuffs.

Besides the universal desire to avoid the social and political implications which would be brought about by a slump in the world coffee market, there is one consideration, which should make coffee importers conscious of the need for a general coffee price stabilization agreement: coffee alone accounts for no less than 8 per cent of the total exports of under-developed areas¹ to North America and Europe. Severe fluctuations in the receipts of the coffee-exporting countries would have adverse repercussions on the exports of the industrial areas and thereby cause a serious setback in world trade.

¹ In this connection, the "under-developed areas" have been taken to include all countries of Latin America, Africa, the Middle East and Asia.

Appendix Table A

WORLD IMPORTS OF COFFEE FROM LATIN AMERICA AND OTHER REGIONS

Thousands of tons

Exporting countries	LATIN AMERICA												Africa			Asia			Total		
	Brazil			Colombia			Other Latin American countries			Total Latin America											
	1934- 1938	1949	1950	1934- 1938	1949	1950	1934- 1938	1949	1950	1934- 1938	1949	1950	1934- 1938	1949	1950	1934- 1938	1949	1950	1934- 1938	1949	1950
France	82.5	25.5	34.9	3.6	—	0.8	41.3	—	—	127.4	25.5	35.7	34.4	60.8	112.3	22.8	1.2	1.7	184.6	87.5	149.7
Western Germany ^a	68.6	22.1	9.6	29.6	0.8	3.4	61.1	0.3	1.7	159.3	23.2	14.7	2.4	1.1	4.8	4.1	2.0	7.1	165.8	26.3	26.6
Belgium	21.8	67.6	35.5	0.5	3.1	3.5	4.8	9.9	11.4	27.1	80.6	50.4	15.8	9.0	8.8	7.4	0.5	0.8	50.3	90.1	60.0
Netherlands	14.0	11.7	7.3	2.0	0.3	0.4	5.1	1.2	3.0	21.1	13.2	10.7	1.9	10.4	10.7	12.8	1.4	0.9	35.8	25.0	22.3
Italy	20.9	28.4	25.6	1.4	0.7	0.9	8.6	9.0	14.8	30.9	38.1	41.3	3.0	2.4	3.5	3.1	0.2	1.3	37.0	40.7	46.1
United Kingdom	0.4	16.4	13.6	0.3	—	—	10.7	0.3	0.9	11.4	16.7	14.5	8.8	27.9	25.6	2.3	0.1	0.3	22.5	44.7	40.4
Scandinavian countries	61.1	57.3	58.0	3.7	8.7	8.8	26.3	6.4	6.5	91.1	72.4	73.3	3.3	6.0	6.0	9.7	0.4	0.4	104.1	78.8	79.7
Switzerland	8.2	8.1	12.4	0.9	1.0	2.0	4.1	6.1	3.9	13.2	15.2	18.3	1.1	2.9	6.5	1.4	0.2	0.5	15.7	18.3	25.3
Spain	3.7	2.7	—	0.9	—	—	15.7	—	—	20.3	2.7	—	1.4	4.3	6.4	2.8	—	—	24.5	7.0	6.4
Total of countries listed above	281.2	239.9	196.8	42.9	14.6	19.8	177.7	33.2	42.2	501.8	287.6	258.9	72.1	124.8	184.6	66.4	6.0	13.0	640.3	418.4	456.5
United States	475.8	766.2	571.3	174.1	297.1	243.6	109.6	233.4	239.0	759.5	1,296.7	1,053.9	12.4	25.6	49.2	13.9	1.2	2.4	785.8	1,323.5	1,105.5
Other countries	117.8	156.1	121.9	12.8	12.9	4.9	9.1	26.7	4.4	139.7	195.7	131.2	45.5	99.6	46.2	24.7	16.8	18.6	209.9	312.1	196.0
TOTAL WORLD	874.8	1,162.1	890.1	229.8	324.6	268.3	296.4	293.3	285.6	1,401.0	1,780.0	1,444.0	130.0	250.0	280.0	105.0	24.0	34.0	1,636.0	2,054.0	1,758.0

Source: National trade statistics.

^a Pre-war figures refer to the whole of Germany.

Appendix II

SUGAR

Sugar Production in Latin America and the World

Over one-third of the world's sugar is produced in Latin America and, of total Latin American production, Cuba accounts for one-half. Fluctuations in Latin American sugar production, especially during the inter-war period, are largely due to the violent changes in Cuban sugar output (Table 1). The fall in the sugar production of Latin America from 1924-1928 to its post-depression levels was almost entirely due to the fall in production in Cuba, which was offset only to a small extent by the expansion in other Latin American countries. In fact, the divergent movements between the rest of Latin America and Cuba in the inter-war period are illustrated by the fall in Cuba's share in total Latin American production from 64 per cent in 1924-1928 to 47 per cent in the years immediately preceding the second World War. Cuba is responsible for most of the expansion in the post-war period, but, in spite of the fact that its own production is now more than twice its 1934-1938 average, it has

not as yet regained the place it had in the early 'twenties, since the other Latin American countries have increased their output at a considerably higher rate. Nevertheless, Cuba's importance as an exporter of sugar remains overwhelming: about 80 per cent of total Latin American sugar exports originate in Cuba.

Cuba: Pre-war Experience

Cuba's production of sugar-cane dates from the first twenty years after its discovery, when the first Spanish colonists are supposed to have introduced the crop, but the major increases in output belong to the first quarter of the twentieth century. In some parts of the country the fertile clay soils permit the production of sugar-cane without the application of commercial fertilizers, and the possibility of harvesting several years after each sowing gives Cuba a great competitive advantage, since sowing represents about 20 per cent or more of the total cost of production. The great availability of land

Table 1

WORLD SUGAR PRODUCTION *Thousands of tons; raw sugar equivalent*

	1924-1928	1929-1933	1934-1938	1948/49	1949/50	1950/51 ^a	1951/52 ^b
Latin America	7,819	5,879	5,940	9,972	10,177	10,876	12,435
of which:							
Cuba	5,328	3,090	2,838	5,228	5,557	5,759	7,167
Brazil ^c	928	1,163	1,031	1,780	1,650	1,900	1,800
Argentina ^{c d}	419	380	410	565	548	612	650
Peru ^{c d}	375	440	382	488	467	462	465
Mexico	204	236	319	635	640	715	800
Dominican Republic	374	392	436	476	475	531	594
Other Latin American countries	191	178	524	800	840	897	959
Europe ^e	6,398	6,606	6,460	6,700	6,943	9,101	8,815
Rest of world ^e	11,281	12,706	15,600	13,503	13,970	12,981	13,203
Total world ^e	25,498	25,191	28,000	30,175	31,090	32,958	34,453
Percentage share of Latin America	31	23	21	33	33	33	35
Percentage share of Cuba in Latin American production	68	53	48	52	55	53	58

Sources: 1924-1928 to 1934-1939: International Institute of Agriculture; 1948/49 and 1949/50: Food and Agriculture Organization of the United Nations; 1950/51 and 1951/52: International Sugar Council and C. Czarnikow, Ltd., *Sugar Review*.

^a Partly estimated.

^b Provisional estimates.

^c Calendar years.

^d Actual weight.

^e Excluding the U.S.S.R.

Table 2

EXPORTS OF SUGAR FROM LATIN AMERICA

Thousands of tons; raw sugar equivalent

Country	1924-1928	1929-1933	1934-1938	1948/49	1949/50	1950/51
Cuba	4,432	3,216	2,591	4,996	4,813	5,828
Brazil	27	35	43	165	5	42
Peru	281	344	310	312	276	247
Mexico	5	27	—	169	143	23
Dominican Republic	298	345	418	491	445	434
Other Latin American countries	38	41	38	122 *	113 *	122 *
Total of countries listed	5,081	4,008	3,400	6,255	5,795	6,696
Percentage share of Cuba	87	80	76	80	83	87

Sources: Pre-war: International Institute of Agriculture and FAO; post-war: FAO and International Sugar Council.

allows extensive cultivation,¹ but although climatic conditions are favourable² they would hardly have been sufficient to ensure Cuba's twentieth-century expansion of production had it not been for one more geographical factor — the proximity to the vast, rich and expanding United States market.

Until the 'thirties, Cuba supplied about one-half of total United States sugar consumption. This heavy dependence on imports from Cuba meant, too, that United States investors had a special interest in financing Cuban production once Cuba had seceded from Spain and enjoyed, under the Reciprocity Treaty of 1902, a preferential tariff amounting to no more than 20 per cent of the normal rate of duty. The availability of funds from the United States was of particular importance since modern cane-sugar production requires a large amount of capital. In the period preceding the first World War, about 35 per cent of total sugar output was controlled by United States capital; this ratio had increased to 48 per cent by 1920 and was as high as 63 per cent in the late 'twenties. The greater control of United States capital in the latter period was due to the financial difficulties experienced by Cuban producers after the collapse of the sugar market, which forced many Cuban enterprises to sell out at bankruptcy prices.

If the United States was and is heavily dependent on sugar imports from Cuba, Cuba was and is even more dependent on its sugar sales to the United States. Until the second World War, only one other

¹ Much of the arable land is as yet uncultivated: it is estimated that of the total land in farms in Cuba (80 per cent of total land), 60 per cent is tillable, but of this only slightly over one-third is under cultivation.

² Cuba does, however, suffer from one climatic disadvantage in so far as it lies in the hurricane belt with the result that occasionally there is severe damage to the growing crop, to stocks and to plant.

country, the United Kingdom, was of major importance in Cuban sugar exports (Table 3).

Table 3

PERCENTAGE DISTRIBUTION OF SUGAR EXPORTS FROM CUBA

Annual average	United States	United Kingdom	Rest of world
1925-1929	76	15	9
1930-1933	69	24	7
1934-1938	69	23	8
1948-1950	57	12	31

Sources: 1925-1938: Cuban Sugar Council; 1948-1950: International Sugar Council.

However, the share of the United States in Cuban sugar exports has been declining ever since the 'twenties. This is mainly the result of changes in United States import policy. The preferential rate did not prevent Cuban exports from being adversely affected, after the first World War, by the threefold increase in the duty on sugar, designed to protect sugar production in the United States dependencies of Hawaii and Fiji as well as domestic production of cane and beet in the United States. In the 'thirties the duty on Cuban sugar was again lowered and Cuba was given a 52 per cent preferential rate, but at the same time, by the Sugar Acts of 1934 and 1937, the share of Cuban sugar in total United States supply was reduced from the 48.1 per cent it had been previously to 28.6 per cent. The new Cuban quota was based on the depressed levels of imports of the years 1931 to 1933.

The effect of United States legislation on the Cuban sugar industry was twofold: a restriction of production and a diversion of exports away from the United States (Table 3).

The great rise in Cuban sugar output during and immediately after the first World War was mainly due to the fall in European production, and the interruption of European imports from the Far East. The world-wide shortage of the period which lasted until 1920, when the price of Cuban sugar c.i.f. New York reached the peak of 22 cents per pound and fell within six months to 3.75 cents per pound, gave rise to the colourful episode of the "Dance of the Millions". The fall was caused by the recovery of production in Europe which, although very slow at first, soon gathered momentum,¹ and also by the imposition of the United States tariff which has already been mentioned. In the hope of stabilizing prices the first restriction scheme was launched by 1924/25. This first scheme provides a clear illustration of the main reason for the failure of so many restriction schemes—the lack of universality. Since Cuba was the only country to restrict production while production in other countries, especially the United States possessions and Java, was expanding,² sugar prices continued to fall, and it was obvious that sooner or later the inevitable decision to reverse the restrictionist policy would be taken. Unfortunately, this change in policy occurred in the season 1928/29 and gave rise to the bumper crop of 1929, coinciding with the onset of the world depression.

In 1930, Cuba, Java, Peru and the important European beet-sugar exporters, Czechoslovakia, Germany and Poland, agreed to meet in conference at Brussels. The result was the Chadbourne agreement, of May 1931, which, although concluded between the producers' associations in each country, was in most cases supported by Government policy and legislation. Under the terms of the agreement each country undertook to limit its production to a level compatible with its assigned over-all export quota plus its home consumption. The export quotas were determined so as to allow a gradual disposal of the accumulated stocks. In the event, the agreement was a failure because the two largest blocks of consumers-cum-producers, the United States and its dependencies and the British Dominions, did not participate. In these two areas, production rose from 1931 to 1935 by some 60 and 35 per cent respectively, and although, on the whole, the restricting countries observed their export quotas, drastic revisions of production plans had to be made because of difficulties in marketing even the agreed quantities. A reduction of output amongst the

European beet exporters was relatively easy since beet has to be sown annually, but for the perennial cane production in Cuba the successive reductions were insufficient to meet the fall in United States import demand, even though some relief came from the lowering of the preferential duty mentioned above. Java, Cuba's major competitor in markets other than the United States, was in an even worse position because of higher production in Japan and Formosa and the building up of a big Indian sugar industry, protected by a high tariff.

The combination of the lowering of preferential duties and the strict quantitative limitation of imports into the United States market resulted in a wide spread between the price of sugar in New York and the world market price as indicated by the London market (Table 4).

Table 4

PRICE OF RAW CUBAN SUGAR IN LONDON AND NEW YORK

United States cents per lb, and percentages

Year	London c.i.f., ex duty ^a (U.S. cents)	New York c.i.f., ex duty (U.S. cents)	London price as percentage of New York price
1931	1.25	1.33	94
1932	0.88	0.93	95
1933	0.97	1.22	80
1934	1.04	1.50	69
1935	1.00	2.33	43
1936	1.02	2.73	37

Source: International Institute of Agriculture.

^a London price expressed on c.i.f. New York basis.

At the same time as these changes in United States import policy for sugar were being felt, preparations were made for a second, more all-embracing scheme. A sugar conference was held in London in 1937, including Government representatives of almost all the sugar-producing countries. The agreement which resulted from the conference contained a pledge by the United Kingdom, which had greatly expanded its production in the 'thirties, that its domestic production of white sugar would not exceed 500,000 tons, and by the United States that its free market imports should not decline further. An International Sugar Council was set up whose function it was to estimate in advance the requirements of the free market and to adjust basic quotas accordingly. During the two pre-war years in which the agreement was in force, Cuba exceeded its quota very slightly. The quotas have not been in force since the war.

Thus, the history of Cuban sugar production during the inter-war period is one of almost continuous Government intervention. There are two

¹ Great though the rate of increase was even in the mid-'twenties, it was only in 1928 that the pre-war output of 8 million tons was reached; in the following years production in Europe fell again as a consequence of the restrictive agreements.

² The expansion in Javanese output was also due to the introduction of a fast-yielding cane, the POJ 2878, which has since the early 'thirties been introduced into Cuba. More than 60 per cent of the cane now planted in Cuba is of this variety.

major reasons for this. The first is the extremely low elasticity of supply of Cuban sugar. The usual difficulties which individual primary producers have in adjusting production downwards in response to lower prices are well known. In Cuba, however, the elasticity of supply was still lower than for most of the other sugar areas because of the perennial nature of the crop.¹ Indeed, in the days before the restriction schemes, the reaction of the Cuban sugar producers to low prices was to increase rather than restrict production, in order to stabilize the value of sales. Secondly, if normal market forces were allowed to operate, the most modern mills—i.e. those run with United States capital—would force the older and smaller Cuban mills out of production, with the inevitable result of large-scale unemployment. As it was, unemployment continued at a rather high level, but Cuban producers did receive some protection and, at the same time, attempts were made to diversify the Cuban economy to some extent by encouraging production of crops for the home market, such as rice and coffee.

Cuba: Post-war Developments

Developments in the post-war period, however, suggest a return to a high dependence of the economy on sugar, for which a number of reasons may be given. There has been a high demand for Cuban sugar since the fall in production in Europe and in the areas politically affiliated with the United States (Hawaii and Philippines), and a vast expansion of production has taken place. Sugar output in Cuba now exceeds its greatest inter-war average and it has, in fact, reached record levels (Table 1). This achievement is due to the extension of the harvested area rather than to spectacular increases in yields, but, once again, it was encouraged mainly by increases in exports to the United States.² Access to the United States market was made possible by the Sugar Act of 1948, according to which, out of a total consumption of some 6 million tons, 3.8 million tons are to be supplied from domestic sugar production and 900,000 tons from the Philippines, while 98.6 per cent of the remainder of United States consumption is to be bought from Cuba. However, Cuba benefited most from the additional proviso that it was to share in the allocation of deficits in the supply from domestic production, and was to cover 95 per cent of any deficit in the supply of sugar from the Philippines.

¹ There remains the possibility of not harvesting the sown area, and this device is used to some extent. But because the second, third or fourth year's sowing costs little to the grower, he is willing to undertake the harvesting even at a derisory profit.

² At the end of the war, shipments to Europe were also of some importance.

The importance of a correct appraisal of the demand situation for Cuban sugar can be seen from the fact that sugar and its derivatives now account for 70 to 80 per cent of total Cuban exports, and 30 to 40 per cent of the national income (according to rough estimates), and give employment to one-third of the labour force at the height of the harvesting and grinding season. Since the United States, and not Europe, has most directly influenced the Cuban sugar economy, more attention has been paid to the volume of exports to that country and only passing references have been made so far to trade with Europe. Before considering the question of Cuban sugar exports to Europe, it is necessary to review briefly the export potential of the other major producers in Latin America.

Other Exporting Countries

It has already been shown (Table 1) that the share of Cuba in total Latin American production was 67 per cent in the period 1924 to 1928 (a period during which some restriction had already been applied) and, in subsequent periods, never fell below the neighbourhood of 50 per cent. The level of sugar production and exports in other Latin American countries can be seen from Tables 1 and 2. Brazil has the largest output, but, since home consumption is also high, it is not important as an exporter. In Peru and the Dominican Republic, on the other hand, the greater part of production is for export, and these two countries, although covering only 20 per cent of sugar output in Latin America (outside Cuba), account for more than 70 per cent of exports (again excluding Cuba).

Climatic conditions in the Dominican Republic are favourable to the cultivation of sugar-cane, but a major difficulty is the supply of labour. Production was expanded somewhat during the 'twenties and the early 'thirties when the restriction schemes described above were enforced in other areas, and although the International Sugar Agreement checked expansion in the years immediately preceding the second World War, there were no reductions in production. In the post-war period, and especially since 1948/49, there has been a marked expansion of about 30 per cent (Table 1). This is part of a deliberate plan which aims at raising production to about 750,000 tons, or 70 per cent higher than pre-war. Some experimental work has been done to increase yields and to introduce technical improvements in the mills, but much remains to be done both in spreading these technical improvements and in the selection of better-yielding strains of cane.

In Peru, costs of production are higher than in Cuba and the Dominican Republic, because cultivation depends on irrigation and because of the small number of crops taken from one sowing. In the

inter-war period, cotton production competed with sugar production and the area under cotton was expanded at the expense of the sugar area. There was some expansion of sugar production after the war, in spite of difficulties arising from the shortage of fertilizers.

Sugar production in Mexico is now about two and a half times its pre-war level and ranks second amongst that of Latin American countries outside Cuba. Government policy is largely responsible for this great increase. The Nacional Financiera, a Government credit institution, has granted loans to sugar producers for the replacement of machinery and improvement in cultivation. There has been an increase in yields caused by imports of high-yielding varieties and greater and better use of fertilizers. In addition, the cultivation of new and more fertile irrigated lands has compensated whatever fall in yields there may have been because of the extension of production to humid lands.

Ever since the 'twenties, Brazil's sugar production has increased without interruption, but the increase has been particularly rapid since the war. The expansion has been partly brought about by wartime legislation, which guaranteed "normal profits" to producers and manufacturers alike. A further incentive to increased production has been the relative freedom of production as compared with the 'thirties, when progress was impeded by cartels. There has been since the war a high rate of replacement of machinery and expansion of capacity greatly helped by the fact that a considerable part of the machinery for sugar mills is now produced within the country. The increase in production has, however, been used to satisfy the increased *per capita* requirements of a growing population and it seems that, in the absence of price movements favourable to sugar production at the expense of the other traditional export crops—i.e. cotton and coffee—exports will continue to be only a small fraction of total production.

For the Latin American sugar exporters (other than Cuba) taken as a whole, the share of production devoted to home consumption has increased considerably relatively to pre-war, as can be seen by comparing the figures in Tables 1 and 2. On the other hand, the amount of sugar available for exports to destinations outside Latin America has been increased by the higher home production in the sugar-deficit countries of Latin America. Thus, in Venezuela, Bolivia and Chile, the Corporaciones de Fomento (Development Corporations) have financed the modernization and construction of sugar mills. In Bolivia, where the greatest difficulty lies in the establishment of an adequate transport system, the basic project consists in the construction of a mill with a capacity large enough to cover about 75 per cent of the country's present consumption of sugar. In Chile, a preliminary study of beet

production has been completed, and plans have been made for greatly expanded cultivation of this crop.

European Consumption

Europe's *per capita* consumption of sugar is about 25 kgs. per year. This is of course higher than in Africa and Asia, where *per capita* consumption is less than 10 kgs., but considerably lower than in North America and Oceania (40 and 50 kgs. respectively). The over-all European average, however, conceals wide disparities between countries (Table 5).

The classification in groups of countries according to the quantity of sugar consumed appears to correspond broadly to a classification by income. The most striking exceptions are the comparatively high consumption of Ireland and the low consumption of Norway, where sugar was still rationed in 1952. On the whole, there seems to be a marked tendency for consumption to increase with the level of income, although naturally the sensitiveness of consumption to changes in income is lower the higher the level of income, and there seems to be a ceiling at about 50 kgs. per year. This is confirmed not only by intercountry comparisons, but also by a number of national consumption studies which show great differences in consumption between different income groups within a given country.

The influence of the relative price of sugar on consumption is not always easy to distinguish from the influence of income since, by and large, sugar prices are high in the countries where incomes are low and *vice versa*. For instance, the retail price of sugar in Italy is about four times the price of sugar in Denmark. The explanation for this is mainly that the tendency for sugar taxes to decline in relative importance during the last decades is less pronounced in the poorer countries.

In conclusion, it is likely that an increase in income, especially if accompanied by a fall in the relative price of sugar, would result in higher consumption of sugar in the countries of average or low consumption. Among the countries in the high-consumption group, the United Kingdom and Denmark are likely to expand their sugar consumption. However, the prospects for European sugar imports from Latin America depend also on developments in production in Europe and in the overseas countries competing with Latin American exports. These factors are now to be considered.

Sources of European Supplies

European supplies come from three distinct sources: imports from overseas countries enjoying preferential treatment, imports from other suppliers (among which Latin America), and local production. Table 6 on page 72 shows the distribution from these

Table 5
EUROPE : PER CAPITA SUGAR CONSUMPTION BY COUNTRIES

Country	1934-1938 (Kgs. per head)	1949/50 (Kgs. per head)	1949 income range (U.S. dollars per head)
I. High consumption			
Belgium-Luxembourg	29.6	35.3	500-800 ^c
Denmark	55.4	43.7 ^a	
Ireland	41.2	42.8	
Netherlands	31.6	39.5	
Sweden	49.3	50.2	
Switzerland	40.8	35.0 ^a	
United Kingdom	49.0	40.2	
II. Medium consumption			
Austria	27.4	25.4	300-500 ^d
Czechoslovakia	26.7	30.4 ^b	
France	25.9	25.6	
Finland	28.9	29.5 ^a	
Germany	27.6	30.2 ^a	
Norway	30.2	25.1 ^a	
III. Low consumption			
Greece	11.3	8.8 ^a	100-300
Hungary	11.4	17.6	
Italy	7.9	12.9	
Poland	12.2	18.4 ^b	
Portugal	9.3	12.9 ^a	
Spain	12.4	9.7	
Yugoslavia	5.0	5.9 ^b	
Average of countries listed	24.4	24.9	

Sources: Consumption: FAO; income levels: *National and per Capita Incomes in Seventy Countries, 1949*, United Nations, New York, October 1950.

^a 1949. ^b 1948/49.
^c Except Ireland \$420 and Switzerland \$843.
^d Except Austria \$216 and Norway \$587.

Table 6
SOURCES OF SUPPLY OF FIVE MAJOR SUGAR-IMPORTING COUNTRIES

Percentages of total supply

	United Kingdom		France		Netherlands		Belgium		Switzerland		Total of five countries	
	1934-1938	1949/50-1950/51	1934-1938	1949/50-1950/51	1934-1938	1949/50-1950/51	1934-1938	1949/50-1950/51	1934-1938	1949/50-1950/51	1934-1938	1949/50-1950/51
Gross imports ^a	83	79	28	24	36	45	27	18	93	91	61	57
"Imperial suppliers"	37 ^b	31 ^b	11 ^c	10 ^c	19	—	—	—	—	—	26	17
Others	46	48	17	14	17	45	27	18	93	91	35	40
Local production	17	21	72	76	64	55	73	82	7	9	39	43
Total availabilities ^d	100	100	100	100	100	100	100	100	100	100	100	100
Production as percentage of consumption	21	31	90	105	78	76	109	135	6	13	47	63

Source: Pre-war: national trade statistics. post-war: International Sugar Council.

^c Guadeloupe, Martinique and Reunion.

^a I.e. imports without deduction for exports and re-exports.

^d Including availabilities for exports and re-exports.

^b Australia, British Guiana, British West Indies, Mauritius and Union of South Africa.

Table 7

SUGAR PRODUCTION IN EUROPE^a

Thousands of tons (raw sugar equivalent) and index numbers

Country	1934-1938	1949/50	1950/51	Index numbers 1950/51 1934-1938 = 100
Belgium	237	343	446	188
Denmark	201	322	360	179
France	971	881	1,434	148
Western Germany	572 ^b	614	1,017	178
Ireland	81	100	98	121
Italy	335	475	610	182
Netherlands	235	388	398	169
Spain	308	184	194	63
Sweden	300	290	305	102
Switzerland	11	24	28	255
United Kingdom	487	523	740	152
Yugoslavia	75	97	94	125
Other European countries	2,647	2,712	3,377	128
Total Europe ^a	6,460	6,943	9,101	141

Source: FAO.

^a Excluding the U.S.S.R.

^b Calculated from official statistics showing output by provinces. See: "The Regional Interdependence of Germany", *Economic Bulletin for Europe* Vol. I, No. 3.

sources for four major importing countries and for Switzerland. The latter country is included in the table as an example of a European country with high consumption but small home production of sugar. The table shows that the share of local production in total supplies and in consumption has risen in all the countries shown, except the Netherlands, where a big expansion in production was offset by the combined effect of a rise in *per capita* consumption and in population. In the United Kingdom there was a fall in the share of suppliers with preferential treatment because of the relatively slow expansion of export availabilities in the overseas countries of the British Commonwealth, and the increased British import needs owing to the expansion of re-exports.

Sugar Production in Europe

With the exception of some cane grown in Portugal and Spain, European sugar production consists almost entirely of beet sugar, the output of which increased five-fold from the middle of the nineteenth to the beginning of the twentieth century. The Brussels Convention of 1902, by making illegal the export subsidies which had been particularly active in stimulating German production, slowed down the rate of expansion and after the outbreak of the first World War there was an actual decline. By 1928, however, production reached the 1913 level under the stimulus of tariffs and other kinds of protection and subsidies, concealed or open. The degree of pro-

tection varied from country to country, but almost nowhere were the indigenous beet-sugar industries exposed to the full blast of competition from the cane-producing countries.

Europe found itself in serious supply difficulties for sugar at the end of the second World War, as it had been at the end of the first. Shortage of fertilizers, shortage of labour, the need to divert resources to increasing production of other foods, as well as the general disorganization of agriculture, resulted in a decline of production to about half its pre-war level. The recovery, however, was much more rapid than in the early 'twenties, and by 1948 the output of the 'thirties had been exceeded (Table 7).

Production is in excess of pre-war in all European countries with the exception of Spain, where the shortage of fertilizers has been particularly acute in the post-war period, and Sweden, where, in addition to an acute shortage of labour, the output of oil-crops stimulated by relatively high prices has been expanded at the expense of sugar beet. In western Germany, the increase is mainly due to the partition of the territory which limited the access to eastern German supplies. Otherwise, production in European countries has been stepped up mainly in order to save hard currency on imports (or gain foreign exchange by exports).

It is difficult to make forecasts of the future course of European production. Governments in European countries have always tended to protect their sugar production for two main reasons: first, the

desirability of home-grown supplies of sugar in case of war; secondly, the technical advantage of beet sugar as a rotation crop in farming. Everywhere, producers of beet sugar are strongly organized and their pressure for protection was supported, in the 'thirties, by the desire to prevent a decline in agricultural employment.

Under conditions of rearmament there is little doubt that European production will continue to be subsidized and heavily protected, but an additional factor should be considered when judging the future trend of imports: the tendency to over-expansion of beet-sugar production, apparent particularly in France, where the surplus of sugar-beet has for some years been *quasi* destroyed in the form of subsidized alcohol production.

In a general way, beet-sugar production in Europe (and the United States) provides a major example of an uneconomical allocation of resources, brought about by a system of protection which can hardly be justified as being "educative".

Imperial Preferences

From the point of view of Latin American and other free market producers, imports from suppliers enjoying an imperial preference are very similar to indigenous production since, besides granting their affiliated territories either preferential or absolute marketing quotas, or both, metropolitan countries resort to imports from foreign countries only after imperial supplies are exhausted. In other words, Latin America and the other non-affiliated areas are in the situation of residual suppliers.

To these suppliers the market where discrimination matters most is the United Kingdom, which accounts for about one-half of European imports. The share of supplies from the Commonwealth in United Kingdom imports increased from 25 per cent in 1924-1928 to 45 per cent in 1934-1938. It is difficult to estimate the degree of preference enjoyed by Commonwealth suppliers, since this preference varies with the degree of polarization, but, according to rough estimates, Commonwealth sugar paid as much as 83 per cent of the full rate in the early 'twenties and only 41 per cent in the depression years.

The abolition of the "colonial rate"¹ and the fuller utilization of refining capacity within the United Kingdom had the effect of lowering the preference, but the agreements signed since the war still provide a guaranteed market for Commonwealth sugar in the United Kingdom. The first of these arrangements gave Commonwealth territories a market for all the sugar they could produce until 1952. This agreement was renewed by another of December 1951, valid until the end of 1959, but

¹ A rate lower than the ordinary preferential rate, introduced during the depression.

subject to annual price revision. The Commonwealth supplying countries agree to limit their exports to 2,375,000 long tons, of which the United Kingdom would purchase 1,568,000 long tons, and New Zealand 75,000 long tons. The rest may be offered for sale competitively in the preferential markets of the Commonwealth and Canada. Commonwealth suppliers are thus protected even if their market is not fully guaranteed. This arrangement, if fully realized, would give the Commonwealth suppliers a much larger share in the British market than at present, but it is doubtful if all participants in the agreement will find it possible to expand production to the full limit of their quotas.

The Free Market with Special Reference to Latin America

The prospects for Latin America's sugar exports to Europe depend on European consumption levels, on the competition which Latin American exporters will have to face from imperial and/or from free market suppliers as well as from local European production and on export availabilities in Latin America. It was seen that a rise in European consumption is most likely in those countries where the level of consumption is below 25 kgs. per head per annum. It is difficult to make estimates of the probable effect of increases in *per capita* consumption. If, for instance, it were assumed that consumption in the Mediterranean countries were to increase to some 20 kgs. per head per annum, while consumption per head in other countries were to remain unchanged, this would imply an increase in consumption in these countries alone of some 700,000 tons. In addition, there may well be an increase in some countries where consumption is now below 50 kgs.

Prospects for competition from "imperial" producers are closely tied to future supply conditions. Competition from other free market suppliers is likely to increase, especially from Far Eastern suppliers, whose eclipse after the war greatly favoured Latin American exporters. The rate of recovery of sugar production in the Far East has been slow² and the future will depend on the achievements of Governments in expanding sugar production, according to their formulated programmes, in the face of changes in the social and economic climate as well as pressure on scarce land and water resources. Indications are that exports from these countries will rise, especially from the Philippines, where the increase in production in the post-war years has been much more rapid than in other areas.

As against such competition, the position of Latin American suppliers *vis-à-vis* Europe will depend to

² For the countries under the purview of the Economic Commission for Asia and the Far East, production was estimated at 6.3 million tons in 1950/51 as compared with 7.4 million tons in 1934-1938. Consumption per head is lower than before the war, and lower than in Africa.

some extent on pure price competition but to a much greater extent on the trade relations which they will be able to maintain with their European customers. The effectiveness of price competition differs as between Cuba and the other Latin American suppliers. The existence of quotas and long-term price agreements largely precludes the functioning of the prices mechanism, as was shown when comparing Cuban prices in London and New York, and as can also be seen from the divergence between British import unit values for Cuban and West Indian sugar. Large changes in the price of Cuban sugar dramatically affect Cuban export receipts. Thus, if Cuban exports were to be of 5 million tons a fall in the price of sugar of 1 cent per lb would mean a fall in total receipts of \$100 million, or 6 per cent of national income in 1949.¹

As long as the dollar shortage persists, the prospects of Cuban sugar exports to Europe are closely tied to the prospects for European exports to Cuba. In 1951, Cuban imports from the United States amounted to \$490 million or 77 per cent of its total imports, while imports from the United Kingdom were 3 per cent and from the rest of Europe some 10 per cent. An expansion of Europe's exports to Cuba might well induce a number of European countries to rely more on sugar imports from that

¹ This of course is the initial loss in income. It goes without saying that a fall in the receipts of the export industries would bring about a fall in the income of other industries whose incomes depend on the earnings of the sugar industry.

country in preference to other sources of supply and/or to home production. Even though Europe might find it difficult to displace American imports of foodstuffs, it might be an important potential competitor in manufactures, which make up at least 50 per cent of total Cuban imports. At present, as a counterpart to the preference enjoyed by Cuban sugar in the United States, United States goods also enjoy a similar preference in Cuba. As a first step, attempts should be made to decrease this discrimination. Some progress has already been made in this direction. According to the agreement of August 1951 between the United Kingdom and Cuba, the United Kingdom is to enjoy the same preference as the United States in the Cuban market for a scheduled list of items: in return, the United Kingdom granted concessions for imports of sugar—of which it undertook to purchase at least 1½ million tons by 31 December 1952—and of cigars.

The situation as regards the other Latin American countries is broadly similar. Their production is much higher than before the war and, although the rise in home consumption is likely to make serious inroads, the volume of exports of these countries may well increase to over one million tons, provided a market is guaranteed and provided there is sufficient capital equipment for the construction of centrifugal mills. Here again, the creation and maintenance of a European market would, especially as regards Mexico, demand an over-all high level of trade with Europe as an essential condition.

Appendix III

COTTON

Latin American Production

Latin America produces just over 10 per cent of the world's cotton, and four countries—Argentina, Brazil, Mexico and Peru—account for well over 90 per cent of total Latin American production. Although the share of Latin America in world cotton production and trade is small in comparison with world totals, cotton has played an important role in the region, not only as an earner of foreign exchange but also as a raw material for the expanding textile industry.

It appears from Table 1 that Latin America's share in world cotton production rose slightly but steadily until the crop year 1950/51. In that year the restriction on cotton acreage in the United States, occurring at a time when cotton production in other areas was expanding, raised the share of Latin America (as well as that of other regions) to an abnormally high figure. In the following year, Latin America's percentage contribution to world cotton production again declined as the combined result of the post-Korean expansion of cotton production in the United States and in most other areas, and of the fall in its own production.

Production of cotton developed in rather different ways in individual countries of Latin America. These divergencies must be explained in the light of the geographical and historical factors affecting production in each of these countries.

Brazil

Cotton production in Brazil expanded at a remarkable rate during the inter-war period (Table 2). Its development dates, in fact, from the depression, when two factors contributed to the rise in its importance in the Brazilian economy. The first was the United States price support of cotton and acreage limitation programme of the 'thirties, which gave Brazil the opportunity of entering world markets, particularly since the type of cotton it produced competed with American cotton. The second stimulus to cotton production was the low level of coffee prices, which led to the spectacular destruction of coffee described in another part of this study. In 1934-1938, cotton production in Brazil was just over three times the pre-depression level, while in the United States it was 15 per cent lower. For purposes of comparison, however, it is

Table 1

COTTON PRODUCTION IN LATIN AMERICA AND IN OTHER MAJOR PRODUCING AREAS^a

Thousands of tons

Country	1934-1938	1948	1949	1950	1951 ^b
Latin America	621	635	736	824	795
Argentina	60	99	142	110	110
Brazil	389	325	299	341	297
Mexico	69	120	201	254	260
Peru	84	67	74	82	81
Other Latin American countries	19	24	20	37	47
Egypt	400	400	391	388	349
India	1,150	412	477	602	616
Pakistan		176	221	268	290
United States	2,755	3,226	3,497	2,175	3,347
Rest of world ^c	1,724	1,463	1,462	1,869	2,451
Total world	6,650	6,312	6,784	6,126	7,848
Percentage share of Latin America	9.3	10.0	10.8	13.5	10.1

Sources: 1934-1938, 1947, 1948 and 1949: FAO; 1949, 1950 and 1951: International Cotton Advisory Committee, *Cotton*, December 1951.

^a In this and in other tables of this study, except where otherwise specified, individual years refer to crop years beginning 1 August.

^b Preliminary figures.

^c Including rough estimates for China.

Table 2

DEVELOPMENT OF COTTON PRODUCTION IN MAJOR LATIN AMERICAN PRODUCING COUNTRIES

Production in thousands of tons.	Area in thousands of hectares.			Yield in kgs. per hectare.		
	1924-1928	1929-1933	1934-1938	1949	1950	1951
<i>Brazil</i>						
Production	120	135	389	299	341	297
Area	531	807	2,118	2,104	..	..
Yield	230	170	180	140	..	..
<i>Peru</i>						
Production	49	58	84	67	82	81
Area	119	128	171	120	..	..
Yield	410	450	490	560	..	..
<i>Mexico</i>						
Production	53	43	69	201	254	260
Area	179	147	275	549	..	..
Yield	300	290	250	370	..	..
<i>Argentina</i>						
Production	21	35	60	142	110	110
Area	94	144	465 ^a	540 ^a	..	..
Yield	220	240	130	260	..	..

Sources: Pre-war: International Institute of Agriculture: post-war: FAO.

^a Area sown.

more revealing to take figures of the area sown to cotton in the two countries since average yields were falling in Brazil while, for reasons which will be explained below, they were rising in the United States. From such a comparison it appears that, whereas the area sown to cotton in the United States was in 1934-1938 slightly less than 70 per cent of the 1924-1928 level, in Brazil it had increased nearly fourfold.¹

It was, however, the second of the factors mentioned, the dramatic fall in world coffee prices, rather than the decline in United States supplies to the world, which gave the greatest spur to cotton production in Brazil. The depression in the world cotton markets in the late 'twenties had brought a decline of about 50 per cent in the ratio of cotton to coffee prices, but, in the depression, cotton prices were fairly well maintained while coffee prices fell to less than half the former level, with the result that the ratio of cotton to coffee prices improved even beyond the 1924 ratio. This factor in itself provided a strong incentive to develop cotton production at the expense of that of coffee and the change-over was further stimulated by Government measures. Thus, from 1930 onwards, new coffee plantings were restricted and, while returns to coffee planters were even below world market prices because of the great

burden of State taxes and Federal export taxes, cotton production was promoted by special exchange rates for cotton exports, by Federal support credits, technical aid to cotton farmers, duty-free imports of cotton-ginning machinery, and other measures. In addition, imports of foreign cotton textiles were kept low by high tariffs.

Southern Brazil, whose economy was almost wholly dependent on coffee, was affected most by the development in cotton production. Up to the early 'thirties, the old-established cotton-growing districts of the north-east accounted for over 80 per cent of total production, but from then on, despite some rise in output in the north-east, the share of that area in the Brazilian cotton crop was progressively reduced by the rapid rate of expansion in the interior plateau region of the south, mainly in the State of Sao Paulo.

The conditions for cotton production in the two regions are different both as regards the quality of the crop and the possibilities of expanding production. In north-eastern Brazil, where the climate is semi-arid, mainly tree cotton, bearing for five to fifteen years, is grown. Yields in the region fluctuate widely, and the effects of recurrent droughts have been aggravated by deforestation. The quality of the cotton is irregular partly because of the variations in climate, but also because of mixing and crossing with different annual varieties. Expansion is limited by difficulties of transport and by the long-run tendency for labour to emigrate to the southern regions.

In southern Brazil, on the other hand, where the climate is of the humid mesothermal type, the cotton grown is of smaller staple than in the north, but yields do not fluctuate widely although there is always

¹ The relevant figures are shown in the table below:

Cotton Production in the United States			
	Production (Thousands of tons)	Area (Thousands of hectares)	Yield (Kgs. per hectare)
1924-1928	3,258	16,939	190
1929-1933	3,118	15,350	200
1934-1938	2,755	11,493	240

Source: International Institute of Agriculture.

the danger of frosts. The labour situation is easier than in the North. At the time of the great cotton expansion of the 'thirties there was already a large reserve of semi-skilled labour from coffee plantations, but the development of cotton production was aided not only by the transfer of labour from coffee but also by a sizeable flow of immigration consisting largely of Italian and Japanese land workers. From 1935 onwards, immigration was restricted and it is still limited by relatively small and highly selective quotas, though plans are being considered for admission of immigrants on a large scale. Although "good earth" in the south was more abundant than in the north, the ruthless exploitation of the soil resulted in a decline in yields (Table 2). Instead of attempting to maintain the fertility of the areas under cultivation, the cotton growers generally preferred to move to new areas.

The figures shown in Table 2 refer to the whole of Brazil and not only to the south. It is in fact a common feature of both the north and the south that the methods of cotton cultivation are generally primitive and still rely largely on the one-row hoe system. Fertilizer application is very sparse and hence the improvement in yields per hectare does not show the same upward trend as in the United States. The decline in Brazilian yields in the post-war period is due partly to the fact that some of the best land for cotton-growing was transferred to food crops, but the main reason is the careless soil management coupled with insufficient interest in procuring suitable seed and undertaking cultivations at the right season. The decline is most marked in the State of Sao Paulo.

In addition to the decline in yields, there has also been a decline in the area sown to cotton. This is partly the result of the large cotton surpluses which accumulated during the war and which have been disposed of only very gradually; in addition, there was the greater attraction provided by food crops, as well as the increasingly acute labour shortage.

A future expansion of Brazil's cotton production is more likely to be achieved by an increase in yields rather than by a large-scale substitution of cotton for other crops. The substitution of cotton for coffee which was so widespread in the 'thirties was discontinued in the post-war period, and was even replaced by a slight relative increase in the coffee area.

Peru

Peru is the other major Latin American cotton producer whose output is stagnating relatively to pre-war. Peruvian cotton is a high-quality, long-staple product, traditionally marketed in western Europe. In the inter-war period, production expanded rapidly and continuously (Table 2). This development was induced to a great extent by the fall in world prices of cane sugar, which was much more drastic than the fall in prices of cotton.

The post-war stagnation of production is partly due to the decline of sales to Europe during the war and, later, to the dollar shortage. Deprived of their traditional European markets, Peruvian cotton growers came to an agreement in 1941 with the Commodity Credit Corporation for the sale of the cotton crop during the war. The price to be paid by the C.C.C. was to increase in proportion to the reduction in acreage. Furthermore, Peru increased its sales to Latin America, thereby offsetting to some extent the loss of its sales to Europe.

The reduction of the acreage sown to cotton has been effected by Government regulations (abolished in 1947) requiring farmers to devote 20 per cent of their land to food crops, and by an allocation system for fertilizers favouring food crops at the expense of cotton. The increase in the production of guano in the years 1948 to 1950 did not put an end to rationing. The Government monopoly earmarked a certain proportion of "surplus" for sale by auction in Peru or abroad and, since food crops continued to receive 100 per cent of their requirements, only sugar and cotton growers have to purchase auction guano at the much higher price.

There are several projects on hand the ultimate effect of which would be an expansion of cotton production, given favourable market conditions. Some of the projects aim at an increase of the irrigated areas in the cotton belt. While these projects are still at the blueprint stage, an increase in production can be achieved only by reducing the area under food crops in the traditional cotton-producing areas and either increasing food production in other areas or increasing the volume of food imports. Both solutions are likely to strain the balance of payments, since an increase of food production in other areas requires heavy investment in roads, irrigation and improved farm equipment.

Mexico

The record growth of Mexican cotton production and exports is one of the outstanding developments in the country's economy. By 1949/50, Mexican cotton production had expanded to more than three times the 1934-1938 average (Table 2) and it accounted for more than one-quarter of the Latin American crop in that period.

This great increase in production was made possible by two interacting factors: the first was an abundant supply of labour—the 3 per cent rate of population increase in Mexico means that there is a very heavy pressure on cultivated land—and the second was the introduction of a large-scale public irrigation programme between 1947 and 1952. In Mexico, cotton is grown largely on irrigated land, and the expansion of production is dependent upon water supply. The type of cotton grown is similar, if slightly inferior, to the United States upland type, although there are variations according to regions.

In the Laguna area, the principal cotton-growing region, the predominant species has a fibre one inch long, but its length is gradually being improved.

The average yield per hectare is around 300 kgs. in Mexico, whereas in Egypt and Peru it is between 500 and 600 kgs. However, average yields compare favourably with those of the United States (where a large proportion of cotton is grown on non-irrigated land). With the extension and improvement of irrigation facilities, the increased use of improved seed and better methods of insect control, a substantial increase in yields has been achieved in the past few years.

The possibilities of expanding production differ according to regions. In La Laguna and Mexicali a further expansion of output will depend on the relative attractiveness of cotton compared with wheat, the cultivation of which was until recently concentrated in the central part of the high plateau where climatic conditions are unfavourable. With the development of irrigation in other regions there is a tendency for wheat cultivation to move northwards while cotton growing is expanded.

Argentina

The expansion of cotton production in Argentina, particularly in the years of the world depression, was the result of the Government's desire to create greater diversification in agriculture by promoting production of industrial crops, both for export and for the supply of local industries. The Government distributed free seeds and employed specialists to improve the methods of cultivation and handling. Subsidies were granted to farmers, and large numbers of the unemployed were sent to the cotton region to increase the labour supply.

Government assistance to cotton-growers continued after the outbreak of the war. The labour shortage is being obviated by greater mechanization. Other features of the programme for expanding cotton production are guaranteed floor prices, the continued preparation and distribution of improved seeds, experimental work on insect control and the construction of official gins and warehouses in the production areas.

Table 3
CONSUMPTION AND EXPORTS OF RAW COTTON
Thousands of tons and percentages

Period ^a	BRAZIL			PERU		
	Mill consumption	Exports	Export as per cent of production	Mill consumption	Exports	Exports as per cent of production
1924-1928	94 ^b	14 ^b	13	..	..	..
1929-1933	77	30	28	..	..	..
1934-1938	148	211	59	7	77	92
1948	179	207	54	15	56	79
1949	179	129	42	12	49	80
1950	187	150	45	12	68	85

Period ^a	MEXICO			ARGENTINA		
	Mill consumption	Exports	Exports as per cent of production	Mill consumption	Exports	Exports as per cent of production
1924-1928	35 ^c	21 ^c	38	..	..	..
1929-1933	24	7	23	7 ^d	25 ^d	78
1934-1938	51	28	35	4	29	88
1948	67	50	43	87	6	6
1949	62	116	65	87	113	57
1950	68	163	71	96	55	36

Sources: Pre-war: Brazil, U.S. Department of Agriculture. Peru, Camara Algodonera del Peru, *Algodon*, Vol. XI, No. 121, October 1950. Mexico, U.S. Department of Agriculture, *Foreign Trade Circular*, "Recent Trends in Mexican Cotton", January 1949. Argentina, Statement of the Argentine Delegation in the *Proceedings, Seventh Plenary Meeting of the International Cotton Advisory Committee*, April 1948.

Post-war: All countries: International Cotton Advisory Committee, *Quarterly Bulletin, Cotton*.

^a Individual years refer to crop years, beginning 1 August.

^b 1927.

^c 1925-1928.

^d 1930-1933.

Table 4

AVAILABLE SUPPLIES OF COTTON TEXTILES IN LATIN AMERICA

Thousands of tons; raw cotton equivalent

	Total Latin America				Four major producers				Other Latin American countries			
	1938	1948	1949	1950	1938	1948	1949	1950	1938	1948	1949	1950
Production	269.0	415.0	421.8	425.7	231.0	338.0	348.9	351.0	38.0	77.0	72.9	74.7
Imports ^a	71.2	34.9	28.3	28.7	33.7	10.8	7.4	5.7	37.5	24.1	20.9	23.0
Exports ^a	0.2	12.0	9.0	8.0	0.2	11.2	8.7	7.4	—	0.8	0.3	0.6
Available supplies	340.0	437.9	441.1	446.4	264.5	337.6	347.6	349.3	75.5	100.3	93.5	97.1
Production as percentage of supplies	79	95	96	96	87	100	100	101	50	77	77	77

Source: Based on data in "Per Caput Fibre Consumption Levels", *FAO Commodity Series*, Bulletin No. 21, December 1951.

^a Including trade between Latin American countries.

Production, Exports and Domestic Consumption

The preceding description of cotton production in Latin America has shown that in its early stages the increase in production was stimulated mainly by a desire for diversification of exports. Another important factor was the improvement, during the depression, of the cotton price in relation to the coffee price. In Brazil, the share of cotton in total exports rose from a negligible proportion to about 18 per cent in 1938, while the share of coffee exports fell from about 70 to 45 per cent. In the post-war period, the relative importance of cotton exports has fallen back to some 10 per cent, partly because of the fall in the volume of exports, but also because of the rise in the price of coffee. The share of cotton in the total exports of Peru is higher than before the war, but it is in Mexico that the importance of cotton as an export crop has risen most. While in 1938 the share of cotton was a mere 2.7 per cent of total exports, it was over 10 per cent in the years 1948 to 1950.

Table 3 shows exports in relation to mill consumption for the major Latin American producers. The post-war average volume of exports for Brazil, Argentina and Peru is distinctly lower than before the war, although exports have grown in importance in relation to local mill consumption in the year 1950/51, when Latin American cotton was in particularly great demand owing to the shortage of American cotton.

The remarkable expansion of mill consumption has brought Latin America very near to self-sufficiency in cotton textiles, as can be seen from

Table 4.¹ It appears that there is a marked difference between developments in the major producing countries and in the rest of Latin America. In the former, imports of cotton textiles have been cut to very small amounts and these countries now have sizeable exports. The other countries still have to provide for 20 per cent of their needs from outside sources. The standard of cotton consumption per head in these countries is very low in relation to Europe and the United States (Table 5).

Table 5

PER CAPITA CONSUMPTION OF COTTON TEXTILES

Kgs. per year

	1938	1949-1950 (Average)
Latin America	2.8	2.9
of which :		
Major producers ^a	3.3	3.5
Others	1.8	1.9
Europe	3.7	4.0
North America	9.5	11.9

Source: Based on data in "Per Caput Fibre Consumption Levels" *FAO Commodity Series*, Bulletin No. 21, December 1951.

^a Argentina, Brazil, Mexico and Peru.

¹ This and the following table should be taken only as representing very broad orders of magnitude, since the fibre equivalent of the final consumption of textile products country by country and year by year can at best be represented by a series of approximations.

Table 6

MILL CONSUMPTION OF RAW COTTON IN SIX EUROPEAN COUNTRIES

Thousands of tons and index numbers

Country	1924-1928	1929-1933	1934-1938	1950-1951	<i>Index numbers 1950/51 1934-1938 = 100</i>
United Kingdom	694	532	605	470	78
France	263	242	255	266	104
Italy	214	189	161	217	135
Western Germany ^a	240	222	217	231	106
Belgium	77	70	84	105	125
Netherlands	35	39	53	66	125
Total of countries listed	1,523	1,294	1,375	1,355	99

Source: International Cotton Advisory Committee.

^a The pre-war figures have been calculated by assuming that 79 per cent of the cotton imported by the whole of Germany was consumed in the western

zones. (See Table 10 in "The Regional Interdependence of Germany", *Economic Bulletin for Europe*, Vol. 1, No. 3.)

The disparity between textile consumption in Latin America and in the other regions is even greater than appears from the table because the relative consumption levels in Latin America are still lower for fibres other than cotton. There is great scope for an increase in Latin American *per capita* consumption of cotton textiles and the exportable surplus of raw cotton would thereby be correspondingly reduced, since an expansion of consumption is unlikely to come about through greater imports of textile manufactures.

Cotton Consumption in Europe

Six European countries—the United Kingdom, France, Italy, Belgium, the Netherlands and western Germany—account for some 75 per cent of Europe's total consumption of raw cotton. The movement of consumption in these countries is given in Table 6.

The United Kingdom consumes at present some 35 per cent of the total imports of these countries. The decline in its consumption of cotton relatively to 1934-1938 and, still more, to 1924-1928, was part of a long-term trend reflecting the fall in its exports of cotton manufactures. Such exports accounted for about 80 per cent of United Kingdom consumption of raw cotton before the first World War; in 1950 they accounted for only 20 per cent. Among other countries, the share of exports in total consumption of raw cotton has declined considerably in France. For five major exporting countries as a whole, exports in 1950 accounted for no more than 12 per cent against 24 per cent in 1938 (Table 7). Both the growing self-sufficiency in cotton manufactures in many overseas countries, the vigorous competition from India and Japan and the continued competition from textiles of artificial fibre point towards a further decline in Europe's sales of cotton goods to overseas.

It remains to be considered whether consumption of cotton textiles within Europe is likely to increase. The level of consumption differs widely as between European countries. In the United Kingdom, annual consumption per head in the years 1948 to 1950 was 6.5 kgs. The corresponding figures were 4.9 kgs. for France, 2.9 kgs. for Italy and 2.7 kgs. for Greece. Although the possibilities of expanding consumption in the higher-income countries may be slight, there would appear to be some possibilities for the lower-income countries to increase their consumption of textile manufactures. But even if it were assumed that consumption in those countries which consume less than 3 kgs. per head were to increase to 3.5 kgs. per head, while consumption in the other countries remained unchanged, the increase in total European consumption would be no more than 5 per cent. This would appear to be the prospect under rather optimistic assumptions, both as to the increase in income levels in the poorer European countries and as to the prospects of further substitution of artificial textiles for cotton. This substitution has greatly increased since the war. The price of rayon has become very competitive with the price of cotton: whereas in 1938/39, prices of rayon were twice the level of cotton prices, in 1952 they were only slightly above.

These considerations combine to suggest that *per capita* cotton consumption in Europe will at best be maintained around its present levels. In the next section the part which imports from Latin America can play in this restricted market will be examined.

Cotton Exports from Latin America to Europe

The volume of Latin American cotton exports in 1950/51 was 13 per cent higher than in 1934-1938, while the total volume of world exports was 7 per cent lower. The great increase in Latin American exports

Table 7

COTTON CONSUMPTION AND EXPORTS IN FIVE EUROPEAN COUNTRIES

Thousands of tons (raw cotton content) and index numbers

Country	Mill consumption of raw cotton		Net exports (-) or imports (+) of cotton manufactures ^a		Final domestic consumption of cotton ^b		Net exports (-) or imports (+) of cotton manufactures as percentage of mill consumption	
	1938	1950	1938	1950	1938	1950	1938	1950
United Kingdom	569.0	453.5	-190.0	- 84.4	379.0	369.1	-33	-19
France	249.0	243.9	- 52.7	- 25.3	196.3	218.6	-21	-10
Belgium	79.0	86.9	- 27.3	- 33.6	51.7	53.3	-35	-39
Netherlands	56.0	60.5	- 7.9	+ 12.6	48.1	73.1	-14	+20
Western Germany	183.3 ^c	189.3	+ 1.7 ^c	+ 3.4	185.0	192.7	+ 0.9	+ 1.7
Total of countries listed	1,136.3	1,034.1	-276.2	-127.3	860.1	906.8	-24	-12

Source: Based on data in "Per Caput Fibre Consumption Levels", *FAO Commodity Series*, Bulletin No. 21, December 1951.

^a Yarns and cloth.

^b Including raw cotton content of exports of apparel.

^c Calculated on the basis of spinning and weaving capacity in western Germany. See footnote to Table 6.

was due, as already mentioned, to the expansion of Mexico's exports to about eight times and of Argentina's exports to twice their pre-war level. In contrast with the exports of these two countries, the exports of the two other Latin American cotton producers, Brazil and Peru, declined by some 30 and 10 per cent respectively.

Europe remains an important market for all four Latin American exporters, although there has been a slight shift towards other destinations in the exports of Peru and Brazil. In 1950/51, Europe ¹ accounted for one-half of total cotton exports from Latin America (Table 8).

Table 8

SHARE OF EUROPE ^a IN TOTAL EXPORTS OF COTTON FROM FOUR MAJOR LATIN AMERICAN PRODUCERS

Percentages

Country	1934-1938	1949/50	1950/51
Brazil	62	57	55
Peru	80	41	65
Mexico ^b	34	13	37
Argentina	17	48	63
Total of countries listed	60	35	50

^a Belgium, France, western Germany, Italy, the Netherlands and the United Kingdom. The 1934-1938 figures include exports to the whole of Germany.

^b Owing to trans-shipment through the United States, Mexico's exports to destinations other than the United States are under-estimated.

The relative importance of Latin America as a supplier to Europe is, of course, much smaller,

¹ In this context and elsewhere in this section the word "Europe" refers to the six major importing countries.

amounting to 18 per cent in 1950/51, which in this respect was a record year.

The post-war changes in the geographical pattern of Europe's cotton imports are the joint effect of export availabilities, price considerations and the foreign exchange situation of various countries. It appears from Table 9 that there has been a pronounced shift in the United Kingdom and Belgium and to a smaller extent in Italy, towards Latin American cotton. This was due to some extent to the fact that Egyptian cotton lost its importance in total European consumption, capacity for longer staple having become more limited. In 1949/50—the first post-war year shown in the table—the share of United States cotton was much higher than in 1934-1938 (except for the United Kingdom). This was due not only to the preference which importers have for the purchase of United States cotton, which allows buying in great bulk and therefore helps maintain an even standard of production, but also to the fact that in 1949/50, as in 1948/49, when cotton was declared in surplus for the purpose of trade under the E.R.P., European countries had a strong incentive to buy United States cotton.² It will be seen that in 1949/50 the share of the United States in the total cotton imports of western Germany, Italy and Japan (all of which were largely dependent on dollar aid for their foreign exchange supplies) was indeed very great.

The figures for 1950/51, however, show a considerable decline in the share of imports from the United States and an increase in the share of the Latin American producers. For instance, the share of Latin America in Germany's imports, after

² E.R.P. dollars were not available for "off-shore" purchases of cotton.

Table 9

SHARE OF MAJOR PRODUCERS IN COTTON IMPORTS OF SELECTED EUROPEAN COUNTRIES AND JAPAN

Percentages

Country	1934-1938				1949/50				1950/51			
	Latin America ^a	United States	Egypt	Rest of world	Latin America ^a	United States	Egypt	Rest of world	Latin America ^a	United States	Egypt	Rest of world
United Kingdom	14	41	20	25	21	32	17	30	30	15	21	34
France	7	53	18	22	2	57	17	24	13	48	9	30
Western Germany ^b	28	33	15	24	2	75	—	23	16	53	—	31
Italy	3	62	17	18	4	79	12	5	9	59	17	15
Belgium-Luxembourg	8	28	3	61	16	54	3	27	24	33	5	38
Netherlands	11	47	2	40	1	75	4	20	9	65	8	18
Total of countries listed	14	43	17	26	9	57	11	23	18	39	13	30
Japan	8	42	5	45	2	86	3	9	19	51	3	27
Total world	12	41	14	33	13	48	14	25	16	34	13	37

Sources: 1934-1938: National trade statistics; 1949/50 and 1950/51: International Cotton Advisory Committee, *Cotton*, December 1951.

^a Argentina, Brazil, Mexico and Peru.

^b Pre-war figures refer to the whole of Germany.

having declined steeply from 1934-1938 to 1949/50, increased very considerably in 1950/51. In that year, cotton acreage had been reduced in the United States and the decline in production in the world's greatest producing centre coincided with the wave of speculative buying which followed the outbreak of the war in Korea; the result was that both the prices and the volume of Latin American cotton exports rose to high levels.

The situation in the following year was by no means as favourable. Once the speculative buying had ceased and Europe's textile industries were faced with a severe crisis underlining the trend mentioned in the previous section, the inflated prices of Latin American cotton fell drastically, not only in absolute terms but also in relation to United States prices (Table 10).

It would appear, however, that the relative fall in Latin American cotton prices ¹ in 1951/52 has been insufficient to offset the effect of renewed United States competition. In 1951/52, exports from the United States were running at a rate 50 per cent higher than in the preceding year. The increase in United States exports was due in no small measure to the financial help provided by the United States Government. France, Germany and Italy, which had postponed purchases during the early part of the season partly because of payment difficulties and partly because of the accumulation of stocks during the recent textile recession, obtained dollar funds for the purchase of United States cotton.

¹ The fall in the cotton producers' proceeds from exports is smaller than the fall in export prices, since export taxes have generally been lowered.

Table 10

COTTON PRICES: 1949 TO 1952

Percentages, U.S. cents per lb and index numbers

	Percentage of price of U.S. middling				Price in U.S. cents	Index numbers (March 1951 = 100)
	1949/50	1950/51	March 1951	March 1952	March 1952	March 1952
U.S. middling	100	100	100	100	40.10	88
Mexican, Torreon	90	124	166	83	33.60	45
Brazil, Sao Paolo	104	141	163	120	47.90	65
Peru, Tangois . . . . .	..	111	..	107	42.94	71 ^a
Alexandria, Ashnoui	154	174	197	142	57.00	64

Source: Based on data in *Cotton*, March 1952, and *Monthly Review of the World Situation*, March 1952, both published by the International Cotton Advisory Committee.

^a March 1952 as percentage of 1950/51.

Appendix IV

LINSEED AND LINSEED OIL

Linseed is grown for its fibre, which produces a high-quality textile, and for its seed, which produces an oil with special drying qualities and a residual cake which is an excellent cattle feed. European farmers cultivate two varieties: in one case only the fibre is used; in the other it is a dual-purpose plant yielding both fibre and seed. Outside Europe the practice is to cultivate the varieties which produce an abundance of seed and the straw or fibre is not utilized. By far the most important use of linseed oil is for paints, but substantial quantities are also used for linoleum and oilcloth. Linseed oil is the major oil used in these products but soya bean, dehydrated castor, and tung oils are also used. Before the war, perilla oil from Manchuria-grown perilla seed was an important substitute for linseed oil, but perilla seed and oil have not been available in world markets since the war. Linseed oil has been relatively high-priced since the war and this has encouraged the development of alternative materials, notably modified soya-bean oil, alkyd resins, other synthetic resins, and rubber-based compounds.

The Inter-war Period

World Production and Exports

The importance of Argentina in world production and trade in linseed and linseed oil can be seen from Table 1. During the inter-war period, the share of Argentina was maintained at about 50 per cent of world production¹ as against less than 30 per cent before the first World War. Among the other producers, the trend was steadily rising in the U.S.S.R. and falling in the United States and, particularly, Canada. In all three countries, exports, which had been rather important before the war, almost completely disappeared, and the share of Argentina (and Uruguay) thereby increased to some 85 per cent of world exports, as against 50 per cent before 1914. European linseed production, which accounts for only 5 to 7 per cent of world output, increased in the late 'thirties, especially in Germany,

¹ Also including the small amount of exports from Uruguay.

Table 1

PRODUCTION, EXPORTS AND CONSUMPTION OF LINSEED AND LINSEED OIL

Thousands of tons: oil equivalent

	1909-1913	1924-1928	1929-1933	1934-1938	1949	1950	1951	1952
<i>Production</i>								
World total	940	1,265	1,185	1,173	974 ^a	868 ^a	779 ^a	..
of which:								
Argentina	260	605	575	562	223	184	100	..
United States	155	195	115	69	368	337	283	257
Canada	100	50	20	11	19	39	83	112
India	175	140	135	143	142 ^b	138	121	104
U.S.S.R.	160	185	250	279	..	..	..	..
<i>Exports</i>								
World total	551	679	659	642	260 ^c	418 ^c	462 ^c	..
of which to Europe ^d	362	415	430	415	249	309	371	..
Argentina and Uruguay	222	500	525	538	110	277	369	..
<i>Consumption</i>								
Europe ^a	411	460	477	465	338	388	457 ^e	..

Sources: *Oils and Fats: Production and International Trade*, IIA, Rome, 1939. *Yearbook of Food and Agricultural Statistics*, 1951, "Production", FAO. *Agricultural Economics and Statistics*, FAO, June 1952, and data supplied directly by FAO.

^a Excluding the U.S.S.R.

^b Excluding Pakistan.

^c The total of exports from Argentina, Canada, Ethiopia, India, Mexico, French North Africa, Turkey, the United States and Uruguay. This comes very close to total world exports.

^d European net imports.

^e Estimate.

where it was encouraged by Government intervention.

By far the larger part of the increase in exports of linseed and linseed oil was accounted for by imports into North America, while imports into Europe increased only by one-fifth. In both Germany, and the United Kingdom, net imports in the late 'thirties were lower than before the first World War.

Consumption

No statistical data are available to show actual consumption from year to year, but the fluctuations are probably not very great. By far the largest part of the consumption of linseed oil is accounted for by the building industries and of this again the major part is for maintenance rather than for new houses. The stability of the consumption of linseed oils in the face of cyclical movements seems to be confirmed by the figures in Table I, which show that the consumption of linseed oil did not decline during the great depression of the 'thirties. In a number of countries, consumption in those years was even appreciably higher than in the preceding five-year period.

Post-war Changes in Production and Trade

World production of linseed (excluding the U.S.S.R.) amounted to some 900,000 tons in 1951, or roughly 5 per cent above pre-war. This is the joint result of a great expansion of production in the United States and Canada and a drastic decline in output in Argentina. Output in India is roughly at pre-war levels, and production in the U.S.S.R. is reported to have risen sharply, exceeding the 1940 level by 40 to 50 per cent in 1951. Some minor producers in Europe and Africa have expanded production considerably.

Equally important changes have taken place in the pattern of trade in linseed and linseed oil. During the years 1946 to 1949, average annual exports from Argentina were less than one-quarter of the 1934-1938 average and this was a major reason for the very low level of European consumption during those years. During the following two years, Argentine exports recovered substantially after the Government had lifted the ban on exports of linseed (in force since 1946) and adopted a price policy encouraging increased sales, but Argentine exports in 1951 still amounted to only about half the pre-war figure. At the same time the composition of Argentine exports has changed: formerly, practically all exports were in the form of linseed. In 1947 to 1949, exports were exclusively in the form of oil. In the following two years, 1950 and 1951, about one-fourth (in terms of oil content) was exported in the form of linseed.

At the same time, the United States, with the increase in its production, returned once more to the position of a net exporter which it had held before the first World War. A similar development took place in Canada. Together, the United States and Canada accounted for some 30 per cent of world exports in the years 1948 to 1950.

Prospects

Production and Trade

The prospects for Argentine production and exports of linseed and linseed oil depend mainly on economic policy in Argentina itself and on the future development in United States production and consumption. In comparison with these factors, the possible development of export surpluses in other overseas countries (mainly India) is probably less important, and as for the level of demand in Europe it seems unlikely that it will undergo important changes.

The very low level of Argentine linseed production after the war is to a large degree the result of the policy of the Government, which strongly emphasized the industrial development of the country. This had particularly severe effects on labour-intensive crops such as linseed. Unfavourable weather in some post-war years has contributed further to the decline of output. After the recent serious crisis of the Argentine economy, resulting from the dramatic decline in production for exports, it is likely that more attention will be given to the development of agricultural production. It was recently announced that the development programme for Argentina's economy had reached its second stage, where agricultural output and exports are to be strengthened. However, in order to raise exports of linseed and linseed oil to anything like the pre-war level, production will have to be expanded considerably beyond that level, since home consumption has been increasing with the industrialization of the country.

Early in 1952, the Argentine Ministry of Agriculture announced a plan for increasing the area under linseed to 1.6 million ha., an area nearly two-and-a-half times that of 1951, although less than 60 per cent of what it was before the war. However, the price policy for the 1952 crop appears to have been inappropriate for attaining this target and actual sowings failed to increase significantly over the 1951 area of 650,000 ha.

In the United States, production of linseed will most probably be stabilized around the level required to provide enough oil for domestic consumption. The guaranteed price to producers is \$3.77 per bushel for 1952, which is not much above the price actually paid in 1949 or 1951. Armaments production may, to some extent, stimulate the consumption of linseed oil and there may also be a reversal of the tendency to substitute other oils for linseed oils in United

States drying industries, which was rather pronounced in the first post-war years, when prices of linseed oil were very high. Thus, the exportable surplus is not likely to increase over the level of the last years, and it may even decline.

Consumption of linseed in western Europe remains well below pre-war levels, as already mentioned. If pre-war *per capita* consumption were to be reached within the next few years, 500,000 tons of linseed oil would be needed, or some 50 per cent more than was consumed in 1950. It is unlikely that a further expansion of European production

will contribute much to this increase. On the contrary, there are already signs in a number of countries of a stagnation or decline in the cultivation of linseed.

In conclusion, there would seem to be a secure market for increased imports, at reasonable prices, of linseed oil into Europe, adequate to absorb even a considerable increase of production in Argentina. Whether such an increase will actually take place in the years to come depends predominantly upon the agricultural price policy adopted by the Argentine Government.

Appendix V

WOOL

Wool is by far the most important commodity exported from Uruguay and also ranks among the main items of Argentine exports. For the years 1947 to 1950, wool made up 9 per cent of Argentine and 45 per cent of Uruguayan exports. The corresponding proportions for 1950, when wool prices were rising sharply, were 16 per cent and 60 per cent respectively.

Total South American wool exports during the last four seasons have averaged 136,000 tons, clean basis,¹ and have accounted for about 20 per cent

¹ Throughout this study, unless otherwise specified, quantity figures indicate weight on a "clean basis". It should be noted, in particular, that the figures given in Table 1 are in actual weight. The shrinkage in the weight of wool as a result of scouring varies between 30 and 65 per cent. Figures on a clean basis are more approximate than figures on a greasy or actual weight basis but are more significant for the purpose of comparisons between production, consumption and trade of different countries, grades etc.

of the total volume of world trade in wool, of which 12 per cent from Argentina, 6 per cent from Uruguay and 1 per cent from Chile, Brazil, the Falkland Islands and Peru (Table 1). Latin America's share in apparel wool separately has been about 15 per cent (against 80 per cent for the British Dominions). In carpet wool, Argentina's share is as much as one-third.

Where available, separate conversion factors have been used for each grade of wool for each region and, wherever possible, also for each season. The following are the standard conversion factors from greasy to clean for over-all clips in the post-war period:

Argentina . . .	52 per cent	Falkland Islands	68 per cent
Uruguay . . .	62 "	Australia . . .	57 "
Chile	59 "	New Zealand . .	68 "
Brazil	63 "	South Africa . .	47 "

The average clean yield for exports is 1½ to 2 per cent higher; in the case of Argentina it may, in view of the marked divergence between the quality composition of the clip and of exports, be as much as 5 per cent higher.

Table 1

WORLD TRADE IN WOOL

Thousands of tons, actual weight

Exporting country and period	Importing country	United Kingdom	France, Germany, Italy and Belgium	Other European countries including the U.S.S.R.	TOTAL EUROPE	United States	Rest of world	TOTAL WORLD
Dominions ^a								
1934-1938		240	219	39	498	20	87	605
1947/48-1950/51		270	297	73	640	91	59	790
Latin America								
1934-1938		54	89	10	153	26	13	192
1947/48-1950/51		7	48	18	74	132	8	214
of which:								
Argentina								
1934-1938		36	59	5	100	21	10	131
1947/48-1950/51		3	34	11	48	84	5	137
Uruguay								
1934-1938		9	20	5	35	5	3	43
1947/48-1950/51		—	13	6	19	41	2	63
Rest of world								
1934-1938		45	60	25	130	30	10	170
1947/48-1950/51		25	20	20	65	35	—	100
Total world								
1934-1938		339	368	74	781	76	110	967
1947/48-1950/51		302	365	111	779	258	67	1,104

Sources: Tables 1 to 4, FAO.

^a Including re-exports from the United Kingdom and sales to British mills at United Kingdom auctions.

Table 2
EUROPEAN AND WORLD IMPORTS AND CONSUMPTION OF WOOL
Thousands of tons, clean basis

Country	Imports		Consumption	
	1934-1938	1947-1951	1934-1938	1947-1951
United Kingdom	165 ^a	180 ^b	197	209
France	84	95	105	111
Western Germany	71 ^c	30	82 ^c	38
Italy	25	45	26	55
Belgium	24 ^a	28 ^a	27	30
U.S.S.R.	17	20	70	90
Other European countries	55	82	90	140
Total Europe ^d	450	490	597	673
United States	61	180	150	277
Japan	49	13	49	15
Rest of world	18	30	139	135
Total world	580	715	935	1,100
Europe as percentage of world total	78	69	64	61

^a Retained imports.

^b Excluding shipments of stock wool from the Dominion subsidiaries to Joint Organization U.K. and imports of consigned wool but including sales in the United Kingdom of J.O. and consigned wool to British mills.

^c Whole of pre-war Germany.

^d Including European wool and retained imports of wool on skins (not shown separately for countries).

The United States and five European countries—the United Kingdom, France, Germany, Italy and Belgium—together account for over 80 per cent of world wool imports; the United States and United Kingdom alone account for 50 per cent of the total. As a result of increased consumption of both apparel and carpet wool and smaller domestic clip as compared with pre-war, the United States' share of world imports has risen from 10 per cent before the war to about one-quarter, whilst the European share has dropped from about 80 to about 70 per cent (Tables 1 and 2). For carpet wool separately, the United States accounts for 70 per cent of world imports and Europe for virtually all the remaining 30 per cent.

Factors affecting Trade

Latin American Production, Consumption and Export Surplus

Although there have been setbacks in the post-war period, wool production in both Argentina and Uruguay is now tending towards stability at a level considerably higher than in pre-war years (Table 3). In total, the 1951/52 Latin American clip is estimated on a clean basis at 190,000 tons—that is to say, equivalent to 40 per cent of European import requirements in the post-war period. About one-fifth of the clip is of 60's quality and finer (merino and Montevideo primas), nearly 40 per cent fine crossbred, 15 per cent medium crossbred, over one-fifth coarse crossbred and Cordoba wool, and the

rest unimproved wool of little commercial importance. Most of the wool is produced in Argentina (55 per cent) and Uruguay (25 per cent), with an important commercial production also in Rio Grande do Sul (Brazil) and Magallanes (Chile).

Consumption by local mills has increased considerably in the last twenty years and, as long as the Latin American market remains virtually closed to imports of wool textiles, it is possible to reckon with a domestic consumption of 50,000 to 60,000 tons a year on a clean basis.

Table 3

WOOL PRODUCTION IN ARGENTINA AND URUGUAY

Thousands of tons, greasy basis

Season or seasonal average	Argentina	Uruguay
1909/10-1912/13	159	65
1913/14-1917/18	150	38
1918/19-1922/23	158	49
1923/24-1927/28	142	53
1928/29-1932/33	157	59
1933/34-1937/38	165	52
1938/39-1942/43	211	58
1943/44-1947/48	231	73
1948/49	195	65
1949/50	192	74
1950/51	195	75
1951/52	190	77

Table 4

WOOL EXPORTS FROM LATIN AMERICAN COUNTRIES

Thousands of tons, greasy basis

Period	Argentina	Uruguay	Chile	Other Latin American countries	TOTAL
1909-1913	149	65	..	..	..
1924-1928	137	53	..	..	..
1934-1938	143	45	11	8	207
1947-1950	174	74	7	7	262
1947	207	80	6	7	300
1948	208	65	8	9	290
1949	116	53	6	5	180
1950	166	97	8	6	277

NOTE. — Includes only exports of shorn and pulled wool. In addition, Argentina, Uruguay and Chile export important quantities of woolled sheep-

skins, the chief market for which is the felt-mongering industry at Mazamet in France. Exports to other Latin American countries are included.

Since industrial consumption is almost entirely confined to apparel wool and heavily concentrated on merinos and fine crossbreds, the quality composition of the exportable surplus (from current production) is rather different from that of the overall clip. On a rough estimate, it may be said that 60's and finer (including Montevideo primas) account for no more than 15 per cent of the exportable surplus, on a clean basis (compared with nearly 60 per cent in the case of British Dominion wools), fine crossbreds for less than 40 per cent, medium crossbreds for about 20 per cent. The remainder is largely carpet wool.

Fluctuations in the volume of exports from the different Latin American countries in the post-war period (Table 4) have been considerable, reflecting as they do the nature of post-war outlets and artificial conditions of trade.

Distribution of Latin American Exports

The most important influence on the pattern of the Latin American export trade in wool in the post-war period has been the fact that the United States has not only accounted for a far larger share of world imports than before the war, but has also concentrated its purchases largely in Latin America. United States purchases have accounted for more than 60 per cent of Latin American exports and European purchases for only one-third (Table 1).

The United States demand for Latin American wool is by no means homogeneous, but falls broadly into two distinct classes: the demand for apparel wool (in the first place for fully skirted Montevideo fleece wool and to a lesser extent for Argentine wool, and to some extent also for Punta, Brazilian and at times for Peruvian wool) and the demand for carpet wool—i.e., for Provincia coarse crossbreds and Cordoba wool. Whilst the United States has been

taking virtually all the carpet wool exported from Argentina, in the case of apparel wool, United States purchases currently absorb only about half of total exports from Latin America.

European Consumption and Imports

Wool consumption in Europe has been running at a rate little short of 700,000 tons a year in the post-war period and has accounted for 60 per cent of the world total (Table 2). On a rough estimate it may be said that 60 per cent of European wool consumption is in top-making (mostly in the United Kingdom, France, Italy and Belgium) and 40 per cent in woollen spinning, including perhaps 10 per cent for the manufacture of carpets, principally in the United Kingdom.

The preponderance of the United States in Latin American export trade in wool in the post-war period is reflected in the reduced dependence of Europe on Latin American supplies. Whilst before the war (1934-1938) nearly one-fifth of the wool imported into the five main European importing countries came from Latin America, in the years 1947/48 to 1950/51 the proportion was only 10 per cent. At the same time, the share of Dominion wool in exports to these countries had risen to 80 per cent (Table 1). This marked change in the European import pattern is attributable also to the greater availability of Dominion wool in the post-war period, and payments difficulties encountered notably by the United Kingdom and Italy and the lower level of German purchases.

Since Latin American wools are generally of shorter staple than Dominion wools of comparable qualities, the demand for Latin American combing wools comes largely from continental mills equipped with French combs. The British demand is more for carpet wool and for certain speciality wools from the

Provincia and Punta clips. The largest European markets for Latin American wool are France (also the main outlet for wool on skins), Belgium (particularly for carbonizing types), western Germany and Italy.

In relation to the total requirements of the importing country, however, Latin American wools, notably clothing wools, find particularly important markets in the Netherlands, Sweden and Switzerland. In contrast to the main importing countries, the import demand in some of the minor European importing countries is mainly for scoured wool. About 30 per cent of both Argentine and Uruguayan exports (on a greasy basis) consist of scoured wool.

Commercial Policies in Argentina and Uruguay

Argentina imposed a licensing system on wool exports at the beginning of the 1948/49 season, with a view to ensuring supplies for the local industry. In fact, local mills have, in the post-war period, generally been paying higher prices for southern territory wools than prices ruling for comparable types in the world market, so that difficulties in securing their requirements in the event of pressing overseas demand have never arisen for the mills. Export licensing was, however, used from April 1951 onwards, to prevent the shipment of wool, except at prices rather above those prevailing in the world market, with the result that exports were virtually at a standstill in the second half of the 1950/51 season and throughout most of the 1951/52 season. Trade in sheepskins was taken over by the Government trading corporation (I.A.P.I.) in September 1949.

Following the devaluation of sterling, the preferential exchange rate of 4.83 pesos to the dollar (instead of the basic rate of 3.36 pesos) was made applicable to wool exports. In August 1950, the preferential exchange rate for wool was further increased to 5 pesos. Exports of wool tops, on the other hand, enjoy the extremely favourable rate of 7.5 pesos to the dollar. An effective rate for wool exports of 6.25 pesos to the dollar (representing a devaluation of 20 per cent) was re-introduced as a temporary measure in July 1952.

With a view to maximizing dollar earnings, Argentine wool exporters agreed in 1948 with the Government to accept only dollars in payment for wool exports. In practice it has been found necessary to negotiate trade or payments agreements with practically every country interested in Argentine wool, and the payments difficulties have severely restricted purchases of Argentine wool by the United Kingdom, Italy and Czechoslovakia.

In contrast to the other main wool-exporting countries, Uruguay did not devalue in 1949. Until recently, wool could be exported from Uruguay only against payment in dollars, except in the case of

countries such as France, Belgium and the Netherlands, which had bilateral agreements with Uruguay. However, wool can now also be exported against payment in inconvertible currencies with the prior approval of the Central Bank.

Prospects

Production in Latin America

The largest fluctuations in sheep numbers are likely to occur on the Argentine Pampas, in response to movements in price and cost relationships between sheep and cattle products, as well as between pastoral and agricultural products generally. The long-term trend in sheep numbers in this area is, however, downwards.

In Uruguay, the decisive factor is the relation between wool and meat prices. For the last few seasons, this relationship has been so strongly in favour of wool that sheep numbers are probably at the maximum that is technically possible under present production conditions.

In the southern territories of Argentina and Chile, where the long-term trend has been upward, the sheep population is limited only by the carrying capacity of the land, there being little competition for land use by other enterprises. Except for the territory of Aysen (Chile), these areas would appear to be fully stocked.

Southern Brazil, on the other hand, still offers considerable opportunities for an expansion in wool production, both by an increase in sheep numbers and by raising the average cut per head. Brazilian wool has so far found only a limited and spasmodic outlet on the European market, but there would appear to be no technical obstacle to its wider use in the European wool textile industry.

In the longer run, there is considerable room for improvement in the quality and style of the wool clip in the upland regions of Latin America—e.g., in Peru and Bolivia. It should be noted that Mexico has initiated an ambitious development programme for wool production. Largely for technical reasons, Latin America is not likely to increase appreciably its production of merino wool, but some substitution between breeds producing wool of crossbred quality, in response to changes in the relative profitability of wool, mutton and lamb, is continuously taking place. Over the past quarter of a century there has been an improvement in the average quality of the crossbred clip.

Availability of Latin American Wool for Europe

Apart from the possibilities of raising the level of production, the availability of Latin American wool for Europe is affected by the level of domestic consumption and the extent of United States purchases in Latin America. Over the next few years,

consumption by local mills is not likely to show any great change from its present rate, which absorbs 30 per cent of the current clip. The exportable surplus from current production is about 125,000 tons, on a clean basis.

Although United States demand is a most uncertain factor, the higher level of apparel wool consumption in the United States, and the greater dependence on imports, may be considered as continuing features of the world wool situation. Moreover, there are strong commercial motives (especially in periods of price uncertainty) for the covering of a relatively large proportion of United States import requirements in Latin America. Even so, United States demand by no means extends to all types of Latin American wool and roughly half of the exportable surplus of apparel wool in Latin America will probably have to be marketed in Europe. Of this nearly two-thirds is Argentine wool and nearly one-third Montevideo wool.

As regards carpet wool, the situation is even more difficult to forecast. Although United States consumption of carpet wool is hardly likely in the near future to regain the high levels of the immediate post-war period, the United States may well continue to account for the bulk of Argentine carpet wool exports, in view of the limited volume of supply from other regions.

European Demand for Latin American Wool

Wool consumption in the next few years will be on a somewhat lower level than hitherto in the post-war period, since it will have to be more closely related to current world production. With reduced consumption in Europe, the domestic clip will account for a higher proportion of total supplies. However, in western Europe (excluding Spain) which accounts for 90 per cent of European imports, retained supplies of domestic wool only cover 10 per cent of requirements; nor is there, in view of the competition for land use, likely to be any substantial increase in the European clip, except possibly in the Soviet Union.

As the price of wool can have only a slow effect on production, changes in demand in relation to supply tend to be reflected in the price rather than in the quantity of wool moving into commercial

channels, except in so far as this movement is influenced by Government policies or, as may happen to a limited extent, by the stocking policy of growers or dealers. Moreover, the physical volume of wool shipped to Europe is determined by the prices which Europe is willing and able to pay in competition with the rest of the world. Although Europe currently accounts for two-thirds of world consumption of apparel wool and a somewhat larger share of world trade the decisive factor in the case of wool exported from Latin America is the strength of competition from the United States.

At the same time, the marked shift away from Latin America in European imports in the post-war period, in so far as it reflects payments difficulties, may be regarded as a continuing feature of world wool trade. Although the United Kingdom is likely to be and is, in fact, already a larger buyer of Argentine carpet wool than in previous post-war years, the principal markets in Europe for Latin American wool lie in the Continental countries of western Europe (excluding Spain and Portugal). In addition to such countries already purchasing in Latin America, there are potential markets in Austria, Greece, Norway, Denmark and Ireland. To some extent, Finland and Yugoslavia also offer outlets. Although East European countries and Spain have bought appreciable quantities of Latin American wool in the post-war period, the possibilities of extending trade in this direction appear to be limited.

The European Market for Tops

There is a certain unbalance in the Argentine textile industry, in that a shortage of worsted spinning capacity exists in relation to combing capacity. This is also a feature of the Uruguayan industry. The considerable export of tops from these two countries recently, which may be attributed largely to the preferential exchange rates which these exports have enjoyed, has been almost entirely to the United States. Although combing mills in wool-exporting countries are confronted with certain technical and commercial difficulties in competing with British and other European mills, one should not lose sight of the fact that Europe presents a large market for imported wool tops, in which Latin America might take a larger share.

Appendix VI

MEAT

In contemplating the prospects for increased trade in meat¹ between Latin America and Europe, it is necessary to consider: (1) Europe's demand for meat; (2) the extent to which Europe can meet its own needs; (3) foreign sources of European imports, other than Latin America, and the possibilities for increased supplies from these sources; (4) Latin American exportable supplies; and (5) alternative outlets for Latin American meat.

In this outline, supplies from Latin America are treated as a residual because the United Kingdom is the principal European meat importer. Its supplies from outside Europe must come primarily from Latin America or Oceania, and, since New Zealand and Australia have close economic and social ties with the United Kingdom, it is to be expected that, given no significant difference in prices for meat from different suppliers, the United Kingdom would be inclined to take all of Oceania's exportable supplies of meat, before turning to other sources.

¹ The term "meat" as used in the statement refers to the meat derived from cattle, hogs and sheep. The figures given are in terms of carcase weight, including offal. International trade in live animals is not included in either production or trade data. Trade in animals, however, is almost strictly intra-continental except for occasional movement of small numbers of breeding stocks.

Europe's Demand for Meat

The basic statistics of European meat production for most countries do not go back further than the 1930's. It is generally understood that, in the higher-income countries of Europe, consumption *per capita* was more or less static during the first four decades of the twentieth century. Thus, in Germany and the United Kingdom, for which estimates have been made, consumption was in the neighbourhood of 50 kgs. per person in 1909-1913 and likewise in 1934-1938.² Although consumption fell severely during both world wars, it was not greatly affected by the economic depression of the 1930's. Thus, in Germany, consumption never fell by more than 5 per cent below the 1927-1929 average, while in the United Kingdom it increased. In the lower income countries of Europe, an historical series of statistics does not exist, but it is believed that meat consumption has been gradually increasing.

Some notion of the income elasticity of demand for meat may be derived from family budget surveys. In Germany, the data in the 1927/28 survey, which

² Different figures are quoted depending on what exactly is included in the definition of "meat". Sometimes the figures include poultry and game, sometimes they exclude offal and sometimes they also exclude slaughter fats.

Table 1

PER CAPITA MEAT CONSUMPTION^a IN SELECTED EUROPEAN COUNTRIES

Kilogrammes per year, carcase weight

Country	Pre-war	1948/49	1949/50	1950/51	Preliminary estimates 1951/52
Austria	49	23	30	38	..
Belgium-Luxembourg	46	45	43	42	42
Denmark	75	64	65	56	60
Finland	33	27	28	28	..
France	53	57	57	56	57
Western Germany	51	18	32	37	38
Ireland	55	54	53	53	52
Italy	20	16	16	15	16
Netherlands	38	21	29	32	30
Norway	38	26	37	36	34
Sweden	49	44	51	51	50
Switzerland	53	40	45	46	46
United Kingdom	64	44	52	49	46

Source: Yearbook of Food and Agricultural Statistics, Food and Agriculture Organization of the United Nations.

^a Including offal and poultry.

is probably the most representative, show an income elasticity of 0.67 in the lower-income brackets, declining to about half that figure in the upper-income brackets. Very similar results are found in the United Kingdom. Since the ratio is not linear, the significant redistribution of income in favour of the lower-income groups which has occurred in the last ten years in the United Kingdom and other countries would have stimulated a considerable rise in *per capita* consumption had this not been held in check by rationing or by high prices.

In all of Europe—but particularly in the western countries, where livestock losses were less severe—consumption has rapidly recovered from the wartime shortages, but in only a few countries is *per capita* consumption up to or above the 1934-1938 level.

The high level of economic activity in the United States, Canada and western Europe will undoubtedly cause a further strengthening of demand, especially for the more expensive food items. Government intervention through price control and rationing programmes may, however, prevent the increased demand from manifesting itself.

A study made by the Organization for European Economic Co-operation (O.E.E.C.) in December 1951¹ estimates the probable demand for food in 1956/57, taking into account both increase in popu-

¹ O.E.E.C., *Studies on Economic Expansion: "A Report of the Special Group on Agriculture"*, AC (51), 4 December 1951.

lation and possible increase in real incomes, one basis assuming a higher level of economic activity and thereby of demand than the other. The lower basis corresponds to an increased consumption of all foods of about 12 per cent over the 1950/51 level, of which roughly 5 per cent would result from population growths and 7 per cent from larger real income. The higher level of economic activity corresponds to an increase in total food consumption of 16 per cent. For meat, the report estimates that, given the lower level of economic activity, by 1956/57 meat consumption would have increased by approximately 14 per cent (i.e., from 10.1 to 11.7 million tons) and at the higher level of activity by 25 per cent (i.e., to 12.8 million tons). In short, the increase in meat consumption at the lower level would be approximately 1½ million tons, and at the higher level 2½ million tons.

The higher figure is also obtained by making the calculations on a different basis. For instance, the volumes of additional meat which would have been required to raise the 1950/51 *per capita* supplies to the pre-war level are roughly as follows:

Western Europe—about 1.9 million tons;

Principal importing countries (United Kingdom and western Germany)—about 1.5 million tons.

To the extent that population in these countries continues to increase, an additional supply of meat will be required. At an assumed rate of population growth of 1 per cent a year, the required additional

Table 2

PRODUCTION AND IMPORTS OF MEAT BY MAJOR PRODUCING AREAS^a

Area	Pre-war	1949	1950	1951	1951 as per cent of pre-war
<i>Europe (excluding the U.S.S.R.)</i>					
Production (million tons)	11.6	8.9	10.3	10.9	94
Western Europe ^b	8.4	6.9	7.7	8.1	96
Eastern Europe ^c	3.2	2.0	2.6	2.8	88
<i>Western Europe</i>					
Production (million tons)	8.4		7.7	8.1	96
Net imports (million tons)	1.3 ^d		1.1	0.7	54
Net <i>per capita</i> production (kgs.)	35		30	28	81
<i>Per capita</i> total supplies (kgs.)	41		34	31	75
<i>Two chief importing countries^e</i>					
Production (million tons)	3.0		2.5	2.8	93
Net imports (million tons)	1.6 ^d		1.5	1.1	65
<i>Per capita</i> production (kgs.)	38		27	28	75
<i>Per capita</i> supplies (kgs.)	57		42	40	68

^a Meat is in terms of carcass-weight equivalents and includes beef, veal, lamb, mutton and pork. Tallow, lard and edible offal are excluded except in Austria and Denmark where offal is included.

^b Austria, Belgium, Denmark, Finland, France, Saar, western Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

^c Albania, Bulgaria, Czechoslovakia, eastern Germany, Berlin, Hungary,

Poland, Rumania and Yugoslavia. Figures for 1949, 1950 and 1951 are based largely on estimated information for individual countries in this group.

^d It has been assumed that western Germany's imports, including imports from eastern Germany, amounted to about 150,000 tons.

^e United Kingdom and western Germany. The combined imports of these two countries exceed those of "Western Europe" since they include imports from other countries of western Europe.

amount of meat over 1950 supplies needed by, say 1955, in order to have the pre-war *per capita* supply would be 2.5 million tons for western Europe.

European Production

Although there are no reliable statistics of meat production in Europe as a whole for the period 1909 to 1938, production expanded more rapidly than livestock numbers because of an increase in the rate of growth of animals. Pig numbers increased from 63 millions in 1909 to 1913 to 107 millions in 1934 to 1938 and thus expanded much more rapidly than cattle, which, increasing from 94 to 114 millions, did not keep pace with the increase in human population. Sheep numbers declined during this period, but the production of meat for export—in particular, bacon for the English market and fresh pork for the German market—expanded rapidly in Denmark and the Netherlands. In the United Kingdom, meat production declined by some 10 per cent because of cheap imports.

After 1934-1938, European production was grievously affected by the war, and in 1950/51 cattle and pig numbers were respectively 12 per cent and 30 per cent below the pre-war level. Meat production was still less than pre-war.

In discussing the possibilities of Europe's increasing its meat production to reduce its dependence upon foreign supplies, it must be remembered that Europe's deficit is primarily in beef and mutton and that the opportunities for expanding production of these items in Europe are more limited than for an increased pork supply, although further improvement of grassland may also lead to a considerable increase in beef production. In 1950, western Europe's total net imports of meat consisted of about 90 per cent of beef, lamb and mutton; the remainder consisting mainly of pork, bacon and hams.

The following figures, in terms of pre-war production, show what certain Governments have reported as their meat production for 1951/52. These figures should not be considered as other than estimates. If it is assumed, however, that the western European 1952/53 supply of meat from indigenous production will be no higher than 5 per cent above pre-war, while population growth during the same period will be about 15 per cent, the need for greater supplies is apparent. Production would be 9.2 million tons compared with 8.1 millions in 1951 and net imports would need to be 2.4 million tons to attain pre-war *per capita* consumption by 1952/53. During and since the war, Europe has tended to concentrate on milk output to a greater extent than meat production. In 1950, milk production for the western European countries as a group was about 106 per cent of the pre-war level, whereas meat output was about 93 per cent. These figures reflect the encouragement that some European Govern-

Table 3

PRODUCTION PERCENTAGES OF MEAT^a
IN SELECTED EUROPEAN COUNTRIES

Country	1951/52 as per cent of pre-war
Austria	94
Benelux	97
Denmark	105
France	109
Western Germany	103
Ireland	87
Italy	108
United Kingdom	96
Western Europe	103

Sources: O.E.E.C. and FAO.

^a Beef, veal, pork and mutton, excluding offal.

ments—and the British Government in particular—have given to the production of milk. Since 1950, however, the tendency in the United Kingdom has been to give greater encouragement to meat production.

Most western European countries are dependent in part upon imported feed in their production of livestock products and, whereas formerly certain quantities of feedstuffs were obtainable from eastern Europe, supplies from this area in large volume are not likely to be forthcoming in the immediate future. Pre-war total annual imports of coarse grains into O.E.E.C. countries were about 10½ million tons; during 1950-1952 they have been about 7½ million tons annually. A large part of the reduction results from the fall in imports from Argentina (from 6 million tons to about 2 million tons). Imports from the United States, however, increased from less than 1 million tons to 3.2 million tons. Thus, despite the contraction in total imports, European countries have been relying heavily upon the Western Hemisphere for imported feeds since the war, but, in the words of a recent O.E.E.C. report, "there is some doubt as to whether growing demand for livestock products in the United States and Canada may not lead to some reduction in the exportable surplus of coarse grains".¹ On the other hand, a recent survey made by the United States Department of Agriculture² indicates that in the next four or five years farmers could produce 20 per cent more than they did in 1950 and 18 per cent more than in 1951. For particular products, the estimate shows a possible increase of 21 per cent for maize and 40 per cent for wheat.

¹ O.E.E.C., *Studies on Economic Expansion*: "A Report of the Special Group on Agriculture" AC (51), 10 December 1951.

² *Agriculture's Capacity to Produce*, United States Department of Agriculture, 1952.

It is true that many western European countries are utilizing feed much more efficiently than before the war and, through better use of grass, some of the dependence on foreign sources of feed has been reduced. Greater use of fertilizers in Europe has raised the yields of feed crops and brought about a marked improvement in grassland. In spite of this, there does not seem to be much opportunity in the immediate future for a big increase in meat production if milk and poultry products are maintained at the current *per capita* level. Undoubtedly, through greater use of fertilizers, Ireland could improve its pastures to the point where a substantial increase in cattle production could be obtained. Such an increase, with the surplus production going to the United Kingdom, could reduce slightly the United Kingdom's dependence on Latin American beef. The cost of such beef, however, is likely to be higher than the cost of Argentine beef, and it appears doubtful whether a marked increase will occur within the next few years.

The O.E.E.C. report already referred to considers the possibility for increased meat production. Much attention is given to the scope for technological improvement. In connection with meat, the general conclusion is that by 1956 it should be possible technically to expand the production sufficiently to meet the higher consumption rates (i.e., at the lower level 14 per cent above 1950/51, and at the higher level 25 per cent above 1950/51). It is emphasized, however, that a great deal depends on the availability of cereals from outside the area. The report states: "It should be possible to produce much of the larger requirement of meat, particularly if the implementation of the Turkish programme makes possible substantial shipments of cereals to other participating countries". Thus, the O.E.E.C. report takes rather an optimistic view, and the broad conclusion is that, given the necessary technological improvements and adequate supplies of feed, the increased production of meat needed to satisfy expected increases in demand could largely be met from home production.

European Import Demand

The United Kingdom normally takes more than three-quarters of the total import, the remainder being shared chiefly between Belgium, France, Germany and Italy. The latter four countries, however, generally buy from European exporters. United Kingdom imports developed as follows :

Million tons		Tons	
1909-1913	1.1		
1924-1928	1.5		
1934-1938	1.52	(of which	64,008 canned meat)
1950	1.24	(,, ,,	133,096 ,, ,,)
1951	0.92	(,, ,,	171,704 ,, ,,)

The Continental countries imported meat on a substantial scale for a short period after each world

war, but thereafter returned to a position of virtual self-sufficiency.

To some extent, Germany may in future become an exception to this generalization. The large population now living in the reduced territory of Western Germany makes it difficult to provide enough meat from domestic resources. In 1950, total consumption was about 75 per cent of pre-war, rather less on a *per capita* basis. Production, however, recovered to the pre-war level in 1951/52, but formerly there were imports from eastern Germany. To compensate for these, Germany's imports from abroad might rise to some 200,000 to 300,000 tons, which would still leave *per capita* consumption from 10 to 15 per cent below pre-war.

For the United Kingdom, the picture is as follows :

Table 4

UNITED KINGDOM MEAT SUPPLIES

	<i>Millions of tons</i>		
	1934-1938	1950	1951
Total supplies	2.82	2.40	2.10
Production	1.31	1.16	1.18
Imports	1.52	1.24	0.92

In the United Kingdom, where redistribution of income has created a strong consumer demand for all better-quality foods, meat consumption has been restrained by rationing. If *per capita* consumption were allowed to return to the pre-war level by 1953, the total supplies would have to be as high as 3.3 million tons, and, indeed, in the absence of rationing, one might even expect *per capita* consumption to increase. This means that, on the assumption that the increase in domestic meat production is smaller than the increase in consumption, imports might be between 1 to 1.9 million tons or even higher. Taking this in conjunction with the possible German requirements and about 100,000 tons from all other European importers, the result is about 2.3 million tons in 1953, and even this would not restore the pre-war consumption level.

In considering ways of finding additional supplies of meat to satisfy its estimated increase in demand by 1956/57, the O.E.E.C. report considered the possibility of meat imports. It emphasized that total meat imports into participating countries in 1947/48 and 1949/50 were about at the pre-war level, but that this was made possible only because of Marshall Aid, which facilitated shipments from North America. The significance of this aid was emphasized in 1950/51, when supplies fell by a quarter, owing to a reduction in imports from the United States and Canada and a temporary fall in imports from Argentina. The report considers that it would be unrealistic to expect a significantly large increase in supplies from

North America because of the growing population and rising consumer demand in that area. In the words of the report, "it would not be prudent to count on any increase over current imports from North America". It is also emphasized that consumption has been increasing in Latin America, especially in Argentina, and that exports from that area are also unlikely to rise. The general conclusion as to imports of meat into Europe is that "the optimistic hypothesis seems to be the maintenance of the current of meat imports at the present level of between 1 million and 1.3 million tons."

It is sometimes argued that eastern Europe (including the U.S.S.R.) can be expected to become an important exporter of meat in the foreseeable future. Obviously, lack of data as to production in these countries makes analysis extremely difficult. On the whole, however, the prospects do not seem to be favourable. It is clear that meat production in these countries has not kept pace with population growth. Moreover, it is certain that *per capita* meat consumption is at very low level, and it is reasonable to assume that the Governments of these countries will wish to raise the level. Consequently, any increase in meat production may be needed for domestic consumption.

Trade statistics also point in much the same direction. The only meat exports of any significance from eastern European countries are bacon and ham (and small quantities of canned meat) from Poland, mainly to the United Kingdom and live pigs from Hungary and Poland, mainly to western Germany and Austria. In addition, Yugoslavia also exports live pigs and pork. Before the war, Hungary exported approximately 175,000 head of pigs a year and Poland about 200,000: in 1950 the comparable figures were 140,000 and 160,000 respectively. In 1950, Yugoslavia exported 50,000 head of pigs as against 245,000 pre-war. On the other hand, exports of bacon and ham from Poland in 1950 totalled 45,000 tons as compared with 24,000 tons before the war, but this is a relatively small proportion of the total supplies of bacon and ham entering world trade.

Thus, given the expected relatively slow increase in meat production in eastern European countries and the declared intention of these countries to increase domestic meat consumption, their meat exports are unlikely to increase significantly.

Non-Latin-American Meat Exports

The history of international trade in meat has been largely determined by technical developments in transportation. With the introduction of cold storage it became possible to ship frozen meat over long distances, and on that basis the meat export industries of Australia, New Zealand and the Argentine developed. More recently ways have been developed

for holding chilled meat for longer periods, and this may in time change the character of the Australian and New Zealand trade. These two countries together built up a trade with the United Kingdom which in the 1930's reached some 600,000 tons of meat a year, representing about half of Europe's imports from overseas. During the last ten years there has been no further significant expansion of production in either country. However, given the necessary price incentives—assured market and agriculture requisites—meat production could be expanded in both countries. In New Zealand, it is hoped that by 1955 the annual volume of meat exports will have been increased by about 50,000 tons. This would mean an increase of about 14 per cent. Over the long run, an expansion of about 23 per cent in the sheep population of 33 million has been thought possible.¹ Australia's exports are expected to increase slightly over the next few years, but, if the population of that country grows rapidly as a result of heavy immigration and domestic requirements increase faster than meat production, there is the possibility that Australia's exportable supplies may decline. But for both countries there are factors which make for expansion of meat production at a faster rate than domestic requirements. On the one hand there are strong economic forces which make for larger agricultural exports if the two countries are to maintain an increasing population at a rising standard of living and develop further their industries. On the other hand, there are the long-term arrangements which assure both countries a market for any expansion in their meat exports: namely, the 15-year meat agreement between the United Kingdom and Australia and the 15-year declaration on meat trade between the United Kingdom and New Zealand.

During 1950/51, meat production was influenced in both New Zealand and Australia by the abnormally high price of wool. Many graziers delayed slaughtering and in consequence the volume of meat exports fell. Consequently, whereas meat exports from Australia in 1949/50 totalled 227,500, in 1950/51 they were only 148,800 tons. For New Zealand the corresponding figures were 336,100 tons and 280,700 tons. In the 1951/52 season, however, New Zealand meat exports were 316,200 tons. This upward trend is expected to continue. For Australia, however, the position is less favourable because of the serious drought during 1951/52, but even so an increased volume of meat exports is expected during 1952/53.

Tropical Africa offers possibilities as a source of meat supplies, particularly since some headway is being made against the tsetse fly, which spreads trypanosomiasis among cattle. This, however, is a long-run prospect and there is not much hope

¹ See *New Zealand: Trends and Prospects of Food Production and Exports*, FAO (CCP 52/61 October 1952), page 27.

that Africa will become an important source of European meat exports during the next ten or fifteen years.

Canada and the United States supplied Europe with large quantities of meat during the second World War and, after the war, Canada continued to ship both beef and pork to the United Kingdom. But, while the dollar shortage persists, it seems reasonable to assume that the United States and Canada will not be important suppliers of meat to Europe.

Thus, it seems that any increase in meat supplies from non-Latin-American sources to Europe during the foreseeable future will come from Australia and New Zealand.

Latin American Export Supplies

Argentina has long been by far the most important meat-exporting country of Latin America. Her shipments expanded steadily from the beginning of the century until they reached a peak of one million tons in the period 1924-1928, after which they declined, being affected by the protectionist policies of Continental European countries and by the introduction of imperial preference in the United Kingdom. During the 1930's, imports of beef into the United Kingdom were regulated by the International Beef Conference, of which the United Kingdom, the Argentine and the relevant British Dominions were members. During the war years Argentine exports again expanded, exceeding one million tons in 1944.

Brazil, which was a large exporter prior to the war, has declined in importance because its population has increased while its production of meat has tended to remain static, though large areas of land in the south suited to cattle-rearing are as yet unexploited. Uruguay has a remarkably stable livestock industry and has been a regular exporter for several decades. Drought in the later war years caused heavy liquidation of herds and the industry has not yet fully recovered. Possibilities of further expansion of livestock numbers or of meat exports are not great. There are no large areas of territory unsettled

and uncultivated as there are in Brazil. Increased meat production must come mainly from better use of the presently cultivated area.

Chile, which exported small quantities of meat before the war, was a net importer if account is taken of its imports of live cattle from Argentina. It is doubtful whether Chile will become a significant meat exporter in the foreseeable future. The same is true of Paraguay.

The kinds of meat exported by the Latin American countries are chiefly beef and lamb (or mutton). Very little pork is produced except in Brazil, and none of these countries exports significant quantities.¹ Prior to the war, large quantities of chilled beef were exported from both Argentina and Uruguay. Lack of shipping space during the war resulted in a cessation of chilled beef exports and the practice of shipping this product has not been resumed since the war.

Mexico exported very little meat prior to 1947, but its annual shipment of live cattle to the United States amounted to 200,000 to 400,000 head (equivalent to about 20,000 to 40,000 tons of meat). In 1947, Mexico experienced an outbreak of foot-and-mouth disease among its cattle which resulted in the United States barring all imports of Mexican live cattle. Following this embargo, Mexico began to develop its trade in both fresh and canned meats and has made fairly rapid progress.

The chief outlets of Latin American meat have been the western European countries, particularly the United Kingdom, and before the war the United Kingdom was dependent upon this source of supply for about 20 per cent of its total meat consumption.

That Latin America has in turn been dependent upon Europe (particularly the United Kingdom) as an outlet for its meat exports is evident from Table 6.

¹ During the war years, Argentina produced large quantities of pork for export to the United Kingdom. In 1944, it reached a peak in production and export, and in that year pork exports amounted to 145,000 tons, an amount equivalent to 15 per cent of Argentina's total exports of meat.

Table 5
LATIN AMERICAN EXPORTS OF MEAT ^a

Thousands of tons

Period	Argentina	Brazil	Uruguay	Paraguay	Chile	Mexico
1934-1938	627	72	120	5.5	9.5	—
1947	807	45	51	11.1	7.7	7.5
1948	590	57	76	17.4	6.3	44.9
1949	548	39	102	12.1	1.1	61.5
1950	423	28	114	12.1	1.1	25.6
1951	395	16	90	...	0.5	29.3

^a Pre-war figures exclude poultry meat whereas post-war figures include it. Canned meat is included at carcass equivalent.

Table 6

LATIN AMERICAN^a EXPORTS OF CERTAIN KINDS OF MEAT
AND APPROXIMATE PERCENTAGE EXPORTED TO EUROPE

Thousands of tons and percentages

Kind of meat	Total exports			Percentage to Europe		
	1934-1938	1948	1951	1938	1949	1950
Beef (fresh, chilled and frozen)	506.7	335.8	204.2	94	85	86
Mutton and lamb (fresh, chilled and frozen)	67.0	90.2	30.8	98	86	98
Canned meat (actual weight)	120.1	140.5	124.0	49	64	32

Sources: FAO Secretariat and Commonwealth Economic Committee publications.

^a Based on five countries: Argentina, Brazil, Chile, Uruguay and Mexico. Exports of live animals are excluded. Percentages to Europe are, however, based on the first four countries.

Possibilities for increasing Meat Production in Latin America

Higher prices for Argentine and Uruguayan meat exports—if such higher prices were reflected back to the livestock producers and were not offset by rising costs—would increase production. Moreover, an increase could be gained by marketing younger animals and thus providing a more rapid turnover of supplies. In the United States, for example, annual slaughter of cattle and calves represents about 40 to 45 per cent of total cattle numbers. In Argentina, where there is no substantial dairy industry, cattle slaughtered plus exports of live animals is only 20 to 25 per cent of the total. This percentage is much lower in other Latin American countries—in some no higher than 10 per cent. The low rate of slaughter results from a low rate of calf production, heavy losses from disease, and delaying slaughter until cattle are 3 to 5 years old. Data are not available to contrast the yield of calves in the United States and Latin America or to compare the relative losses from disease. It is common knowledge, however, that the disease rate is higher in most Latin American countries, particularly those in the tropical belt, than in the United States. That cattle are maintained to older ages before slaughter contributes to a higher death loss.

An improvement in pastures would help to bring livestock into condition for slaughter at an earlier age. In Uruguay, the development of alfalfa for cattle feed would help the industry both to increase the carrying capacity of the land and to provide a fattening feed for earlier conditioning of cattle. Improvement of breeds is also necessary (see *Report of the Inter-American Meeting on Livestock Production*, FAO, December 1950; also *Breeding Livestock adapted to Unfavourable Environments*, FAO, January 1948).

Meat production could be increased further through improved feeding, better utilization of pastures, reduction in the high death loss of small

pigs and calves, reduction in the heavy loss due to crippling and death of livestock in the marketing process, and better control of disease. Such improvements in Latin American countries would probably bring about bigger gains than in the United States. Prices for livestock, however, would have to be such as to make the improvements profitable, or Government aid would be required. Low prices for livestock in relation to competing agricultural products are likely to result in smaller meat production. The high wool price during 1950/51 undoubtedly caused, particularly in those areas of Argentina and Uruguay where sheep and cattle compete for the same land, a shift away from production of animals for meat.

Systems of pricing which emphasized more the quality of meat might be beneficial in South America. It is possible, for instance, that the price scale under the Anglo-Argentina agreement did not differentiate sufficiently in this respect.

Reduction in Domestic Consumption

The average annual *per capita* consumption of meat in Argentina and Uruguay is about 120 kgs. as compared with about 34 kgs. in western Europe. As other types of food (vegetables and fruits) become more plentiful, there is likely to be a decline in the *per capita* meat consumption which could result in larger meat exports. In 1951, Argentina and Uruguay exported about 485,000 tons of meat. If, for instance, their *per capita* consumption had been reduced to 90 kgs.—an amount which would still have been nearly three times the average level for western Europe and about 30 per cent above the United States level the amount of meat which would have been available for export would have been increased to around one million tons.

Possibilities for increasing Latin America's Meat Exports

The exportable supplies of meat from Latin America—especially from Argentina—in recent years

Table 7

UNITED KINGDOM IMPORTS OF CARCASE
MEAT AND OFFAL

Thousands of tons (product weight) and percentages

Period	Total imports	From Argentina	Imports from Argentina as per cent of total United Kingdom imports
Pre-war . . .	1,057	443	43
1950. . . .	855	240	28
1951. . . .	523	88	17

Source: Ministry of Food Bulletin, No. 662, United Kingdom Ministry of Food, 2 August 1952.

have been much lower than the quantities drawn from that area before the war and during some war and early post-war years. Brazil's exports in the early war years were many times the 1951 volume. While Brazil might not be an important supplier of meat in the next few years, largely because of its rising internal demand for meat, Argentina's exportable supplies could be raised above the level of the past few years.

Data relating to the relative profitability of various alternative uses for some of the land now devoted to livestock in Latin America are not available. In Argentina, the cattle-feeding area where alfalfa is grown is an area which could be used for the production of other crops—grain or oilseed. There is some evidence that, from the end of the war, up to about 1951, prices paid to livestock producers have not been sufficiently high to make cattle production attractive.

The price which the United Kingdom paid Argentina in 1949/50 for meat was considerably lower than the price which alternative markets were willing to pay Argentina for small quantities of export beef. On the other hand, this price was 25 per cent above the price paid to Australia and New Zealand, whereas in 1939/40 the United Kingdom was paying Argentina only 80 per cent of the Australia-New Zealand price.

The meat agreement between the Argentine Government and the United Kingdom came into force on 18 July 1949 and was for five years, although it may be terminated on 1 July of any year. In the first year of the agreement, Argentina undertook to supply not less than 300,000 tons of meat, and if possible 400,000 tons each subsequent year. This agreement was supplemented and in part suspended by the protocol of August 1951. Failure to agree on a price for the 1950/51 period resulted in Argentina stopping all shipments of meat to the United Kingdom in July 1950. Later, Uruguay also terminated its shipments to the United Kingdom.

Argentina was able to weather this cessation of shipment because of a combination of factors. A drought in early 1950 resulted in very heavy slaughter of beef cattle, and heavy exports of meat to the United Kingdom. For a period following July 1950, Argentina had a low slaughter of livestock because of the previous heavy slaughterings. It increased its exports to other markets and also its domestic consumption.

Shipments were not resumed until the middle of 1951 following the protocol to the agreement which provided for the shipment to the United Kingdom of a minimum of 200,000 tons of carcase meat and offal during the year following the signing of the agreement. This quantity was delivered.

The effect of the cessation of shipments on the imports into the United Kingdom is shown by the following statistics :

In looking at the prospects for meat exports from Latin America, the supply position in Argentina is of the utmost importance. In recent years, a number of factors, particularly increased domestic consumption and industrialization have contributed to the fall in meat exports. In 1951, Argentine exports of carcase meat were equivalent to only 29 per cent of the pre-war volume. In that year, however, the position was abnormal, as shipments of meat to the United Kingdom had been stopped during part of the year because of disagreement on contract prices. None the less, the trend of exports has been downward. In 1947, on a carcase weight basis, total meat exports at 807,000 tons were 30 per cent above the pre-war volume. In each of the following years, however, exports contracted and in 1950 were only 423,000 tons and, as indicated above, they fell further during 1951. In view of this development and particularly because of the importance of agricultural exports to the Argentine economy, the Argentine Government has taken special steps to increase exports. A meatless day each week was introduced and this helped to make it possible for Argentine to meet its commitment under its contract with the United Kingdom to export to that country 200,000 tons of meat during the 1951/52 season. As a result, in 1951 *per capita* consumption decreased for the second consecutive year. In addition, prices to meat producers have been increased and negotiations with the United Kingdom for the 1952/53 season are likely to result in an increase in contract prices. None the less, although the scope for increasing meat production in the long run is great, the short-term prospects are not favourable. Cattle numbers are currently estimated at approximately 37 million and there appears to be little opportunity to increase significantly the herds for meat production within the next three or four years. In this connection, the relatively long reproductive cycle of cattle is of major importance. Consequently, although there may be some increase above the abnormally low volume of meat exports from Argentine in 1951, the

maintenance of exports in the next two or three years will be difficult and may involve a further fall in *per capita* consumption.

Alternative Outlets for Latin American Meat

Apart from Europe, the United States is likely to be the largest potential market for Latin American meat exports. The United States is indeed a tempting market for Latin American exporters. Not only is its level of meat prices very high, but sales to the United States mean dollar exchange. Furthermore, it is sometimes argued that the United States will not be able to produce at reasonable prices the quantity of beef which a rapidly expanding population is demanding. If this turns out to be true, there may be a permanent demand on the part of the United States for certain types of Latin American meat. The United States market is large relative to the exportable meat supplies from Latin America. In 1951, the United States meat production totalled 10.3 million tons, of which about one-half was beef, veal, lamb and mutton. In 1951, Latin America's meat exports, most of which were beef or lamb and mutton, amounted to about 530,000 tons. In that year, Argentina exported 102,000 tons of canned meat, of which 55,000 tons went to the United States.

Although it would be wrong to ignore the possibility of the United States increasing its meat imports from Latin America, it would be misleading to ignore the strong upward trend of United States meat production and the great potentialities for meat production in that country. For instance, cattle numbers on United States farms increased from 77 millions in January 1949 to 88 millions at the beginning of 1952, and total meat production in the United States during 1953 is expected to exceed 1952 production and may reach a record high peacetime level. Even so, the number of cattle is expected to be about 93 millions in January 1953.

Moreover, these figures must be considered in relation to the high level of United States grain exports. Consequently, it may well be that the United States will be able to increase its meat production at a rate equal to the increase in domestic demand. It would therefore seem to be unwise to look to the United States as a certain outlet for Latin American meat exports. Furthermore, while foot-and-mouth disease remains endemic in many Latin American countries, meat exports to the United States will continue to be restricted mainly to canned and cured meats.

Latin American Exports to Europe

This brief outline of some of the main factors influencing trade in meat between Latin America and Europe emphasizes the large number of variables involved and the difficulty of forecasting future changes. On the one hand, it has been shown that,

given a high level of economic activity, the demand for meat imports into Europe is likely to increase. On the other hand, of the main overseas suppliers, the possibilities of increasing exportable supplies both in Australia and New Zealand and in some Latin American countries are large. And, unless the United States increases significantly the volume of its meat imports, any increase in supplies from these countries are likely to come to Europe. So far as Latin America is concerned, therefore, much depends on how rapidly its principal meat exporters regain their position in the European market. For it is clear that, if Latin American supplies continue to be relatively small, then the pressure to increase meat exports from Australia and New Zealand will become greater. Already in both these countries plans are being followed for increasing meat production for export, and in these plans the long-term arrangements (the 15-year meat agreement between Australia and the United Kingdom, and the 15-year declaration on meat trade between New Zealand and the United Kingdom) are of considerable significance; for these arrangements guarantee a market for all exportable meat supplies from these two countries at prices which are to be fixed so as to give producers a reasonable return. It still remains to be seen what the competitive position of the three producers will be in future. Clearly, much will depend on this, but it is not at all certain that the price for Latin American meat will favour supplies from these countries. Moreover, it is becoming increasingly clear that the main importer of meat is endeavouring to establish a more stable flow of meat imports—hence the long-term arrangements with Australia and New Zealand. Over the past few years, on the contrary, the supplies from Latin America have not only been falling but have also been extremely unstable.

With prices for Latin American meat now at higher levels than in the past few years the position seems highly favourable to expansion of exports. But, for Latin America, the possibility of continued increase in domestic meat consumption and the uncertain prospects for an immediate expansion of meat production are retarding factors. Much therefore depends on how quickly Latin American meat exports can be not only raised but maintained at a reasonably stable level and at competitive prices. The significant shift in the pattern of meat trade is emphasized by the fact that in 1951 the volume of carcass meat exports from Argentina was only about half the pre-war level, whereas from New Zealand meat exports were 7 per cent higher. It is not yet clear that this shift has been reversed.

In short, the possibilities for increased meat trade between Europe and Latin America are undoubtedly large but much depends on the ability of Latin America to increase its meat production, to reduce uncertainty by reducing fluctuations in its meat exports, and on the price which it asks for them.

Appendix VII

EXPORTS OF TEXTILE MACHINERY FROM EUROPE TO LATIN AMERICA

In the process of industrialization in Latin America, as well as in other countries, the industries requiring relatively little capital per unit of output and relatively small numbers of highly skilled workers were the first to be developed. The greatest progress in replacing imports by domestic production was made in light consumer goods, among which textiles provide the most striking example. As the production of textiles from raw materials largely derived from within the region has developed, Latin American countries have been building textile mills which require the importation of increasing amounts of textile machinery. Thus, the specific case of the textile industry provides an illustration of the changes in the structure of imports brought about by industrialization: Latin America's imports of textiles from the United States and Europe had declined to one-third of their 1928 volume in 1950, whereas imports of textile machinery had risen to about three times their pre-war level.

The subsequent analysis will deal with the characteristics of Latin American markets for textile machinery, the position of Europe and the United States in those markets, the difficulties in the way of expanding European exports and the prospects for developing this trade. In view of the large number of types and the heterogeneous character of the equipment required for turning fibres into finished products, the emphasis will be on economic rather than on technical aspects.

Table 1

EXPORTS OF TEXTILE MACHINERY FROM MAIN PRODUCING COUNTRIES

Yearly average, 1929 to 1939

Country	Value		Weight ^a
	£ millions	Per cent	Thousands of tons
United Kingdom	7.0	38	70.0
Germany	6.7	37	42.8
United States	1.7	9	..
Switzerland	1.5	8	10.9
France	0.7	4	10.9
Japan	0.7	4	15.7
Total of countries listed	18.3	100	150.3

Source: Planning, Political and Economic Planning (P.E.P.), London, July 1946, page 10.

^a Figures for the weight of United States exports were not available. However, United States machinery is known to be of a relatively expensive type, and its share in world exports by weight is therefore lower than by value.

Main Producing and Exporting Areas

The predominant importance of the United Kingdom and Germany as exporters of textile machinery before the war is shown in Table 1. These countries were followed at a considerable distance by the United States and Switzerland. The composition of textile machinery exports varied from country to country, a large proportion of German and United States exports consisting of hosiery, knitting, dyeing and finishing machinery, while other countries exported mainly preparatory, spinning and weaving machines.

Since the war, the situation has changed substantially. As shown in Table 2, German production had declined sharply by 1948 and Germany had

Table 2

PRODUCTION AND EXPORTS OF TEXTILE MACHINERY ^a BY SELECTED EUROPEAN COUNTRIES AND THE UNITED STATES

Millions of dollars at 1948 prices

Country	Production		Exports	
	1938	1948	1938	1948
Austria	1.5	0.8	0.6	0.1
Belgium-Luxembourg	5.7	19.0	3.6	12.6
Czechoslovakia . . . . .	..	..	2.2	5.9
Denmark	2.1	4.0	0.6	1.5
France	30.9	61.1	5.6	12.2
Western Germany	140.0 ^{b c}	16.6	67.3 ^d	3.3
Italy	33.3	86.5	2.2	26.2
Netherlands . . . . .	..	2.6	1.0	0.7
Poland	4.0 ^e	10.4	1.0	..
Sweden	3.9	11.2	1.6	3.8
Switzerland	20.0 ^e	52.0 ^e	16.8	45.9
United Kingdom	131.1 ^f	232.8	89.2	170.4
Total of countries listed	372.5	497.0	191.7	282.6
United States	193.0 ^g	442.0 ^h	27.6	142.0

Source: General Survey of the European Engineering Industry, Economic Commission for Europe (E/ECE/125), April 1951.

^a Includes all types of machinery other than general purpose machinery—i.e., machinery required for the following processes: preparation of materials, spinning, twisting, weaving, finishing, dyeing, hosiery manufacture, knitting, sewing, cutting and machinery for the manufacture of clothing. The materials used are cotton, wool, flax, hemp, ramie, jute, artificial fibres from cellulose and protein, and synthetic fibres, each requiring special types of machinery.

^b 1936.

^f 1937.

^c For the whole of Germany, U.S. \$310 million.

^g 1939.

^d Pre-war territory of Germany.

^h 1947.

^e Estimate.

temporarily disappeared from the world market as a supplier. In the following years, production again rose, but, since domestic textile mills had been severely damaged during the war, a relatively large share of the output was retained by the home market. Nevertheless, German exports of textile machinery increased rapidly and already in 1950 the sales to Latin America had nearly regained their pre-war volume. Japanese production and exports have shown the same trend for similar reasons (see Table 5).

The decline in German exports in the earlier post-war period was more than offset by a considerable increase in exports from the United Kingdom and Switzerland. In addition, Italy has emerged as an exporter of some significance since the war. Belgium exports a certain amount but specializes in machinery for wool textile production. By far the biggest increase was in United States exports, which in 1948 equalled more than 50 per cent of European exports against some 15 per cent in 1938.

Table 3 shows the pattern of trade in 1948 by main exporting and importing areas. It appears that some 20 per cent of exports from Europe and the United States were sold to Latin America.

Table 3

EXPORTS OF TEXTILE MACHINERY IN 1948

Millions of dollars at current prices

Exporters \ Importers	Exporters		
	Europe	United States	Total
Europe	75 ^a	26	101
United States	10	—	10
Latin America	40	40	80
Others	157	76	233
Total	282	142	424

Sources: National trade statistics. Some figures partly estimated.

^a Trade between European countries.

Latin American Markets

There is an important difference between the domestic markets for textile machinery and, consequently, between the structure of its production in the United States and in Europe. In the United States, the high level of wages makes for a continuous process of modernization through the introduction of labour-saving methods, and the big and rather uniform internal market favours the production of textile machinery devised for large-scale production of a few specific products. The European type of textile machinery, on the other hand, is mostly intended for smaller units and is made more flexible as to their uses, as in the case of looms, where several sizes of yarns can be used and several breadths of cloth woven efficiently.

The conditions prevailing in most Latin American countries differ from those of both the United States and western Europe. In several of those countries, however, the market shows a closer resemblance to European than to United States characteristics. In certain parts of Latin America, the low level of wages and in some countries the relatively low standards of technical skill act as a deterrent to modernization. In many places, as will be discussed in more detail in a subsequent section, obsolete amortized machines compete with expensive modern equipment the main advantage of which is to reduce labour costs. It is uncertain which of the types of machinery can be used to greater advantage. Operating costs of old machinery may be lower or higher than those of modern equipment, depending on whether in the use of old machines the wages of the larger number of operatives required do or do not offset the difference in depreciation and interest charges between the old and the new machine. Moreover, private cost-accounting may not adequately reflect the social costs involved in the introduction of modern equipment. As has been pointed out in a study by the secretariat of the Economic Commission for Latin America,¹ one of the problems which faces countries with a relative scarcity of capital is that the equipment produced in highly industrialized countries, and chiefly in the United States, is devised for a maximum of labour-saving. The purchase of such highly automatic equipment by less developed countries, where the main problem is simply to increase production, may be wasteful, since relatively too much investment would be employed in the displacement of labour, leaving insufficient saving to install capital equipment in other fields in order to absorb the labour displaced.

The relative scarcity of labour and capital is the essential factor governing the type of equipment and the actual rate of renewal. Other important factors are the main features of the consuming market, for instance, whether it makes large-scale production possible and whether the products must change often or can be sold over a long period. The types of raw materials available affect the specifications of the machinery, but do not interfere with the rate of renewal as long as there is not a turn to other materials.

Some information on the characteristics of the markets of Brazil, Chile, Ecuador, Mexico and Peru (which countries account for 85 per cent of Latin American cotton manufacturing capacity) appears in a report by the Economic Commission for Latin America on the productivity of the cotton textile industry. Table 4 shows the amount and age of equipment installed in these countries.

¹ See *Theoretical and Practical Problems of Economic Growth*, Economic Commission for Latin America, May 1951.

Table 4

EQUIPMENT INSTALLED IN SELECTED LATIN AMERICAN COUNTRIES

Country	1,000 spindles	1,000 looms	Number of firms	Average age of machinery	Per cent installed before 1935	
					Spindles	Looms
Brazil	3,279	100	455	very old	91	95
Chile	173	5	19	new	30	28
Ecuador	37	1	10	very old	..	..
Mexico	935	34	278	very old	85	95
Peru	176	6	24	fairly new	..	..

Source: Tabulated by the secretariat of the Economic Commission for Europe from information appearing in the report on *Productivity of the*

Cotton Textile Industry, (E/CN.12/219, 12 May 1951) by the Economic Commission for Latin America.

The Chilean equipment is modern for the following reasons: few plants were in existence twenty years ago; protection for growing industries was afforded after 1932 by exchange controls, devaluation of the currency and, later, by the war. In Peru, there has been a fair extent of modernization. Instead of erecting entirely new plants, as is often the case in Latin America, new machines have been placed beside old ones in the same mill. In Peru, contrary to Chile, the textile market is not highly protected and indigenous products, having to compete with imports, are of a high quality. The good quality of indigenous cotton also explains this high standard. As is often the case, protection facilitates the growth of an industry, while free trade conditions tend to improve the quality of output. In other countries equipment is usually very old, with a few exceptions as, for instance, in the State of Sao Paulo in Brazil.

In all countries, the cotton textile mills are heterogeneous with wide discrepancies in efficiency from one mill to another. The low level of wages does not induce manufacturers to improve the lay-out of the mills, to rationalize the methods of work or to introduce labour-saving devices and modern labour-saving equipment. Generally, the owners tend to keep their machines going rather than to buy new ones, even if this means more labour for operation and maintenance. In other words, there is a tendency not to replace manpower by machines, a tendency which, as already mentioned, has some foundation in the general economic situation of these countries. This largely explains why the present imports of machinery are somewhat low if compared with the amount of installed old equipment.

In general, the administration of the mills does not reach a high standard of efficiency and large gains may be obtained in this field without heavy investment. This also applies to the organization of the plants, methods of operation and upkeep. This is not surprising, as defective organization also occurs in many highly developed countries. It seems,

however, that, in addition to advice from consultant engineers, in the case of new plants, the sellers of machinery could also give some advice not strictly limited to erection, operation and maintenance of their equipment.

Preferences of Latin American Textile Manufacturers for American or European Machinery

The secretariat of the Economic Commission for Latin America has made a field analysis of the attitudes of Latin American textile manufacturers towards European and American machinery. The answers from thirty-six cotton spinning and weaving firms in Brazil, Chile, Mexico and Peru show the following main features.

Before 1940, the majority of textile machines were of European origin and that fact, together with the fact that many technicians came from Europe, would have helped future imports from the same source. During the war, imports from Europe were drastically reduced, and the Latin American countries had to rely on the United States as the sole supplier. After the war, European production continued to be limited by various shortages. This affected amounts available for export, especially in some countries where the home textile industries, damaged by the war, needed to be reconstructed. Furthermore, production difficulties meant also long delays in delivery which are very troublesome to buyers and often decided their preference for American equipment during that period.

At present, the two main factors are price considerations and preference for certain technical features (including the similarity to equipment already in use), the latter factor being perhaps the most important.

As to adaptability to local materials, labour and markets, Brazilian manufacturers find European equipment better suited, while manufacturers in the

three other countries (in particular Mexico) prefer American machinery. Most manufacturers consider American equipment as having a higher productive capacity and prefer it also because, as is well known, it is better designed to save labour. The labour-saving aspect, however, is not an essential one in Latin America, as mentioned above. The American machines are also considered as being equipped with more modern mechanisms, such as drafting, automatic stop-motion lubrication, etc., than the average European machine. In this respect, however, the most expensive of modern European machines appear to be comparable to American. As to the quality of the product, all manufacturers were in favour of European machines.

It thus seems that American or European machines are better suited for the Latin American market depending upon technical or economic factors under consideration in each single case, and that neither can claim an over-all superiority. As to price, at the present level, American machines are usually more expensive than European, except perhaps Swiss machines.

It seems that American and European manufacturers at present show equal interest in promoting sales, while European producers are generally more agreeable to meeting the purchaser's requirements as to changes in machinery and supply better technical information as regards its assembly and operation.

Importance of Latin America as a Market for European Textile Machinery

Before the war, several Latin American countries obtained a large proportion of their textile machinery imports from the United States and from Germany. In addition to these two suppliers, as seen in Table 5, Brazil imported substantial amounts from the United Kingdom and Switzerland, and Argentina from the United Kingdom. In 1951, the United States and the United Kingdom were by far the largest suppliers and accounted together for about 65 per cent of total imports into Latin America, with Switzerland and Italy making up most of the balance, since Germany had so far only regained the pre-war export volume.

European exports to Latin America in 1948¹ were about one-twelfth of total production in Europe. Taking into account unused capacity existing in Europe, an expansion of exports to Latin America could be achieved quite easily from the point of view of production. Exports of textile machinery to Latin America accounted in the same year for about one-seventh of total European exports to all destinations including exports within Europe amounting to some \$75 million.

¹ Exports in 1948 are referred to in this instance since this is the latest year for which production figures are available. See Table 2.

Difficulties encountered by European Exports to Latin America

Although European exports of textile machinery to Latin America have increased very markedly in the post-war period, they have been hampered by obstacles of various kinds. The main complaints of European producers' associations have centred around payments difficulties and administrative procedures and can be divided into two categories: difficulties which are common to all machinery exports to Latin America and those which are specific to textile machinery.

In the first category, the lack of a formal trade agreement during certain periods has hampered trade in some cases. The failure to establish quotas by categories of goods in sufficient detail produces an element of uncertainty for the exporter even if he has signed a contract. The formalities for the granting of import licences are very complex and involve long waiting periods and licences are not always issued according to strict administrative standards. The validity of licences granted is often too short and renewals entail further loss of time. When the currency of the exporting country becomes scarce, the transfer of funds for exports which have already been delivered is often unduly delayed. Belgian exporters have complained about this difficulty in their relations with Brazil; Swiss exporters have encountered it in their exports to Argentina, Chile, Bolivia, and Colombia; and Italian exporters in their trade with Argentina and Brazil.

In addition to these obstacles, which are more or less common for all trade under bilateral conditions, there are some difficulties more specifically experienced in textile machinery exports. Textile equipment has sometimes not been classified as essential and as a result licences have been difficult to obtain. Further, some European producers of textile machinery are not able to grant as favourable credit terms as their United States competitors. Argentina, for instance, they amount to over 40 per cent *ad valorem* as against 15 per cent for machines. Sometimes no import licences for parts are granted at all and in other cases lack of currency hampers the export of necessary parts and accessories. This difficulty has been overcome in some instances by the erection of works in Latin America which produce the parts under licence.

Prospects for Trade in Textile Machinery with Latin America

Latin America, with its 150 million inhabitants, is potentially a very large market. Although the prosperity of Latin American countries is generally based on the sale of primary products, the more advanced countries have embarked on a rapid process of industrialization. In the case of textiles, natural fibres are available locally and the demand

Table 5

EXPORTS OF TEXTILE MACHINERY FROM WESTERN EUROPEAN COUNTRIES,
THE UNITED STATES AND JAPAN TO LATIN AMERICA

Thousands of dollars

1938 at 1950 prices. 1949, 1950 and 1951 at current prices

Exporting country	Year	Importing country			
		Argentina	Brazil	Others	Total Latin America
Belgium-Luxembourg	1938	174	65	100	339
	1949	460	500	240	1,200
	1950	400	840	200	1,440
	1951	244	1,543	427	2,214
France	1938	136	624	152	912
	1949	641	1,483	778	2,902
	1950	1,061	1,599	1,119	3,779
	1951	866	1,931	1,380	4,177
Italy	1938	47	80	..	127
	1949	11,490	727	3,365	15,582
	1950	3,936	947	2,288	7,171
	1951	2,992	5,227	3,088	11,307
Switzerland	1938	330	1,210	440	1,980
	1949	2,855	2,948	2,414	8,217
	1950	1,794	3,159	2,484	7,437
	1951	609	3,969	2,818	7,396
United Kingdom	1938	900	2,650	1,950	5,500
	1949	5,114	12,297	6,743	24,154
	1950	2,995	8,010	4,480	15,485
	1951	2,548	9,839	5,020	17,407
Western Germany	1938 ^a	1,083	2,728	1,979	5,790
	1949	4	338	189	531
	1950	23	2,806	1,787	4,616
	1951	155	3,485	1,587	5,227
Total of countries listed	1938	2,670	7,357	4,621	14,648
	1949	20,564	18,293	13,729	52,586
	1950	10,209	17,361	12,358	39,928
	1951	7,414	25,994	14,320	47,728
United States	1938	1,039	1,138	5,418	7,595
	1949	7,284	11,633	31,544	50,461
	1950	1,581	8,714	20,529	30,824
	1951	1,159	21,244	22,892	45,295
Japan	1938 ^b	..	..	..	119
	1950	43	151	175	369
	1951	439	113	320	872

Source: Official foreign trade statistics and replies from Governments to a questionnaire.
^a Pre-war territory of Germany.

^b The figure for Japan in 1938 has been calculated on the assumption that the relative amount of exports to Latin America (2 per cent) was the same as in 1935.

for equipment may be expected to increase substantially with industrial development. Machinery is not at present produced in Latin America in any significant amount. However, many types of mechanical and chemical apparatus are not difficult to build and in a few years the necessary skilled personnel could be either brought in from abroad or trained locally, and construction under licence could be started. This may be facilitated by some Latin American Governments which may wish to establish domestic industries even if economic conditions are not very well suited for certain types of production. But in the near future, indigenous industries will be able to cope with only a limited part of the demand and machinery of all types will be imported from the United States and from Europe.

The respective shares of the United States and Europe in those markets will tend to be determined in each importing country by availabilities of currencies, prices, credit terms, delays in delivery, commercial and personal ties, technical features, and the needs of particular markets which may be more or less similar to those of the United States or Europe.

Conclusions

The following conclusions emerge from the preceding discussion :

1. Though Europe increased its exports of textile machinery to Latin America between 1938 and 1951, the export drive should be intensified in view of the downward trend in European textile exports and of the urge for industrialization in Latin America. This conclusion is reinforced by the fact that European equipment is generally regarded as perfectly satisfactory by Latin American importers.

2. It might prove useful if European and Latin American experts were to undertake a more detailed study of the difficulties encountered in textile machinery trade, covering the structure of trade agreements, the granting and extension of licences, simplification and standardization of formalities, the transfer of funds, and the issue of licences and reduction of duties on spare parts.

3. Emphasis should be laid on adequate exchange of information and advertising. Latin American countries should give publicity to their development plans. Local textile mills should advertise their equipment needs in several producing countries to take advantage of competition and European producers should send all the necessary literature on their machines to their Chambers of Commerce and agents in Latin America and provide the latter with spare parts and with all necessary technical information.

Appendix VIII

LATIN AMERICAN MARKETS FOR TRACTORS ¹

Mechanization of Agriculture in Latin America

From 1930 to 1948, the number of tractors in use in Latin America increased from 20,000 to 64,000. In the next three years, from January 1948 to January 1951, 74,000 tractors were imported and the number of tractors in use rose to 122,000.

The increase in the tractor park from 1948 to 1951 has been considerable in most Latin American countries and particularly marked in Brazil and Uruguay (Table 1). In Argentina, on the other hand, the recent expansion of the tractor park has been relatively modest.

The amount of land in cultivation in Latin America is about 84 million hectares, but the total arable land is estimated at 113 million hectares.² Thus, in January

1951, the total park of 122,000 tractors represented 1 tractor for 930 hectares of arable land and for 680 hectares of land in cultivation. This compares with a number of hectares of land in cultivation per tractor of 23 in the United Kingdom, 25 in Switzerland, 100 in Australia and 8,300 in India.

These figures provide, *prima facie*, evidence of great technical possibilities for a further expansion of the tractor park in many Latin American countries. More important, a rapid mechanization of agriculture also seems to deserve a high priority among the many competing claims on the scarce investment resources of these countries. The main reason for this is the acute shortage of agricultural manpower in several of the major Latin American countries, notably in the southern countries, Argentina, Chile and Uruguay. This means that in these countries the mechanization of agriculture promises to lead to an increase in agricultural output without

¹ For further information on the European tractor industries, see document E/ECE/139, *The European Tractor Industry in the Setting of the World Market*, Geneva, 2 February 1952.

² *Yearbook of Food and Agricultural Statistics, 1950*, FAO.

Table 1

TRACTOR PARK OF LATIN AMERICAN COUNTRIES

Country	Imports ^a (Number)			Tractor park (Thousands)			Hectares ^d per tractor 1951
	1948	1949	1950	January ^b 1948	January ^c 1951	Index numbers Jan. 1951 (Jan. 1948 = 100)	
Argentina	6,956	1,129	3,182	18.8	25.0	133	1,200
Brazil	2,064	4,217	5,789	4.7	15.7	335	1,200
Chile	1,703	1,157	775	4.1	6.0	146	980
Colombia	776	1,570	1,446	2.8	6.5	232	610
Cuba	1,900	1,638	2,107	3.5	8.0	228	245
Mexico	6,894	6,363	6,000	17.0	32.0	188	310
Peru	452	708	873	2.3	3.6	156	455
Uruguay	4,395	1,398	2,528	2.9	10.5	362	148
Venezuela	1,595	1,561	1,200	4.4	7.7	175	195
Total of countries listed . .	26,735	19,741	23,900	60.5	115.0	190	640
Other Latin American countries	1,592	1,429	1,069	4.1	7.7	188	1,350
Total Latin America	28,327	21,170	24,969	64.6	122.7	190	680

^a Based on national trade statistics, partly of exporting, partly of importing countries, and supplemented by estimates.

^b *Farm Mechanization*, FAO, 1950, page 54.

^c Estimates.

^d Based on land in cultivation as given in *Yearbook of Food and Agricultural Statistics, 1950*, FAO.

the danger of displacing labour which cannot easily find alternative employment.

The need for mechanization of agriculture is increasingly being realized by Governments in Latin America. Thus, credits to farmers on easy terms for the purchase of machinery are being afforded by the Governments of Chile, Colombia, Uruguay and Mexico. In the latter country, credits are supplemented by direct grants to the "ejidos" (co-operatives). In Uruguay there is a special rebate to farmers on the price of petrol. In Chile and Peru, tractors are being hired out to small farmers. In Brazil, labour legislation is being extended to rural areas and a substantial increase in farm wages has been encouraged, which will provide an incentive to introduce tractors.

The rapid introduction of tractors which has been attained in a number of countries as a result of Government measures has tended to give rise to temporary difficulties such as lack of sufficient drivers and inadequate repair facilities. Accordingly, in Chile, Colombia and Uruguay, special training-courses have been instituted.

Specific plans for the introduction of tractors in the future have not been drawn up but the trend of Government policy, together with the economic and technical reasons in favour of a steady increase in the tractor park, suggest that there is likely to be a fairly rapid increase over the next few years. It is impossible to estimate, even approximately, the demand for tractors in Latin America for the coming years. Experience from other countries shows that where mechanization really gets under way, the tractor park can expand with astounding rapidity. As a purely illustrative example, one might assume an annual rate of expansion in the tractor park of 25 per cent for Latin America as a whole, over the five years from 1952 to 1957. Assuming, further, a rate of replacement of 5 per cent per annum, this would imply import requirements totalling nearly 300,000 tractors for the five years, or an annual average of 60,000.

Latin American Imports of Tractors

Latin American imports of tractors have been influenced by a number of permanent and temporary factors, examples of the latter being the import restrictions of the Argentine in 1949 which accounted for the decline in that year, and the larger volume of credits available, especially from the United States, to most of the countries in 1950. By far the larger part of the tractors in use in Latin America was bought in the United States. Only Argentina and Uruguay took a considerable part—33 and 48 per cent respectively—from Europe.¹

¹ Source : ECE document IM/33, " Note by the Secretariat on European Exports of Tractors to Latin America ", 10 November 1951.

Table 2

IMPORTS OF TRACTORS INTO LATIN AMERICA BY COUNTRY OF ORIGIN^a

<i>Numbers</i>			
Country or area of origin	1948	1949	1950
<i>Europe</i>			
United Kingdom	5,322	2,135	3,300 ^b
Western Germany	—	54	1,033
France	8	365	440
Italy	254	132	129
Sweden	104	159	267
Austria	19	4	63
Total of countries listed	5,707	2,849	5,232
<i>North America</i>			
United States	23,710	16,428	22,038
Canada	39	233	392
Total	29,456	19,510	27,662

^a The figures are derived from trade statistics of exporting countries. Therefore, the totals do not correspond exactly to the totals given in Table 1, which is based partly on exporting and partly on importing countries' trade statistics.

^b Partly estimated.

The principal reasons which have favoured the United States as a source of tractor imports can be summarized as follows :

- (i) A long-established and effective distribution system.
- (ii) Trade on a comparatively large scale, which has made possible the maintenance of large stocks of spare parts widely distributed and the maintenance of adequate servicing arrangements.
- (iii) The geographical proximity of a number of countries to the United States made for low freight rates and facilitated the import of spare parts and exchange of technical personnel.
- (iv) The availability of a wide range of ancillary agricultural machinery, including more specialized equipment such as cotton and maize pickers.
- (v) The assistance rendered by various United States organizations for developing agricultural programmes ; some of the organizations are non-governmental in character, and some are directly sponsored by the United States Government.
- (vi) The extension of loans and credits, both medium and long-term, by commercial houses, distributing organizations, Governments and international organizations supplying dollar currency ; recent examples include a loan to Chile for the purchase of agricultural machinery and a \$5 million

loan from the International Bank for Reconstruction and Development to Colombia.

- (vii) The unsuitability of several pre-war European types of tractors and agricultural machinery.

Since the end of the war, as will be discussed below, the European tractor and farm machinery industry has undergone a fundamental change. It is now able to meet virtually the whole range of the needs of Latin American countries in types of tractors and agricultural equipment; quantities available are now such as to enable large orders to be placed for single types.

The Economic Commission for Latin America has carried out market surveys for tractors in five Latin American countries: Chile, Colombia, Peru, Mexico and Uruguay. These surveys show the types of equipment in use, the basic conditions governing the choice of a particular type of equipment and the general preferences of farmers.

In Mexico, 46 per cent of the farmers consulted showed preference for diesel engines, 45 per cent for kerosene engines and 6 per cent for petrol engines. The average draw-bar power of the tractors in use was 20 HP in the case of wheeled tractors and 53 HP in the case of tracklaying tractors; 61 per cent had pneumatic tyres, 22 per cent had steel wheels and 17 per cent were tracklayers. Types in these proportions seem to meet local Mexican conditions.

In Peru, the farmers consulted indicated a preference for petrol/kerosene engines up to 35 HP and diesel engines for large tractors. Of the existing tracklaying tractors, 82 per cent were powered with diesel engines. This type represented about 32 per cent of tractors imported, with an average draw-bar HP of 38. Wheeled tractors fitted with pneumatic tyres average 30 HP. Steel wheels were preferred in the regions.

In Uruguay, although there were more petrol than diesel tractors in use, farmers expressed a preference for diesel engines in the ratio of 2:1. Importers and distributors also asserted that farmers tend to favour diesel engines and tractors over 35 HP. Of the tractors surveyed, 61 per cent had pneumatic tyres, 31 per cent had steel wheels and 8 per cent were tracklayers. These proportions appear to correspond roughly to requirements.

In Chile, of the tractors in use 39 per cent had diesel engines, 54 per cent kerosene and 7 per cent petrol engines; 52 per cent of the farmers, however, expressed a preference for diesel engines, and only 38 per cent for kerosene. The cost of fuel favours diesel engines, the price of diesel oil being lower than that of kerosene and, especially, petrol. Of the farmers consulted, 53 per cent indicated a preference for pneumatic tyres, 12 per cent for steel wheels and 35 per cent for tracklayers. The power requirements

most suitable for local conditions were stated to be about 35 draw-bar HP.

In Colombia, 26 per cent of the tractors in use were diesel-powered; 46 per cent of the farmers questioned indicated a preference for diesel tractors, but, in spite of this preference, it is understood that the bulk of the orders being placed are for petrol/kerosene engines, in view of the fear that mechanics may not be available for the maintenance of diesel engines. One large importer expressed the opinion that the most suitable power for tractors called for by local conditions was 26 draw-bar HP in the case of wheeled tractors and 34 draw-bar HP in the case of tracklayers.

To the extent that the results of the enquiries made in these five countries can be generalized, it may be said that tractors required should be simple and robustly built, economical in use and easy to maintain. A large proportion should be powered with diesel engines, and of these a considerable number, perhaps the bulk, should be 35 draw-bar HP and over. There appears to be a trend towards greater use of diesel engines and larger tractors. The majority of the wheeled tractors required should be fitted with pneumatic tyres but some steel wheels are required, and some tractors should have both steel wheels and rubber tyres. A fair proportion of tracklaying diesel tractors in the 35 HP group and in the 50-60 HP group are required. Tractors should be supplied with, or capable of being fitted easily with implements suitable for Latin American conditions. Throughout, emphasis is placed on the need for spare parts, adequate servicing arrangements and the need for training of operating and maintenance personnel.

Europe as a Supplier of Tractors

The production of modern tractors and farm machinery is a recent development in Europe. Total United Kingdom production in 1937 was 18,000. Until the second World War, three-quarters of the tractors in use were of one make, the Fordson. Germany started producing tractors after the first World War, but total production had reached only 16,000 by 1937. Before the second World War the combined production of the rest of Europe (excluding the U.S.S.R.) was just over 6,000 a year. The U.S.S.R. was the only European country which had by that time begun to tackle seriously the question of mechanization of agriculture. During the war, the need for increased food production, and also the drain on agricultural labour for industry, stimulated the mechanization of agriculture. In the United Kingdom production rose to 20,000 tractors a year, and in Germany to 35,000 tractors a year. After the war the continued shortage of manpower, together with the need to find peace-time outlets for war industries, further stimulated the development of

production. As will be seen from Table 3, European tractor production excluding the U.S.S.R. rose from 40,000 in 1937 to 164,000 in 1948 and 237,000 in 1950.

Table 3

PRODUCTION OF AGRICULTURAL TRACTORS
IN EUROPE ^a

Thousands

Country	1937	1948	1950
Austria	0.1	4.1	5.4
France	1.7 ^b	12.4	14.2
Western Germany	12.0	7.6 ^c	52.1
Italy	2.0 ^d	3.3	8.0
Sweden	0.3 ^d	4.7	6.4
Switzerland	1.3	2.0	1.6
United Kingdom	17.9	117.0	120.2
Sub-total	35.3	151.1	207.9
Czechoslovakia	0.2	9.1	12.0
Eastern Germany	4.0	—	5.0
Hungary	0.7	1.5	5.1
Poland	—	1.2	3.7
Rumania	—	0.8	3.7
Sub-total	4.9	12.6	29.5
U.S.S.R.	51.0	51.0	97.0
Total			
Excluding U.S.S.R.	40.2	163.7	237.4
Including U.S.S.R.	91.2	214.7	334.4

Sources: *Economic Survey of Europe in 1950*, Economic Commission for Europe, Geneva, 1951, and information from official sources.

^a Including three- and four-wheel and tracklaying. Excluding garden tractors. ^b 1938.

^c U.K./U.S. Zone.

^d 1934-1938.

Since the war, much development work has been carried out with the aim of meeting more exactly farmers' needs and taking advantage of technical advances in production methods. The most important development has undoubtedly been the more extensive use of the diesel engine. The modern diesel engine is flexible, has a high torque at low speed and is extremely economical in fuel and oil. The first cost ¹ is higher than the cost of the petrol/kerosene engine, but, if the tractor is used for a sufficient number of hours per year, its low consumption of relatively cheap fuel compensates the increase in initial costs. Maintenance costs are no higher, and adjustments between major overhauls are very infrequent. The United Kingdom showed an increase of over 400 per cent in diesel tractor production between the beginning of 1948 and the end of 1950.

¹ Owing to large-scale production, the relative cost of diesel engines has been greatly reduced. In 1952, the price difference in a 40 HP tractor was about \$280 (£100) as compared with a carburettor engine.

During this period, production of diesel engine tractors as a percentage of total production rose from 3 to over 12 per cent.

Total European production (excluding the U.S.S.R.) of diesel and semi-diesel wheeled and tracklaying tractors in 1950 was about 121,000, of which 91,000 were produced in western Europe and 30,000 in eastern Europe. German production consisted almost entirely of diesels and semi-diesels. Austria, Czechoslovakia and Hungary produced exclusively diesels. In France, Italy and Sweden, the proportion of diesels produced has been steadily increasing.²

Other important technical developments have been the introduction of devices for changing more easily from one type of farm equipment to another; gear boxes with more speeds and better-planned ratios; and improved design details which reduce fuel consumption and maintenance costs. These developments have all been assisted by the establishment of testing stations, which not only publish comparative tests of tractor performance but assist manufacturers in overcoming difficulties and in introducing improvements.

Although a very large number of types are still produced in Europe, there are now signs of an increased tendency towards standardization among the larger manufacturers, which helps to reduce costs, to eliminate the need for so many types of spare parts, and to simplify servicing arrangements. For example, some types of tractor engine are now being produced by specialized engine manufacturers and are used in other types of equipment, such as excavators, air compressors, welding sets, motorboats and motor vehicles. One particular type of diesel engine is now being used by five or six European tractor manufacturers and there are signs that this number may increase further.

Thus, generally speaking, the recent technical developments in the European tractor industry must have made it more nearly equal to the United States manufacturers, as regards the ability to meet the particular requirements of the Latin American tractor market.

It might be asked whether, in the present conditions of rearmament, the level of European tractor production would be sufficient to utilize the possibilities for increased sales in Latin America. Undoubtedly, the direct and indirect demands of rearmament have affected production prospects in Europe. Nevertheless, bearing in mind that, until recently, there was a substantial surplus capacity, there is reason to believe that a sufficient margin of capacity is still available to enable exports to be considerably increased.

² *The European Tractor Industry in the Setting of the World Market*, E/ECE/139, Geneva, 2 February 1952.

The actual production of tractors in the principal European exporting countries in 1950 was roughly 220,000.¹ The production capacity of these countries may be roughly estimated at 375,000, leaving a surplus capacity of more than 150,000.² Production in these countries in the first six months of 1951 was running at an annual rate of about 275,000, corresponding to a higher demand in Europe and overseas.³ It seems likely that part of the surplus production capacity available in 1950 has since then been diverted to other purposes. Nevertheless, a considerable part of it apparently still remains, probably of the order of 30,000 or more. European exports of tractors to Latin America in 1950 were about 5,000.³ Thus, a very considerable increase of the rate of export to Latin America would appear to be within the capacity of the European tractor industry without diversion from other markets.

European manufacturers now produce tractors suitable for Latin American countries. In diesel engine tractors they are pre-eminent. Such questions as servicing and spare parts, which have raised and continue to raise difficulties, can be satisfactorily overcome if imports are on a sufficient scale. The European manufacturers have in recent years overcome similar difficulties in other overseas countries where the volume of sales justified the outlay. Moreover, European manufacturers, who have already set up producing and assembling factories

¹ United Kingdom, Western Germany, France, Italy, Switzerland, Sweden, Austria and Czechoslovakia (see Table 3).

² Source : E/ECE/139, *op. cit.*

³ See Table 2.

in many parts of the world, would probably be prepared to set up similar factories in Latin American countries. The only type which was not available in sufficient quantities was the large tracklayer. Several manufacturers, however, have started production and types up to 150 HP are now available.

The studies made of the actual obstacles to increased trade experienced by Latin American importers or by European exporters brought out a number of points which, if not fundamental, have been serious in recent years. Inadequate spare parts and servicing arrangements undoubtedly worry the Latin American farmer. Apart from the sheer inability in certain cases to get the necessary part, the cost of repairs tends to be high, and the time required to carry out repairs keeps the tractor out of use for too long a period. It has already been indicated that this problem can be solved as soon as the volume of trade justifies it. The need for repairs is minimized where diesel types are employed. A method being adopted increasingly is the system of complete replacement of the engine after a certain period. Another problem which deserves attention is the simplification, unification and cheapening of the process of testing.

As far as price is concerned, there is no evidence to suggest that European tractors are not competitive with tractors of United States origin. Now that there are a number of types of tractors being produced on a large scale, there is reason to suppose that European prices can continue to be on a competitive basis. Standardization and reduction in the number of types would tend still further to reduce prices.



NOTES ON SOURCES AND METHODS

Throughout this Study, the terms "Europe" and "Latin America" include the following countries :

Europe: Austria, Belgium-Luxembourg, Czechoslovakia, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and Yugoslavia.

Data for Germany relate to the whole of the pre-war territory until 1938 and to western Germany for post-war years (unless otherwise indicated).

Because of lack of data or insignificant figures, the other European countries are not included.

Latin America: Argentina, Bolivia, Brazil, Chile, Colombia, Costa-Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, El Salvador, Uruguay, and Venezuela. Panama includes the Canal Zone, as the distinction between the two territories is not given for many of their trading partners.

SECTION I. VALUES AT CURRENT PRICES

Generally speaking, the current values shown in the tables relate to three kinds of trade relations : (1) total trade of Latin America and its distribution by trading partners ; (2) trade with the United States ; and (3) trade with Europe.

The following sources have been used :

(1) *Total trade of Latin America and/or its distribution by trading partners*: Figures are based on trade statistics of Latin American countries. They include intra-trade.

(2) *Trade with the United States*: Figures are taken from *Foreign Commerce and Navigation of the United States* and relate to general trade. For the years 1949 to 1951, imports from the United States given by importing countries exclude "special category" commodities, but when figures relate to total Latin America's imports from the United States they include those commodities, because their distribution by Continent is known while that by country is not available (see *Foreign Commerce Weekly*, 5 May 1952, page 3).

(3) *Trade with Europe*: Figures are taken from trade statistics of the European countries. For Czechoslovakia, Hungary, Poland and Yugoslavia, certain post-war data were derived from Latin American statistics, as figures from the European side were not available. Wherever possible, figures relate to special trade and country of origin and consumption, with the following important exceptions :

United Kingdom	general imports	from 1949 to 1951
Sweden	country of purchase and sale	from 1925 to 1935
Denmark	general trade	from 1925 to 1936
	country of purchase and sale	all years
Finland	country of purchase and sale	from 1925 to 1934
Norway	general trade	from 1925 to 1938
	country of purchase and sale	from 1925 to 1934

Exchange rates used for European countries

Up to 1938, the exchange rates are those given in *Banking and Monetary Statistics*, Board of Governors of the Federal Reserve System, Washington, D.C., with the exception of those for Germany from 1935 to 1938. At that time, Germany traded with Latin American countries on the basis of a differential system of exchange rates. The following estimates were retained for that trade :

German trade with :	<i>U.S. cents per Reichsmark</i>
Argentina, Uruguay and Paraguay	30
Other Latin American countries	35

For 1938 and thereafter, exchange rates were taken from *Direction of International Trade*, Statistical Papers Series T Statistical Office of the United Nations.

Adjustment made on c.i.f. figures

When figures originally given on a c.i.f. basis were changed to an f.o.b. basis, a 12.5 per cent deduction was applied to the c.i.f. figures.

SECTION II. INDICES OF UNIT VALUES AND VOLUME

In general, indices of unit value and of current value were first computed and volume indices were derived from them. The unit value indices have been computed according to the following methods :

(1) *Trade with the United States:*

(a) *Exports to the United States:* *The Pattern of United States Import Trade since 1923*, John H. Adler, E. R. Schlesinger, E. van Westerborg, Federal Reserve Bank, New York, May 1952, gives a unit value series for the years 1923 to 1950 (1935-1939=100) for United States imports from Latin America. For 1951, a series 1936-1938=100, is published in *Foreign Commerce Weekly*, 5 May 1952, which was linked to the series described above.

(b) *Imports from the United States:* *Statistical Abstract of the United States* gives a series of unit value indices of exports to all destinations. The two series for semi-manufactures and finished manufactures were put on base 1938=100 and then combined by weighting them with values of exports to the world. This source was used for the years up to 1938. For post-war years, figures given for Latin America in *Foreign Commerce Weekly*, 5 May 1952, were used, by linking them to the series above.

(2) *Trade with Europe:*

(a) *Exports to Europe:* For 1925 and after, unit value indices based on 1938=100 have been computed for 21 main commodities from quantities and values of imports from Latin America, as given in trade statistics of seven main European countries. Details of this sample of commodities and countries are shown in the synoptic table given in Section IV. It covers a considerable proportion of total exports of Latin America to total Europe. For Chart 2, where Argentina's exports are shown separately, the sample used refers to commodities for which Argentina is the main supplier. For "other Latin America", figures were obtained by deducting Argentina's exports from total Latin America's exports to Europe.

(b) *Imports from Europe:* Exports by 10 commodity groups provide for 1928, 1938, 1948, 1949, 1950 and 1951 exports at constant 1948/49 prices to Latin America for the main bilateral relations (see synoptic table in Section III below).

Unit value indices were derived for each European exporting country from the 10-group data, both in constant and in current values for the importing countries covered by these data, and then applied to the rest of the importing countries. For the years not covered by this computation, price movements were obtained by combining unit value indices of exports of semi and finished manufactures to all destinations for the main European countries (weighting them by their total exports to Latin America) and linking the results with the indices described above.

For Chart 4, the unit value index used for the United Kingdom (years 1939 to 1947) relates to exports of manufactures to all destinations given in "Monthly Digest of Statistics".

(3) *Total Trade of Latin America:*

It must be kept in mind that Latin America's trade with Europe and the United States takes three-fourths of Latin American foreign trade; the remaining fourth consists mainly of intra-Latin American trade.

(a) *Total exports from Latin America:* The series of unit value indices of Europe and United States imports from Latin America, as described in (1) (a) and (2) (a), were combined, and the resulting series has been applied to total Latin America's exports.

(b) *Total Latin America's imports:* These imports are from three main areas for which the following indices have been used :

Europe: unit value indices as described in (2) (b) ;

United States: unit value indices as described in (1) (b) ;

Rest of world: These imports are mainly intra-Latin American trade, the composition of which has been assumed to be similar to the composition of exports to the United States and Europe. On this assumption, the unit value index of exports to the United States and Europe given in (3) (a) above has been applied to Latin America's imports from the rest of the world.

SECTION III. LATIN AMERICA'S IMPORTS FROM EUROPE AND THE UNITED STATES BY COMMODITY GROUPS

These imports were taken entirely from trade statistics of European countries and the United States.

Owing to the incompleteness of international trade statistics, it is not possible to make an exact study, according to rigorously uniform definitions, of the exports of European countries and the United States by countries of destination and for well-defined commodity groups. In certain cases, therefore, it has been necessary to use the broad commodity groups. Nevertheless, the results obtained may be taken as a good approximation of the order of magnitude involved.

The primary interest of the investigation is centred on the exports of manufactured products. The exporting countries considered are the major European exporters of manufactured products. The countries of destination considered with reference to each exporting country comprise all the Latin American countries for which data by commodity groups are available for all the years 1928, 1938, 1950 and 1951. Consequently, the list of countries of destination is different for each exporting country included in the investigation (see the table below, showing the bilateral relations covered).

The classification for the commodity groups is essentially based upon that used in the foreign trade statistics of the United Kingdom, with minor modifications. It has not, of course, been possible to reproduce the same classification in all cases, partly because of the diversity of nomenclatures used by different exporting countries and partly because the commodity classifications used for the exports to given countries are often less detailed than those in use for total trade.

The following list gives the composition of each of the 10 commodity groups considered in terms of the British nomenclature :

Commodity Classification

Group I. Food, Drink and Tobacco :

- Class I. Food, drink and tobacco.
- Class IV. Animals not for food.

Group II. Passenger Cars :

- Passenger cars, excluding chassis, engines, spare parts and auto parts for assembly (from class III S).

Group III. Textiles and Manufactures :

- Class III I. Cotton yarns and manufactures.
- Class III J. Woollen and worsted yarns and manufactures.
- III K. Silk and artificial silk yarns and manufactures.
- III L. Manufactures of other textile materials.
- III M. Apparel.

Group IV. Other Consumer Goods, manufactured :

- Class III B. Pottery, glass, abrasives, etc. (excluding cement).
- III H. Manufactures of wood and timber.
- III N. Footwear.
- III Q. Leather and manufactures thereof.
- III R. Paper, cardboard, etc. (excluding newsprint).
- III T. Rubber manufactures.
- III U. Miscellaneous articles.

Watches (from class III E).

Rubber tyres and tubes (from class III S).

Group V. Raw Materials and Articles mainly unmanufactured :

- Class II. Raw materials and articles mainly unmanufactured.
 - Class III A. Coke and manufactured fuel.
 - III P. Oils, fats and resins, manufactured.
- Cement (from class III B).
Newsprint (from class III R).

Group VI. Machinery :

- Class III F. Electrical goods and apparatus.
- III G. Machinery.

Group VII. Transport Equipment :

- Class III S. Excluding items in group II above and excluding rubber tyres and tubes.

Group VIII. Metals and Manufactures :

- Class III C. Iron and steel and manufactures thereof.
- III D. Non-ferrous metals and manufactures thereof.
- III E. Cutlery, hardware, implements and instruments (excluding watches).

Group IX. Chemicals and Related Products :

- Class III O. Chemicals, drugs, dyes and colours.

Group X. Unspecified :

- Class V. Parcel post.
- Unspecified exports.

Conversion into Post-war Prices

The figures in national currency for the years 1928, 1938, 1950 and 1951 thus collected, and completed by estimates where necessary, were adjusted to post-war prices (1928, 1938 and 1948 at 1948 prices, 1950 and 1951 at January-September 1949 prices) by use of special price indices computed for each commodity group for each exporting country. In principle, the price indices used have been unit value indices of exports for each commodity group. Where no unit value indices were available, wholesale indices or specially computed unit values for the principal items included in each commodity group were used. In some cases, it was possible to deflate subsections of the broad commodity groups with separate price indices, thus achieving greater accuracy in the deflated totals. For the United Kingdom, for example, the *Board of Trade Journal* gives separate unit value indices for nineteen different commodity subgroups.

IMPORTS OF LATIN AMERICA BY COMMODITY GROUPS FROM MAIN
EUROPEAN SOURCES AND FROM THE UNITED STATES

Bilateral Relations included for 1928, 1938, 1950 and 1951

<i>Exporting country</i>	<i>Importing countries</i>
United Kingdom	Argentina, Uruguay, Brazil, Peru, Chile, Cuba, Venezuela, Mexico and Colombia
France	Argentina, Uruguay, Brazil, Cuba and Colombia
Netherlands	Argentina, Brazil and Venezuela
Belgium-Luxembourg	Argentina, Uruguay, Brazil, Chile, Cuba, Venezuela and Colombia
Switzerland	Argentina, Uruguay, Brazil, Chile, Cuba, Venezuela, Mexico and Colombia
Italy	Argentina, Uruguay, Brazil, Chile, Venezuela, Mexico and Colombia
Portugal	Brazil
Spain	Cuba
Norway	Brazil
Sweden	Argentina, Uruguay, Brazil, Chile, Cuba, Venezuela, Mexico and Colombia
Finland	Argentina
Germany ^a	Argentina, Uruguay, Brazil, Peru, Chile, Cuba, Venezuela, Mexico and Colombia
United States	Argentina, Uruguay, Brazil, Peru, Chile, Cuba, Venezuela, Mexico and Colombia

^a Western Germany for post-war years.

SECTION IV. LATIN AMERICA'S EXPORTS BY COMMODITIES

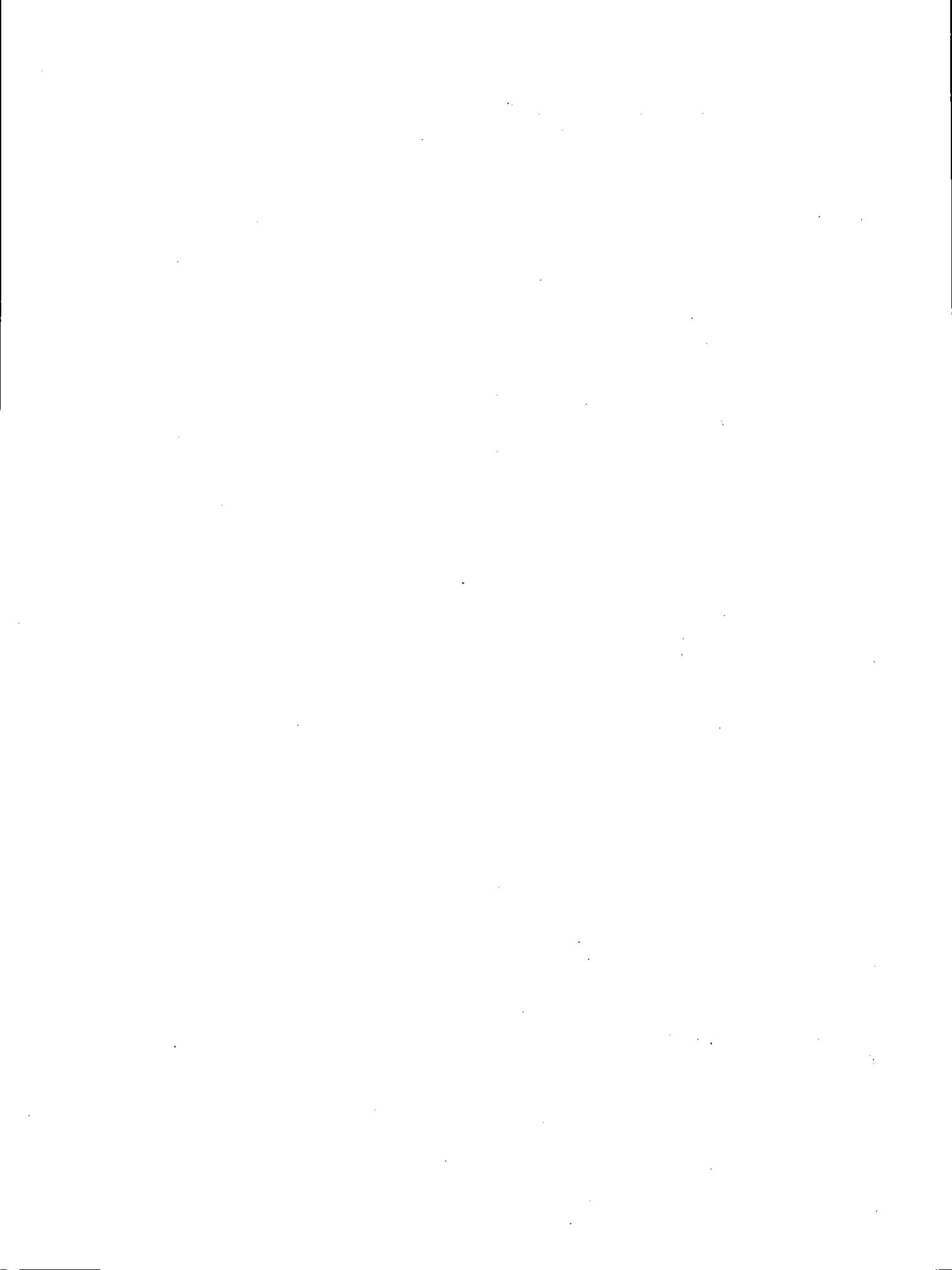
Table 8: This table is the continuation of Table 7 in "Europe's Trade with Latin America", *Economic Bulletin for Europe*, Vol. 2, No. 3, United Nations, Economic Commission for Europe. Sources and methods are those given in this article. Figures for the United States have been added, taking them from *Foreign Commerce and Navigation of the United States*.

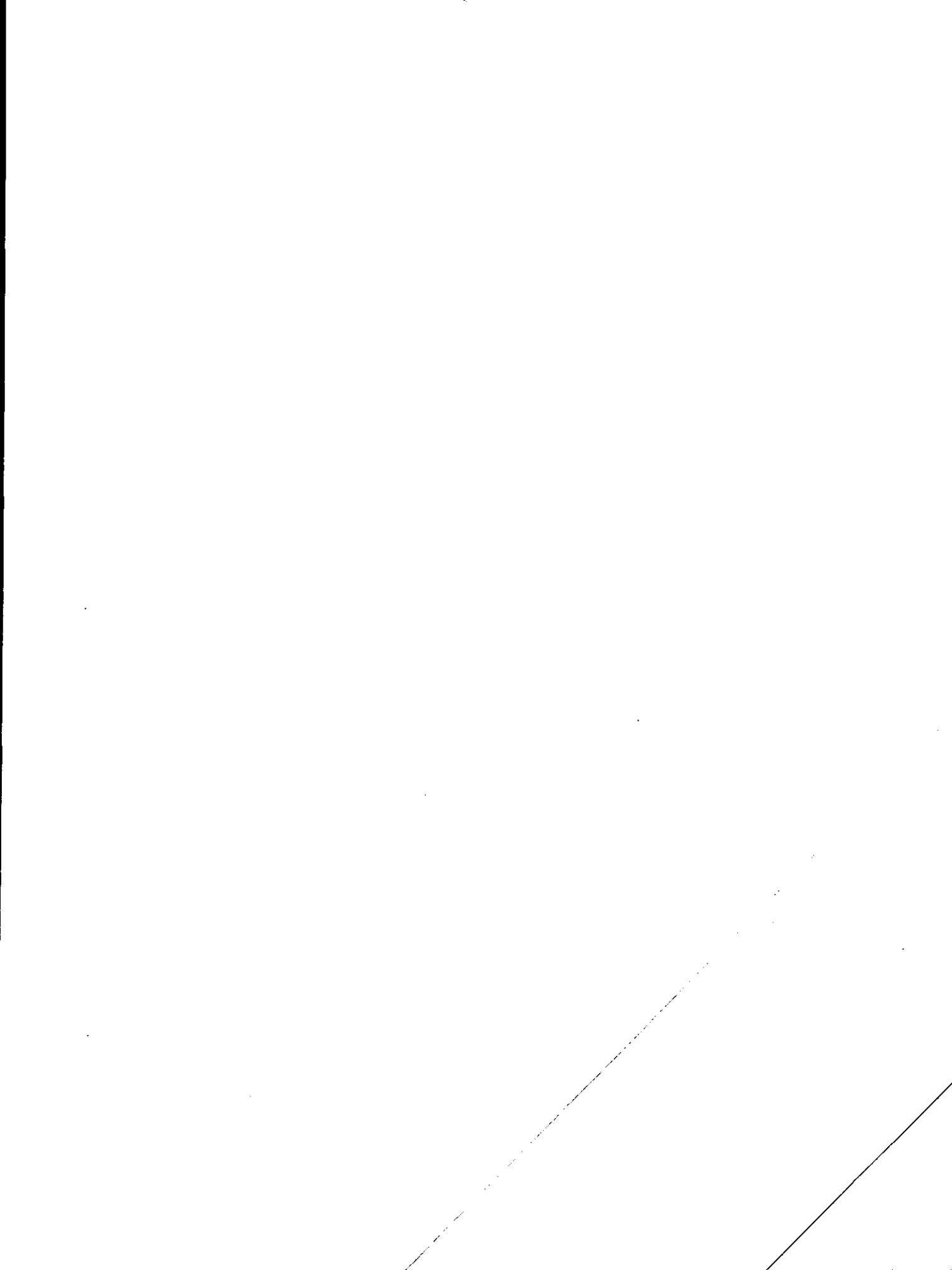
Appendix Table 1: Figures were taken entirely from trade statistics of European countries and they refer to the bilateral relations given in the synoptic table below. As countries included and sources used are not the same, data in Appendix Table I cannot be exactly compared with those in Table 8.

LATIN AMERICA'S EXPORTS TO EUROPE, BY COMMODITIES

Synoptic Table of the Bilateral Relations covered

Commodity	Exporting country	Importing countries					
		Belgium-Luxembourg	France	Germany	Italy	Netherlands	United Kingdom
Wheat	Argentina	×		×	×	×	×
Maize	Argentina	×	×	×	×	×	×
Barley	Argentina	×					×
	Chile	×					×
Oats	Argentina			×			×
	Chile			×			×
Linseed	Argentina	×	×	×	×	×	×
	Uruguay		×	×		×	×
Cotton	Brazil	×	×	×	×	×	×
	Mexico	×	×	×	×	×	×
	Peru	×	×	×	×	×	×
Sugar	Cuba	×	×	×		×	×
	Dominican Republic	×	×				×
	Peru	×		×		×	×
Coffee	Brazil	×	×	×	×	×	×
	Colombia	×	×	×	×		×
	Costa Rica			×			×
	Dominican Republic					×	
	El Salvador		×	×	×		
	Guatemala			×			
	Haiti	×	×		×		
	Nicaragua		×				
Cocoa	Venezuela		×		×		
	Brazil			×	×	×	
	Costa Rica			×			
Ecuador	Ecuador			×	×	×	
Beef	Argentina			×			×
	Brazil						×
	Uruguay						×
Lamb and mutton .	Argentina						×
	Brazil						×
	Chile						×
	Uruguay						×
Lard	Argentina			×			×
Butter	Argentina					×	
Wool	Argentina	×	×	×	×	×	×
	Uruguay	×	×	×	×	×	×
Cattle and hides . .	Argentina			×			×
Quebracho	Argentina	×		×			×
Copper	Chile	×		×	×		×
Lead	Mexico	×		×			×
	Peru	×		×			×
Petroleum	Mexico	×		×			×
	Peru						×
	Venezuela	×		×			×
Nitrate	Chile	×		×		×	×





SALES AGENTS FOR UNITED NATIONS PUBLICATIONS

- ARGENTINA**
Editorial Sudamericana, S.A., Calle Alsina 500, Buenos Aires.
- AUSTRALIA**
H. A. Goddard Pty. Ltd., 255a George Street, Sydney, N.S.W.
- BELGIUM**
Agence et Messageries de la Presse, S.A., 14-22 rue du Persil, Brussels.
W. H. Smith & Son, 71-75 bd Adolphe-Max, Brussels.
- BOLIVIA**
Libreria Selecciones, Empresa Editora "La Razón", Casilla 972, La Paz.
- BRAZIL**
Livreria Agir, Rua Mexico 98-B, Caixa Postal 3291, Rio de Janeiro, D.F.
- CANADA**
The Ryerson Press, 299 Queen Street West, Toronto, Ontario.
- CEYLON**
The Associated Newspapers of Ceylon, Ltd., Lake House, Colombo.
- CHILE**
Libreria Ivens, Calle Moneda 822, Santiago.
Editorial del Pacífico, Ahumada 57, Santiago.
- CHINA**
The World Book Co., Ltd., 99 Chung King Road, 1st Section, Taipei, Taiwan.
The Commercial Press, Ltd., 211 Honan Road, Shanghai.
- COLOMBIA**
Libreria Latina, Ltda., Apartado Aereo 4011, Bogotá.
Libreria Nacional, Ltda., 20 de Julio, San Juan-Jesus, Baranquilla.
Libreria América, Sr. Jaime Navarro R., 49-58 Calle 51, Medellín.
- COSTA RICA**
Tercios Hermanos, Apartado 1313, San José.
- CUBA**
La Casa Belga, René de Smedt, O'Reilly 455, Havana.
- CZECHOSLOVAKIA**
Ceskoslovensky Spisovatel, Národní Trída 9, Prague I.
- DENMARK**
Messrs. Einar Munksgaard, Ltd., Nørregade 6, Copenhagen.
- DOMINICAN REPUBLIC**
Libreria Dominicana, Calle Mercedes 49, Apartado 656, Ciudad Trujillo.
- ECUADOR**
Libreria Científica Bruno Moritz, Casilla 362, Guayaquil.
- EGYPT**
Librairie "La Renaissance d'Égypte", 9 Sharia Adly Pasha, Cairo.
- EL SALVADOR**
Manuel Navas y Cia, "La Casa del Libro Barato", la Avenida Sur 37, San Salvador.
- ETHIOPIA**
Agence éthiopienne de Publicité, P.O. Box 128, Addis Ababa.
- FINLAND**
Akateeminen Kirjakauppa, 2 Keskuskatu, Helsinki.
- FRANCE**
Editions A. Pedone, 13 rue Soufflot, Paris, V^e.
- GREECE**
"Eleftheroudakis", Librairie internationale, Place de la Constitution, Athens.
- GUATEMALA**
Goubaud & Cia., Ltda., Sucesor, 5a Av. Sur, No. 28, Guatemala City.
- HAITI**
Max Bouchereau, Librairie "A la Caravelle", Boite postale 111-B, Port-au-Prince.
- HONDURAS**
Libreria Panamericana, Calle de la Fuente, Tegucigalpa.
- ICELAND**
Bokaverzlun Sigfusar Eymundssonar, Austurstreti 18, Reykjavik.
- INDIA**
Oxford Book & Stationery Company, Scindia House, New Delhi.
P. Varadachary & Co., 8 Linghi Chetty Street, Madras I.
- INDONESIA**
Jajasan Pembangunan, Gunung Sahari 84, Djakarta.
- IRAN**
Ketab Khaneh Danesh, 293 Saadi Avenue, Teheran.
- IRAQ**
Mackenzie's Bookshop, Booksellers and Stationers, Baghdad.
- ISRAEL**
Blumstein's Bookstores, Ltd., 35 Allenby Road, P.O.B. 4154, Tel Aviv.
- ITALY**
Colibri, S.A., 36 Via Mercalli, Milan.
- LEBANON**
Librairie Universelle, Beirut.
- LIBERIA**
Mr. Jacob Momolu Kamara, Gurly and Front Streets, Monrovia.
- LUXEMBOURG**
Librairie J. Schummer, Place Guillaume, Luxembourg.
- MEXICO**
Editorial Hermes, S.A., Ignacio Mariscal 41, Mexico, D.F.
- NETHERLANDS**
N. V. Martinus Nijhoff, Lange Voorhout 9, The Hague.
- NEW ZEALAND**
The United Nations Association of New Zealand, G.P.O. 1011, Wellington.
- NICARAGUA**
Dr. Ramiro Ramirez V., Agencia de Publicaciones, Managua, D.N.
- NORWAY**
Johan Grundt Tanum Forlag, Kr. Augustsgt. 7a, Oslo.
- PAKISTAN**
Thomas & Thomas, Fort Mansion, Frere Road, Karachi.
Publishers United, Ltd., 176 Anarkali, Lahore.
- PANAMA**
José Menéndez, Agencia Internacional de Publicaciones, Plaza de Arango, Panama.
- PARAGUAY**
Moreno Hermanos, Casa América, Palma y Alberdi, Asunción.
- PERU**
Librería internacional del Perú, S.A., Casilla 1417, Lima.
- PHILIPPINES**
D. P. Pérez Co., 132 Riverside, San Juan.
- PORTUGAL**
Livreria Rodrigues, Rua Aurea 186-188, Lisbon.
- SINGAPORE**
The City Bookstore, Ltd., Winchester House, Collyer Quay, Singapore.
- SWEDEN**
C. E. Fritze's Kungl. Hovbokhandel, Fredsgatan 2, Stockholm 16.
- SWITZERLAND**
Librairie Payot, S.A., 1 rue de Bourg, Lausanne, and at Basle, Berne, Geneva, Montreux, Neuchâtel, Vevey, Zurich.
Librairie Hans Raunhardt, Kirchgasse 17, Zurich I.
- SYRIA**
Librairie universelle, Damascus.
- THAILAND**
Pramuan Mit, Ltd., 55, 57, 59 Chakrawat Road, Wat Tuk, Bangkok.
- TURKEY**
Librairie Hachette, 469 Istiklal Caddesi, Beyogh-Istanbul.
- UNION OF SOUTH AFRICA**
Van Schaik's Bookstore (Pty.), P.O. Box 724, Pretoria.
- UNITED KINGDOM**
H.M. Stationery Office, P.O. Box 569, London, S.E. 1; and at H.M.S.O. Shops in London, Belfast, Birmingham, Bristol, Cardiff, Edinburgh and Manchester.
- UNITED STATES OF AMERICA**
International Documents Service, Columbia University Press, 2960 Broadway, New York 27, N.Y.
- URUGUAY**
Oficina de Representación de Editoriales, Prof. Héctor d'Elia, 18 de Julio 1333, Palacio Diaz, Montevideo, R.O.U.
- VENEZUELA**
Distribuidora Escolar, S.A., Ferrenquin a La Cruz 133, Apartado 552, Caracas.
Distribuidora Continental, S.A., Bolero a Pinda 21, Caracas.
- YUGOSLAVIA**
Drzavno Preduzece, Jugoslovenska Knjiga, Marsala Tita 23/11, Belgrade.

United Nations publications can also be obtained from the following booksellers:

- AUSTRIA**
Gerold & Co., I. Graben 31, Wien I.
B. Wüllerstorff, Waagplatz 4, Salzburg.
- GERMANY**
Buchhandlung Elwert & Meurer, Hauptstrasse 101, Berlin-Schöneberg.
W. E. Saarbach, G.m.b.H., Ausland-Zeitungshandel, Gereonstrasse 25-29, Köln I. (22c).
Alexander Horn, Spiegelgasse 9, Wiesbaden.
- JAPAN**
Maruzen Co., Ltd., 6 Tori-Nichome, Nihonbashi, P.O.B. 605, Tokyo Central.
- SPAIN**
Libreria José Bosch, Ronda Universidad 11, Barcelona.

1 — 53-1

Orders from countries where sales agents have not yet been appointed may be sent to
Sales Section, European Office of the United Nations, Palais des Nations Geneva, Switzerland] or Sales and Circulation Section, United Nations, NEW YORK, U. S. A.

Printed in Switzerland
72955—January 1953—4,000

Price: \$1.25 (U. S.); 9/- stg.; Swiss francs 5.00
(or equivalent in other currencies)

United Nations publication
Sales No.: 1952.II.G.2