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PREFACE.

This tenth survey of world production and prices contains a revised world index of primary production as well as a new world index of industrial activity. The first section of Chapter I is concerned with the production and stocks of primary products, the second with industrial activity in general, the third with the activity of individual industries and the production of raw materials of those industries considered severally. While the statistical tables in this chapter cover the period 1925-1935 (1925/26-1935/36), the observations in the text refer mainly to 1935 and the early part of 1936.

In Chapter II, a comparison is made of the quantitative changes during recent years in production and trade. Chapter III contains a study of recent price tendencies which is complementary to that included in the memorandum on *Money and Banking, 1935/36*, Vol. I, *Monetary Review*.

The detailed statistics on which the indices of production are mainly based have been published in the *Statistical Year-Book of the League of Nations, 1935/36*.

A summary of the principal facts which emerge from the present study will be found at the beginning of this volume (pages 7 and 8).

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*League of Nations,
Geneva, August 1936.*

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SUMMARY OF PRINCIPAL FACTS.

(1) The recovery in world production activity which began in the middle of 1932 continued during 1935 and the early part of 1936.

Total primary production increased by 2 % in 1935 and was as large as in 1928 ; raw material stocks were considerably reduced, the industrial recovery continued at an accelerated pace, and the quantum of world trade rose by 5 %. Commodity prices rose slowly in most countries and certain discrepancies which had developed in the general price structure during the years of depression tended to diminish.

SUMMARY OF WORLD INDICES.

Average 1925-1929 = 100.

| Nature of Indices | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| A. Primary production (total) . | 96 | 96 | 99 | 103 | 106 | 104 | 100 | 97 | 100 | 101 | 103 |
| Thereof : | | | | | | | | | | | |
| { Agricultural production . . | 97 | 97 | 99 | 103 | 103 | 104 | 103 | 103 | 104 | 102 | 102 |
| { Non-agricultural production. | 89 | 92 | 100 | 104 | 114 | 102 | 87 | 75 | 84 | 95 | 104 |
| { Foodstuffs | 96 | 97 | 100 | 104 | 103 | 106 | 104 | 104 | 106 | 106 | 104 |
| { Raw materials | 91 | 94 | 99 | 104 | 112 | 102 | 91 | 79 | 88 | 95 | 103 |
| B. Industrial activity : | | | | | | | | | | | |
| World, excluding U.S.S.R. . . | 93 | 93 | 100 | 104 | 110 | 95 | 83 | 69 | 78 | 84 | 92 |
| World, including U.S.S.R. . . | 91 | 93 | 100 | 105 | 112 | 99 | 89 | 77 | 87 | 95 | 106 |
| C. Quantum of international trade | 91 | 94 | 101 | 104 | 110 | 102 | 94 | 82 | 83 | 86 | 90 |

* Provisional indices, subject to revision.

(2) World agricultural production, which had remained remarkably stable at about the level reached in 1928/29, fell slightly in 1934/35 and remained practically unchanged in 1935/36. As simultaneously the demand for agricultural products tended to increase, the situation of the agricultural markets was improved and farm income rose in several countries. Owing, however, to the growing isolation of national markets, the depression of agriculture continued in many important areas.

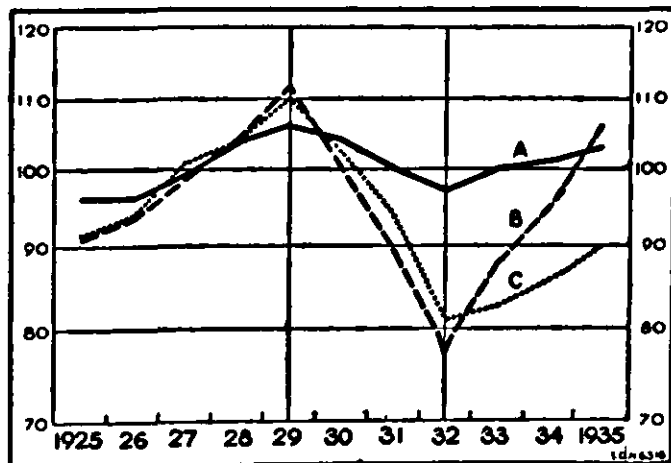
(3) World production of foodstuffs (excluding China) increased a little between 1928/29 and 1934/35, and declined slightly in 1935/36.

(4) World production of non-agricultural raw materials rose, in response to the increased industrial activity, by 13% in 1934 and by 10% in 1935. Total raw material production, including raw materials of agricultural origin, increased by 8% in both years.

DEVELOPMENT OF WORLD PRIMARY PRODUCTION, INDUSTRIAL PRODUCTION AND WORLD TRADE.

Average 1925-1929 = 100.

- A. World primary production.
- B. World industrial production.
- C. World trade (quantum).



(5) Industrial activity in the world as a whole was greater in 1935 than it had been in 1928 and only some 5% less than the 1929 record; but in the world, excluding the Union of Soviet Socialist Republics, it had only recovered to the level of 1925/26. In Europe (excluding the Union of Soviet Socialist Republics), it again just reached the average for the quinquennium preceding the depression; in North America, it still fell short of that average by some 17-18%.

In the course of 1935 and the early part of 1936, industrial activity, and that of the capital goods industries in particular, developed rapidly almost everywhere, except in the countries of the gold *bloc*, where industry remained depressed.

At the beginning of the second quarter of 1936, the industrial activity of the world, including the Union of Soviet Socialist Republics, exceeded the average for 1929; excluding the Union of Soviet Socialist Republics, it was still some 5% to 10% short of the 1929 level.

(6) The quantum of international trade in foodstuffs increased slightly in 1935, but was still 14% less than in 1929 and less also than in 1932, the year in which the quantum of world trade as a whole reached its lowest point. In view of the fact that the world production of foodstuffs was almost as great in 1935 as in 1929, the decline in trade in foodstuffs mainly reflects the increased self-sufficiency of food-importing countries.

(7) The quantum of international trade in industrial raw materials and semi-manufactured goods rose less than the production of these commodities between 1932 and 1935. The increase in trade was 14% and that in production 30%. But, as compared with 1929, world trade in raw materials had reached in 1935 approximately the same level as raw-material production.

(8) The quantum of international trade in manufactured goods increased considerably less than the production of such goods between 1932 and 1935. In the world, excluding the Union of Soviet Socialist Republics, the quantum of trade in these goods was still some 32% smaller, while the activity of manufacturing industries was about 16% less, than in 1929. A large part of this discrepancy is accounted for by the industrialisation of agricultural countries and by the restrictive commercial policy of certain important industrial countries.

(9) The prices of most basic commodities rose in 1935. The rise was greatest for certain raw materials, while certain foodstuffs did not share in the price improvement.

(10) Further progress was made in 1935 towards the restoration of the pre-depression price relationships. In most countries, wholesale prices rose more than the cost of living, and raw-material prices more than those of manufactured goods. The terms of trade of the States producing raw materials were materially improved, though at the beginning of 1936 they still showed a deterioration as compared with 1929.

I. WORLD PRODUCTION.

The first step in any attempt to measure changes in world production is to examine the output of primary products of farm, forest or mineral origin, whether foodstuffs or as industrial raw materials, the physical volume of which can be measured directly. Owing to the nature and diversity of the products, the physical volume of "secondary production" — *i.e.*, manufacturing and construction — can be measured only indirectly. A world index of primary production is shown in Section A below; a parallel index of industrial production in Section B. Recent developments in the production and consumption of important individual commodities or groups of commodities and in the activity of relevant branches of manufacturing industry are reviewed in Section C.

A. PRIMARY PRODUCTION.

SCOPE AND METHOD OF COMPUTATION OF THE WORLD INDEX OF PRIMARY PRODUCTION.

The world index of primary production computed by the Economic Intelligence Service has been thoroughly revised in the present edition. The number of commodities included has been increased from sixty-six to eighty-one. The commodities added are: milk, sea fish, whale-oil, three "hard" textile fibres, mohair, staple fibre, sawn soft-wood, natural gas, hydro-electric energy, nine metals and minerals; on the other hand, certain manufactured chemicals previously included have been omitted from the revised index. The full list of commodities covered is given in Appendix I, Table 1. In certain cases where satisfactory information regarding the output of a given raw material is lacking, the first "partly manufactured" product derived from that material has been taken into account. Owing to the absence of comprehensive or sufficiently representative data, the index still omits certain primary commodities, the most important of which are vegetables, fruit, poultry, eggs, hides and skins, as well as wood other than sawn soft-wood and wood pulp. Gold has been omitted, because so large a proportion of the production is used for monetary purposes. Production of all foodstuffs in China (apart from Manchuria), for which no comprehensive periodical statistics exist, is also omitted from the index.

The index is calculated according to the "aggregative method" explained in Appendix I. The quantity of each commodity produced each year being multiplied by a constant representative price, variations in the index represent changes in the quantities produced and not in values. As in the last four editions, the prices ruling in 1930 have been used as weights, and the average annual production in the quinquennium 1925-1929 — the "average pre-depression level" — has been taken as base.

For the purposes of analysis of the general changes in world primary production, sub-indices have been calculated for certain classes of commodities. The classification has been somewhat modified. The eighty-one commodities have been classified according to three different criteria — *viz.* :

(a) According to their origin, into :

- (1) Agricultural, including marine, products ;
- (2) Non-agricultural products ;

(b) According to the main use to which they are put, into :

- (1) Foodstuffs ;¹
- (2) Fodder crops ;
- (3) Raw materials ;²

¹ This group consists partly of crude foodstuffs ready for human consumption and partly of raw materials for manufactured food, drink and tobacco.

² This group excludes raw materials for manufactured food, drink and tobacco, which are included under (b) (1).

(c) According to their nature, into fifteen commodity groups shown in Section C below and in Appendix I.¹

The indices refer to quantities produced per calendar year, except as regards certain agricultural products in the Northern Hemisphere and the whole agricultural production in the Southern Hemisphere, the data for which relate to periods of twelve months ending in the July, August or September following the year stated.

All indices for 1935 (1935/36) are partly based on estimates, and should be considered as provisional.

TOTAL PRIMARY PRODUCTION.

The general production index of the eighty-one primary commodities considered is given below for the world and its main continental groups.²

Table 1. — GENERAL INDICES OF PRIMARY PRODUCTION, WEIGHTED BY 1930 PRICES.
Average 1925-1929 (1925/26-1929/30) = 100.

| Continental groups | 1925 1925/26 | 1926 1926/27 | 1927 1927/28 | 1928 1928/29 | 1929 1929/30 | 1930 1930/31 | 1931 1931/32 | 1932 1932/33 | 1933 1933/34 | 1934 1934/35 | *1935 *1935/36 |
|-----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| Europe, excluding U.S.S.R. . . . | 96 | 91 | 100 | 104 | 110 | 105 | 104 | 104 | 106 | 110 | 111 |
| U.S.S.R. | 91 | 100 | 101 | 103 | 105 | 114 | 97 | *90 | *98 | *102 | *111 |
| Europe, including U.S.S.R. . . . | 94 | 93 | 100 | 104 | 109 | 107 | 102 | *100 | *104 | *108 | *111 |
| North America | 96 | 99 | 98 | 103 | 103 | 96 | 93 | 87 | 86 | 84 | 87 |
| Latin America | 96 | 98 | 100 | 105 | 102 | 105 | 100 | 97 | 102 | 108 | 105 |
| Africa | 96 | 94 | 97 | 103 | 109 | 106 | 103 | 103 | 110 | 114 | 118 |
| Asia, excluding Asiatic Russia* . | 97 | 97 | 100 | 103 | 104 | 106 | 103 | 103 | 108 | 105 | 106 |
| Oceania | 95 | 99 | 99 | 104 | 103 | 110 | 112 | 122 | 122 | 123 | 124 |
| World { Total Primary Production | 96 | 96 | 99 | 103 | 106 | 104 | 100 | 97 | 100 | 101 | 103 |
| World { Theeof: | | | | | | | | | | | |
| World { Agricultural Production . | 97 | 97 | 99 | 103 | 103 | 104 | 103 | 103 | 104 | 102 | 102 |
| World { Non-agricultural Product. | 89 | 92 | 100 | 104 | 114 | 102 | 87 | 75 | 84 | 95 | 104 |

* Excluding also production of foodstuffs in China (apart from Manchuria).
* Provisional indices subject to revision.

World production of foodstuffs and raw materials did not decline during the depression years. The average annual output during the five years 1930-1934 was about $\frac{1}{2}$ % more than the average annual output during the preceding quinquennium. It fell, however, by about 8% from the maximum reached in 1929 to the minimum touched in 1932. During the three subsequent years, about two-thirds of the ground thus lost was recovered. In 1935, world primary production equalled the level it had reached in 1928 and exceeded the level of any year since 1931.

The continental indices given in the table show that the development of primary production has been far from uniform in the different parts of the world. The contrast between the index for North America and those for all other continental groups is striking. North-American production has remained considerably below the pre-depression level

¹ This grouping follows closely the classification used in the "Minimum List of Commodities for International Trade Statistics" drawn up in 1935 by the Committee of Statistical Experts of the League of Nations.

² In the continental grouping of countries used throughout this volume, Europe includes Turkey, Asia excludes the Union of Soviet Socialist Republics, while Latin-America comprises Mexico, the whole of Central and South America and the islands in the Caribbean Sea.

throughout the period 1930-1935, and reached its low point as late as in 1934. All other continental indices not only moved above the average pre-depression level, but also reached their peaks during recent years. These peak years are 1933 for Asia, 1934/35 for Latin America, 1935 for Europe including the Union of Soviet Socialist Republics, 1935/36 for Africa and Oceania.

Diagram 1. — WORLD PRIMARY PRODUCTION :

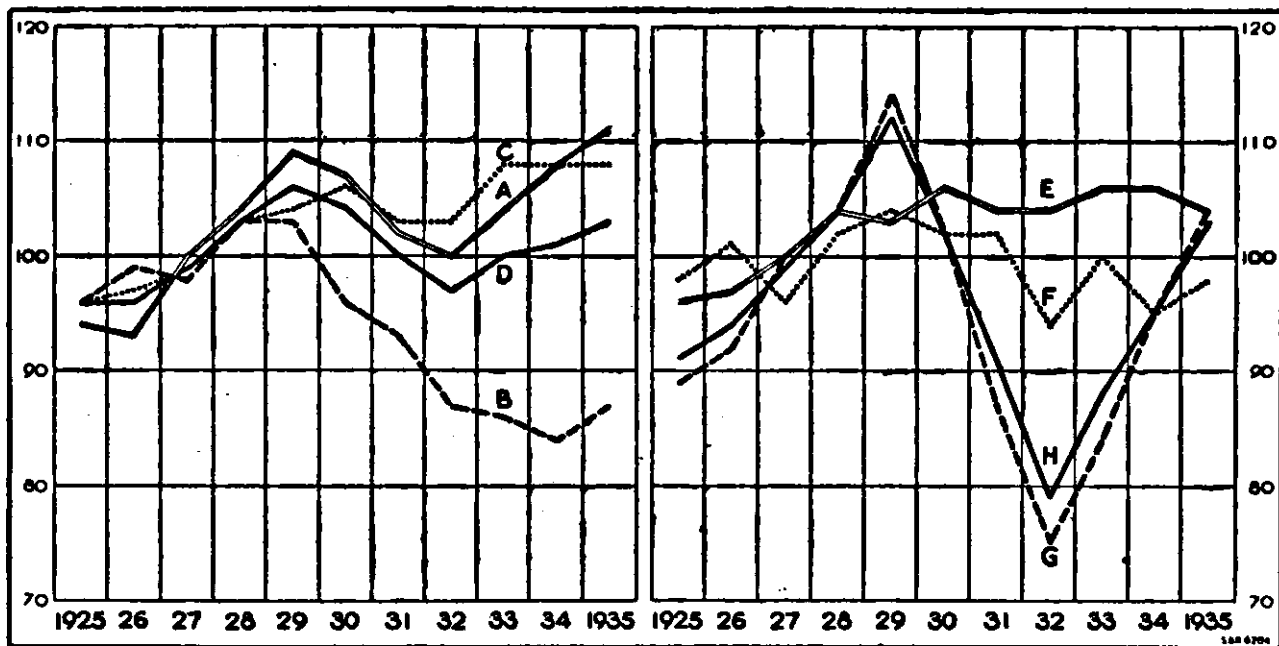
(a) *By Main Territorial Divisions.*

- A. Europe (incl. U.S.S.R.).
- B. North America.
- C. All other continental groups.
- D. World.

(b) *By Chief Classes of Commodities :*

- E. Foodstuffs.
- F. Raw materials of agricultural origin.
- G. Non-agricultural products.
- H. All raw materials.

Average 1925-1929 = 100.



The chief factors which have determined the course of the world index will perhaps be best seen from Diagram 1. For the purpose of Part (a) of this diagram, the indices for Latin America, Africa, Asia and Oceania have been aggregated into a composite index. It will be seen that, after a considerable revival in 1933, this composite index remained stationary in 1934 and 1935, the divergent movements of production in the four continental groups counterbalancing each other. The European index, on the other hand, shows a continuous rise during the last three years, while the North-American index turned upwards only in 1935. The rise in the world index was thus attributable, in 1933, to both Europe and the rest of the world excluding North America; in 1934, to Europe alone; and, in 1935, to Europe and North America in a roughly equal degree.

How these movements have affected the relative shares of these three main groups of countries in the world total will be seen from the following percentage figures :

Relative Distribution of World Primary Production :

| | Europe, (excl. U.S.S.R.) | U.S.S.R. | Total | North America | Rest of world | World |
|-------------------------|-----------------------------|----------|-------|------------------|------------------|-------|
| Average 1925-1929 | 33.1 | 10.2 | 43.3 | 30.4 | 26.3 | 100 |
| Average 1930-1934 | 35.0 | 10.2 | 45.2 | 27.0 | 27.8 | 100 |
| Year 1934 | 36.0 | 10.4 | 46.4 | 25.2 | 28.4 | 100 |
| Year 1935 | 35.6 | 11.0 | 46.6 | 25.6 | 27.8 | 100 |

The increase in Europe's share, excluding the Union of Soviet Socialist Republics, was checked in 1935; the share of the Union of Soviet Socialist Republics increased. North American production was greater than that of Latin America, Africa, Asia and Oceania taken together in 1925-1929, but smaller during the years 1930-1935. A slight tendency towards the restoration of the previous relationship is noticeable, however, in 1935. Detailed figures for each continental group are given in Appendix I, Table 3.

Part (b) of Diagram 1 affords an indication of the divergent movements of the production of the principal groups of commodities.¹ It brings into light, above all, the contrast between the relative stability of the world's agricultural production and the sharp fluctuation of the output of non-agricultural (i.e., forest and mineral) products. During the last three years under review, the spread between the curves representing agricultural and non-agricultural production has been narrowed down and was, indeed, practically eliminated in 1935. In the course of its vigorous upward swing, the curve for non-agricultural production joined that for raw materials of agricultural origin in 1934 and that for foodstuffs in 1935.

The composition of world primary production and its changes during recent years are summarised in the following statement, where the principal commodity groups are cross-classified according to the criteria of "origin" and "use" referred to in the introductory section:

Composition of World Primary Production by Chief Classes of Commodities.

| | Percentages | | | | | | | | |
|----------------------------------|-------------------|-------------|-------------------|-------------|-----------|-------------|-----------|-------------|----------------------------|
| | Average 1925-1929 | | Average 1930-1934 | | Year 1934 | | Year 1935 | | |
| | By use | By origin | By use | By origin | By use | By origin | By use | By origin | |
| Foodstuffs | 61.5 | 61.5 | 64.6 | 64.6 | 64.9 | 64.9 | 62.1 | 62.1 | |
| Fodder crops | 10.2 | 10.2 | 9.6 | 9.6 | 8.4 | 8.4 | 9.6 | 9.6 | |
| Raw materials, total . | 28.3 | | 25.8 | | 26.7 | | 28.3 | | |
| Of agricultural origin | | 6.8 | | 6.8 | | 6.5 | | 6.5 | |
| | | <u>78.5</u> | | <u>81.0</u> | | <u>79.8</u> | | <u>78.2</u> | Agricultural products. |
| Of non-agricultural origin | | 21.5 | | 19.0 | | 20.2 | | 21.8 | Non-agricultural products. |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | Total. |

Detailed figures showing the composition of the indices for each continental group are given in Appendix I, Table 4. It will there be seen that agricultural production accounted, in the base period, for about two-thirds of the total in North America and for over four-fifths in Europe, while the corresponding proportion was about nine-tenths for Latin America, Africa, Asia and Oceania. These differences in the composition of the total production go far to explain the varying courses of the continental indices given in Table 1 above. They do not, however, furnish the only explanation. Both agricultural and non-agricultural products are responsible for the considerable difference between the European and North American indices; and, despite the broad similarity of the composition of primary production in the four other continental groups, the movements of their indices show marked differences.

¹ For the sake of clarity, the index for fodder crops has been omitted from the diagram. This index, which is largely determined by the variations in the maize crops, will be dealt with in Section C below.

AGRICULTURAL PRODUCTION.

The revised index of world agricultural production, given below, includes the first forty-three commodities of the list given in Appendix I, Table 1.¹ The indices for the Union of Soviet Socialist Republics (for 1932-1935) and North America (for 1933-1935) are partly based on estimates, owing to the lack of comprehensive data regarding the production of meat.

Table 2. — INDICES OF AGRICULTURAL PRODUCTION, WEIGHTED BY 1930 PRICES.
Average 1925-1929 (1925/26-1929/30) = 100.

| Continental groups | 1925 1925/26 | 1926 1926/27 | 1927 1927/28 | 1928 1928/29 | 1929 1929/30 | 1930 1930/31 | 1931 1931/32 | 1932 1932/33 | 1933 1933/34 | 1934 1934/35 | *1935 1935/36 |
|-------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| Europe, excluding U.S.S.R. | 97 | 93 | 98 | 103 | 108 | 105 | 108 | 111 | 112 | 113 | 113 |
| U.S.S.R. | 93 | 101 | 101 | 103 | 103 | 111 | 92 | * 83 | * 90 | * 92 | * 97 |
| Europe, including U.S.S.R. | 96 | 95 | 99 | 103 | 107 | 107 | 103 | *103 | *106 | *107 | *108 |
| North America | 99 | 100 | 99 | 104 | 99 | 97 | 102 | 101 | * 95 | * 88 | * 88 |
| Latin America | 97 | 99 | 101 | 104 | 99 | 104 | 102 | 100 | 106 | 110 | 105 |
| Africa | 96 | 95 | 97 | 103 | 109 | 105 | 103 | 104 | 111 | 113 | 116 |
| Asia, excluding Asiatic Russia* | 98 | 98 | 100 | 102 | 102 | 104 | 102 | 103 | 106 | 101 | 100 |
| Oceania | 94 | 99 | 98 | 105 | 103 | 112 | 115 | 126 | 125 | 126 | *126 |
| World | 97 | 97 | 99 | 103 | 103 | 104 | 103 | 103 | 104 | 102 | 102 |
| World, excluding U.S.S.R. | 98 | 97 | 99 | 103 | 103 | 103 | 105 | 106 | 106 | 104 | 103 |

* Excluding production of foodstuffs in China (apart from Manchuria).

* Provisional indices subject to revision.

The effect of the extension of the scope of this index has been to smoothen its general course. It will be seen, indeed, that the world's total agricultural production has remained remarkably stable for eight years in succession. The widest deviations from the average for the period 1928-1935 (1928/29-1935/36) were + 0.9% in 1933 (1933/34) and - 0.8% in 1934 (1934/35).²

The reduction of the supply of agricultural produce in 1934 (1934/35), though slight in proportion to total production, was of great importance in relation to the excess supplies accumulated during the preceding period. The aggregate production in 1935 (1935/36), according to the incomplete data available, was practically equal to that of the preceding year. At the same time, the demand for agricultural products increased. This increase was due chiefly to the industrial revival in most parts of the world, which increased both the demand for raw materials and also the consumption of foodstuffs. In consequence, there was a general though not universal improvement in the agricultural world market conditions in 1934 and in 1935.

In recent years, however, the importance of world markets for the agricultural economy as a whole has been considerably diminished. Almost all countries which formerly relied upon imports of farm products have made efforts to achieve greater self-sufficiency — efforts supplemented, in certain cases, by imperial, colonial or regional agreements; while countries depending upon foreign markets for the disposal of their agricultural products have been compelled to restrict their production. The most important of the recent restriction schemes have been the Agricultural Adjustment Acts in the United States,

¹ It will be observed that these forty-three commodities include two products of marine origin, the relative importance of which, however, is slight.

² Calculated from the value aggregates upon which the index is based.

the reduction of live-stock in certain European countries exporting animal products, and the schemes devised to curtail the supplies of wheat, sugar, coffee and tea. Weather conditions, however, have been a more important factor than the restriction schemes in the year-to-year variations of the agricultural production. The shrinkage of production in 1934, in fact, resulted from a coincidence of deliberate curtailment with a widespread and severe drought in certain important areas. A glance at the continental indices given in the table above shows that the drop in production was wholly due to North America and Asia; while Europe (excluding the Union of Soviet Socialist Republics), Latin America and Africa reached new records in production, and Oceania maintained the high level already reached in 1932/33. The situation changed comparatively little in 1935. Production in Europe (excluding the Union of Soviet Socialist Republics), North America and Oceania remained unchanged, while a drop in Latin America — due to unfavourable weather conditions — and a small decline in Asia were offset by a recovery in the Union of Soviet Socialist Republics and a further increase in Africa which carried the production of this continent to a peak figure.

As a result at once of the improvement of agricultural world market conditions and of the national agricultural recovery schemes, prices of agricultural products have generally risen during recent years. Except in countries where the quantum of production had decreased more than prices have risen, there has, in consequence, been a net increase in the gross farm income. Furthermore, agricultural prices have as a rule risen more than commodity prices in general, or more than the prices of goods bought by the farmers. The rate of improvement was, in most areas, less marked in 1935 than in 1934.¹

Owing to the progressive isolation of the national markets, great differences have developed in the agricultural situation of different countries. While the agricultural-exporting countries overseas have been successful in improving their situation, certain European countries with exportable surpluses of foodstuffs have shared but little in the agricultural recovery. The situation would appear, however, to have improved in some degree during 1935 in certain countries of Eastern Europe, in spite of the growth of agricultural self-sufficiency in European industrial countries.

Of the national agricultural recovery programmes, the most important has been that applied in the United States. As a result of the efforts of the Agricultural Adjustment Administration and of the severe drought, production was heavily reduced in 1934 and the prices received by farmers improved. In 1935, the total quantum of production would appear to have remained unchanged — a great drop in meat production being offset by heavier crops — while prices improved further. Total gross farm income, which was nearly \$12,000 million in 1929, and had dropped to \$5,337 million in 1932, reached \$7,300 million in 1934 and \$7,800 million in 1935. The "Agricultural Adjustment Act" was invalidated by the Supreme Court at the beginning of January 1936, but certain new measures designed to assist agricultural recovery have been embodied in the "Soil Conservation and Domestic Allotment Act" of February 29th, 1936.

Certain agricultural developments in the Union of Soviet Socialist Republics deserve special mention. By 1935, about 90% of all agricultural households, accounting for about 94% of total agricultural production, had been embraced in the collective and Soviet farms. Practically all collective farms have become "artels" — i.e., farms where part of the area, live-stock and buildings is left for private use. The mechanisation of agriculture has progressed rapidly. Of the total sown area, 27% was served by tractors in 1930, and 72% in 1935. Russian agriculture achieved record crops in 1933 and again in 1935. The heavy curtailment of live-stock which occurred in the first period of the collectivisation plan made itself felt in a much reduced output of animal foodstuffs during the whole period 1931-1935. The rebuilding-up of live-stock was one of the main points in the agricultural

¹ See Chapter III, section on "Agricultural and Non-agricultural Prices", below.

part of the Second Five-Year Plan, and the decline in the live-stock was, in fact, checked in 1934. Comprehensive data concerning the meat output during the last four years are, however, lacking. The agricultural index for the Union of Soviet Socialist Republics, given in Table 2 above, is therefore partly based on estimates and is subject to subsequent revision.¹

FOODSTUFFS PRODUCTION.

The revised index of world production of foodstuffs, given below, comprises food crops (but not fodder crops), meat, sea fish, milk, wine, hops, coffee, tea, cocoa, tobacco, as well as part of the group of oil materials and oils. It thus includes both crude foodstuffs ready for human consumption and raw materials for the food, drink and tobacco industries.² The remark made with reference to the indices in Table 2 for the Union of Soviet Socialist Republics and North America applies also to the following table.

*Table 3. — FOODSTUFFS PRODUCTION INDICES, WEIGHTED BY 1930 PRICES.
Average 1925-1929 (1925/26-1929/30) = 100.*

| Continental groups | 1925 1925/26 | 1926 1926/27 | 1927 1927/28 | 1928 1928/29 | 1929 1929/30 | 1930 1930/31 | 1931 1931/32 | 1932 1932/33 | 1933 1933/34 | 1934 1934/35 | *1935 *1935/36 |
|------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| Europe, excluding U.S.S.R. | 97 | 92 | 99 | 105 | 107 | 106 | 109 | 112 | 114 | 115 | 115 |
| U.S.S.R. | 92 | 102 | 102 | 101 | 102 | 111 | 90 | * 81 | * 86 | * 86 | * 92 |
| Europe, including U.S.S.R. | 96 | 95 | 100 | 104 | 106 | 108 | 104 | *104 | *106 | *107 | *109 |
| North America | 95 | 99 | 101 | 104 | 100 | 102 | 103 | 100 | *101 | *105 | * 90 |
| Latin America | 97 | 98 | 101 | 105 | 99 | 102 | 101 | 100 | 106 | 105 | 101 |
| Africa | 98 | 94 | 100 | 102 | 108 | 106 | 106 | 116 | 111 | 118 | 122 |
| Asia, excluding Asiatic Russia * | 98 | 98 | 100 | 102 | 102 | 104 | 105 | 105 | 108 | 101 | 101 |
| Oceania | 95 | 99 | 98 | 105 | 103 | 115 | 118 | 130 | 130 | 131 | *133 |
| World | 96 | 97 | 100 | 104 | 103 | 106 | 104 | 104 | 106 | 106 | 104 |
| World, excluding U.S.S.R. | 97 | 96 | 100 | 104 | 103 | 105 | 106 | 107 | 109 | 109 | 106 |

* Excluding production in China (apart from Manchuria).
* Provisional indices subject to revision.

The scope of the revised index is considerably wider than that of the index previously published and its general level for recent years is sensibly higher,³ chiefly owing to the inclusion of milk. But the index still somewhat understates the increase in the world production of foodstuffs, as the production of the commodities excluded — vegetables, fruit, poultry, eggs — has increased continuously in the course of recent years.⁴ This factor is hardly important enough to invalidate the general conclusions which may be drawn from the index given.

World production of foodstuffs (excluding China) has changed relatively little over the period 1928-1935. The deviations from the average registered in individual years

¹ The decline since 1931 in the index shown for the Union of Soviet Socialist Republics in Table 2 is chiefly due to a fall in the meat production, estimated on the basis of data relating to live-stock.

² It is evident that part of the production of many individual commodities included in the foodstuffs index is used for other purposes — *e.g.*, part of wheat and rye is used for feed, and part of several vegetable products is distilled into industrial alcohol. On the other hand, part of the production of the fodder cereals and part of salt, excluded from the index, are used for food. These points, however, only affect the index to a very small extent.

³ Except as regards the Union of Soviet Socialist Republics.

⁴ Evidence of this increase will be found in documentation prepared by the International Institute of Agriculture for the Mixed Committee on the Problem of Nutrition, League of Nations (document A.12. 1936.II.B).

have been small, although somewhat larger than the corresponding deviations in the world agricultural index. The minimum was attained in 1929 (1929/30), 1.2% below the average for 1928-1935, and the maximum in 1934 (1934/35), 1.7% above that average. In 1935 (1935/36), world production shrank by about 2½%.¹

The recent tendencies of the world's agricultural economy — *i.e.*, the restriction of international trade and the gradual isolation of the national markets — have brought about certain adjustments in the different branches of farm production. The agricultural exporting countries have been compelled to restrict those branches of their production that have furnished exportable surpluses. Thus the professed primary aim of the United States Agricultural Adjustment Administration was "to allow for the decline in agriculture's foreign market".² Other countries have likewise endeavoured to reduce the areas under cultivation and to increase, in many cases, dairy and meat production. The opposite line has been followed in many European countries exporting animal foodstuffs. A rough idea of the net result of these shifts in production may be conveyed by the following indices for the world excluding the Union of Soviet Socialist Republics:

| | Average 1925-1929 | Average 1930-1934 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|------------------------------|----------------------|----------------------|------|------|------|------|------|------|
| <i>World, excl. U.S.S.R.</i> | | | | | | | | |
| Vegetable foodstuffs . . . | 100 | 104 | 105 | 104 | 105 | 105 | 101 | *100 |
| Animal foodstuffs . . . | 100 | 110 | 105 | 108 | 109 | 112 | 115 | *109 |

* Provisional figures.

The significance of this shift from vegetable to animal production is enhanced by the fact that a considerable part of the cereals and sugar produced has been accumulated in stocks, while the stocks of meat and dairy produce are, of course, insignificant in relation to total production. Moreover, the use of wheat and rye for feeding purposes was larger in the period of excess supplies starting in 1930 than in the preceding quinquennium. The continuous and rapid increase in the use of sea fish has also contributed to the increase in the index for animal foodstuffs.

The wide spread in 1934 between the two indices shown above was largely due to an exceptional cause — *viz.*, the drought in the United States, which simultaneously reduced the crops and, on account of the shortage of fodder and pasture, increased the slaughterings. This factor has affected in a considerable degree also the indices for 1935. A large increase in the crops of the United States — although the crops still remained below the average — went far to offset the effects of a serious crop failure in Latin America, and of a decline in the European crops. On the other hand, the heavy curtailment of meat production in the United States, a consequence of the emergency slaughterings effected in the preceding year, was the chief cause of the setback in the total production of animal foodstuffs in 1935, after an uninterrupted rise during a decade.

The main factors that have determined the movements of the continental indices are dealt with in the reviews of individual branches of production given in Section C below.

RAW-MATERIAL PRODUCTION.

(a) *Raw Materials of Agricultural Origin.*

The index for the second class of agricultural produce, industrial raw materials of farm origin, comprises textile materials (except the artificial ones) and the greater part of oil materials and oils.³

¹ Percentages calculated from the aggregates upon which the index is based.

² *Report of the Secretary of Agriculture, 1935* (Washington, 1935), page 1.

³ Tobacco and rubber, previously included in this index, have been referred to other groups in the revised index.

Table 4. — INDICES OF PRODUCTION OF INDUSTRIAL RAW MATERIALS OF AGRICULTURAL ORIGIN, WEIGHTED BY 1930 PRICES.

Average 1925-1929 (1925/26-1929/30) = 100.

| Continental groups | 1925 1925/26 | 1926 1926/27 | 1927 1927/28 | 1928 1928/29 | 1929 1929/30 | 1930 1930/31 | 1931 1931/32 | 1932 1932/33 | 1933 1933/34 | 1934 1934/35 | *1935 *1935/36 |
|------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| Europe, excluding U.S.S.R. . . . | 95 | 92 | 106 | 93 | 115 | 87 | 91 | 84 | 89 | 92 | 98 |
| U.S.S.R. | 92 | 89 | 97 | 110 | 113 | 119 | 128 | 112 | 111 | 112 | 128 |
| Europe, including U.S.S.R. . . . | 93 | 91 | 102 | 101 | 114 | 101 | 108 | 96 | 99 | 101 | 112 |
| North America | 104 | 115 | 87 | 96 | 98 | 94 | 113 | 88 | 88 | 68 | 76 |
| Latin America | 97 | 101 | 101 | 100 | 101 | 103 | 104 | 93 | 112 | 130 | 123 |
| Africa | 97 | 96 | 90 | 104 | 112 | 109 | 96 | 98 | 116 | 109 | 117 |
| Asia, excluding Asiatic Russia . . | 96 | 95 | 101 | 106 | 103 | 107 | 90 | 94 | 103 | 101 | 98 |
| Oceania | 91 | 101 | 98 | 106 | 103 | 101 | 109 | 114 | 109 | 110 | 104 |
| World | 98 | 101 | 96 | 102 | 104 | 102 | 102 | 94 | 100 | 95 | 98 |

* Provisional indices subject to revision.

World production of raw materials of agricultural origin has varied since 1929 more than that of foodstuffs. It reached a minimum in 1932, and still remained below the average pre-depression level in 1935. The drop which occurred in 1934 was chiefly, although not exclusively, due to an unprecedented shrinkage of the crops of cotton and cotton-seed in the United States, the reasons for which have been referred to in the section on agricultural production. A considerable recovery of the United States cotton- and oil-seed crops, and an increase in the oil-material production in Asia (particularly India), as well as in the textile crops in Europe, more than outweighed in 1935 a heavy drop in the linseed crop in Latin America and a reduction in the wool clip in Oceania. As has been pointed out above, reduced supply coincided in 1934 with increased industrial demand for the raw materials concerned. Both the supply and demand rose in 1935, the latter probably at a more rapid rate.

(b) *Raw Materials of Non-Agricultural Origin.*

The world index for non-agricultural production given below includes thirty-eight commodities of forest and mineral origin. Despite the addition of a number of commodities to the index, its general character has not been substantially modified. Its course is still mainly determined by the changes in the output of fuels and metals.¹

Table 5. — INDICES OF PRODUCTION OF INDUSTRIAL RAW MATERIALS OF NON-AGRICULTURAL ORIGIN, WEIGHTED BY 1930 PRICES.

Average 1925-1929 = 100.

| Continental groups | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Europe, excluding U.S.S.R. . . . | 90 | 84 | 105 | 106 | 115 | 104 | 89 | 80 | 87 | 97 | 104 |
| U. S. S. R. | 61 | 84 | 102 | 115 | 137 | 166 | 183 | 193 | 215 | 271 | 323 |
| Europe, including U.S.S.R. . . . | 88 | 84 | 105 | 107 | 117 | 108 | 96 | 88 | 96 | 110 | 120 |
| North America | 91 | 99 | 97 | 102 | 111 | 95 | 76 | 59 | 69 | 75 | 84 |
| Latin America | 87 | 87 | 90 | 113 | 123 | 108 | 88 | 71 | 75 | 95 | 104 |
| Africa | 90 | 93 | 98 | 106 | 113 | 116 | 98 | 87 | 100 | 124 | 133 |
| Asia, excluding Asiatic Russia. . | 86 | 92 | 98 | 105 | 118 | 117 | 110 | 108 | 122 | 143 | 154 |
| Oceania | 99 | 99 | 106 | 98 | 98 | 89 | 74 | 81 | 89 | 97 | 109 |
| World | 89 | 92 | 100 | 104 | 114 | 102 | 87 | 75 | 84 | 95 | 104 |

* Provisional indices subject to revision.

¹ The index is not purely one of industrial raw materials, a large part of fuel being employed in transport and for household use, the basic chemicals included being chiefly used in agriculture as fertilisers.

In striking contrast to agricultural production, the output of non-agricultural raw materials has vigorously advanced during the three years under review. The rate of progress was practically equal in 1933 and 1934, but slowed down to some extent in 1935. The aggregate increase over the three years concerned was 40%. About three-quarters of the ground lost since 1929 had been regained by 1935.

The rate of recovery between 1932 and 1935 has been more rapid in North America than in Europe (even including the Union of Soviet Socialist Republics). But so heavy had been the drop in the former continent that the level of its production is still very much short of that of Europe. In the Union of Soviet Socialist Republics, an increase of 67% during the first three years of the Second Five-Year Plan (1933-1935) has been registered in the output of the products here considered. In Latin America, Africa, Asia and Oceania, taken together, non-agricultural production has risen more rapidly than in either Europe or North America. The indices for Asia and Africa especially reflect in part the progress of industrialisation in countries which are still to be considered mainly agricultural.

(c) *Total Raw-material Production.*

The world index given in Table 6 provides a rough illustration of the fluctuations in the total supply of raw materials to industry. It thus affords an indirect measure of general industrial activity — subject to certain qualifications. First, as stated above, the scope of the index is limited, as it excludes raw materials used in the food, drink and tobacco industries, which are included in the foodstuffs index, and also certain other raw materials for which data are lacking. Secondly, owing to technical progress, equal services are, in the course of time, rendered with smaller quantities of raw materials. Thirdly, a varying part of the total annual production may be added to stocks, or, conversely, industry may in a given year draw from stocks carried over from previous years. Lastly, industry derives part of its supply of raw materials from scrap and waste, which may be employed to a greater relative extent in certain years than in others.¹

Table 6. — INDICES OF TOTAL RAW-MATERIAL PRODUCTION, WEIGHTED BY 1930 PRICES.
Average 1925-1929 (1925/26-1929/30) = 100.

| Continental groups | 1925 1925/26 | 1926 1926/27 | 1927 1927/28 | 1928 1928/29 | 1929 1929/30 | 1930 1930/31 | 1931 1931/32 | 1932 1932/33 | 1933 1933/34 | 1934 1934/35 | *1935 *1935/36 |
|-----------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| Europe, excluding U.S.S.R. | 90 | 85 | 105 | 105 | 115 | 102 | 90 | 80 | 87 | 97 | 103 |
| U.S.S.R. | 75 | 87 | 100 | 113 | 126 | 144 | 157 | 155 | 166 | 197 | 232 |
| Europe, including U.S.S.R. | 88 | 85 | 104 | 106 | 116 | 107 | 98 | 89 | 96 | 109 | 119 |
| North America | 93 | 101 | 96 | 101 | 109 | 94 | 82 | 63 | 72 | 74 | 83 |
| Latin America | 91 | 92 | 94 | 108 | 116 | 107 | 93 | 79 | 87 | 107 | 110 |
| Africa | 95 | 95 | 93 | 105 | 112 | 111 | 96 | 90 | 112 | 113 | 122 |
| Asia, excluding Asiatic Russia. | 92 | 94 | 100 | 105 | 109 | 111 | 98 | 100 | 111 | 117 | 120 |
| Oceania | 94 | 101 | 101 | 103 | 102 | 97 | 98 | 104 | 103 | 106 | 105 |
| World | 91 | 94 | 99 | 104 | 112 | 102 | 91 | 79 | 88 | 95 | 103 |
| World, excluding U.S.S.R. | 92 | 94 | 99 | 103 | 111 | 100 | 88 | 76 | 84 | 91 | 97 |

* Provisional indices subject to revision.

World production of raw materials had risen, by 1935, from the low point reached in 1932 by about 30%. The rate of increase remained remarkably equal during these three

¹ Total steel production, which is included in the index, comprises a considerable quantity of steel made from scrap. In the case of non-ferrous metals, metal content of ores mined is, as a rule, taken into account and production from scrap therefore excluded.

years. If the Russian contribution — which has risen at an exceptional speed during the period considered — is left out of account, world production in 1935 still remained somewhat below the average pre-depression level.

The above world indices under-state the total quantum of raw materials absorbed by "secondary" industries during recent years. The world index of manufacturing production given in Section B below shows an increase of over 38% for the world as a whole and of nearly 35% for the world excluding the Union of Soviet Socialist Republics. The difference in the aggregate increase in the production of industrial raw materials and in industrial production may be largely explained by the following factors. Technological progress in industry has been considerable during the depression. Industry has largely drawn from stocks accumulated in the earlier period of the depression; since 1933, the movement of stocks, briefly referred to in the subsequent section, shows a distinct downward trend, which was accelerated in the course of 1935. Increased amounts of raw materials have also been derived from the regeneration of scrap or waste. No doubt the low prices for new materials during the depression made regeneration less profitable in some cases than in earlier years; but the margin between the prices of new and old materials has tended to narrow down during the most recent years, and, furthermore, the efforts of many industrial countries to decrease their dependence on foreign raw-material supplies have tended to stimulate the use of old material available in the home market. The evidence available about the steel, rubber, paper, wool, textile and other industries (some of which are referred to in Section C below) points towards an increasing trend in the use of regenerated materials. Germany has organised the use of such materials of domestic origin on a large scale.

The changes in the total contributions made by each continental group to the world supply of raw materials have been striking:

| | Europe (excl. U.S.S.R.) | U.S.S.R. | North America | Latin America | Africa | Asia | Oceania | World |
|-----------------------------|-------------------------------|----------|------------------|------------------|--------|------|---------|-------|
| Average 1925-1929 | 29.7 | 4.1 | 42.9 | 5.1 | 2.6 | 13.3 | 2.3 | 100 |
| Average 1930-1934 | 29.8 | 7.4 | 36.2 | 5.3 | 3.0 | 15.7 | 2.6 | 100 |
| Year 1934 | 30.4 | 8.4 | 33.3 | 5.8 | 3.1 | 16.4 | 2.6 | 100 |
| Year 1935 | 29.9 | 9.2 | 34.5 | 5.5 | 3.1 | 15.5 | 2.3 | 100 |

The outstanding feature of the above figures is the ground lost by North America to the other continental groups. The major part of the gain of the latter has been taken by the Union of Soviet Socialist Republics, the share of which more than doubled between the base period and 1935. The gains of Africa, Asia and Latin America were also considerable, while that of Europe, apart from the Union of Soviet Socialist Republics, was very slight.

The special factors which have affected the continental indices shown above are dealt with in Sections B and C below.

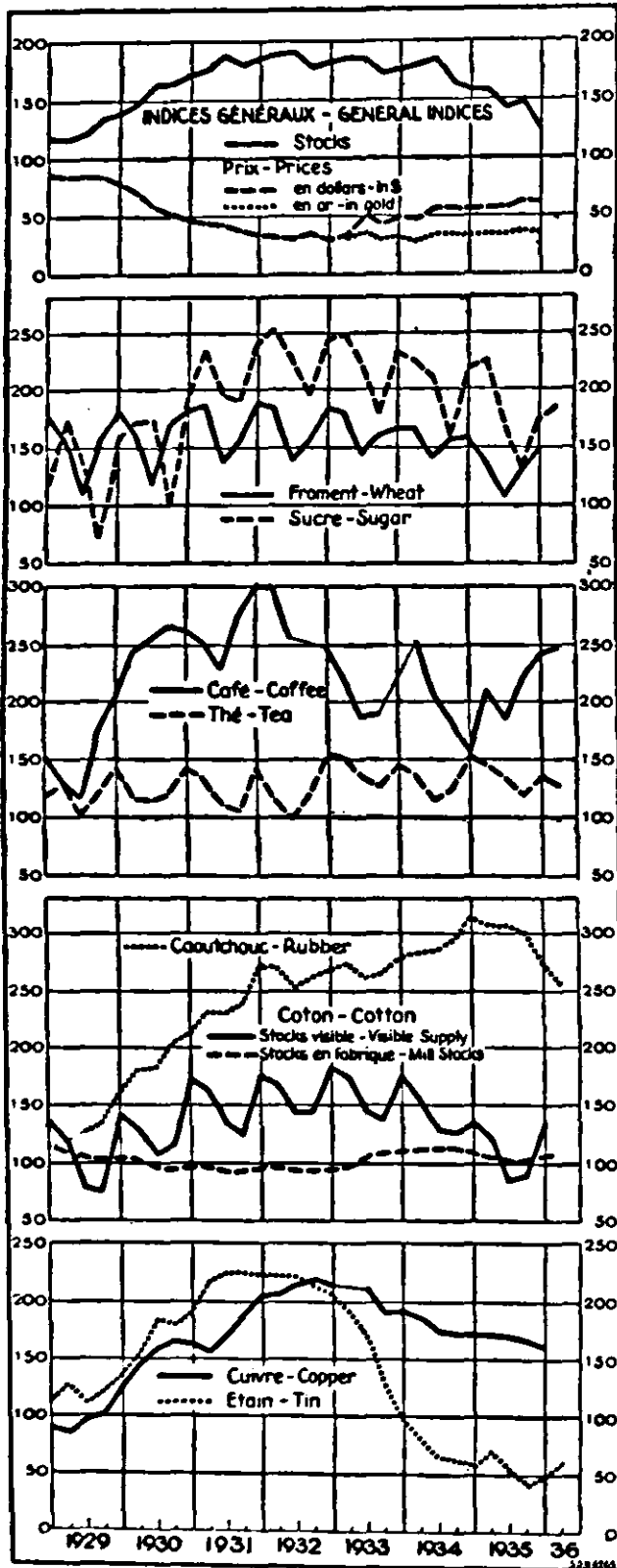
STOCKS OF PRIMARY COMMODITIES.

Statistics of stocks are restricted. Data referring to visible stocks — *i.e.*, stocks held by producers or in public warehouses — are available for a number of commodities, but they vary considerably in scope; information concerning stocks of raw materials held by manufacturers or wholesale traders is even more scarce.

The general movement since 1929 of visible stocks of primary commodities, adjusted for seasonal variations, may be roughly gauged from the composite world index compiled by the United States Department of Commerce and illustrated at the top of Diagram 2 (page 20). Although this index is not directly comparable with the world index

Diagram 2. — MOVEMENT OF STOCKS OF PRIMARY COMMODITIES.

Average 1925-1929 = 100.



of primary production given in Table 1 and Diagram 1, as its scope is much more limited, it nevertheless provides a useful corrective to any inference that may be drawn from the latter as regards changes in consumption. A curve showing the corresponding composite world index of prices (compiled by the same authority) has been added in order to bring out the close inverse correlation that has existed between the movements of stocks and of prices. The diagram further shows the movement of stocks of certain important individual commodities (not corrected for seasonal variations); the absolute figures for these and a number of other commodities will be found in Table 5 of Appendix I.

During 1934 and 1935, as well as the early part of 1936, visible stocks of primary commodities have shown a downward trend. The decline has, moreover, proceeded at an accelerating rate, and the composite index stood, in the first quarter of 1936, lower than at any time since the middle of 1929. The drop since the middle of 1932 amounts to about 35%. Stocks of certain individual commodities, however, have followed a more or less different course. Thus, coffee stocks rose again during the year 1935/36. Rubber stocks reached their maximum at the beginning of 1935, but, by the second quarter of 1936, they had fallen to the lowest point since the middle of 1932. Visible stocks of cotton stood, at the beginning of 1936, at the same level as a year earlier. It would appear that, since 1933 or 1934, there has been a shift in the location of stocks, at least in the case of some important commodities, from producing to consuming centres.

Note to Diagram 2. — The general stock index is based on the following nine commodities (weights in parentheses): cotton (9), sugar (6), wheat (6), rubber (3), coffee (2), copper (2), silk (2), tea (1), tin (1). The weights have been allocated in accordance with the value of the stocks on hand in the original base period, 1923-1925. All series except those for copper and tin are adjusted for seasonal variations. Copper has been omitted since 1931.

The basic series for the other curves shown above relate to visible world stocks in all cases except as regards tea (United Kingdom stocks only) and cotton mill stocks ("invisible" stocks).

While a decline in the visible stocks of raw materials is an indication of industrial revival, stocks held by manufacturers or wholesale merchants tend to increase when business improves. The amount of raw-cotton stocks held by cotton mills, shown in Diagram 2, however, shows a slight decline during 1935 and the beginning of 1936. A few other statistical series relating to this type of stocks are given in Appendix I, Table 5.

B. INDUSTRIAL PRODUCTION.

SCOPE AND NATURE OF THE INTERNATIONAL INDEX OF INDUSTRIAL PRODUCTION.

The index of raw-material production considered above affords an indirect measure of the changes in the industrial activity of the world, although, for the reasons indicated, it is far from satisfactory for this purpose. In the present section, an attempt is made to analyse these changes on the basis of national production indices.¹ By "industrial production" is normally understood both mining and manufacturing and, in certain countries, also building and electric-power generation. The line of demarcation normally drawn in national statistics lies, not between primary and manufacturing, but between agricultural and industrial production. Consequently, the scope of the preceding and the present section overlaps to some extent in so far as the production of non-agricultural raw materials and semi-manufactures is covered in both.

In several editions of this publication, certain index numbers representing weighted averages of the national indices have been given, designed to afford at least an approximate measure of the changes in industrial activity of the world as a whole and some of its main parts. Any world index of industrial production is open to the charge of being so heterogeneous in character as to be wanting in clear significance. Unlike the world index of raw-material production, which relates to well-defined and fairly homogeneous products, an industrial world index necessarily relates to heterogeneous products varying widely in quality and complexity. Moreover, while there is a common world market for most raw materials, manufactured articles are largely produced for isolated markets. Notwithstanding these difficulties, a world index of industrial production—like the national production indices on which it is based—may be taken to reflect at least approximately the changes in the theoretical "quantum" of output. Such an index is of value as a check on the raw-material index dealt with in the preceding section. Further, it has the advantage of being capable of monthly or quarterly calculation, whereas the world production of most raw materials, notably those of agricultural origin, can only be assessed annually.

The Economic Intelligence Service has had frequent recourse in the past to the well-known world index of the German Institute for Business Research. For this volume, however, a new index has been calculated on the basis of the national indices—at present twenty-three in number—which are regularly reproduced in the *Monthly Bulletin of Statistics* of the League of Nations. These indices are combined by computing a weighted arithmetic average. The weights, which are necessarily rough, are based on a detailed comparative study of industrial censuses, where available, or other relevant information relating to the period 1925-1929. The criterion employed has been the net value of the industrial production (value added in the process of manufacture), in so far as it proved possible to ascertain or estimate it.

¹ For information on the composition of and the methods employed in compiling the different national indices of production, see relevant tables and notes given in the *Statistical Year-Book of the League of Nations*, editions 1932/33-1935/36, and for notes on certain special indices relating to individual industries, see Appendix II below.

The net value of production is officially recorded for certain of the countries considered. For the others, it had to be estimated indirectly on the basis of detailed comparisons between their statistics for quantity of output and number of workers in their different industries and those of reasonably comparable countries for which net value data by individual industries or groups of industries were actually available. The results of these comparisons between pairs of countries were further adjusted by means of various cross-comparisons.¹ The final results will be seen from the following schedule, showing the percentage share of each country in the total estimated net value of the industrial production of the countries considered.² In constructing this schedule, building and electric-power generation have been left entirely out of account, as many countries do not include these branches among the industries covered by their indices. Two series of weights are given — one relating to manufacturing alone, and the other to both mining and manufacturing. It will be noted that such differences as exist between the two series are slight.

Schedule of Weights (Averages for 1925-1929).

| | Manufacturing only | Manufacturing and mining |
|------------------------------------|-----------------------|-----------------------------|
| United States | 45.0 | 45.6 |
| Germany* | 12.0 | 12.0 |
| United Kingdom | 10.0 | 10.3 |
| France | 8.0 | 7.8 |
| U.S.S.R. | 5.0 | 5.0 |
| Italy | 3.4 | 3.1 |
| Japan | 2.6 | 2.5 |
| Canada | 2.5 | 2.5 |
| Belgium | 2.0 | 1.9 |
| Czechoslovakia. | 1.7 | 1.7 |
| Netherlands | 1.3 | 1.2 |
| Spain | 1.1 | 1.2 |
| Sweden | 1.1 | 1.0 |
| Poland | 0.8 | 0.9 |
| Austria | 0.7 | 0.7 |
| Denmark | 0.6 | 0.5 |
| Hungary | 0.4 | 0.4 |
| Finland | 0.4 | 0.3 |
| Roumania | 0.3 | 0.3 |
| Norway | 0.3 | 0.3 |
| New Zealand ^b | 0.3 | 0.2 |
| Chile | 0.2 | 0.3 |
| Greece | 0.2 | 0.2 |
| Estonia | 0.1 | 0.1 |
| Total | 100 | 100 |

* Including the Saar Territory.

^b New Zealand, for which only an annual production index is available, is omitted from the monthly calculation, though included in the annual World Index.

Note. — According to supplementary calculations, the twenty-four countries considered are estimated to have accounted, in 1929, for over 90% of the manufacturing and mining production of the world as a whole, the proportion for manufacturing being somewhat higher than for mining.

GENERAL REVIEW OF INDUSTRIAL ACTIVITY.

The general course of industrial activity since 1925 in the world as a whole, and in Europe and North America, may be judged from Table 7, which gives annual indices for (i) mining and manufacturing, (ii) manufacturing alone, and (iii) world production of

¹ Such comparisons were also made between the countries for which net value data are actually recorded, in order to check these data by the indirect method.

² It might be observed in this connection that the differences in relative magnitude between the weights here calculated and those drawn up by the German Institute for Business Research, which in principle relate to the year 1928, would appear not to be great.

industrial raw materials. As mentioned above, the indices under (i) and (ii) do not include building and electric-power generation.¹ The world indices are shown both including and excluding the Union of Soviet Socialist Republics. This distinction is of interest, as industrial production in that country, the relative importance of which in any international index of production is considerable, has followed a course quite different from that elsewhere. For the same reason, the sub-indices for Europe are shown exclusive of the Union of Soviet Socialist Republics.

The industrial recovery which characterised the years 1933 and 1934 made further headway — indeed, at an accelerated rate — in 1935. The indices here shown suggest that, in that year, the industrial production of the world as a whole — *i.e.*, including the Union of Soviet Socialist Republics — was larger than it had been in 1928, though not, of course, per head of population, and only some 5% less than the 1929 record.

Table 7. — WORLD INDICES OF INDUSTRIAL PRODUCTION AND OUTPUT OF INDUSTRIAL RAW MATERIALS.

(Average 1925-1929 = 100.)

| Nature of indices | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|-------------------------------------------------------|------|------|-------|-------|-------|-------|------|------|------|------|-------|
| <i>(i) Manufacturing and Mining :</i> | | | | | | | | | | | |
| (a) World, including U.S.S.R. | 91.3 | 93.1 | 99.5 | 104.6 | 111.6 | 98.8 | 88.5 | 77.2 | 86.7 | 94.6 | 105.8 |
| (b) World, excluding U.S.S.R. | 92.6 | 93.5 | 99.8 | 104.0 | 110.1 | 95.2 | 82.6 | 69.5 | 78.4 | 84.5 | 92.4 |
| (c) Europe, excluding U.S.S.R. | 90.7 | 88.1 | 103.3 | 106.7 | 111.2 | 102.1 | 90.4 | 78.3 | 84.7 | 93.4 | 99.4 |
| (d) North America | 94.5 | 98.4 | 96.7 | 101.6 | 108.8 | 88.0 | 74.4 | 59.1 | 69.9 | 73.2 | 83.1 |
| <i>(ii) Manufacturing only :</i> | | | | | | | | | | | |
| (a) World, including U.S.S.R. | 91.2 | 93.1 | 99.3 | 105.0 | 111.4 | 98.2 | 88.0 | 76.7 | 86.3 | 94.4 | 106.3 |
| (b) World, excluding U.S.S.R. | 92.4 | 93.5 | 99.5 | 104.5 | 110.0 | 94.6 | 82.1 | 69.0 | 78.1 | 84.3 | 92.8 |
| (c) Europe, excluding U.S.S.R. | 90.1 | 88.6 | 103.0 | 107.1 | 111.2 | 102.0 | 90.1 | 77.9 | 84.9 | 93.9 | 100.3 |
| (d) North America | 95.1 | 98.1 | 96.4 | 102.1 | 108.4 | 86.7 | 73.1 | 57.9 | 68.6 | 71.8 | 82.5 |
| <i>(iii) Production of Industrial Raw Materials :</i> | | | | | | | | | | | |
| (a) World, including U.S.S.R. | 91.4 | 94.1 | 99.1 | 103.8 | 111.7 | 102.1 | 90.6 | 79.4 | 87.8 | 94.8 | 102.7 |
| (b) World, excluding U.S.S.R. | 92.1 | 94.4 | 99.1 | 103.4 | 111.1 | 100.3 | 87.8 | 76.2 | 84.5 | 90.5 | 97.2 |

Note. — The index figures are given with one decimal point, not because they claim a corresponding accuracy — the margin of error must necessarily be considerable — but in order to reflect minor movements and discrepancies which would not have become apparent had the figures been rounded off to show only integral numbers.

The differences between the indices including and those excluding mining were insignificant for the pre-depression period, when the annual movement of mining in the world as a whole and Europe in particular closely followed that of manufacturing. In the course of the depression, however, manufacturing activity — especially that relating to capital goods — at first declined and subsequently recovered more rapidly than mining production in the countries covered by the industrial world index. In view of the preponderance of fixed costs in the mining industry, its output was not reduced in proportion to the fall in the demand during the depression — *i.e.*, part of the output went to increase existing stocks. During the subsequent recovery, on the other hand, the increased demand

¹ Hydro-electric-power generation is included in the raw-material index given under (iii).

for mining products was partly met out of the excess stocks previously accumulated, and hence mining output increased more slowly than manufacturing activity.¹ Mining enters, however, with a very much smaller weight than manufacturing into the industrial world index. Even since 1929, therefore, the differences between the series including and excluding mining have been slight.²

Mining production accounts, of course, for a greater share in the world index of raw-material output, which, moreover, covers, not only those countries with a more or less developed manufacturing industry included in the industrial index, but all countries of the world, including colonies, protectorates and mandated territories. The course of this index is influenced, however, to an appreciable extent by the output of raw materials of farm origin, which, like world agricultural production in general, has changed but moderately during the period under review. The production of industrial raw materials as a whole contracted considerably less than manufacturing output during the first three years of the depression — a fact which accounts for the increase in raw-material stocks up to 1932 — and also recovered considerably less up to 1935; hence, raw-material stocks were again reduced after 1932. Although the production of raw materials in 1935 almost reached the level of 1928, it increased between 1934 and 1935 much less than manufacturing, or by 8% as compared with 13%. With the consequent absorption of stocks, the discrepancy between the price-levels for raw materials and finished goods has gradually narrowed, a fact to which attention is drawn in Chapter III of this volume. These broad developments confirm the less comprehensive though more detailed evidence of the improvement in the world position as regards raw-material stocks, which is discussed in Section A of the present chapter.

The high level shown for 1935 by the world indices so far discussed is largely due to the influence exercised upon them by the rapidly expanding output of the Union of Soviet Socialist Republics. Industrial production in the world excluding that country had, by 1935, only recovered to the level of 1925/26. Despite a very marked recovery since 1932, it still fell short of the 1925-1929 average by some 17 or 18% in North America, but in Europe (excluding the Union of Soviet Socialist Republics), it again just reached the average for that quinquennium.

How far are these broad movements of industrial activity or production reflected in the changes that have occurred on the labour side? The answer is to be found in the data compiled by the International Labour Office. In order to supplement the evidence afforded by its international index of unemployment, that institution has recently proceeded to calculate certain companion indices designed to show the changes in employment and hours of work in the world at large and some of its main parts. Though only provisional results, which may be subject to subsequent revision, are available at the moment of writing, it is not without interest to compare them with the industrial-production indices discussed above.

The annual index of employment given below covers twenty countries, including all the principal and some of the industrially less important countries covered by the international index of industrial production. The countries which the two indices cover in common — fourteen in number — account for 96% of the total weights of the former and 94% of those of the latter. The additional countries covered by each, which are not common to the two indices, are therefore of minor importance, and cannot appreciably affect the movements of the general indices.

¹ For both technical and economic reasons, a mine cannot be closed down as readily as a manufacturing establishment. Once a mine has been closed down, on the other hand, its reopening generally involves very considerable initial costs, which the owner hesitates to incur until he feels confident that the improvement in business will last long enough to justify these costs.

² Only in the case of North America did the discrepancy amount to more than 1% (though less than 2%) in any year since 1929, and in 1935 it narrowed again to less than 1%.

The index of hours of work — in essence, an index measuring the percentage reduction or increase (compared with 1929) in hours actually worked per week or day and workers employed — is less comprehensive in scope. It relates to nine countries, which account for some 77% of the aggregate weights of the industrial production index, excluding the Union of Soviet Socialist Republics, and 74% of those of the index of employment, excluding that country. Besides the Union of Soviet Socialist Republics, however, some other industrially important countries — *e.g.*, the United Kingdom — are not covered by the index.

The employment and hours-of-work indices here referred to, while relating mainly to manufacturing and mining, cover, in addition, certain related branches of activity, such as building and transport. Further, they are weighted according to the number of workers occupied in industry and these related branches, as recorded in the statistics of occupations. The scale of weights established on this basis, while entirely appropriate for the purpose of these indices, presents certain differences from that applied to the index of industrial production. In the case of the European countries considered, these differences are not so great as seriously to impair the comparability of the European sub-indices of the production and employment indices respectively. The production and employment sub-indices for North America are also fairly comparable between themselves. But, in view of the fact that North America enters with a very much smaller weight into the world index of employment than into that of industrial production, their relative levels are not directly comparable. In order to mitigate this flaw in their comparability, supplementary series of index figures for world employment have been calculated (series shown in italics), in which North America has been given the same weight in relation to Europe as it carries in the world index of industrial production.

In Table 8 below, the international indices of employment and industrial production are shown together on the basis of 1929 (= 100), the original base year for the former. The employment index relates to the number of workmen employed, short-time workers being generally included in the basic series in addition to those working full hours.

Table 8. — INTERNATIONAL INDICES OF EMPLOYMENT AND INDUSTRIAL PRODUCTION.
(1929 = 100.)

| Nature of indices | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|---------------------------------|-----------|-----------|-----------|-----------|-----------|------------|
| World, including U.S.S.R. : | | | | | | |
| Employment | 95 | 90 | 83 | 84 | 92 | *95 |
| Employment* | <i>94</i> | <i>87</i> | <i>78</i> | <i>80</i> | <i>89</i> | <i>*92</i> |
| Industrial production | 89 | 79 | 69 | 78 | 85 | 95 |
| World, excluding U.S.S.R. : | | | | | | |
| Employment | 92 | 84 | 75 | 77 | 84 | 87 |
| Employment* | <i>90</i> | <i>80</i> | <i>70</i> | <i>73</i> | <i>81</i> | <i>84</i> |
| Industrial production | 86 | 75 | 63 | 71 | 77 | 84 |
| Europe, excluding U.S.S.R. : | | | | | | |
| Employment | 95 | 87 | 79 | 80 | 85 | 87 |
| Industrial production | 92 | 81 | 70 | 76 | 84 | 89 |
| North America : | | | | | | |
| Employment | 88 | 74 | 62 | 66 | 75 | 79 |
| Industrial production | 81 | 68 | 54 | 64 | 67 | 76 |

* Provisional.

* North America weighted relatively to the rest of the world in the same proportion as in the industrial-production index.

During the period of decline, employers generally endeavoured not to reduce the number of their staff in full proportion to the limitation of their total output — mainly by having extensive recourse to short time. On the other hand, during the period of recovery, they have been anxious to utilise their short-time staff to normal capacity before taking on additional staff. This practice is clearly reflected in the table. Up to 1932, the employment indices fell considerably less than the industrial-production indices. Since that year, the latter have risen more rapidly than the former. As regards the world (including or excluding the Union of Soviet Socialist Republics), the employment index shown in italics is, for the reasons already explained, more comparable with the index of industrial production than is the other. In 1935, this employment index and the industrial-production index both stood (excluding the Union of Soviet Socialist Republics) at about 84 (1929 = 100), which would suggest that the average output¹ per worker employed had by then just about reattained the pre-depression level. Had it proved possible to construct an international index of actual man-hours worked, this would have shown a different picture, as short-time work, or at any rate shorter hours than in 1929, were still applied on an extensive scale in 1935.

The international index of hours of work referred to above affords at least a rough measure of the relative reduction in average hours worked. This index is compared below with those of employment and industrial production. The additional index shown under the heading "Man-hours worked" represents the product of the employment and hours-of-work indices. As in Table 8, double series of index figures are given for employment and also for man-hours, the weight attached to North America in the italicised series being adjusted in accordance with the scale applied to the industrial-production index.

World, excluding the U.S.S.R.
(1929 = 100.)

| Nature of indices | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Average hours of work | 96 | 91 | 85 | 88 | 88 | 89 |
| Employment | 92 <i>90</i> | 84 <i>80</i> | 75 <i>70</i> | 77 <i>73</i> | 84 <i>81</i> | 87 <i>84</i> |
| Man-hours worked | 88 <i>86</i> | 76 <i>73</i> | 64 <i>60</i> | 68 <i>64</i> | 74 <i>71</i> | 77 <i>75</i> |
| Industrial production | 86 | 75 | 63 | 71 | 77 | 84 |

The index of average hours of work is not so comprehensive in scope as could have been desired. Though the inclusion of certain countries which it actually fails to cover might on balance have slightly raised its level for recent years, it is believed to give an approximately correct picture of the changes that have occurred since 1929. For obvious reasons, the index representative of man-hours actually worked affords only a rather rough measure of what it is designed to show.

On account of the persistence of short-time work in certain countries, and as a result of the policy of shortening the normal working day or week that has gained ground in the countries most severely hit by the depression, the average hours actually worked per day, week or month and per worker employed seem to have remained in recent years — despite an appreciable increase since 1932 — some 10 to 12% below the level of 1929. Total

¹ As argued in the introductory remarks regarding the nature of the industrial-production indices here considered, they may be taken to reflect — approximately — the changes in the theoretical quantum of output.

man-hours actually worked, which, by 1932, would appear to have dropped by some 36% or more, still fell short of the 1929 total by some 23% or more in 1935.

It will be observed that, until 1932, the "adjusted" index of man-hours worked declined somewhat more than the index of industrial production. This fact suggests that the output per man-hour increased, which is *a priori* to be expected as a result of the elimination of the relatively least efficient enterprises and workers in the course of the depression. Since 1932, the production index has recovered considerably more rapidly than the index of total man-hours worked; up to 1935, the former increased by over 33% and the latter by 25%. The increase in productivity since 1932 which the discrepancy between the two indices may be taken to reflect might have been due for some part to the factor just referred to and also to the gradual utilisation of short-time staff and idle plant to more normal capacity. But the influence of these factors towards an increase in productivity tends to decrease as recovery proceeds. The discrepancy between the indices of production and man-hours worked, however, did not diminish in the course of the recovery; on the contrary, it widened quite considerably in 1935, which suggests that the increase in productivity since 1932 has chiefly resulted from rationalisation (mainly in the form of further mechanisation of the production process) effected in the course of depression with a view to reducing costs of production.

The increased productivity of labour in Europe is apparent from the fact shown in Table 8 — namely, that, by 1935, the index of industrial production in this continent (unlike North America) had risen appreciably above the corresponding employment index.¹ In order to illustrate the recent changes in labour productivity in the two continents, the same comparison of relevant indices as is made above for the world (excluding the Union of Soviet Socialist Republics) is made below for Europe and North America separately (see next page). In the United States, an index of total hours worked in the manufacturing industries alone is currently calculated on the basis of actual returns. For purposes of comparison, this index has been given below, together with companion indices of production and pay-rolls in those industries. For pay-rolls, indices of both nominal value and real purchasing power (nominal value "corrected" for changes in cost of living) are shown.

¹ That this is true also — though in a much more striking degree — of developments in the Union of Soviet Socialist Republics, will be seen from the following indices (1929 = 100):

| | | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|----------------------------------|---|------|------|------|------|------|------|
| Number of wage-earners | A | 137 | 187 | 224 | 210 | 212 | *215 |
| | B | 132 | 178 | 211 | 195 | 207 | *216 |
| Industrial production | | 131 | 161 | 183 | 198 | 238 | 288 |

* Provisional.

Two indices are given for the number of wage-earners: A relates to large-scale industry, building, and construction; B includes, in addition, transport and communications. Data concerning average hours of work are not available, but it may be presumed that the average working-day was at any rate not longer during recent years than in the beginning of the period considered.

Up to 1932 inclusive, the number of wage-earners in the branches considered, and of industrial workers in particular, increased much more rapidly than production; thus, the output per worker declined. It should be recalled, however, that the first Five-Year Plan, which ended with that year, was designed to effect industrialisation on an unprecedented scale. New workers were transferred during that period in rapidly increasing numbers from agriculture to industry, where they only gradually acquired the necessary experience. With the beginning of the second Five-Year Plan in 1933, the number of workers in industry (not in the transport system) was at first reduced, and has subsequently increased but slowly, while production has continued to rise very rapidly. A comparison of the changes in the number of wage-earners, according to Index A, with those in industrial production suggests that, between 1932 and 1935, the output per worker increased by nearly 64%. The increase was particularly marked in 1935 and, according to Soviet authorities, was chiefly accounted for by rationalisation of the methods of work in conformity with what has become known in that country as the "Stakhanov" method.

(1929 = 100.)

| Nature of indices | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|------------------------------------------------------|------|------|------|------|------|------|
| <i>Europe (excluding U.S.S.R.):</i> | | | | | | |
| Average hours of work | 97 | 94 | 91 | 95 | 96 | 96 |
| Employment | 95 | 87 | 79 | 80 | 85 | 87 |
| Man-hours worked | 92 | 82 | 72 | 76 | 82 | 83 |
| Industrial production | 92 | 81 | 70 | 76 | 84 | 89 |
| <i>North America:</i> | | | | | | |
| Average hours of work | 91 | 83 | 72 | 75 | 72 | 77 |
| Employment | 88 | 74 | 62 | 66 | 75 | 79 |
| Man-hours worked | 80 | 62 | 45 | 50 | 53 | 61 |
| Industrial production | 81 | 68 | 54 | 64 | 67 | 76 |
| <i>United States: manufacturing industries only:</i> | | | | | | |
| Man-hours worked | 81 | 63 | 45 | 51 | 55 | 61 |
| Production | 80 | 67 | 53 | 63 | 66 | 76 |
| Pay-rolls: Nominal value. | 81 | 62 | 42 | 44 | 57 | 64 |
| Real value | 84 | 71 | 54 | 58 | 72 | 79 |

In North America, the reduction in average hours of work amounted in 1935 to almost a quarter of the 1929 average,¹ in Europe it averaged about 4%.² The total man-hours worked (the product of the average hours-of-work and employment indices³) in 1935 fell short of the corresponding figure for 1929 by 29% in North America and some 17% in Europe.

Attention should be drawn to the close agreement — in view of the differences in scope — between the man-hours index for North America, calculated according to the indirect method described above, and the corresponding index for manufacturing industries in the United States, which is calculated directly on the basis of employers' returns. The fact that these indices practically coincide may be taken as a proof of the validity of the indirect method.

A comparison of the indices of man-hours worked with those of industrial production suggests that, since 1929, the increase in the output per man-hour has been much greater in North America than in Europe; but in North America most of this increase in the productivity of labour took place between 1929 and 1932,⁴ and may chiefly reflect the radical elimination of less efficient enterprises and the large-scale dismissal, in the first instance, of less efficient workers — measures provoked by the exceptional severity of the industrial depression in that part of the world. Between 1932 and 1935, on the other hand, labour productivity, as here measured, seems to have increased by only some 4% in North America (or by about 5% in the United States manufacturing industries alone), as compared with 10-11% in Europe.

The increase in the number of employed in North America was particularly marked in 1934, when it went hand in hand with a decline in average hours of work — a result

¹ In the United States, according to the compilations of the National Industrial Conference Board, the average working week was 37.2 hours in 1935, as compared with 48.4 hours in 1929.

² Though data concerning the United Kingdom are not included in the basic series for the index showing the relative changes in average hours of work in Europe, some account has been taken of the fact that normal hours of work have hardly changed in that country since 1929, and that short time has there been applied to a relatively less extent, particularly in recent years, than in the European countries actually covered. The index has been slightly adjusted accordingly (in no year, however, to the extent of more than ½%).

³ In multiplying these indices, decimal points not shown above have been taken into account.

⁴ The indices suggest a slight decrease in labour productivity in Europe during that period.

of the system of industrial codes put into practice in the United States during the latter part of 1933. It will be observed that the output per man-hour worked in the manufacturing industries, which had made rapid strides in 1933, declined perceptibly in 1934 *pari passu* with a large increase in pay-rolls, which rose, in terms of real purchasing power, by 24%. After the award of the Supreme Court in May 1935, implying that the code legislation was unconstitutional, the system of industrial codes could no longer be legally imposed. The rate of increase in employment slowed down; the annual index of the number of employed in the manufacturing industries (1929 = 100) increased from 75.2 to 78.4 — *i.e.*, by 4% — between 1934 and 1935, while the average weekly hours of work again rose rapidly (from 34.8 to 37.2 hours, or by 7%). Whereas the total hours worked increased by 11%, manufacturing production rose by over 15%, and output per man-hour more than recovered the ground lost in 1934. The revocation of the code legislation was not, it appears, followed by any reduction in labour's real income, for total pay-rolls, in terms of real purchasing power, increased by nearly 10%. In 1935, the index for pay-rolls corrected for changes in the cost of living stood at 79.4, that for employment at 78.4. This would suggest that the average worker employed actually received a somewhat higher real remuneration than in 1929, despite the reduction of average hours of work by almost a quarter, referred to above.

In European countries, also, wages have generally not been reduced in full proportion to the fall in cost of living since 1929. But the reduction in average hours of work has not been nearly so radical as in the United States.

While an encouraging recovery in industrial employment has been achieved in recent years in the world as a whole, even excluding the Union of Soviet Socialist Republics, unemployment still remains very large, as is demonstrated by the international index of unemployment compiled by the International Labour Office. Despite a decline by one-third between 1932 and 1935, the average for the latter year was still not far from double that for 1929.¹ A further improvement has taken place during the first half of 1936, but world unemployment would still appear to be at least two-thirds higher than it was in 1929. The persistence of unemployment on a scale so much in excess of what would correspond to the decline in production is undoubtedly due in some degree to the increased productivity (per man-hour) of those actually employed; but it is chiefly accounted for by the natural growth of population. The index referred to above covers unemployment, not only in industry, but also in other fields of activity. It would appear that unemployment is at present proportionally less widespread in industry as a whole than in those other fields.² Though some decrease in the number of totally unemployed may result from a general application of the policy of spreading work by shortening the average working day, there would appear to be no hope that present-day abnormal unemployment will be successfully overcome until activity in industry and these other fields has been generally raised quite substantially above the 1929 level.

Up to this point, the broad changes in world industrial activity have been discussed on the basis of annual averages. The monthly indices shown in Appendix II, Table 1, and in Diagram 3 below afford a more realistic picture of the course of industrial recovery in recent years. In addition to the monthly movement of industrial activity (manufacturing and mining), that of employment in the world, in Europe (excluding the Union of Soviet Socialist Republics) and in North America has been plotted in the diagram.

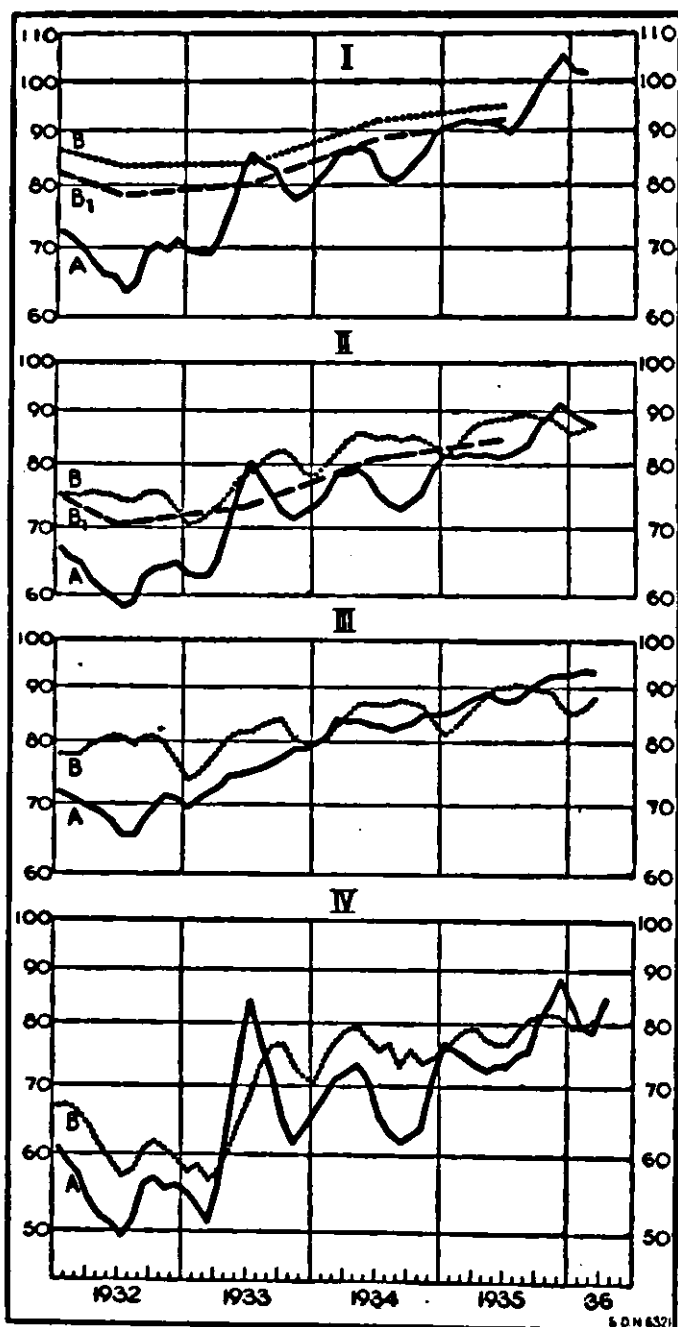
¹ The annual averages are as follows: 1929: 100; 1930: 164; 1931: 235; 1932: 291; 1933: 274; 1934: 221; 1935: 193.

² In the United States, out of an estimated total of some 12 million unemployed round New Year 1936, unemployment in the manufacturing industries accounted for only 29%, or about 3½ millions, thus leaving 8½ millions unemployed in other fields. It should be mentioned that, by that date, the manufacturing industries were actually giving employment to some 9 million persons. On the other hand, it has been estimated that a further recovery in total manufacturing output up to the level of 1929 would provide work for only another 2 million persons in those industries, if average hours of work were to remain as at the end of 1935.

Diagram 3. — MONTHLY MOVEMENT OF INDUSTRIAL PRODUCTION AND EMPLOYMENT.

Average for 1929 = 100 ; logarithmic scale.

- I. World.
- II. World, excl. U.S.S.R.
- III. Europe, excl. U.S.S.R.
- IV. North America.
- A. Industrial production.
- B. Employment : countries weighted according to industrial workers.
- B1. Employment : countries weighted according to industrial importance.



For the world as a whole, only the annual movement of employment is shown, monthly data not being available for the Union of Soviet Socialist Republics. The annual movement of world employment, measured according to the supplementary series given in italics in Table 8, is also shown. For reasons explained in the note to Table 1 of Appendix II, the level of the industrial activity curve for Europe is a few per cent lower throughout than it would have been had the monthly indices of certain countries been as comprehensive in scope as their annual indices. The level of the corresponding curves for the world is less affected by this factor.

The production indices of ten of the countries considered, representing 65% of the aggregate weights for the world index of industrial activity, are adjusted for seasonal variations. In consequence, these variations are largely attenuated in that index, and also in the corresponding sub-indices for Europe and North America (in fact, completely removed in the case of the latter). The basic series for the employment indices are not, as a rule, so adjusted, as will be seen from the fairly pronounced drop of the European index in the late autumn, and its rapid rise in the early months of each year.

The preponderating influence which the United States exercises on the world indices is clearly discernible in the diagram. The erratic movement of the production index for North America, particularly, is reflected, though in a lesser degree, in the world indices, while the course of the curve representing industrial production in Europe has been much smoother throughout the recovery which began in the late summer of 1932.

In the course of 1935, recovery in North America was not affected by any such violent relapses as in the two preceding years. In December, it reached a point only 12% below the average for 1929, but receded again in the beginning of 1936 to some 20% below that

average. Some special reasons for that recession are given below. The trend of production in that continent is, however, decidedly upward, and by May the index stood only 14% below the 1929 level.

If allowance is made for the fact that the monthly index for Europe throughout the period covered by the diagram is a few per cent lower than the more comprehensive annual index, the volume of the industrial output of that continent (excluding the Union of Soviet Socialist Republics) would appear to have reached at the beginning of the second quarter of 1936 a point only some 4% short of the 1929 level.

Industrial production in the world, excluding the Union of Soviet Socialist Republics, may still have been somewhere between 5 and 10% smaller at that date than in 1929; but, including production in the Soviet Union, it surpassed that year's level by November 1935. The fact that the recovery in industrial production has outstripped the recovery in employment — particularly in Europe — despite the shortening of average hours of work referred to above, is clearly demonstrated by the diagram. Industrial developments in the individual countries covered by the group indices here discussed, however, have been rather dissimilar, especially during the recent years of world industrial recovery. These developments are analysed in some detail in the following sub-sections.

INDUSTRIAL ACTIVITY IN INDIVIDUAL COUNTRIES.

Evidence of the broad changes in industrial activity which have taken place since 1925 in twenty-five countries in different parts of the world is afforded by the annual indices or annual averages of monthly or quarterly series given in Appendix II, Table 2.¹ But the recovery in recent years emerges more clearly from Table 9 below, which — beginning with the third quarter of 1932, when the turn in industrial activity occurred in most countries — gives quarterly averages of the monthly indices² available for twenty-three countries. For purposes of comparison, the international index is also given.

Of the twenty-five countries shown in the appendix table, the annual industrial output³ in only nine — Canada, the United States, Austria, Belgium, Czechoslovakia; France, the Netherlands, Poland and Spain — had, by 1935, not recovered to the 1925-1929 average,⁴ though in Canada and Spain it was close to that level. In Germany and Italy (first eight months of 1935), the average for that last pre-depression quinquennium was slightly, and in all the remaining fourteen countries considerably, surpassed in 1935.

According to Table 9 (see next page), industrial activity⁵ in the last quarter of 1935 was some 240% above the 1929 level in the Union of Soviet Socialist Republics; some 50% above in Japan and Greece; between 20 and 30% above in Chile, Roumania, Denmark, Finland, Sweden⁶ and Hungary; from 10 to 20% above in the United Kingdom (Board of Trade Index), Norway and Estonia; while in Germany it was just equal to the 1929 average. Thus, in thirteen out of the twenty-three countries covered by that table, the pre-depression maximum was again reached or exceeded — in most cases, indeed, very considerably exceeded. Production in 1935 would appear to have been much in excess of the 1929 level also in the Union of South Africa and New Zealand (for which countries the annual indices are published rather late⁶), and a great many other countries outside Europe and North America, for which only indirect evidence is available. Italian industrial activity

¹ The average for the quinquennium 1925-1929 is taken as uniform base (=100) in that table, in order to facilitate comparison with the indices of activity of individual industries given on that base in the subsequent tables of the appendix. The annual series are often wider in scope than the monthly series. With reference to countries for which both kinds of series are available, preference should be given to the former in making comparisons over longer periods of years.

² The indices for the United Kingdom and Hungary are, in fact, quarterly. In the case of Germany, where both a quarterly and a monthly index are compiled, the former has here been chosen, as being more comprehensive in scope than the latter.

³ Including building and electric power generation where covered by the national indices.

⁴ That this is true also of Switzerland — the only important industrial country which, for lack of a production index proper, is missing in the table — is suggested by certain indirect evidence available.

⁵ Second quarter of 1935; data for subsequent quarters not available pending revision of the index.

⁶ Monthly or quarterly indices not available; *c.f.* Appendix II, Table 2.

(including building and electricity production), which had risen rapidly to a point somewhat above its 1929 average in May 1935, subsequently dropped at a rapid pace until August, since when no production data have been published.

Table 9. — QUARTERLY INDICES OF INDUSTRIAL PRODUCTION. (1929 = 100.)

| Country | 1932 | | 1933 | | | | 1934 | | | | 1935 | | | | 1936 |
|---------------------------------------|------|-----|------|-----|-----|-----|------|-----|-----|-----|------|------|-----|-----|------|
| | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I |
| <i>America:</i> | | | | | | | | | | | | | | | |
| Canada (A) | 57 | 55 | 49 | 57 | 69 | 67 | 68 | 75 | 77 | 74 | 76 | 79 | 83 | 87 | 83 |
| United States (A) | 52 | 55 | 53 | 66 | 77 | 62 | 68 | 71 | 62 | 65 | 75 | 72 | 74 | 83 | 80 |
| Chile (A) | 90 | 99 | 99 | 95 | 94 | 95 | 97 | 101 | 106 | 116 | 114 | 121 | 119 | 127 | 119 |
| <i>Asia:</i> | | | | | | | | | | | | | | | |
| Japan | 99 | 108 | 105 | 110 | 115 | 123 | 120 | 127 | 128 | 140 | 135 | 141 | 141 | 150 | 142 |
| U.S.S.R. | . | . | . | . | . | . | 223 | 227 | 219 | 273 | 267 | 268 | 271 | 341 | *348 |
| <i>Europe:</i> | | | | | | | | | | | | | | | |
| Austria (A) | 59 | 62 | 59 | 62 | 66 | 74 | 69 | 70 | 71 | 77 | 74 | 75 | 82 | 87 | 86 |
| Belgium | 54 | 68 | 67 | 68 | 64 | 68 | 68 | 65 | 65 | 68 | 66 | 72 | 71 | 80 | 81 |
| Czechoslovakia | 61 | 64 | 58 | 59 | 60 | 64 | 62 | 70 | 68 | 66 | 65 | 67 | 69 | 78 | 75 |
| Denmark | . | . | . | . | . | . | 103 | 113 | 116 | 116 | 118 | 120 | 123 | 123 | *123 |
| Estonia | . | . | . | . | . | . | . | . | . | . | 99 | 102 | 114 | 110 | 114 |
| Finland (A) | 85 | 88 | 91 | 98 | 99 | 96 | 112 | 119 | 120 | 114 | 123 | 120 | 122 | 129 | 133 |
| France | 67 | 69 | 74 | 78 | 80 | 77 | 75 | 72 | 69 | 67 | 67 | 66 | 67 | 68 | 71 |
| Germany (A) | 57 | 59 | 61 | 63 | 66 | 70 | 78 | 82 | 83 | 88 | 89 | 95 | 97 | 100 | 98 |
| Greece | . | . | 106 | 109 | 110 | 114 | 114 | 131 | 126 | 130 | 120 | 152 | 149 | 139 | 136 |
| Hungary (A) | 72 | 79 | 76 | 81 | 86 | 92 | 93 | 98 | 94 | 105 | 106 | 103 | 114 | 121 | 127 |
| Italy | 65 | 69 | 69 | 76 | 77 | 73 | 71 | 80 | 83 | 85 | 90 | 98 | *86 | . | . |
| Netherlands | 55 | 66 | 72 | 67 | 70 | 67 | 75 | 74 | 64 | 65 | 68 | 69 | 62 | 66 | 69 |
| Norway | . | . | 92 | 97 | 86 | 100 | 97 | 100 | 100 | 104 | 103 | 107 | 99 | 112 | 112 |
| Poland (A) | 54 | 54 | 48 | 55 | 58 | 60 | 61 | 64 | 62 | 65 | 65 | 66 | 67 | 68 | 68 |
| Roumania | 98 | 100 | 82 | 100 | 117 | 112 | 114 | 117 | 135 | 129 | 116 | 112 | 132 | ... | ... |
| Spain (A) | 86 | 91 | 83 | 83 | 84 | 88 | 85 | 86 | 85 | 85 | 86 | 84 | 88 | 89 | 84 |
| Sweden* (Industriförbund) (A) | 83 | 88 | 94 | 91 | 95 | 105 | 110 | 117 | 117 | 119 | 124 | *125 | . | . | . |
| <i>United Kingdom:</i> | | | | | | | | | | | | | | | |
| Board of Trade | 78 | 85 | 85 | 86 | 87 | 94 | 98 | 97 | 96 | 104 | 105 | 104 | 103 | 113 | 115 |
| London and Cambridge | 70 | 79 | 80 | 80 | 79 | 88 | 93 | 93 | 88 | 95 | 94 | 98 | 94 | 105 | 105 |
| World* (excluding U.S.S.R.) | 60 | 64 | 63 | 71 | 77 | 72 | 76 | 79 | 74 | 76 | 82 | 81 | 82 | 89 | 88 |
| World* (including U.S.S.R.) | 66 | 70 | 69 | 77 | 84 | 79 | 83 | 86 | 81 | 86 | 91 | 91 | 92 | 103 | *102 |

- (A) Adjusted for seasonal variations.
- * Average of two months.
- VII-VIII. Coal dispute.
- Excluding March, when production fell heavily on account of a comprehensive lockout.
- The level of the monthly index has been adjusted in accordance with that of the official and more comprehensive annual index.
- Excluding building and electricity.

Industrial activity in the last quarter of 1935 fell short of the 1929 average by 11% in Spain, 13% in Austria and Canada, 17% in the United States; in Belgium by rather less than 20%¹; by 22% in Czechoslovakia; and by as much as 32-34% in France, Poland, and the Netherlands, all members of the gold bloc at that time.

¹ Allowance is here made for the fact that the somewhat incomplete monthly index understates considerably the activity of Belgian industry as a whole. As will be seen from Appendix II, Table 2, the more comprehensive annual index stood some 10% above the twelve months' average of the monthly index for 1935.

The changes during the first quarter of 1936 as compared with the last quarter of 1935 were not very great in the European countries, where, on the whole, they were on the up-grade. Industrial activity continued to increase in the United Kingdom, Sweden, Finland, Estonia, Belgium, Austria and Hungary. It also increased in France and the Netherlands, in continuation of a slow upward trend beginning respectively in the second and the third quarter of 1935. It remained practically unchanged in Denmark (apart from a lock-out in March), Norway, Spain and Poland, and it relapsed — though only temporarily — in Germany and Czechoslovakia.

An early decline also took place in Canada and the United States, largely owing to the unusually severe winter, followed in the United States by devastating floods; later, industrial activity has again increased. The change shown by the index for Chile is somewhat inconclusive, in view of the large month-to-month fluctuations in that country, while the decline in Japanese industrial output may have been only seasonal.

In the last edition of this volume, a diagram was given in which the various national indices were aggregated into different groups according to the currency position of the countries concerned and certain other criteria; for some of the principal industrial countries, individual curves were given. Diagram 4 (see next page) is of a similar character. For reasons of uniformity, building and construction activity and electric-power generation, where included in the original indices, have been excluded as far as possible. Each curve shown thus relates, in principle, to mining and manufacturing only.

The six curves given in Part I of the diagram represent :

- A. The Union of Soviet Socialist Republics alone.
- B. The paper-currency countries as a group — the United Kingdom, Sweden, Denmark, Norway, Finland and Estonia (all members of the sterling *bloc*), Canada, Japan, Chile, Greece, and also Hungary and Roumania; the two last-mentioned countries, though still applying (by means of exchange control) official rates at par for certain financial transactions, in fact, allow most imports and exports to take place at depreciated rates.
- C. Germany alone (exchange control and State-promoted recovery).
- D. The United States alone.
- E. Austria, Belgium, and Czechoslovakia together — all countries which, after devaluation, have fixed their currencies *de jure* or *de facto* at a new gold parity; among these countries, Czechoslovakia only is still applying a system of exchange control.
- F. France, the Netherlands, Poland — members of the gold *bloc*¹ — and Spain, which country has maintained, since the end of 1932, a practically stable exchange rate with the French franc, and has thus in a sense subordinated its currency to the fate of the gold *bloc*.

Part II of the diagram is supplementary to Part I. The seven curves given represent :

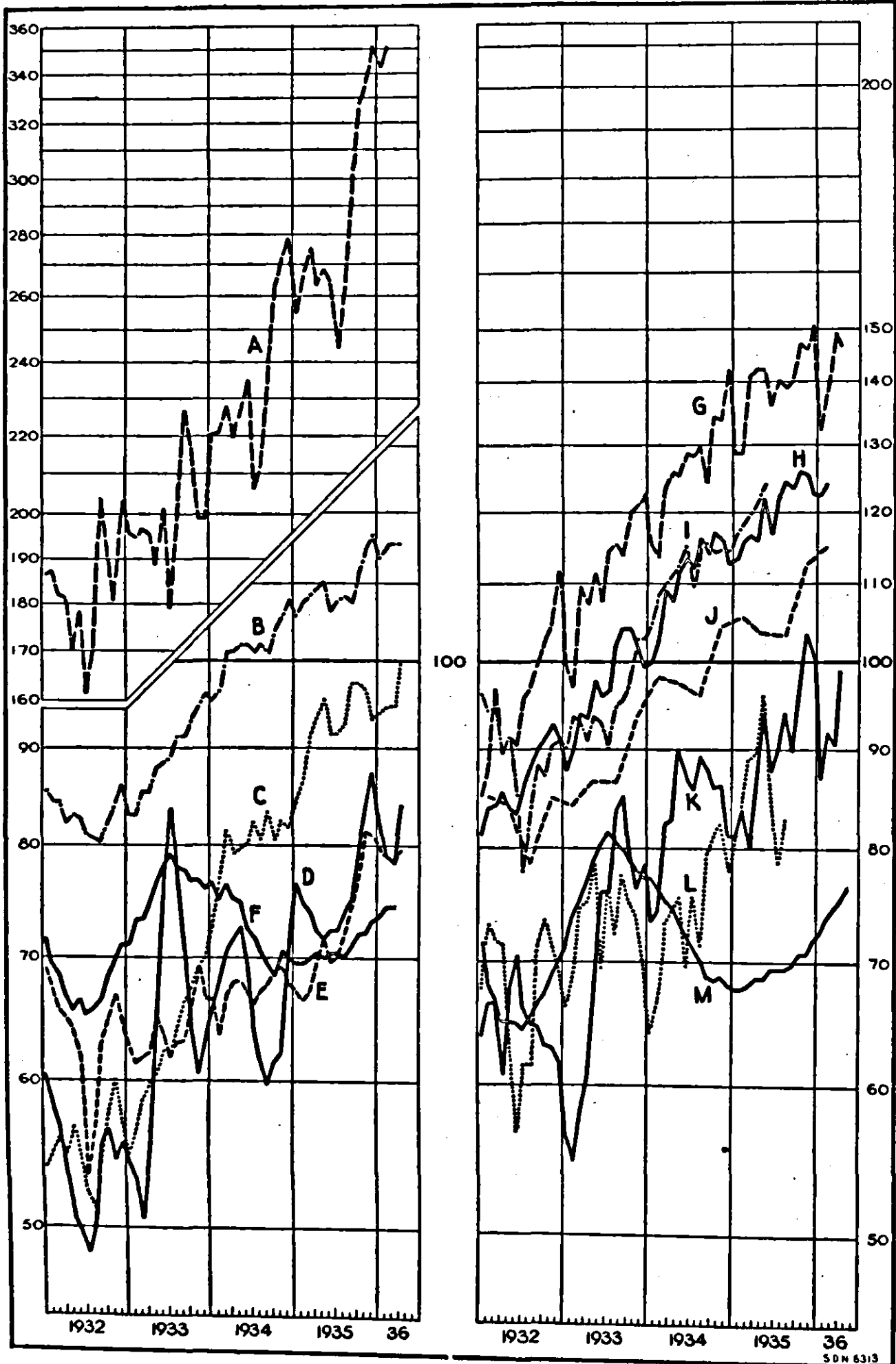
- G. Japan alone.
- H. Seven chiefly agricultural countries — Chile, Denmark, Estonia, Finland, Greece, Hungary and Roumania — in all of which industrialisation has proceeded rapidly since the war, and particularly in recent years.
- I. Four Northern-European countries — Norway, Sweden, Finland, and Estonia — whose industry is largely based on the exploitation of forests.
- J. The United Kingdom alone, the leading country of the paper-currency group.
- K. Canada alone, given for purposes of comparison with the United Kingdom (J) and the Northern-European forestry countries (I), on the one hand, and with the United States (D) on the other.
- L. Italy alone (exchange control and State-promoted recovery).
- M. France alone, the leading country of the gold *bloc*.

¹ Poland separated from the gold *bloc* by introducing official exchange control in April 1936.

Diagram 4. — INDUSTRIAL PRODUCTION IN CERTAIN COUNTRIES AND GROUPS OF COUNTRIES.
1929 = 100; logarithmic scale.
(For an explanation of A, B, C, etc., see the text on the preceding page.)

I

II



Apart from the unique expansion of industrial output in the Union of Soviet Socialist Republics, the most striking feature brought out in the diagram is the contrast, since the middle of 1933,¹ between the course of industrial activity in the countries of the gold *bloc* and elsewhere. By the end of 1934, the deflationary pressure in the gold *bloc* had brought activity down to a level almost one-third below the average for 1929, or but little above the lowest point reached in the summer of 1932, before the general recovery set in. Meanwhile, the recovery proceeded at a rapid rate in the paper-currency countries, and also in Germany and Italy — in the last-mentioned two countries under the impulse of the measures taken by the State authorities with a view to promoting activity and thus providing work for the unemployed. The joint index of industrial production in the paper-currency countries (curve B) was back at the 1929 level by the end of the first quarter of 1934, and continued to rise through that year and 1935, to reach a point somewhere between 15 and 20% above that level by the end of the first quarter of 1936. On the other hand, in the countries of the gold *bloc*, industrial activity remained practically stationary, for about nine months, at the low level to which it had relapsed towards the end of 1934. It tended to revive in the autumn of 1935 and the early part of 1936, but this revival has been modest in comparison, not only with the continued expansion in the paper-currency countries, but also with the simultaneous marked recovery in the countries which have written down the legal gold content of their currency to maintain it subsequently in a fixed value-relation to gold — *e.g.*, the United States (curve D) and the three European countries composing curve E in the diagram.

The course of events in certain of the countries covered by Table 9 and Diagram 4 requires to be studied somewhat more closely.²

The indices of industrial production in France,³ the Netherlands and Poland³ have moved at about the same level since the last quarter of 1934. The index for Spain shows much the same trend as those of the three gold countries, though at a considerably higher level (in the last quarter of 1934, some 15% below the 1929 average, as compared with a decline of 33-35% in the other countries). The incidence of depression on various industries in France and Poland was fairly even in 1935, though activity was, on the whole, better maintained in the textile and other consumption-goods industries than in such investment-goods industries as metallurgy and engineering. Building and construction, which are left out in the diagram but receive special consideration below, were greatly depressed in both countries. Such revival as has recently been noticeable in France has spread over almost the whole range of manufacturing industries, though it has been more marked in automobile, rubber and paper production than in other industries.

In Poland, where the policy of deflation has been more consistently applied than in France in recent years, the slight revival in certain industries towards the end of 1935 did not make further headway during the first quarter of 1936.⁴ With the introduction of official exchange control in April of this year, a reorientation of economic policy on lines similar to those followed in Germany would appear to have taken place. It is too early to judge of the effects of this change.

During the period in which Belgium formed part of the gold *bloc*, activity in her leading industries — iron and steel, and textiles — remained stagnant or declined; but, immediately after the currency devaluation, a rapid expansion set in, which, by the first quarter of 1936, had carried the index for iron and steel 14%, that for the textile industries (which had previously been more depressed) over 50%, and the monthly general index some 23% above their respective levels for January-March 1935, the quarter preceding the devaluation.

¹ Developments prior to the Monetary and Economic Conference held in London in the summer of 1933 have been dealt with in some detail in previous editions of this volume.

² The review proceeds from the bottom of the diagram upwards.

³ The indices for France and Poland as given in Table 9 include building activity, which is excluded from the series on which the relevant curves in the diagram are based.

⁴ In April, however, the index rose perceptibly.

The recovery would appear to have extended to practically every branch of industry for which separate data are available. In Czechoslovakia, which devalued one year earlier than Belgium, the immediate reaction on industrial production was similar; but, after the first fillip given by the devaluation, activity stagnated for about a year, to resume its recovery at a rapid rate during the latter part of 1935. By the first quarter of 1936, the production index had risen 25% above its level for the first two months of 1934, preceding the devaluation. Industrial recovery in Austria, the third country included in group E above, began at a rapid pace during the autumn of 1933, slowed down in the course of 1934, but has again proceeded rapidly since the second quarter of 1935.

After the sudden spurt of activity which followed immediately upon the depreciation of the dollar in the spring of 1933, the recovery in the industrial production of the United States was, on the whole, checked as from the third quarter of that year (*cf.* Table 9 above) for over a year and a half. Though the reasons for this check were manifold,¹ they were, in part, connected with the enforcement of the industrial codes during that period. By the end of 1935, output exceeded the average for 1929 in a number of branches — mainly consumption-goods industries — such as leather and products thereof (by 20%), tobacco (10%), rubber tyres and tubes (5%), and petroleum refining (3%), while activity in the textile group was only 4% short of that level. The output of plate-glass had risen by as much as 77%; in the case of certain consumers' equipment industries, such as refrigerators, wireless sets, etc., which are not covered by the Federal Reserve Board index, the increase was even greater, and the production of motor-cars fell only 7% short of the 1929 average. Iron and steel production, on the other hand, was still 20% below that level, engineering 37% below (but it improved further in the first months of 1936), and cement as much as 48% below. Building activity (which is not covered by the index) was even more depressed, despite an appreciable recovery in the course of 1935.

Building activity in Canada has remained very low throughout the years of industrial recovery, as compared with 1929. It enters with a heavy weight — heavier, indeed, than that of any other single group — into the original index for that country, and has therefore in recent years dragged down the level of the index very considerably. Activity in mining and manufacturing alone,² as shown in the diagram (curve K), never dropped so low in Canada as in the United States. Apart from the marked short-term fluctuations, which in part reflect the wider changes that have occurred in the United States, the trend of recovery since the end of 1932 has been remarkably steep and not unlike that in the United Kingdom (curve J), and in the group of four Northern-European countries (curve I), whose natural resources are largely similar to those in Canada. By the end of 1935, industrial output in Canada exceeded the level for 1929. Mining production had increased by over 30%, and that of newsprint and motor-cars by some 13%. On the other hand, iron and steel output and timber exports³ still fell short of that level by 8% and 13% respectively.

In Germany and Italy, industrial production, excluding building and electric-power generation (the former of which enters with a heavy weight into the original indices, especially for Italy), has not yet reached the average for 1929 in any single month, though it was close to that level during September-November of last year in Germany⁴ and during May in Italy (*cf.* curves C and L of the diagram). In the last edition of this volume, reference was made to the fact that the remarkable recovery in industrial activity which

¹ The production developments during that period have been discussed in some detail in the last two editions of this volume.

² Thus, excluding not only building but also electric-power generation, which has increased more since 1929 than any other major branch of production in Canada.

³ Monthly production data are not available for sawn timber.

⁴ The addition of production data for the Saar to those for the rest of Germany, as from March 1935, has had the effect of raising the level of the German index since that month slightly above what it would have been had Saar production been included also for the base year of the index.

has taken place in Germany since the beginning of 1933 and in Italy since the beginning of 1934 ¹ has been achieved mainly through a policy of direct Government intervention.

Industrial production in Germany rose very rapidly during the first five months of 1935, partly as a result of the wave of merchandise "hoarding" by consumers which had set in during the preceding autumn, owing to fear of a scarcity of industrial raw materials. Since the spring of 1935, activity in industry as a whole has made but little headway, as will be seen from the following quarterly averages of the monthly index figures (1929=100):

| | | 1935 | | | | 1936 |
|------------------------------------|----|------|----|-----|----|------|
| | | I | II | III | IV | I |
| Mining and manufacturing | 88 | 94 | 94 | 96 | 94 | |
| Manufacturing alone | 89 | 96 | 96 | 96 | 95 | |

The failure of manufacturing production to expand further since the second quarter of 1935 may, in part, be accounted for by a falling-off in sales of certain commodities once the hoarding wave had receded; but it would appear to be largely due to the difficulties which industry has encountered in procuring raw materials, particularly those required for the manufacturing of goods for current consumption. Towards the end of 1935, the output of such goods was some 9% short of the average for 1929, but it has subsequently again recovered to the level of 1934. The output of household articles and porcelain was 20-25%, and of boots and shoes some 10%, smaller than in 1929; that of textiles was roughly equal to what it had been in that year, but some 15-20% below the record level of 1927, and, though the output in the food industries as a whole was practically as large as in 1929, it was lower per head of population. In striking contrast to this retardation in the consumption-goods industries, the output of certain producers' goods had, by the end of 1935, risen far above the average for 1929. The production of non-ferrous metals had increased by 22%, and that of copper alone by 78%; steel by 12%, and rolling-mill products by 9%; activity in engineering, as measured by consignments, was still some 6% less, but production of motor-cars was over 60% larger than in 1929, while shipbuilding (merchant ships), as measured by tonnage under construction, was at any rate as large as in that year. Finally, it should be mentioned that the sub-index for building in September-November stood over 20% higher, and that for electricity, by December, some 40% higher, than in 1929.

The two branches last mentioned, which, as already stated, are not taken into account in the diagram, have undergone an even greater expansion in Italy. It was by encouraging building and constructional activity, including public works, that the Italian Government revived industrial production. But the sharp rise in manufacturing output from a level some 25% below the 1929 average in the third quarter of 1934 to a point only 3-4% below that average in May 1935 no doubt largely reflects preparation for the contingency of war. In connection with the calling-up of additional classes of soldiers in the summer of that year, manufacturing production dropped during June and July even more sharply than it had previously risen. By May 1935, textile production was still 8% (by July almost 50%) short of the average for 1929, while metallurgical production stood 12% above (and was in August equal to) that level. The output of motor vehicles and electrical material had just reached the 1929 average in May, but exceeded it by 20% and 12% respectively in August. Activity in "specialised engineering" was in May 19%, and in August 42%, greater than in 1929, and activity in the paper industries was 44% greater in May, but had dropped considerably by August. The building index stood in May 32%, and in

¹ As will be seen from the diagram, the course of industrial activity in Italy, which joined the gold bloc at its formation in the summer of 1933, was at first fairly similar to that in the other countries of the bloc. Since the beginning of 1934, however, the course of activity in Italy has been entirely different from that in these other countries. This fact suggests the end of 1933 or the beginning of 1934 as the date when Italy abandoned the deflationary policy common to the gold bloc countries and ceased to be a member of that group.

August 7%, higher than in 1929, while the index for public works increased steadily until August, when it stood 53% above the 1929 level; the corresponding increase in electricity production was 42% by July 1935.

As will be seen from Part II of the diagram, the recovery in industrial production in the United Kingdom, rapid though it has been from the depths of the depression in 1932, has, in fact, proceeded at a somewhat slower rate than in the other countries of the paper-currency group; and the extent to which industrial activity (excluding building) has expanded in recent years beyond the 1929 level has been smaller in the United Kingdom than in any of these other countries, except Canada. The main reason for this is to be sought in the very structure of British industry, and in the fact that the industrial systems of the other countries are all considerably younger. In most of them, the process of industrialisation was proceeding rapidly before 1929, and the worst years of world economic depression inflicted only a short-lived check on their industrial growth. In Canada, on the other hand, the incidence of the depression was much heavier than in any other country of this group.

Of all the ten main branches covered by the Board of Trade production index, output in only one — namely, mining — had not fully recovered by the first quarter of 1936 to the average for 1929, the coal industry being adversely affected by structural changes. The output of the textile industries¹ and of the chemical and allied trades in the same quarter or the last quarter of 1935 was 4-5% larger, and that of the food, drink and tobacco trades 4-10% larger, than the average for 1929. As the total population had increased by 2½%, output per head had risen. The output of the iron and steel industries had increased by some 14% as compared with 1929, as had also engineering, including shipbuilding. But activity in shipbuilding alone, as measured by tonnage under construction, was still little more than half what it was in 1929. Thus, the increase in other branches of the engineering industry was very much larger than is suggested by the percentage quoted; motor-car production had, in fact, more than doubled. The production of leather, boots and shoes was some 32% larger than in 1929; non-ferrous metal manufactures and gas and electricity production had increased by over 35%, and building and the output of building materials by over a half.

The industrial output of Sweden, Norway, Finland, and Estonia, aggregated in curve I of the diagram, had by May 1935 risen almost a quarter above its level for 1929.² No figures for subsequent months are as yet available for Sweden, pending the revision of her monthly index. As Sweden accounts for more than half the aggregate weight given to these four countries, the curve has not been continued after May 1935. Taking into account such indirect evidence as is available for Sweden, it would appear, however, that, by the first quarter of 1936, the aggregate industrial output of the four countries exceeded its 1929 average by some 30%. In no major branch — except iron-ore mining and stone-works, both of which are typical export industries, particularly in the case of Sweden — had output in any of these countries failed to recover by 1935 to the 1929 level. While the production of timber exceeded that average but slightly, if at all,³ the output of such

¹ Cotton manufacture was still some 4% below, but activity in most other textile branches had risen far above, the level for 1929.

² It will be observed that the level of this curve throughout the period covered is higher than that of the corresponding curve (g) given in Diagram 4 of the last edition; that curve, however, did not include Estonia. The discrepancy is chiefly explained by the fact that, in the present edition, the monthly index (compiled by the Federation of Swedish Industries), which is less comprehensive in scope than the official annual index, and considerably overstates the decline in output between 1929 and 1932 — while slightly understating the degree of recovery between 1932 and 1934 — has been adjusted on the basis of the more comprehensive annual index. As mentioned above, the monthly index is at present in course of revision. The new index will be based on complete production data for 1934, and will therefore have to be linked up with the annual index in that year.

³ Complete data for timber production in 1935 are not yet available for all the countries concerned, but it would appear in aggregate not to have been, in any case, smaller than in 1929, though export conditions were, on the whole, less favourable to timber in 1935 than they were in 1934.

other export articles as pulp and paper, and, in the case of Sweden, certain highly specialised engineering products, had reached very high levels. On the whole, however, production for the home market, and that of current consumption goods in particular, had increased most compared with 1929, though not compared with 1932.

Curve H in the diagram illustrates the rapid pace at which industrialisation is proceeding in seven chiefly agricultural countries — Chile, Denmark, Estonia, Finland, Greece, Hungary and Roumania. (It will be noted that two of these countries, Estonia and Finland, are also included among those covered by curve I.) Industrial activity in these countries, in view of their general economic structure and the relative growth of their industry, is chiefly directed towards the production of goods for current consumption. Textile manufactures may be taken as representative of such goods. As shown by the composite indices given below, the textile industry continued to expand at a very rapid rate in these countries throughout the period of world economic depression,¹ while their other industries as a whole showed a marked decline of activity until 1932, reflecting mainly the decline in such producers' goods industries as are included among them. Though these other industries have subsequently recovered at a very rapid rate, the composite index relating to them still fell very much short, in the first quarter of 1936, of that for textile manufactures.

COMPOSITE INDICES OF INDUSTRIAL ACTIVITY IN SEVEN² CHIEFLY AGRICULTURAL COUNTRIES.
1929 = 100.

| | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 | *1936 1st qr. |
|-------------------------------|------|------|------|------|------|-------|------------------|
| General index | 99 | 92 | 86 | 97 | 112 | 121 | 132 |
| Textile industries | 105 | 108 | 127 | 138 | 154 | 160 | 155 |
| All other industries covered. | 99 | 90 | 81 | 92 | 107 | 115 | 129 |

*Provisional.

The exceptionally rapid industrial expansion in Japan during 1933 and 1934 slowed down markedly in 1935. This expansion had, like the production recovery in Germany and Italy, been largely State-promoted and furthered by a previous reorganisation and modernisation of industry and by the export advantage resulting from the heavy depreciation of the currency. From the end of 1934, a brake was put, for financial reasons, on the expansionist State intervention in the industrial field, and the effects of this change of policy are clearly discernible in the diagram (curve G). Contrary to developments during preceding years, industrial output (excluding electricity production) failed for nine consecutive months in 1935 to reach the level of the preceding December. During the last quarter of 1935, output again began to expand, but the rise in the index between the end of 1934 and the end of 1935 was less than 6%, as compared with a rise of over 16% during 1934 and over 9% during 1933. How far the expansion during the last quarter of 1935 was due to a reversal of policy is difficult to judge. In view of the seasonal fluctuations in Japanese industrial activity, which usually occur during the winter months, no conclusion can be drawn from the figures so far available for the first quarter of 1936. The major industries which, by the end of 1935, had expanded most since 1930 — the first year for which detailed data are available — were engineering, iron and steel, and sulphate of ammonia. The relative increase in rayon manufacture was even greater than that of the products mentioned, but natural-silk manufacture still remained depressed. Woollen manufacture had increased but little, and the increase in cotton manufacture was less

¹ A comparison with the corresponding indices given in the last edition of this volume will show that the level of the textile index has been lowered by the addition of Estonia to the six countries then covered. Estonian textile production, a large proportion of which is normally exported, declined, in fact, until 1933, but since the currency depreciation of that year, it has recovered with exceptional rapidity.

² For lack of detailed data, Roumania is excluded for 1935, and for the first quarter of 1936 Greece also is excluded, while in the case of Denmark the data for March 1936 have been left out of account owing to a general lock-out affecting the greater part of the Danish industry in that month.

than that in consumption goods as a whole. While the index for the latter stood some 45% above its average for 1930 — probably about 35% above the level for 1929 — that for capital goods had risen some 120% since 1930, and had at least doubled since 1929.

The industrial expansion of Japan, rapid as it has been, is far surpassed by that of the Union of Soviet Socialist Republics. In the last two editions of this publication, reference has been made to the general purposes of the industrial planning in that country and to the actual achievements as measured by available indices of output. The quantitative production results would appear on balance to have corresponded to output planned, even when the plans have been changed and rendered more ambitious. There have been partial failures in certain branches and with regard to the quality of the goods produced. But there would appear to have been a steady improvement in organisation and also in the quality of the goods produced. Owing to the improvement in quality, the effective increase in production since 1929 has been even greater than the index figures suggest. 1929 was the first full year of the first Five-Year Plan (practically achieved in four and a-quarter years); 1935 was the third year of the second Five-Year Plan. The industries which developed most rapidly¹ between those two years were engineering and the chemical industry. Engineering output increased by almost 500%, and that of basic chemicals by over 400%. The production of the rubber industry rose by nearly 400%, electricity by more than 300%, and dyestuffs somewhat less. Ferro-metallurgical production increased more than 200%, while the output of non-ferrous metals just doubled. Attempts are now being made to accelerate the development of the latter and, in particular, copper production, which has lagged behind and failed to reach the planned figure. Timber manufacture and coal extraction have made rapid strides in recent years, achieving by 1935 increases of 170-175%, while petroleum-refining increased by about 125%, and the production of building materials and cement by somewhat over 100%. The textile industries as a whole show a much more moderate expansion; cotton manufacture increased by less than 25%, woollen manufacture somewhat more, and linen manufacture by about 60%, while the output of the relatively less important silk industry rose by more than 200%.

Under the first Five-Year Plan, efforts were primarily concentrated on creating the industrial equipment required for further expansion, the immediate interests of the consumer being deliberately set aside. Under the second Five-Year Plan, the supply of goods for current consumption is the principal task. The extent to which this policy has been actually carried through may be judged from the following comparison of the relevant group indices. The period 1929 to 1935 has been divided in two sub-periods of equal length; 1932 was the last year of the first Five-Year Plan.

Percentage Increase between :

| | 1929 and 1932 | | 1932 and 1935 | | Jan.-Feb. 1934 and Jan.-Feb. 1935 |
|-----------------------------|---------------|----------------|---------------|----------------|-----------------------------------------|
| | Total | Annual rate | Total | Annual rate | |
| Total industry | 83 | 23 | 58 | 16 | 33 |
| Capital goods | 113 | 29 | 70 | 19 | 37 |
| Consumption goods | 54 | 16 | 42 | 12 | 26 |

The rate of increase in industrial output fell off very considerably during the first three years of the second Five-Year Plan, as compared with the last three years of the first. It declined, in fact, year by year up to 1933 inclusive, but rose again in 1934 and 1935. Although it remained higher throughout for capital goods than for consumption goods, it declined relatively more in the case of the former than in that of the latter group. The average annual rate of increase of capital goods was over 80% higher than that of consumption goods during 1930-1932, but less than 60% higher during 1933-1935, and

¹ Cf. *Statistical Year-Book of the League of Nations, 1935/36*, Table 108 (pages 180-181), giving production indices for 1928-1935 of some thirty individual branches of industry in the Union of Soviet Socialist Republics.

some 40% higher during the first quarter of 1936. Thus, although by 1935 the accumulated increase since 1929 was very much larger in respect of capital goods (+ 262%) than as regards consumption goods (+ 118% — the index for total industrial production had increased by 188%), the evolution proceeded along the general lines of policy embodied in the new plan. In consequence, current consumption goods have recently been considerably cheapened in price to non-privileged consumers, while the buying privileges enjoyed by certain sections of the people are being gradually abolished.

At the moment of writing, detailed figures are available only for the first two months of 1936; they point to a sharp acceleration of the increase in output. This acceleration is reported to have continued during subsequent months, and to have led to production results for the first quarter of this year, which, compared with those for the same quarter of 1935, suggest a growth far exceeding that foreseen under the plan, particularly as regards engineering products and certain other producers' goods. It is expected, therefore, that the second Five-Year Plan will be completed before the end of the five-year period; certain industries aim at achieving it in four years. The output of the "heavy industries" (mainly producers' goods) is reported to have risen for the first quarter of 1936, as compared with that of 1935, by 40%, that of the "light industries" (mainly current consumption goods) by almost 30%, and that of the food industries by some 32%.

PRICE OF CAPITAL.

Among the various factors which have determined the course of industrial activity during the period here considered, the price of capital is of particular importance. It would fall outside the scope of this volume to attempt any detailed analysis of developments in the national capital markets, or of the influence which monetary factors as a whole have exercised on economic activity.¹ Reference should be made, however, to the influence which the cheapening of credits, and long-term capital in particular, would appear to have had on industrial recovery.

Special indices of the price of industrial capital alone are available for comparatively few countries, and then in the form of average yields of the bonds only of large industrial companies, which may, on the whole, have been in a more favoured position than the smaller industrial enterprises. But the changes in the yields of such bonds may be taken to reflect accurately enough the price trend for long-term capital of industry as a whole. The changes in the yields of representative Government bonds may also be taken to reflect this trend, though more approximately; throughout the period considered, the average cost of industrial capital has no doubt, in practically all countries, ruled considerably higher than these bond yields. Figures of the kind here referred to are given in Table 10 below for the majority of the countries whose industrial activity has been reviewed above. Even in the case of the countries for which industrial bond yields are given, Government bond yields are shown; in the case of Germany, however, a series relating to mortgage bonds has been chosen in preference to the latter. Series for market rates of discount, indicative of the cost of short-term capital, have also been added where available.

The relative level of the price of capital in each country is, of course, determined by a multitude of factors relating, *inter alia*, to the economic structure, the general degree of economic and financial development, and the organisation of the capital market. Even under more normal conditions, therefore, considerable differences obtain, particularly between capital-exporting and capital-importing countries. Attention should, therefore, be directed rather to the relative changes which have occurred in the course of the depression than to an international comparison of the different levels shown.

¹ For a comparative analysis of the rôle of monetary factors in economic change in certain representative countries, see League of Nations, *Money and Banking, 1935/36*, Vol. I, *Monetary Review*, and for more detailed summaries of monetary (including capital) and banking developments in some forty-five countries, see Vol. II, *Commercial Banks*, of the same publication (Geneva, 1936).

In all the countries — except France — for which special series for industrial bonds (or series which largely relate to such bonds) are given, the effective long-term rate for industrial capital, as expressed in the yields of these bonds, reached a maximum in 1932,¹ the worst year of economic depression. During the subsequent years, this rate declined continuously and very considerably in Sweden and the United Kingdom, and also in the United States, Japan and Germany; it would appear to have fallen less in the Netherlands during 1933 and 1934, to rise again in 1935; in France, it rose in 1933 and the beginning of 1934, declined but little on balance in the course of that year and 1935, and rose again perceptibly during the early part of 1936.

In Sweden and the United Kingdom, the yield of industrial bonds, after having reached minima of 3.54% and 3.85% respectively towards the end of 1934 and the beginning of 1935, remained subsequently almost stationary, with a tendency to increase slightly during the latter part of that year; but, since October, the trend of Swedish long-term rates has again been markedly downwards (as has also the yield of British Consols since September). In the United States and Germany, where important loan conversions were effected in the course of 1935, and in Japan, the rates for long-term industrial capital continued to fall throughout that year and the early part of 1936, as did also, and, indeed, quite markedly, the average loan rate charged to customers by commercial banks in the first-mentioned country. In none of these countries, however, has the price of industrial capital as yet reached so low a level as in the United Kingdom or Sweden.

The changes in Government bond yields and market rates of discount in the different groups of countries distinguished in the preceding production analysis confirm, on the whole, the evidence which is afforded by the industrial long-term rates here shown for some countries representative of these various groups.² In recent years, Governments and central banks have generally endeavoured to cheapen interest rates³ and rates for long-term capital in particular. In the countries of the gold *bloc*, however, this object has been achieved but imperfectly, if at all. Not only have long-term rates in France and the Netherlands failed to fall in any considerable degree, but short-term rates have risen very much since 1932. In Poland, though long-term rates have fallen since 1932, they still remain very high, and short-term rates, which rule even higher than the effective yield of representative Government bonds, have been but insignificantly reduced since 1933. Developments in Belgium were similar to those in France and the Netherlands up to the beginning of 1935; but, since the devaluation at the end of the first quarter, the price of capital, and short-term rates in particular, have shown a marked decline *pari passu*

¹ Developments up to 1932 as regards the yield both of Government and industrial bonds and as regards market rates of discount were briefly commented upon in the last edition of this publication.

² The series for the yield of Treasury bonds and the commercial paper rate in New York, given for the United States, would appear for certain reasons to be less indicative for the purpose here envisaged than are the series for Government bond yields and market rates of discount shown for the other countries. This observation also applies (though not perhaps in the same degree) to the relevant series shown for the United Kingdom. London and New York being the two leading financial centres of the world, money rates are largely influenced by the affluence of international refugee capital.

³ A general cheapening of the price of credits has been deliberately induced by a lowering of the official discount rates paving the way for large-scale conversion operations. An examination of central bank discount rates (see *Monthly Bulletin of Statistics* or *Statistical Year-Book of the League of Nations*) will show that, in all the countries — except France and the Netherlands — whose industrial activity has been reviewed above, the annual averages of these rates were considerably lowered between 1932 and 1934. In France and the Netherlands, the average rates were substantially the same in these two years. During 1935 and the first five months of 1936, the official discount rates were further reduced in eleven, remained unchanged in seven, and were increased in only four of the twenty-two countries considered (not counting the Union of Soviet Socialist Republics). The official rate was raised radically for prolonged periods in France and the Netherlands to protect their gold reserves, the Italian rate was raised substantially as from August and September 1935, and the Danish rate was raised, though less than that of the other three countries mentioned, in order to diminish the pressure on the Danish exchange.

Table 10. — MOVEMENT OF BOND YIELDS AND MARKET RATES OF DISCOUNT IN CERTAIN COUNTRIES.

| | Austria | Belgium | | Canada | Czechoslovakia | | Finland | France | | | Germany | | | Hungary | Italy | | Japan | | | |
|---------------------------|----------------------|----------------|-----------------------------|---------------------|------------------|---------------------------|-------------|------------------|----------------------------------|-----------------------------|-------------------|------------------|-----------------------------|---------------------|----------------|---------------------------|-------------------------|------------------|--------------------------|--|
| | 7% 1930 Intern. Loan | Rente belge 9% | Commercial paper 1-3 months | Province of Ontario | Government bonds | Private discount 3 months | State loans | Rente perpét. 3% | Miscellaneous bonds ^a | Commercial paper 45-90 days | 6% Mortgage bonds | Industrial bonds | Private discount 56-90 days | Forced Loan 1924 5% | Rendita 3 1/2% | Commercial bills 4 months | Average of public bonds | Industrial bonds | Commercial paper 60 days | |
| Yearly averages | | | | | | | | | | | | | | | | | | | | |
| 1929 | | 4.52 | 4.30 | 4.90 | 5.76 | 5.01 | 7.70 | 3.98 | 4.89 | 3.46 | 7.40 | 7.81 | 6.87 | 8.76 | 5.14 | 6.38 | 5.07 | 6.43 | 4.85 | |
| 1930 | | 3.94 | 2.78 | 4.71 | 5.68 | 4.46 | 7.90 | 3.44 | 3.82 | 2.32 | 7.15 | 7.57 | 4.43 | 8.18 | 5.21 | 6.00 | 5.41 | 6.54 | 4.85 | |
| 1931 | 7.70 | 3.98 | 2.32 | 4.63 | 5.73 | 4.77 | 8.10 | 3.48 | 3.70 | 1.57 | b) 7.08 | e) 7.75 | 6.14 | 8.61 | 4.90 | 6.00 | 5.44 | 6.49 | 4.85 | |
| 1932 | 9.40 | 4.51 | 3.12 | 5.21 | 6.50 | 5.15 | 8.40 | 3.84 | 4.73 | 1.28 | c) 8.33 | c) 9.87 | 4.95 | c) 22.51 | 4.77 | 5.88 | 5.50 | 6.84 | 5.24 | |
| 1933 | 9.14 | 4.54 | 2.42 | 4.68 | 6.06 | 3.57 | 7.00 | 4.38 | 5.74 | 1.83 | 7.15 | 7.65 | 3.88 | 17.53 | 4.35 | 3.88 | 4.78 | 5.96 | 4.49 | |
| 1934 | 8.35 | 4.08 | 2.16 | 4.11 | 5.84 | 3.50 | 5.70 | 4.14 | 5.61 | 2.12 | 6.57 | 6.76 | 3.77 | 12.22 | 4.09 | 3.75 | 4.53 | 5.41 | 4.38 | |
| 1935 | 6.97 | 3.90 | 2.06 | 3.88 | 5.21 | 3.50 | 5.40 | 3.88 | 5.31 | 3.30 | d) 4.69 | 5.96 | 3.15 | 9.75 | 4.75 | ... | 4.48 | 4.99 | 4.38 | |
| Quarterly averages | | | | | | | | | | | | | | | | | | | | |
| 1933 I | 8.77 | 4.45 | 2.76 | 4.76 | 6.33 | 3.77 | | 4.06 | 5.30 | 1.84 | 7.14 | 7.55 | 3.88 | 21.83 | 4.49 | 4.25 | 5.02 | 6.22 | 4.68 | |
| II | 8.86 | 4.60 | 2.41 | 4.73 | 5.64 | 3.50 | | 4.51 | 5.88 | 1.91 | 7.14 | 7.50 | 3.88 | 18.17 | 4.56 | 4.13 | 4.85 | 5.98 | 4.51 | |
| III | 9.52 | 4.58 | 2.30 | 4.59 | 6.08 | 3.50 | | 4.49 | 5.82 | 1.53 | 7.51 | 8.10 | 3.88 | 14.53 | 4.42 | 4.13 | 4.63 | 5.75 | 4.38 | |
| IV | 9.41 | 4.52 | 2.19 | 4.64 | 6.20 | 3.50 | 6.20 | 4.52 | 5.97 | 2.03 | 6.81 | 7.46 | 3.88 | 15.59 | 3.95 | 3.50 | 4.64 | 5.63 | 4.38 | |
| 1934 I | 8.93 | 4.27 | 2.09 | 4.53 | 5.90 | 3.50 | 5.70 | 4.52 | 6.24 | 2.65 | 6.50 | 6.93 | 3.88 | 13.25 | 3.93 | 3.25 | 4.51 | 5.53 | 4.38 | |
| II | 8.43 | 4.00 | 2.06 | 4.12 | 5.75 | 3.50 | 5.70 | 3.93 | 5.44 | 2.58 | 6.60 | 6.90 | 3.84 | 11.72 | 4.25 | 3.25 | 4.43 | 5.42 | 4.38 | |
| III | 8.36 | 3.86 | 2.22 | 3.95 | 5.96 | 3.50 | 5.70 | 4.14 | 5.58 | 1.73 | 6.72 | 6.78 | 3.75 | 11.94 | 4.07 | 3.25 | 4.57 | 5.31 | 4.38 | |
| IV | 7.68 | 4.18 | 2.28 | 3.83 | 5.75 | 3.50 | 5.50 | 3.97 | 5.19 | 1.51 | 6.44 | 6.44 | 3.63 | 11.99 | 4.09 | 3.75 | 4.60 | 5.28 | 4.38 | |
| 1935 I | 7.10 | 4.04 | 2.38 | 3.74 | 5.34 | 3.50 | 5.50 | 3.75 | 4.86 | 2.06 | 6.24 | 6.11 | 3.40 | 9.52 | 4.36 | 3.75 | 4.56 | 5.16 | 4.38 | |
| II | 6.93 | 3.82 | 2.13 | 3.83 | 5.31 | 3.50 | 5.50 | 3.85 | 5.40 | 3.50 | 4.70 | 5.93 | 3.16 | 9.49 | 4.61 | 4.08 | 4.48 | 5.05 | 4.38 | |
| III | 6.95 | 3.88 | 1.88 | 3.96 | 5.12 | 3.50 | 5.40 | 3.85 | 5.48 | 3.33 | 4.69 | 5.88 | 3.01 | 9.64 | 5.00 | 4.60 | 4.45 | 4.85 | 4.38 | |
| IV | 6.92 | 3.87 | 1.88 | 3.97 | 5.08 | 3.50 | 5.30 | 4.08 | 5.50 | 4.32 | 4.70 | 5.91 | 3.02 | 10.36 | 5.03 | ... | 4.41 | 4.73 | 4.38 | |
| 1936 I | 6.80 | 3.76 | 1.45 | 3.89 | 4.43 | 3.00 | 5.30 | 4.39 | 5.69 | 3.86 | 4.69 | 5.85 | 3.00 | 8.24 | 4.90 | ... | 4.40 | 4.62 | 4.38 | |
| April | 6.78 | 3.75 | 1.38 | 3.76 | 4.44 | 3.00 | ... | 4.46 | 5.89 | 5.01 | 4.69 | 5.84 | 3.00 | ... | 4.58 | ... | 3.98 | 4.89 | 4.02 | |
| May | 6.78 | ... | ... | ... | 4.43 | 3.00 | ... | 4.46 | 6.10 | 5.86 | 4.68 | 5.81 | 2.92 | ... | 4.53 | ... | ... | ... | 4.02 | |

| | Netherlands | | | Norway | Poland | | Sweden | | | U. K. | | | U. S. A. | | | |
|---------------------------|------------------|----------------------------------|------------------|----------------------------|--------------------|------------------|--------------------|------------------|---------------------------|----------------|------------------|--------------------------------|----------------|------------------|-------------------------------------|--------------------------------------|
| | Government bonds | Miscellaneous bonds ^a | Private discount | Miscellaneous bonds 4 1/2% | \$ Loan 1919/20 6% | 4-6 months bills | 7 Government bonds | Industrial bonds | Commercial paper 3 months | Consols 2 1/2% | Industrial bonds | London bankers' drafts 90 days | Treasury bonds | Industrial bonds | Average bank loan rate ^b | New York Commercial paper 4-6 months |
| Yearly averages | | | | | | | | | | | | | | | | |
| 1929 | 5.16 | 4.58 | 4.82 | 5.21 | 7.22 | 12.22 | 4.56 | 5.06 | 4.74 | 4.60 | | 5.26 | 3.60 | 5.06 | 6.14 | 5.84 |
| 1930 | 5.11 | 4.38 | 2.06 | 5.05 | 7.84 | 11.46 | 4.18 | 4.95 | 3.72 | 4.48 | | 2.57 | 3.28 | 4.96 | 5.72 | 3.58 |
| 1931 | 5.16 | 4.39 | 1.42 | 5.01 | 8.99 | 10.95 | 4.22 | 5.03 | 4.09 | 4.39 | | 3.61 | 3.31 | 5.51 | 5.39 | 2.67 |
| 1932 | 4.98 | 4.82 | 0.85 | 5.02 | 10.86 | 10.67 | 4.32 | 5.33 | 4.39 | 3.78 | a) 5.30 | 1.87 | 3.66 | 7.46 | 5.62 | 2.84 |
| 1933 | 4.75 | 4.34 | 1.08 | 4.95 | 10.82 | 9.38 | 4.02 | 4.75 | 3.17 | 3.36 | 4.61 | 0.69 | 3.31 | 6.93 | 5.56 | 1.72 |
| 1934 | 4.37 | 4.03 | 0.87 | 4.67 | 8.44 | 9.00 | 3.47 | 3.86 | 2.50 | 3.08 | 4.12 | 0.82 | 3.10 | 5.30 | 5.17 | 1.02 |
| 1935 | 4.11 | 4.24 | 3.15 | 4.44 | 7.57 | 8.80 | 3.19 | 3.67 | 2.50 | 2.91 | 3.88 | 0.58 | 2.70 | 4.60 | 4.60 | 0.76 |
| Quarterly averages | | | | | | | | | | | | | | | | |
| 1933 I | 4.62 | 4.21 | 0.49 | 4.91 | 10.38 | 9.40 | 4.11 | 4.93 | 3.50 | 3.34 | 4.78 | 0.78 | 3.31 | 7.68 | 5.61 | 1.92 |
| II | 4.78 | 4.45 | 1.63 | 4.92 | 11.78 | 9.40 | 4.22 | 4.90 | 3.33 | 3.40 | 4.65 | 0.53 | 3.32 | 7.20 | 5.65 | 2.17 |
| III | 4.76 | 4.42 | 1.84 | 4.95 | 10.69 | 9.40 | 3.99 | 4.77 | 3.00 | 3.41 | 4.56 | 0.44 | 3.20 | 6.20 | 5.54 | 1.50 |
| IV | 4.83 | 4.26 | 0.49 | 5.02 | 10.44 | 9.30 | 3.77 | 4.41 | 2.83 | 3.67 | 4.49 | 1.00 | 3.40 | 6.63 | 5.45 | 1.29 |
| 1934 I | 4.56 | 4.20 | 0.83 | 4.75 | 9.14 | 9.20 | 3.69 | 4.15 | 2.50 | 3.20 | 4.17 | 0.97 | 3.34 | 5.79 | 5.40 | 1.30 |
| II | 4.48 | 4.14 | 1.39 | 4.73 | 8.07 | 9.13 | 3.63 | 3.90 | 2.50 | 3.18 | 4.13 | 0.93 | 3.02 | 5.25 | 5.27 | 1.00 |
| III | 4.38 | 3.90 | 0.69 | 4.63 | 8.34 | 8.90 | 3.51 | 3.81 | 2.50 | 3.10 | 4.12 | 0.80 | 3.01 | 5.15 | 5.05 | 0.88 |
| IV | 4.04 | 3.87 | 0.58 | 4.56 | 8.22 | 8.83 | 3.05 | 3.59 | 2.50 | 2.85 | 4.03 | 0.59 | 3.03 | 4.99 | 4.97 | 0.88 |
| 1935 I | 3.93 | 3.83 | 0.56 | 4.45 | 7.76 | 8.90 | 3.04 | 3.58 | 2.50 | 2.83 | 3.87 | 0.45 | 2.75 | 4.75 | 4.88 | 0.79 |
| II | 4.08 | 4.21 | 3.92 | 4.40 | 7.53 | 8.80 | 3.15 | 3.61 | 2.50 | 2.89 | 3.89 | 0.63 | 2.62 | 4.68 | 4.78 | 0.75 |
| III | 4.25 | 4.54 | 4.44 | 4.43 | 7.30 | 8.80 | 3.23 | 3.62 | 2.50 | 3.00 | 3.86 | 0.60 | 2.68 | 4.54 | 4.57 | 0.75 |
| IV | 4.16 | 4.37 | 3.66 | 4.48 | 7.67 | 8.70 | 3.33 | 3.88 | 2.50 | 2.94 | 3.89 | 0.64 | 2.74 | 4.46 | 4.54 | 0.75 |
| 1936 I | 4.09 | 4.27 | 1.62 | 4.46 | 7.80 | 8.57 | 3.23 | 3.63 | 2.50 | 2.93 | 3.92 | 0.56 | 2.61 | 4.29 | 4.47 | 0.75 |
| April | 4.10 | 4.33 | 1.16 | 4.47 | 8.09 | 8.80 | 3.13 | 3.50 | 2.50 | 2.92 | 3.92 | 0.56 | 2.51 | 4.38 | 4.40 | 0.75 |
| May | ... | ... | 2.17 | 4.49 | ... | ... | ... | 3.43 | 2.50 | 2.98 | 3.92 | 0.56 | 2.50 | 4.45 | 4.43 | 0.75 |

a) Average of December 1931 and last quarter of 1932. b) I-VI.1931. c) IV-XII.1932. d) 9 months. e) Average I-12.VII and 3-18.IX.1931.
 f) I-VII. 1931.
¹ January 1936, conversion 5 1/2% bonds into 5% and 4 1/2% into 4%.
² 36 bonds: 3 Government, 2 mortgage, 12 railways, 19 industrial.
³ On April 1st, 1935, the 6% bonds were converted into 4 1/2%.
⁴ 8 first-class bonds: 2 Government, 2 municipal, 2 industrial, 1 waterworks, 1 mortgage.
⁵ Average loan rates charged customers by reporting commercial banks in 27 principal cities. The averages relate to the following three types of loans: Commercial loans, demand and time loans and securities.

with the revival of industrial activity reviewed above. The devaluation in Czechoslovakia, which took place at the beginning of 1934, was not followed during that year by any appreciable reduction in interest rates, and, as has already been mentioned, industrial activity in fact stagnated after the first fillip to production given by the devaluation ; but, during 1935, a more decisive downward trend of the price of capital set in, paving the way for and supporting the industrial revival, which began with the second quarter, and became especially marked during the latter part of the year. Further examples for individual countries could be quoted at length, but it suffices to observe that, in the case of all countries where the reduction in capital rates has been large and continuous since 1932 — and this applies particularly to those which, for the purpose of the preceding analysis, have there been grouped under the heading of “ paper-currency countries ” — the industrial recovery or expansion has been, not only the most rapid, but has spread over the widest range of individual industries.

The rôle played by the cheapening of long-term capital rates in the revival of building activity is referred to later.

INDUSTRIAL PROFITS.

The improvement in the profitability of industrial enterprise during 1933 and 1934, referred to last year, continued, in fact, at an enhanced rate during 1935. Since 1932, when industrial profits had fallen to extremely low levels in most countries, and had even in some cases give place to a large net loss for industry as a whole, the recovery in profits has, as a rule, been more rapid than the rise in industrial output. This normally happens in the course of recovery from any major depression, as profits, for obvious reasons, tend to fluctuate more widely between the lowest and the highest points of the cycle than does production. Reference should be made, however, to two important factors which have been operative in the rapid improvement during recent years in the earning position of industry in certain countries :

(1) Effective costs of production have been lowered by rationalisation, both in the form of increased mechanisation of production and in the form of improved methods of work. As shown above (see “ General Review of Industrial Activity ”), this rationalisation has resulted in a marked increase in labour productivity, which has helped to improve industrial profits, while at the same time enabling industry to pay higher real wages per man-hour worked than in 1929.

(2) Overhead costs have fallen as a whole (except in the countries of the gold bloc) in consequence of the cheapening of the price of capital demonstrated above, and they have fallen, in particular, per unit of output as the industrial recovery has proceeded.

The improvement in manufacturing profits would appear not to have been due so far — at any rate not to any appreciable extent — to rising prices. Though wholesale prices have risen more or less considerably in most countries during recent years, this rise has been much less marked in the case of finished articles ¹ than as regards products in earlier

¹ Certain finished goods have, indeed, continued to cheapen as a result of the lowering of costs of production referred to above ; but, in contrast to the price-fall during the decline of activity, this cheapening has gone hand in hand with improved profitability. Where industrial prices as a whole have not actually begun to rise, a further fall due to factors other than cost-reduction would appear to have been effectively checked.

In this connection, it is of interest to compare the changes in industrial prices in Sweden, where a unique index embracing the prices *loco* works of all products covered by its industrial statistics is calculated annually, with the changes in wholesale prices on the one hand and in industrial production on the other. No comprehensive index of industrial profits is available for Sweden, but the production index is roughly indicative of the changes in real profits, though these changes have no doubt been considerably wider in amplitude as between low points of depression and high points of boom than have those in output. [Continued on opposite page.]

stages of production — a fact which would tend to diminish rather than increase manufacturing profits.

Comprehensive indices of industrial profits are compiled or published for only a limited number of countries, and those available are not strictly comparable internationally,¹ more especially as regards the level of profits shown. The trend of profits in each country during the years of depression and subsequent recovery is nevertheless significant.

The annual net profits and rates of earning of some 2,000 companies in the United Kingdom, and an index compiled by *The Economist* showing the changes in their aggregate profits since 1929, are given below. These compilations relate almost exclusively to industrial concerns, and are thus indicative of the changes in industrial profits.² For purposes of comparison with the changes in industrial activity, the Board of Trade production index is also shown, recalculated on the same base year.

United Kingdom.

| Year | Number of companies considered in columns (b) and (c) (a) | Net profits (after debenture payments) £ (000,000's) (b) | Ratio of profits to preferred and ordinary capital % (c) | Index of changes in aggregate profits (d) | Index of industrial production (e) |
|--------|--------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------|---------------------------------------|
| 1929 | 1,932 | 198.8 | 10.5 | 100.0 | 100.0 |
| 1930 | | 197.5 | 9.8 | 99.4 | 92.3 |
| 1931 | | 175.0 | 7.2 | 77.1 | 83.8 |
| 1932 | 1,998 | 143.3 | 5.8 | 63.1 | 83.5 |
| 1933 | | 144.8 | 6.1 | 63.4 | 88.2 |
| 1934 | 1,975 | 168.8 | 7.2 | 73.9 | 98.8 |
| (1934) | | (175.3) | (7.2) | (73.9) | (98.8) |
| 1935 | 2,116 | 203.2 | 8.5 | 85.7 | 105.7 |

Note. — The number of companies whose reports are considered in the statistics of *The Economist* changes, though not very considerably, from year to year; but, as comparisons are made each year for identical companies in the preceding year, the figures have been arranged in two-year groups. For 1934, two sets of figures are given, one relating to the same companies as in 1933, and the other to the same companies as in 1935. In the index shown in column (d), the difficulties involved in a comparison extending over more than two years have been overcome by means of the chain-linking method.

Continued from opposite page.]

(1913 = 100.)

| Year | Wholesale prices | Prices of industrial products | Industrial production | Year | Wholesale prices | Prices of industrial products | Industrial production | Year | Wholesale prices | Prices of industrial products | Industrial production |
|------|------------------|-------------------------------|-----------------------|------|------------------|-------------------------------|-----------------------|------|------------------|-------------------------------|-----------------------|
| 1920 | 359 | 335 | 96 | 1926 | 149 | 162 | 123 | 1931 | 111 | 133 | 144 |
| 1921 | 222 | 242 | 75 | 1927 | 146 | 159 | 127 | 1932 | 109 | 128 | 136 |
| 1922 | 173 | 188 | 87 | 1928 | 148 | 158 | 134 | 1933 | 107 | 125 | 145 |
| 1923 | 163 | 176 | 96 | 1929 | 140 | 153 | 151 | 1934 | 114 | 127 | 175 |
| 1924 | 162 | 170 | 109 | 1930 | 122 | 146 | 150 | 1935 | 116 | ... | ... |
| 1925 | 161 | 169 | 112 | | | | | | | | |

It will be noted that, between 1921, the worst year of the first post-war slump, and 1930, the last year of the subsequent boom, the industrial output doubled *pari passu* with a reduction of industrial prices by 40% (wholesale prices dropped simultaneously by 45%), which industry sustained very successfully, to judge by such profit data as are available. The drop in industrial prices was precipitated during the slump of 1931/32, and continued (as did also that in wholesale prices) during the first year of the subsequent recovery. The fairly marked rise in wholesale prices in 1934 entailed only an insignificant rise in the prices of industrial products as a whole, while output rose in that year by some 20%, and profits, according to the partial evidence available, would appear to have increased even more.

¹ The limits set to such comparison by certain peculiarities inherent in these indices are discussed in some detail in the last edition of this publication, to which reference should be made.

² Railway companies are not considered, and though, in addition to purely industrial concerns, certain oversea plantation companies (rubber and tea), as well as investment trust and similar financial corporations, are actually included, these enterprises account for only a small proportion of the total capital and profits of the companies covered by the statistics.

It should be mentioned that the profits shown for each year have, as a rule, been earned wholly or in part in the previous year. The time-lag involved should be borne in mind when comparing the relative changes in profits and industrial production. Moreover, the production index measures, in principle, changes in quantity, while the profit index relates to values and prices which had fallen considerably by 1932-1933 (as compared with 1929) and have since risen relatively little, especially as regards manufactured articles. These reservations apply also to comparisons of the relative changes in profits and industrial activity in other countries.

For the reasons here indicated, the profit index given in column (d) above — as, indeed, also the ratio of profits to the capital stock, given in column (c) — fell but little in 1930, but by 1932 and 1933 reached a level very much lower than that of industrial activity (column (e)). The marked recovery in production during 1933 only became clearly apparent in the profit figures shown for 1934, and, although the profits increased more than production in 1935, they were still some 15% below the 1929 aggregate, while production was over 5% higher. Taking into account, however, first, the fall in prices since 1929,¹ and, secondly, the fact that the profits shown for 1935 mainly relate to activity in 1934, it would appear that already by that year the "real profitability" of average industrial enterprise in the United Kingdom had recovered in roughly the same proportion as industrial production, and had, in 1935, risen higher above the 1929 level than had the industrial output. Apart from certain export industries, such as cotton manufacture in particular, which were in a less favourable position, the increased earning power has been common to most industries, and has been specially marked as regards electrical equipment, motors, iron and steel, building materials, tobacco, brewing, food and confectionery.

The current compilations available for the United States are less representative of the profits of industry as a whole than are the British statistics discussed above. The profit statistics of the *National City Bank of New York*, summarised in columns (a)-(c) below, are based on the reports published by the principal industrial, commercial, and financial corporations whose shares and bonds are publicly quoted. In column (d), the industrial profit index of the *Standard Statistics Company*, covering 120 purely industrial corporations, has been added; this index (which has been converted on to the basis of 1929 = 100) obviously affords but an incomplete measure of the changes in industrial profits in a country of the dimensions of the United States.

| Year | Number of corporations considered in columns (b) and (c) (a) | United States. | | |
|------|-----------------------------------------------------------------|-----------------------------------|--------------------------------------------|---------------------------------------------------------------------------------|
| | | Net profits \$ (000,000's) (b) | Rate of return on nominal capital % (c) | Index of changes in the volume of profits of 120 industrial corporations (d) |
| 1929 | 1,303 | 3,524 | 13.5 | 100.0 |
| 1930 | | 1,937 | 6.7 | 59.3 |
| 1931 | | 718 | 2.5 | 25.0 |
| 1932 | 1,475 | — 97 | (Negative) | (Net loss) |
| 1933 | | 661 | 2.6 | 15.7 |
| 1934 | 2,010 | 1,789 | 3.5 | 26.1 |
| 1935 | | 2,541 | 5.1 | 41.1 |

Note. — The figures have been arranged in groups of comparable years, for the same reasons (applicable to columns (a)-(c)) as those indicated under the United Kingdom above.

The above series, relating only to large enterprises, understate, in fact, very considerably the decline in industrial profits as a whole up to 1932-1933. In order to elucidate this point, recourse may be had to certain data contained in a study on "Income

¹ For this purpose, the cost-of-living index has been employed. It stood at 86 in 1934 (1929 = 100).

| Japan. | | | | | | | |
|------------|-----------------------------------|-----------------------------------------|--------------------------------------|---------------|-----------------------------------|-----------------------------------------|--------------------------------------|
| Year | Net profits Yen (000,000's) | % return on paid-up share capital | Index of volume of net profits | Year | Net profits Yen (000,000's) | % return on paid-up share capital | Index of volume of net profits |
| 1929 | 531 | 10.3 | 100.0 | 1933..... | 500 | 9.5 | 94.1 |
| 1930 | 273 | 5.2 | 51.4 | 1934..... | 611 | 10.7 | 115.0 |
| 1931 | 268 | 5.3 | 50.5 | 1934, I-VI .. | 279 | 10.2 | ... |
| 1932 | 381 | 7.5 | 71.8 | 1935, I-VI .. | 367 | 12.1 | ... |

Even though the paid-up share capital of the enterprises considered was larger in 1934 than in 1929, the rate of return on that larger capital exceeded the corresponding rate for 1929. Net profits for the first half-year 1935 rose, as compared with those for the first six months of 1934, by over 30%, and the yield of the capital stock by some 19%. According to the more detailed profit data available for the two half-years of 1934 and the first half-year of 1935, the rate of return on the share capital of 182 purely industrial enterprises included among the 350 corporations considered amounted to 14.8%, 15.4%, and 16.3%, respectively, for these three half-years. The profits were particularly high in the industries which profit from armaments (such as iron and steel, mechanical and electrical engineering, and chemicals), and also in certain new and rapidly developing consumption-goods industries (such as rayon, dyestuffs, glass, and porcelain).

The improvement in the profit position of German industry, which was very marked between 1931 (heaviest net loss) and 1933 (profit and loss just balanced),¹ continued at a much slower rate in 1934 and 1935 according to the statistics of the German Business Research Institute reproduced below :

*Germany: Net Profit or Loss (—) of 2,000 Industrial Concerns.**
(R.M. 000,000,000's)

| 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|------|------|------|------|------|---------|----------|
| 2.2 | 0.6 | -5.0 | -3.0 | ±0.0 | 0.5-1.0 | over 1.0 |

* Source: *Vierteljahrshefte zur Konjunkturforschung*, 10. Jahrgang, Heft 4, Teil A, Berlin, 1936.

According to a more detailed compilation,² which, however, only relates to twenty-five larger concerns, net profit would appear to have scarcely increased in certain industries between 1934 and 1935 :

| Business year ending middle of | Germany. | | | | | | | |
|--------------------------------------|---------------------------------|----------------|------------------------------|----------------|---------------------------|----------------|-------------------------|----------------|
| | Heavy industry (7 companies) | | Engineering (9 companies) | | Textiles (9 companies) | | Total (25 companies) | |
| | Gross profits | Net profits | Gross profits | Net profits | Gross profits | Net profits | Gross profits | Net profits |
| | R.M. (000,000's) | | | | | | | |
| 1933 | 305 | 19.3 | 78 | -2.3 | 24 | 1.2 | 407 | 18.2 |
| 1934 | 355 | 24.5 | 104 | 3.5 | 29 | 2.2 | 489 | 30.2 |
| 1935 | 414 | 23.3 | 140 | 3.6 | 31 | 2.8 | 585 | 29.7 |

In explanation of the fact that the net profits of most of the enterprises covered by these statistics hardly rose, if they did not actually decline, as in the heavy industry, while their gross profits continued to increase during 1935, the *Reichs-Kredit-Gesellschaft* points to a number of factors. It maintains that, failing a rise in prices of manufactured articles, the limit for a fall in overhead costs per unit of output has been approached, if not exceeded, in certain industries, which have expanded up to or beyond the optimum volume of production.³ The rates of taxation, which were increased sharply during the slump and have since been scarcely reduced, absorb an increasing proportion of the rising gross profits.

¹ For comments on industrial profit developments in Germany during the slump and the first years of production recovery, see *World Production and Prices, 1925-1934* (Geneva, 1935), pages 41 and 42.

² Source: *Reichs-Kredit-Gesellschaft, Germany's Economic Situation at the Turn of 1935/36*, Berlin, 1936.

³ No evidence to this effect is as yet apparent for the other countries considered.

The social burdens of employers have risen in various ways. The measures adopted for giving assistance to exports involve considerable additional expense; the maintenance of exchange control and the shortage of raw materials, entailing readaptation of plant in order to make use of home-produced substitutes, have led to considerable extra costs in certain branches.

Certain profit figures are also available for Belgium and the Netherlands.¹ These figures, which are compiled by the Belgian National Bank² and the Central Bureau of Statistics at The Hague,³ are reproduced below:

| Year of publication of business reports considered | Number of companies | Belgium. | | Netherlands. | |
|----------------------------------------------------|---------------------|------------------------------------------------------------------|----------------------|-----------------------------|----------------------------|
| | | Excess of total profits over total loss Francs (000,000's) | % of paid-up capital | (76 industrial enterprises) | |
| | | | | Gross profits Florins | Net profits (000,000's) |
| 1929 | 5,719 | 5,796 | 20.2 | 163 | 73 |
| 1930 | 6,668 | 6,324 | 14.4 | 105 | -24 |
| 1931 | 7,091 | 4,358 | 8.9 | 71 | 12 |
| 1932 | 7,130 | 1,410 | 2.8 | 60 | 15 |
| 1933 | 7,062 | 789 | 1.6 | 50 | 17 |
| 1934 | 7,334 | 1,334 | 2.7 | 52 | 22 |
| 1935 | 7,183 | 1,655 | 3.7 | ... | ... |

The Belgian series, which cover all the companies in Belgium and the Belgian Congo that publish reports in the *Moniteur Belge* in the course of each year considered, may not be quite representative of industrial profits. Further, the profit figures would appear to relate largely to activity in the year preceding that for which they are shown. Hence, although the economic revival since the second quarter of 1935, consequent upon the devaluation of the currency (end of March) and the ensuing rise in prices, may account for some part of the increase in the total net profits (of a smaller number of companies) and in the return on paid-up capital shown for that year, the figures fail as yet to reflect to any appreciable extent the improvement in the profit position of industry which, according to other evidence available, did actually occur in the course of that year.

Some time-lag would also appear to be involved in the profit figures shown for the Netherlands. That net profits became negative in 1930 is explained by the very heavy depreciation charges effected that year, notably by the Philips concern, which holds an important place among the seventy-six enterprises covered. While gross profits declined rapidly up to 1933/34, net profits show a slow upward trend throughout the depression years since 1930, reflecting mainly, it would appear, effective reductions in certain cost factors. Whatever compressions have actually been made in the current costs of production of the individual enterprises, they have not led, so far, to any essential and lasting revival of industrial activity.

ACTIVITY IN CAPITAL-GOODS AND CONSUMPTION-GOODS INDUSTRIES.

In reviewing above the production developments in the different countries, some reference has been made to the degree of depression and recovery of individual industries. A further step in the analysis of these developments will here be attempted by grouping the different industries according to certain uniform criteria as regards the economic nature or purpose of the goods they produce. From the point of view of business-cycle analysis,

¹ The series for Italy given in the last edition of this publication has been discontinued since *La Borsa* ceased to appear.

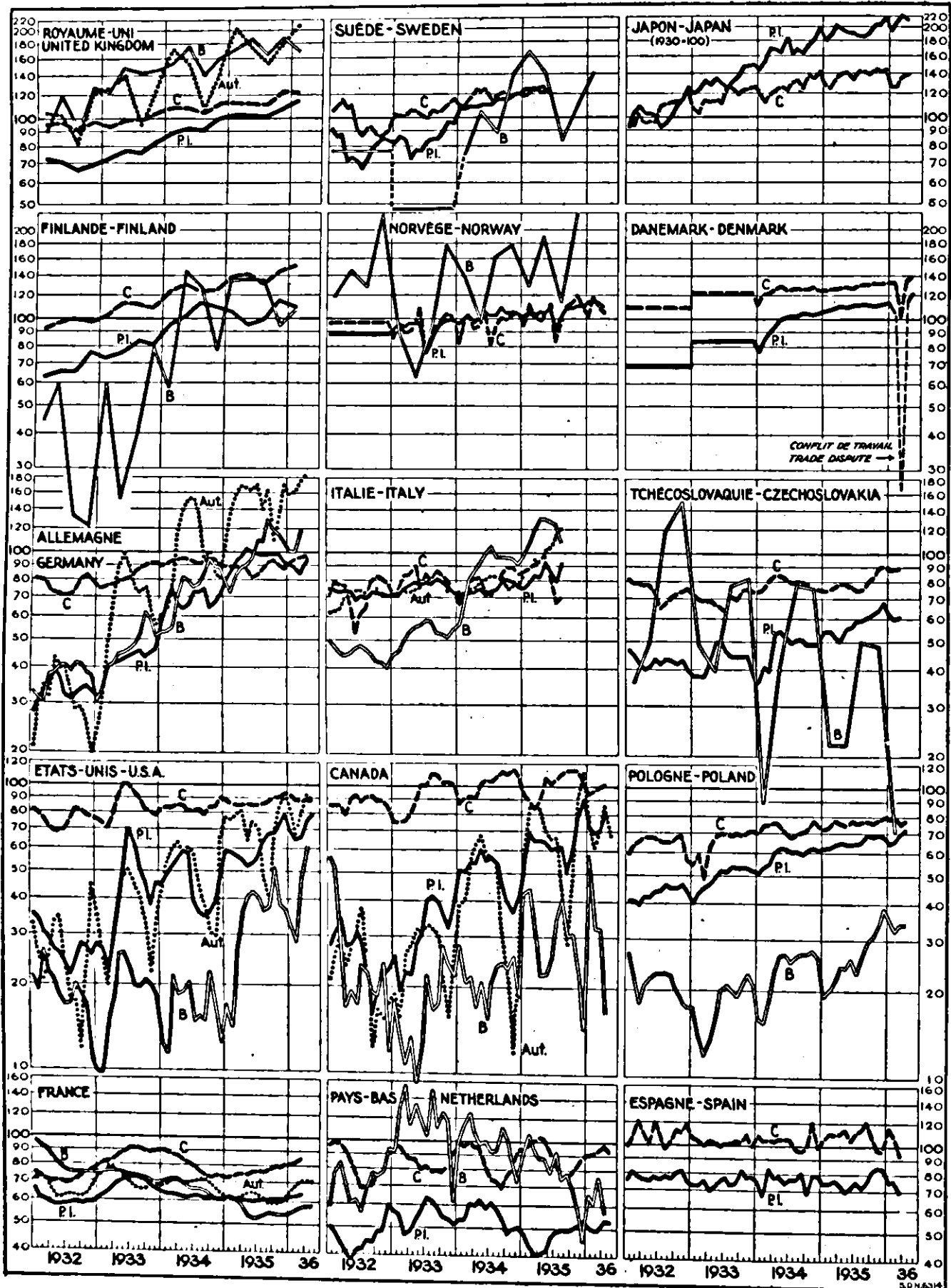
² Banque nationale de Belgique, *Bulletin d'information et de documentation*.

³ Bureau central de Statistique des Pays-Bas, *Le Mouvement des Affaires aux Pays-Bas*.

Diagram 5. — MOVEMENT OF PRODUCTION OF INVESTMENT AND CONSUMPTION GOODS.
(Average for 1929 = 100; logarithmic scale.)

P.I. Producers' investment goods.
C. Current consumption goods.

Aut. Automobiles.
B. Building.



particular interest attaches to the distinction between investment-goods and consumption-goods industries. Relevant sub-indices of the national general indices have therefore been calculated, so far as the information available regarding the different branches covered and the weights assigned to them in each case has permitted.¹ The results of these calculations are shown in Table 11 in the form of annual averages since 1929 and quarterly averages since 1932, and are illustrated graphically in Diagram 5, which is drawn on the basis of monthly figures² since January 1932. The year 1929 is taken as base period (average = 100).³

Mining and similar primary stages of industrial production have, as far as possible, been excluded throughout.⁴ Among the remaining branches considered, in each case two main groups have been distinguished covering the industries which produce chiefly :

(P.I.) Producers' investment goods, all "durable", such as industrial, agricultural, trade and transport equipment (mainly products of engineering, shipbuilding and construction, excluding dwellings) or semi-manufactures (mainly of the iron and steel, metallurgical, wood-working and cement industries) intended for ultimate transformation into equipment or investment goods in general.⁵

(C.) Goods intended for more immediate consumption, all "non-durable", such as prepared foodstuffs, beverages and tobacco products, textile manufactures, clothing and footwear, rubber goods, paper and printing products, chemical products, gas and electric light, or semi-manufactures intended for ultimate transformation into such consumption goods.

A third main group of industries — namely, those producing consumers' investment goods ("durable" or "semi-durable" consumption goods), the development of which has been particularly rapid during recent years in most of the principal industrial countries — is covered but incompletely, if at all, by the national industrial indices. Though residential building⁶ and private motor-car production,⁷ the two quantitatively most important industries belonging to this economic group, are both covered by some of the national indices, they have not here been combined in a group index, which would, in fact, have been too heterogeneous in character to be truly significant, but are shown separately in the table and the diagram (series and curves B and Aut.). In the case of the countries whose industrial production indices do not cover building, special indices of building activity are shown, when available.⁸

The information available with reference to the production indices of Austria, Chile, Greece and Hungary is not detailed enough to permit of the calculation of sub-indices of the kind referred to above. The Union of Soviet Socialist Republics, Belgium, Estonia and Roumania, for which monthly or quarterly production data comparable with their annual figures are either not available or available only for part of the period covered by the diagram, have been omitted therefrom while being included in the table.

¹ Such sub-indices distinguishing between "producers' and consumers' goods", "durable and non-durable goods", "investment and consumption goods", etc., are, in fact, currently calculated in several countries by the authorities compiling the national industrial indices, but the criteria applied in making these distinctions are far from uniform. However, in the case of some of these countries, the sub-indices thus calculated would appear to correspond more or less closely to the industry groups described below, and these have been used in their original form for the purpose of Table 11 and Diagram 5.

² In some cases only quarterly figures are available.

³ In the case of Japan, comprehensive data are only available in sufficient detail since 1930, which has therefore been taken as base year for the relevant Japanese group indices. It should be mentioned that the average level of general industrial activity in that country in 1930 was some 5% lower than in 1929.

⁴ In all cases where these branches are of importance in the national indices, they are, in fact, shown separately and could thus be excluded.

⁵ Semi-manufactures are, in most national indices, included as representative of production in later stages of manufacture, which is more difficult to measure and but incompletely recorded.

⁶ Building and construction for industrial and commercial purposes are, where shown separately, included under (P.I.). Activity in those branches of the building industry fluctuates, in fact, in fairly close harmony with that in producers' investment industries as a whole.

⁷ Lorries, tractors and autobuses are, where shown separately, included under (P.I.).

⁸ This is done also as regards automobile production in the United Kingdom, which is not shown separately in the Board of Trade Index, but for which a separate index exists.

Table 11. — COMPOSITE INDICES OF PRODUCTION OF INVESTMENT AND CONSUMPTION GOODS (continued).

P. I. = Producers' Investment Goods. Aut. = Automobiles.
C. = Current Consumption Goods. B. = Building.

(Average for 1929 = 100.)

| Years | Germany | | | | Italy | | | | Netherlands | | | Norway | | |
|----------|---------|-------|-------|------|-------|-------|-------|------|-------------|-------|------|--------|-------|-------|
| | P. I. | Aut. | B. | C. | P. I. | Aut. | B. | C. | P. I. | B. | C. | P. I. | B. | C. |
| 1929 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1930 | 78.8 | 72.4 | 88.0 | 94.3 | 95.8 | 81.8 | 87.3 | 91.7 | 86.6 | 110.6 | 96.3 | 106.3 | 105.4 | 98.0 |
| 1931 | 51.5 | 51.3 | 55.7 | 88.0 | 86.8 | 64.5 | 52.8 | 83.1 | 62.9 | 103.3 | 98.5 | 75.0 | 108.6 | 81.9 |
| 1932 | 33.7 | 31.4 | 37.6 | 77.7 | 72.4 | 69.9 | 45.1 | 72.2 | 45.9 | 71.5 | 83.0 | 88.3 | 154.8 | 97.4 |
| 1933 | 41.7 | 65.5 | 46.2 | 82.5 | 76.8 | 76.0 | 53.1 | 80.9 | 55.2 | 117.1 | 85.9 | 93.2 | 105.6 | 94.8 |
| 1934 | 68.6 | 104.9 | 76.0 | 92.0 | 74.3 | 78.0 | 88.6 | 80.6 | 55.8 | 100.1 | 86.1 | 98.1 | 145.0 | 97.4 |
| 1935 | 95.3 | 149.4 | 100.1 | 92.6 | . | . | . | . | 47.2 | 80.0 | 89.6 | 105.8 | 165.8 | 105.1 |
| Quarters | | | | | | | | | | | | | | |
| 1932 I | 31.3 | 29.0 | 31.5 | 82.0 | 74.0 | 63.0 | 47.6 | 75.8 | 47.1 | 73.1 | 97.8 | . | 118.5 | . |
| 1932 II | 37.4 | 37.9 | 39.3 | 78.1 | 71.5 | 71.8 | 45.4 | 65.0 | 40.2 | 64.5 | 83.9 | . | 146.3 | . |
| 1932 III | 32.2 | 33.8 | 40.4 | 74.5 | 71.3 | 72.6 | 46.4 | 68.7 | 43.5 | 67.0 | 68.1 | . | 126.9 | . |
| 1932 IV | 33.9 | 25.0 | 39.2 | 78.7 | 71.4 | 72.2 | 41.2 | 80.6 | 52.2 | 82.3 | 83.0 | . | 227.4 | . |
| 1933 I | 35.0 | 35.4 | 34.7 | 79.8 | 72.0 | 72.7 | 47.0 | 76.8 | 52.9 | 125.6 | 94.3 | 93.4 | 90.6 | 90.5 |
| 1933 II | 41.9 | 85.4 | 43.7 | 79.6 | 78.2 | 74.9 | 55.6 | 83.4 | 53.1 | 121.6 | 84.5 | 96.2 | 63.3 | 98.2 |
| 1933 III | 45.0 | 77.3 | 48.9 | 81.6 | 79.7 | 80.9 | 57.0 | 84.1 | 61.7 | 120.7 | 80.0 | 84.4 | 94.1 | 87.9 |
| 1933 IV | 44.8 | 64.0 | 57.3 | 87.1 | 76.2 | 75.5 | 52.8 | 79.4 | 53.1 | 100.9 | 84.0 | 98.5 | 174.5 | 102.4 |
| 1934 I | 67.5 | 67.0 | 56.6 | 90.2 | 71.3 | 73.4 | 68.4 | 72.7 | 55.8 | 112.3 | 98.5 | 99.7 | 139.4 | 93.8 |
| 1934 II | 65.2 | 137.0 | 77.6 | 91.6 | 73.2 | 78.9 | 93.3 | 79.4 | 60.5 | 101.5 | 90.4 | 101.5 | 98.1 | 98.2 |
| 1934 III | 74.2 | 127.1 | 79.3 | 91.0 | 76.3 | 83.3 | 99.2 | 81.0 | 57.7 | 99.4 | 72.1 | 104.6 | 162.2 | 92.4 |
| 1934 IV | 67.5 | 88.8 | 90.4 | 93.6 | 78.6 | 76.3 | 93.6 | 87.9 | 49.3 | 87.2 | 83.7 | 104.3 | 180.1 | 102.6 |
| 1935 I | 88.6 | 136.4 | 77.7 | 94.6 | 79.2 | 89.2 | 108.5 | 89.1 | 43.6 | 96.5 | 97.3 | 103.6 | 128.5 | 102.1 |
| 1935 II | 99.7 | 166.3 | 91.5 | 91.8 | 87.1 | 100.5 | 130.5 | 92.2 | 43.5 | 84.5 | 99.3 | 106.9 | 191.9 | 106.2 |
| 1935 III | 97.9 | 157.2 | 116.3 | 91.0 | 85.8 | 118.2 | 115.7 | 68.8 | 49.7 | 81.5 | 78.0 | 100.0 | 114.3 | 98.1 |
| 1935 IV | 96.6 | 137.5 | 114.7 | 93.6 | . | . | . | . | 52.0 | 67.7 | 84.0 | 110.3 | 228.6 | 114.2 |
| 1936 I | 87.5 | 164.0 | 106.3 | 97.2 | . | . | . | . | 49.8 | 67.7 | 91.9 | 114.7 | ... | 109.9 |

| Years | Poland | | | Roumania | | Spain | | Sweden | | | United Kingdom | | | |
|----------|--------|------|------|----------|-------|-------|-------|--------|-------|-------|----------------|-------|-------|-------|
| | P. I. | B. | C. | P. I. | C. | P. I. | C. | P. I. | B. | C. | P. I. | Aut. | B. | C. |
| 1929 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1930 | 81.1 | 67.3 | 85.6 | 96.4 | 99.1 | 94.0 | 107.3 | 98.4 | 107.4 | 100.8 | 91.7 | 94.6 | 105.7 | 92.0 |
| 1931 | 60.5 | 39.2 | 76.8 | 96.6 | 98.9 | 85.0 | 109. | 89.8 | 85.9 | 100.1 | 73.3 | 87.8 | 91.5 | 91.3 |
| 1932 | 43.2 | 21.5 | 65.5 | 100.9 | 81.3 | 77.4 | 109.5 | 80.2 | 76.8 | 98.6 | 69.6 | 103.0 | 105.9 | 94.7 |
| 1933 | 49.6 | 18.1 | 65.1 | 104.1 | 111.6 | 75.0 | 102.5 | 84.4 | 47.9 | 105.3 | 77.7 | 123.3 | 140.8 | 98.9 |
| 1934 | 58.9 | 23.9 | 72.5 | 121.5 | 131.0 | 76.2 | 103.7 | 112.9 | 102.5 | 118.1 | 93.1 | 145.8 | 157.2 | 107.9 |
| 1935 | 65.6 | 26.8 | 76.1 | ... | ... | 76.2 | 106.3 | . | 126.7 | . | 103.1 | 178.5 | 177.2 | 114.2 |
| Quarters | | | | | | | | | | | | | | |
| 1932 I | 40.2 | 22.5 | 63.4 | 90.3 | 65.7 | 78.0 | 109.3 | 89.3 | . | 110.4 | 71.8 | 104.0 | 88.7 | 94.5 |
| 1932 II | 42.7 | 22.0 | 68.2 | 91.8 | 74.7 | 75.8 | 110.2 | 72.7 | . | 104.1 | 70.6 | 102.8 | 118.5 | 96.1 |
| 1932 III | 45.2 | 22.8 | 65.4 | 108.4 | 92.0 | 77.2 | 103.9 | 72.7 | . | 91.0 | 66.3 | 82.1 | 89.9 | 89.5 |
| 1932 IV | 45.5 | 18.4 | 64.2 | 113.5 | 87.4 | 78.6 | 114.7 | 84.3 | . | 88.4 | 69.4 | 123.2 | 126.7 | 97.1 |
| 1933 I | 43.2 | 14.2 | 53.8 | 96.3 | 85.0 | 73.8 | 102.3 | 84.4 | . | 102.1 | 73.1 | 126.7 | 124.5 | 93.2 |
| 1933 II | 49.5 | 16.1 | 67.1 | 97.8 | 109.2 | 72.4 | 102.1 | 76.1 | . | 105.3 | 77.5 | 140.2 | 149.4 | 98.0 |
| 1933 III | 52.8 | 20.0 | 69.3 | 109.4 | 130.3 | 74.9 | 102.4 | 84.8 | . | 103.5 | 76.6 | 94.6 | 143.4 | 99.2 |
| 1933 IV | 52.5 | 21.6 | 70.2 | 112.0 | 121.9 | 79.0 | 103.4 | 94.2 | . | 112.0 | 83.4 | 131.8 | 145.8 | 104.9 |
| 1934 I | 53.2 | 16.5 | 73.8 | 112.4 | 121.4 | 74.9 | 105.5 | 82.7 | 74.2 | 111.7 | 89.3 | 170.7 | 154.6 | 109.0 |
| 1934 II | 61.4 | 25.7 | 73.9 | 125.5 | 120.6 | 76.8 | 105.0 | 110.1 | 104.6 | 124.2 | 91.9 | 155.4 | 175.1 | 106.9 |
| 1934 III | 59.9 | 26.1 | 69.0 | 126.6 | 143.2 | 77.8 | 99.0 | 114.3 | 89.2 | 118.2 | 91.2 | 106.0 | 139.7 | 104.6 |
| 1934 IV | 61.6 | 26.9 | 74.3 | 127.9 | 135.2 | 75.1 | 105.4 | 119.0 | 141.7 | 118.5 | 99.9 | 151.1 | 159.7 | 113.2 |
| 1935 I | 63.0 | 20.3 | 74.4 | ... | ... | 74.7 | 109.1 | 125.1 | 168.8 | 121.1 | 103.2 | 202.7 | 171.9 | 113.1 |
| 1935 II | 64.3 | 24.9 | 75.8 | ... | ... | 71.5 | 109.6 | 122.6 | 142.0 | 127.8 | 101.9 | 175.4 | 185.6 | 112.2 |
| 1935 III | 68.3 | 26.8 | 76.7 | ... | ... | 74.4 | 116.0 | . | 84.1 | . | 101.0 | 154.7 | 165.9 | 111.3 |
| 1935 IV | 68.4 | 35.0 | 77.8 | ... | ... | 84.1 | 98.5 | . | 111.8 | . | 106.8 | 181.1 | 185.5 | 124.1 |
| 1936 I | 66.7 | 33.7 | 78.0 | ... | ... | 73.0 | 106.0 | . | 142.0 | . | 115.0 | 213.4 | 168.5 | 122.2 |

* Average of two months. † Number of dwellings started on new ground. ‡ Net increase in number of dwellings in boroughs of more than 2,000 inhabitants. § Building permits delivered for number of rooms (dwellings) in 11 larger towns. ¶ Estimated cost of plans approved for dwelling-houses by 146 local authorities.

The general validity of the observation made above with reference to certain countries — namely, that the industries producing investment goods have been the most seriously affected by the depression — is clearly confirmed by the table and the diagram. The slump in these industries up to 1932 was particularly heavy in Canada and the United States and also in Germany, Czechoslovakia, the Netherlands and Poland. For obvious reasons, the activity of the industries producing goods for current consumption was, on the whole, much better maintained throughout the depression.

In recent years, on the other hand, the producers' investment industries have recovered more rapidly than the consumption-goods industries in all the countries considered, except Spain and the countries of the gold *bloc*,¹ where industry as a whole has revived but little, if at all.

The diagram does not permit of any general conclusion on whether the investment industries or the consumption industries have taken the lead in the reversal of the trend of industrial activity. To determine this point, which is of very considerable economic interest, a more detailed analysis of the data would be required than can be attempted here. But in all cases where the increase in the output of producers' investment goods has been rapid, it has been accompanied by a rise in that of current consumption goods. Where an isolated rise in the latter has occurred, it does not appear as a rule to have led to a lasting recovery of the former.²

The rapid recovery, especially in the producers' investment industries, of those countries where quantum of output has risen above or close to the 1929 level has been effectively sustained by an even more rapid expansion of building activity. This expansion, especially of residential building, has been greatest in the countries of the sterling *bloc*, where it has been stimulated, primarily, by the fall in long-term interest rates and also by the effects on consumers' demand of the easy money policy pursued. The expansion of building in Italy and Germany, like the recovery in their manufacturing industries, has been chiefly State-promoted. Residential building activity in 1935 and the early part of 1936 still lagged very considerably behind in the recovery in the United States and Canada; it remained low in France, and the trend was falling in the Netherlands and Czechoslovakia.

Production developments in the motor-car industry³ have been similar to those in residential building, although in all countries for which relevant indices are shown in the diagram the expansion of the former industry has been greater than that of the latter in recent years. In the United States and in Canada, the index of motor-car production only just touched the level of that for current consumption goods at the end of 1935, but has ruled higher⁴ than that for producers' investment goods since the spring of 1934.

The strikingly rapid industrial growth of Japan has chiefly related to the producers' investment industries, the index for which, however, does not only reflect the increase in production equipment, but is also largely influenced by armament demands. The increase in current consumption goods has been much smaller. In these and other respects, Japanese developments during the last four and a half years have been similar — though on a smaller scale — to those in the Union of Soviet Socialist Republics discussed on pages 40 and 41 above, to which reference should be made.

¹ Production developments in Poland differed in this respect from those in the other gold *bloc* countries up to the second quarter of 1934, but have since been fairly similar in character to those reflected in the indices for these other countries and Spain.

² General conclusions as to the influence exercised for shorter periods of time by changes in the activity of either industry group on that of the other are rendered difficult by the fact that the indices of several of the countries shown are not adjusted for seasonal variations and that they have been differently affected in many cases by labour conflicts.

³ It should be recalled that private motor-cars, together with residential building, are considered representative of consumers' investment goods.

⁴ Disregarding the seasonal fluctuations in motor-car production, which are very great.

The marked increase in manufacturing production — generally far above the 1929 level — which has taken place in the countries of the sterling *bloc* is accounted for in part by a steady rise in the output of consumption goods (which had, in fact, fallen but little ¹ in the course of the depression), but mainly by the rapid recovery in producers' investment goods. In Sweden, the index for the latter had risen to the level of the former ² by the end of 1934 and, in the United Kingdom, the difference between the indices for the two categories of products was slight in the first quarter of 1936.

The monthly index for the output of current consumption goods in Germany which is plotted in the diagram is influenced more than the quarterly index ³ shown in Table 11 by industries which were affected by the raw-material shortage in the autumn of 1934 and a large part of 1935. The monthly index dropped from 96 to 81% of the 1929 average between October 1934 and June 1935, but since that date there has been a marked improvement. By April 1936, the output of the consumption industries covered by that index was higher than it had been at any time since March 1930 and only 2% lower than the 1929 average (though it still fell 12% short of the record average of the first quarter of 1928). The remarkably rapid recovery of the producers' investment industries up to the spring of 1935, when their output exceeded, though slightly, the 1929 average, was accounted for in part, no doubt, by the rearmament policy. But these industries were also affected by raw-material shortage in 1935. Their output declined, at first slowly between May and November, and then very sharply up to February 1936; it rose again, however, to 96% of the 1929 average in April.

In Italy, the output of both consumption and producers' investment goods rose steadily during 1934 under the influence in part of the rapid expansion of building and construction activity, and sharply during the first five months of 1935 in preparation for the contingency of war. The slump which set in after May affected most heavily the consumption industries. The building activity, then deprived of special support from the State, also declined rapidly until August, the last month for which economic statistics have been published. By that month, the output of producers' investment goods had again recovered to the May level, and the automobile production ⁴ was wholly unaffected by the slump.

The marked recovery in manufacturing production which took place in the United States and Canada in 1935 related almost exclusively to investment industries. Between December 1934 and 1935, the index for producers' investment goods rose from 50% to 80% of the 1929 average in the United States ⁵ and from 44% to 90% of that average in Canada. The index for current consumption goods only rose during the same period from 90 to 94 (1929 = 100) in the former country. In Canada, where the consumption industries had maintained their activity much better than in the United States, particularly since the summer of 1933, the corresponding index stood at 116 in November 1934 and at 114 in November 1935.⁶

¹ The low level of the Norwegian output of consumption goods in 1931 was due to extensive labour conflicts affecting also the output of producers' investment goods.

² The level of the Swedish monthly indices both for consumption goods and producers' investment goods has been roughly adjusted to that of the corresponding group indices of the more comprehensive annual index (cf. footnote ² on page 38).

³ The production index of the German Institute for Business Research has been thoroughly revised, extended and regrouped since the last edition of the present publication was written. This fact accounts for certain differences between the German series then shown and those used in the present edition. The quarterly index for consumption goods is more comprehensive than the monthly index, which excludes certain goods (foodstuffs in particular) the demand for which is comparatively inelastic. The monthly index therefore shows wider fluctuations.

⁴ The information available with reference to the automobile production index does not permit of determining to what extent it relates to private motor-cars only.

⁵ It will be observed that the output of investment goods in the United States had risen by the end of 1935 far above the peak it attained with the sudden burst of activity in the summer of 1933.

⁶ In recent years, the seasonal peak of activity in the Canadian consumption-goods industries has occurred in November; December has been the peak month for these industries in the United States.

In sharp contrast to the trend shown by the industrial group indices for the countries discussed so far, those for the three countries of the gold *bloc* here considered — France, the Netherlands, Poland — and for Spain reflect a marked stagnation of activity in recent years, particularly as regards the producers' investment industries, which are more sensitive to high long-term interest rates and in other ways also more exposed to the repercussions of deflation than are the consumption-goods industries. In France, the slow revival of industrial activity which has taken place since the second quarter of 1935 has been almost exclusively confined to the consumption industries, although since the autumn a certain revival has been noticeable as regards automobile production. Activity in the French producers' investment industries has remained practically unchanged since the spring of 1934 at a level some 40% below that of 1929, and residential building has declined even more. In the Netherlands, the activity of producers' investment industries in the first quarter of 1936 still fell short of the 1929 average by some 50%; in Poland, by over 30%; and in Spain, by about 25%. Building activity has shown a marked downward trend in the Netherlands since 1933, and in Poland it is still very much depressed, despite some revival.

C. REVIEW OF PRINCIPAL BRANCHES OF PRIMARY AND MANUFACTURING PRODUCTION.

World indices of primary production for fifteen commodity groups for the years 1925-1934, together with provisional indices for 1935 for most of these groups, are given in Table 12 below. The figures in the text column show the percentage share of each group in total world primary production in the base period.

Individual indices of world production of each of the commodities comprised in the above groups and the continental indices for each commodity group will be found in Appendix I, Tables 1 and 2.

In Table 13 below are shown world indices of production of some of the principal manufacturing industries. These indices represent changes in the quantum of production. The production of pig-iron and steel (ingots and castings) timber, wood pulp and artificial textiles is, in the absence of more direct data, also included in the world index of primary production.

National indices of activity in individual industries will be found in the subsequent text tables (quarterly indices) and in Appendix II, Table 3 (annual indices).

All figures marked with an asterisk (*) are partly based on estimates and subject to revision.

Note on Diagrams. — The diagrams relating to "World Supplies" of certain individual commodities given in the present section show (in full black) stocks at the beginning of the year¹ plus annual production (hatched part), and thus illustrate (1) the movement of total supplies available each year, (2) the movement of stocks, and (3) the ratio of stocks to total supplies. The diagrams relating to "Consumption" show apparent consumption of certain commodities. Diagrams relating to "Production" alone are given for a few industries in the case of which the stocks would appear unimportant. All the above data are given as indices with the period 1925-1929 (1925/26-1929/30) as base.

¹ In the case of most agricultural products, the crop year begins on August, September or October 1st.

Table 12. — INDICES OF WORLD PRODUCTION OF GROUPS OF PRIMARY COMMODITIES,
WEIGHTED BY 1930 PRICES.

Average 1925-1929 (1925/26-1929/30) = 100.

| Groups of commodities | 1925 1925/6 | 1926 1926/7 | 1927 1927/8 | 1928 1928/9 | 1929 1929/30 | 1930 1930/1 | 1931 1931/2 | 1932 1932/3 | 1933 1933/4 | 1934 1934/5 | *1935 1935/6 |
|------------------------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|-----------------|
| Food crops (19.2)* | 98 | 97 | 100 | 104 | 101 | 107 | 103 | 104 | 108 | 102 | 104 |
| Fodder crops (10.2)* | 102 | 99 | 96 | 101 | 102 | 95 | 97 | 104 | 95 | 83 | 97 |
| Meat* (18.7)* | 95 | 97 | 100 | 104 | 104 | 105 | 102 | 100 | 103 | 109 | 97 |
| Sea fish (0.8) | 93 | 95 | 98 | 104 | 110 | 116 | 112 | 114 | 126 | 131 | ... |
| Milk* (17.7) | 96 | 98 | 100 | 103 | 104 | 105 | 106 | 107 | 107 | 107 | ... |
| Wine and hops (1.2) | 109 | 79 | 96 | 109 | 107 | 92 | 101 | 105 | 99 | 125 | 128 |
| Coffee, tea, cocoa (1.0) | 87 | 89 | 98 | 112 | 113 | 111 | 104 | 115 | 116 | 108 | 101 |
| Tobacco (1.4) | 101 | 99 | 98 | 98 | 105 | 109 | 107 | 92 | 98 | 90 | ... |
| Oil materials and oils (2.7) | 95 | 94 | 104 | 100 | 107 | 103 | 107 | 101 | 107 | 98 | 103 |
| Textile fibres (5.9) | 96 | 100 | 95 | 103 | 106 | 104 | 105 | 98 | 107 | 105 | 110 |
| Rubber (0.3) | 80 | 95 | 93 | 100 | 132 | 125 | 121 | 107 | 129 | 154 | 133 |
| Wood products (1.2) | 88 | 95 | 100 | 103 | 114 | 107 | 95 | 88 | 100 | 110 | ... |
| Fuels and power (10.1) | 92 | 93 | 102 | 103 | 111 | 104 | 94 | 87 | 92 | 99 | 105 |
| Metals (7.7) | 88 | 91 | 99 | 106 | 116 | 95 | 71 | 52 | 65 | 79 | 95 |
| Non-metallic minerals (1.9) | 88 | 92 | 98 | 108 | 114 | 107 | 86 | 70 | 73 | 85 | ... |
| General index (100) | 96 | 96 | 99 | 103 | 106 | 104 | 100 | 97 | 100 | 101 | 103 |

* Provisional indices subject to revision.

* Excluding production in China (apart from Manchuria).

Table 13. — INDICES OF WORLD PRODUCTION OF CERTAIN MANUFACTURING INDUSTRIES.

Average 1925-1929 = 100.

| Industry | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Brewing* | 96 | 97 | 99 | 103 | 106 | 100 | 89 | 78 | 79 | 82 | 83 |
| Textile manufacturing: | | | | | | | | | | | |
| General ^b | 91 | 96 | 106 | 101 | 106 | 92 | 93 | 93 | 103 | 104 | 110 |
| ✓Cotton* | 97 | 103 | 101 | 102 | 98 | 87 | 88 | 96 | 99 | *101 | ... |
| Wool ^c | 90 | 99 | 104 | 101 | 108 | 105 | 106 | 104 | 114 | 95 | 105 |
| Artificial textiles ^d | 63 | 72 | 99 | 121 | 146 | 150 | 169 | 182 | 232 | 259 | 317 |
| Saw mills | 97 | 98 | 102 | 100 | 103 | 87 | 69 | 57 | 67 | 72 | 71 |
| Wood pulp | 85 | 94 | 99 | 104 | 117 | 114 | 103 | 98 | 112 | 123 | 141 |
| ✓Paper | 87 | 94 | 99 | 105 | 114 | 109 | 100 | 93 | 100 | 112 | ... |
| ✓Coke-ovens | 89 | 89 | 100 | 105 | 119 | 105 | 79 | 65 | 73 | 87 | 94 |
| ✓Iron and steel | 88 | 91 | 99 | 106 | 116 | 92 | 67 | 49 | 65 | 78 | 95 |
| Rolling-mills ^e | 89 | 92 | 99 | 106 | 115 | 89 | 65 | 46 | 60 | 73 | 88 |
| Motor vehicles | 95 | 98 | 82 | 102 | 123 | 81 | 59 | 39 | 52 | 73 | 101 |
| Shipbuilding | 95 | 72 | 97 | 116 | 120 | 125 | 70 | 31 | 21 | 42 | 56 |
| General index of manufacturing activity ^f | 91 | 93 | 99 | 105 | 111 | 98 | 88 | 77 | 86 | 94 | 106 |

* Provisional indices.

^a Excluding the United States and certain minor producing countries.

^b Index compiled by the Institut für Konjunkturforschung (Berlin).

^c World cotton-mill consumption; years ending 31.VII of following year.

^d Consumption in the nine principal wool-manufacturing countries.

^e Rayon and staple fibre.

^f Six principal producing countries.

* Index calculated by the Economic Intelligence Service of the League of Nations.

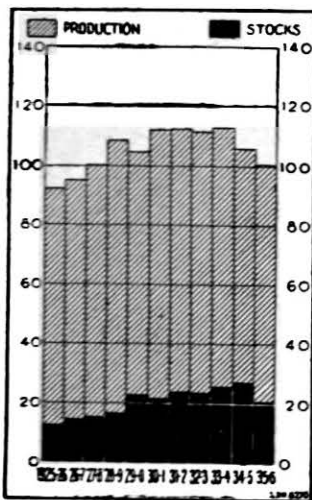
FOOD CROPS.

World total " food crops " have shown an upward trend during the general economic depression. Crops in the five-year period 1930-1934 (1930/31-1934/35) averaged 4.8% above the average for the preceding quinquennium. However, if the U.S.S.R. is excluded, the increase between the two five-year periods was only 3.8%. Record crops were harvested in 1933 (1933/34); but, owing mainly to widespread drought, the total dropped heavily in the following year; crops in 1935 (1935/36) were average. The trend of the main divisions of the group will be seen from the following indices (average 1925-1929 (1925/26-1929/30) = 100):

| | Average 1930-1934 | 1930 (1930/1) | 1931 (1931/2) | 1932 (1932/3) | 1933 (1933/4) | 1934 (1934/5) | *1935 (1935/6) |
|----------------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
| Bread cereals and rice | 104 | 106 | 102 | 104 | 108 | 100 | 101 |
| Potatoes | 113 | 112 | 110 | 113 | 111 | 120 | 121 |
| Sugar | 98 | 110 | 104 | 89 | 94 | 94 | 103 |
| All food crops | 105 | 107 | 103 | 104 | 108 | 102 | 104 |

Diagram 6 A.

WORLD SUPPLY OF WHEAT.



Wheat. — The world wheat situation improved during the crop years 1934/35 and 1935/36. Stocks of old wheat were on August 1st, 1934, larger than ever before; but, owing to relatively small world crops and negligible exports from the U.S.S.R., world supplies were in 1934/35 the smallest since 1929/30 and below current requirements. They increased but slightly during 1935/36, so that it was expected that stocks would be reduced to nearly normal amounts by the end of the crop year. Meanwhile, consumption of wheat for food and international trade in wheat continued low.

It is customary to consider the "world" crop of wheat excluding the crops of the U.S.S.R., China, Turkey, Iran and Iraq, and to include only net exports from this group of countries in "world current supplies". The diagrams opposite and the

following statement refer to the "world" in this limited sense.

| | Average 1925-29 | Average 1930-34 | 1930 (1930/1) | 1931 (1931/2) | 1932 (1932/3) | 1933 (1933/4) | 1934 (1934/5) | *1935 (1935/6) |
|---------------------------------------------------------------|--------------------|--------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
| <i>World (excluding U.S.S.R., etc):</i> | | | | | | | | |
| Area (million hectares) ¹ | 95 | 98 | 101 | 98 | 99 | 98 | 96 | 96 |
| Crops (million metric tons) | 97 | 99 | 102 | 101 | 102 | 99 | 91 | 92 |
| Current supplies ² (million metric tons) | 97 | 100 | 105 | 103 | 102 | 100 | 91 | 93 |
| Apparent consumption (million metric tons) | 95 | 100 | 103 | 103 | 99 | 99 | 98 | 100 |
| Season-end stocks (million metric tons) | 21 | 28 | 27 | 27 | 30 | 32 | 24 | 17 |

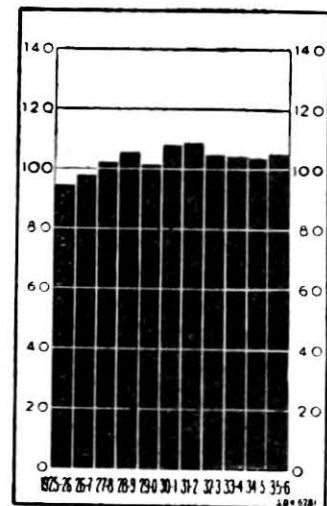
The total crops of the last two years were exceptionally light. The fall was due mainly to unfavourable weather conditions in large areas. The crops of three main groups of countries

¹ Up to 1933/34, area harvested; since 1934/35, area sown.

² By "current supplies" are meant world crops, excluding the U.S.S.R., China, Turkey, Iran and Iraq, but including net exports from these countries.

Diagram 6 B.

WORLD CONSUMPTION OF WHEAT.



— the “four major exporters” (Canada, the United States, Argentina and Australia), the “Danubian exporters” (Bulgaria, Hungary, Roumania and Yugoslavia), and “importing Europe” (Europe, excluding the above four countries and four other exporters — Poland, Lithuania, Turkey and the U.S.S.R.) — will be seen below (metric tons, 000,000's):

| | Average 1925-29 | Average 1930-34 | 1930 (1930/1) | 1931 (1931/2) | 1932 (1932/3) | 1933 (1933/4) | 1934 (1934/5) | *1935 *(1935/6) |
|----------------------------------|--------------------|--------------------|------------------|------------------|------------------|------------------|------------------|--------------------|
| “Four major exporters” | 44.4 | 40.7 | 47.8 | 45.3 | 44.7 | 34.7 | 31.2 | 31.7 |
| “Danubian exporters” | 8.3 | 8.5 | 9.6 | 10.1 | 6.0 | 10.0 | 6.8 | 7.9 |
| “Importing Europe” | 26.6 | 30.5 | 24.9 | 26.5 | 32.9 | 35.2 | 33.0 | 31.9 |

For three years in succession (1933-1935), Canada and the United States reaped very light crops, and the latter country has ceased to be an exporting country since the second half of 1934. In 1935 (1935/36), a recovery of the United States crop and slight increases in the Canadian and Australian crops were almost offset by a heavy drop in Argentina's. The reduction in the crops of “importing Europe” in 1935 was due to France and Spain.

The harvests reaped in the U.S.S.R. have increased considerably and continuously between 1932 and 1935. The 1935 crop was 46% above the average for 1925-1929 and 25% above that for 1930-1934. Russian wheat exports were negligible during the 1934/35 season, but were resumed to some extent during 1935/36.

The following estimate shows the apparent consumption or “disappearance” of wheat during two three-year periods ending July 31st (metric tons, 000,000's)¹:

| | World, excl. U.S.S.R. | | | | Europe, excl. Danubian countries | | | |
|-----------------------------|-----------------------|------|------|-------|----------------------------------|------|------|-------|
| | Food | Seed | Feed | Total | Food | Seed | Feed | Total |
| Average 1927-1930 | 80.3 | 10.9 | 5.4 | 96.6 | 39.2 | 3.1 | 3.1 | 45.5 |
| Average 1932-1935 | 78.4 | 10.6 | 9.0 | 98.0 | 37.3 | 3.5 | 4.8 | 45.6 |
| Change | -1.9 | -0.3 | +3.6 | +1.4 | -1.9 | +0.4 | +1.7 | +0.1 |

Under the joint influence of Government controls and the reduced purchasing power of masses of people, the absolute amount of wheat consumed for food has decreased since 1929 in many countries, and the amount consumed per head of population in most — not only in the sheltered European markets, but also in North America, Australia, Brazil, Egypt, South Africa, Japan, etc. On the other hand, wheat imports into China (including Manchuria) increased between the two three-year periods by 0.54 million tons, which renders the aggregate drop in world consumption all the more striking. The increased diversion during recent years of wheat into feed has been chiefly caused by feed shortage in the United States, relatively low prices of wheat in the United Kingdom and Denmark, subsidised denaturing and exports of wheat from France, Poland and Sweden, and similar measures in other European importing countries. The North-American crops of 1935 contained much low-quality wheat competing with alternative feeds, which tended to raise somewhat the total wheat consumption of the world during the 1935/36 season.

World supplies during the last two years were smaller than requirements and involved heavy drafts upon stocks. The reduction of world total stocks from the peak reached on August 1st, 1934, to August 1st, 1936, is expected to be about 43%. In Canada, as a result of price-supporting operations, centrally controlled stocks were still extremely high on August 1st, 1935, but decreased by almost half during the subsequent year. On August 1st, 1935, stocks remained exceptionally heavy in European importing countries which had big crops in 1933 or 1934 or both years, but tended to decrease during 1935/36.

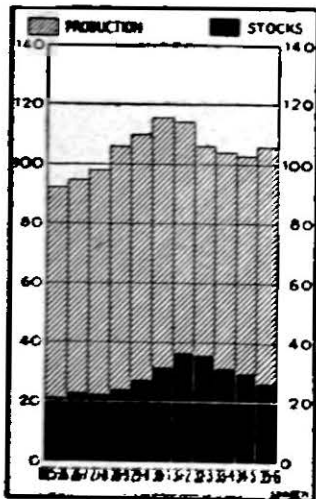
These factors, coupled with widespread and effective Government control, caused international trade in wheat and flour to fall, during 1934/35, to the lowest total in twenty-five years (except for

¹ Food Research Institute, Stanford University, *Wheat Studies*, Vol. XII, No. 4, page 136. The estimate is presented “with no pretence to accuracy”, although it is believed that “the margin of error is not so wide as to throw doubt on the broad indications which it brings out”.

one year during the world war). The United States, one of the "four major exporters", was a net importer for the first time for about a century, and Argentina was the leading exporter for the first time in history. France ranked fourth among exporting countries, and Sweden, Estonia and Latvia, formerly importing countries, also became net exporters with the aid of export bounties or other schemes. During the first part of the 1935/36 season, international trade in wheat and flour fell to a new post-war minimum. While imports to the United States increased, shipments to countries outside Europe were the smallest since 1924/25.

Rice. — The world rice crops averaged in the years 1930/31 to 1934/35 about 4% above the average for 1925/26 to 1929/30. The peak over the whole period was reached in 1933/34, when the crops were 908 million quintals; 1934-35 witnessed a drop to 848 million quintals, and 1935/36 a further reduction to about 830 million — the smallest figure for the past decade. All of the chief producing countries in the Far East, except the Netherlands Indies, shared in the drop which occurred in 1934/35; but the decrease was exceptionally sharp in Japan and considerable also in the two other major importing areas — China and India (excluding Burma); as a result, exportable surpluses were reduced in the principal exporting areas — Siam, Indo-China and Burma. In 1935/36, Japan's crops recovered considerably, without, however, reaching the 1925/26-1929/30 average, and were, moreover, outweighed by a heavy contraction in the crops of India (excluding Burma). While the total importing requirements thus increased, the chief exporting areas reaped heavier crops than in the preceding year.

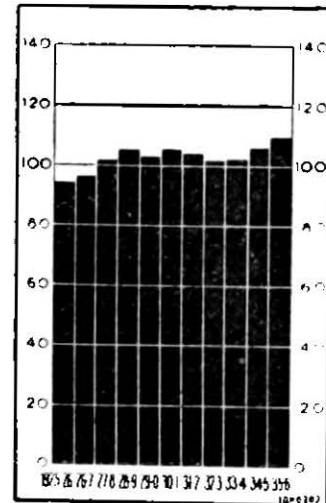
Diagram 7 A.
WORLD SUPPLY OF SUGAR.



Sugar. — The world sugar situation has been improving since 1932, when stocks reached their peak. Production has recovered from the low level of 1932/33, but consumption has also increased, and stocks have gradually diminished. Meanwhile, the world's free sugar market has remained extremely restricted, and international trade in sugar has continued at low levels.

During a period of five years, from September 1st, 1930, to September 1st, 1935, the sugar market was largely influenced by the International Sugar Agreement known as the "Chadbourne Plan". The chief sugar-exporting countries — Cuba, Mexico, Peru, Java, Belgium, Czechoslovakia, Germany, Poland and Yugoslavia¹ — attempted by this plan to control the marketing and to reduce the stocks of sugar. The development of the sugar-producing industry during

Diagram 7 B.
WORLD CONSUMPTION OF SUGAR.



the operation of the Chadbourne Plan and during the first year following its expiration will be seen below :

| Output from : | Average | | Average | | | | | | |
|---------------------------------------|----------------------|---------------|------------|------------|------------|------------|------------|------------|------------|
| | 1925/6-1929/30 | 1930/1-1934/5 | 1929/30 | 1930/1 | 1931/2 | 1932/3 | 1933/4 | 1934/5 | *1935/6 |
| | Quintals (000,000's) | | | | | | | | |
| Controlled area | 113 | 76 | 121 | 110 | 86 | 62 | 59 | 65 | 64 |
| Uncontrolled area | 125 | 160 | 136 | 152 | 156 | 157 | 168 | 168 | 184 |
| <i>Thereof :</i> | | | | | | | | | |
| British Empire | 35 | 50 | 37 | 42 | 45 | 50 | 54 | 56 | 61 |
| U.S.A. and dependencies | 31 | 40 | 35 | 36 | 40 | 42 | 49 | 35 | 40 |
| U.S.S.R. | 9 | 12 | 10 | 15 | 15 | 8 | 10 | 14 | 21 |
| Other countries | 50 | 58 | 54 | 59 | 56 | 57 | 55 | 63 | 62 |
| World, Total output | 238 | 236 | 257 | 262 | 242 | 219 | 227 | 233 | 248 |
| <i>Thereof :</i> Cane sugar | 160 | 151 | 172 | 158 | 162 | 147 | 146 | 144 | 156 |
| Beet sugar | 78 | 85 | 85 | 104 | 80 | 72 | 81 | 89 | 92 |

¹ Yugoslavia, although a party to the Agreement, has made no exports in the last four years.

The principal reason for the failure of the Chadbourne Plan to do what it set out to do appears clearly from the above figures. While the "Chadbourne countries" reduced their production by more than half between 1929/30 and 1933/34, production expanded rapidly in countries outside the plan, under the stimulus of high tariffs and other forms of protection. Another reason for the failure was the decline in consumption and the sharp fall in prices brought about by the general economic depression. The greatest reduction in output was enforced in Java and Cuba, while the greatest expansion occurred in the British Empire. The general tendency was reversed in 1934/35, when the production of exporting countries increased slightly while that of importing or self-sufficient countries was reduced; but in 1935/36, the former group again reaped relatively light crops and the latter group reached a new record. The chief contributors to this record were the U.S.S.R. and India. Production in the United States and dependencies recovered in 1935/36 from the failure of the preceding year, but continued to be restricted by the sugar adjustment scheme.¹ On the other hand, unfavourable weather reduced the European crops.

World consumption of sugar touched a low point at the same time — during the 1932/33 season — as world production. Both have shown an increasing trend during the last three seasons under review. But, as the drop in production had been much larger than that in consumption, requirements have remained above current supplies. As a consequence, world stocks of sugar have been considerably reduced. The ratio of world total stocks to total production dropped from 47% in 1931/32 to 33% in 1935/36. The existing surplus of sugar, however, still remained large in relation to the "free" market of sugar.

FODDER CROPS.

The bulk of "fodder crops" (oats, barley and maize) is used as a raw material for foodstuffs (meat and milk), and they are therefore given in the revised index of primary production as a separate group between foodstuffs and raw materials for industry. World aggregate fodder crops have, unlike food crops, shown a downward trend during recent years: the average annual crops in the period 1930-1934 (1930/31-1934/35) were more than 5% below the average for the preceding quinquennium. Meanwhile, more wheat has been diverted for feed use and production of oil-cakes has increased. The year-to-year variations of fodder crops have been very wide: between the peak reached in 1932 and the minimum over the whole period considered, touched in 1934, the drop was 20%. The recovery in 1935 carried the crops but little above the 1930-1934 average. As a result of these developments, the United States have suffered from a feed shortage, and the international position of feed grains has been tight.

Maize. — The world crops of maize, the principal fodder cereal, decreased between 1932 (1932/33), the peak year, and 1934 (1934/35) by 27%. This decline, more drastic than that of any foodstuff included in the index, was chiefly attributable to a severe drought in the United States. On the other hand, owing to weather conditions, large areas in Argentina were diverted from wheat to maize; Europe also reaped a large maize crop. The year 1935 (1935/36) witnessed a sharp recovery of crops in the United States, which more than offset a considerable contraction in Argentina and in Europe; the total crop remained, however, below the average. Visible supplies of maize at the principal centres decreased between January 1935 and January 1936, by 42%, and this decrease continued in the early months of 1936.

MEAT.

For the revised world index of primary production, meat production has been recalculated in the light of additional information which has become available. The revised meat index still remains, however, largely conjectural in character. Comprehensive annual data are lacking for many countries, including, for example, Italy and Spain. Slaughtering statistics are not available for the U.S.S.R. since 1932; those for the United States since 1933 are under revision; the recent figures for these important countries, therefore, are partly based on estimates and subject to revision.

Estimated production of meat in the world as a whole during the five-year period 1930-1934 was 3.9% above that of the preceding quinquennium. If, however, the U.S.S.R., whose live-stock

¹ The Philippine Independence Act provides for a limitation of duty-free imports of sugar into the United States. This has necessitated a substantial adjustment of production in the Philippine Islands.

was heavily curtailed during the early period of the collectivisation programme, is considered apart, it will be found that the remaining world production increased continuously between 1930-1934, but seems to have dropped heavily in 1935. This development, together with the changes in the production of different classes of meat, will be seen from the following indices (average 1925-1929 = 100):

| | Average 1930-1934 | 1930 | 1931 | 1932 | *1933 | *1934 | *1935 |
|------------------------------|----------------------|------------|------------|------------|------------|------------|------------|
| <i>World, excl. U.S.S.R.</i> | | | | | | | |
| Beef and veal | 102 | 97 | 94 | 95 | 104 | 122 | 110 |
| Pig-meat | 110 | 105 | 112 | 111 | 112 | 111 | 94 |
| Mutton, lamb, goat-meat . | 111 | 110 | 112 | 113 | 110 | 108 | 110 |
| Meat, total | 107 | 102 | 104 | 104 | 108 | 116 | 102 |

The sharp increase in total meat production in 1934 and the heavy drop in 1935 were both largely due to an exceptional cause — the drought which ravaged the United States in 1934. The resulting shortage of fodder and pasture necessitated emergency slaughterings on a large scale. On January 1st, 1935, the number of live-stock on farms was the smallest since early in the present century. The meat supply was therefore subnormal in 1935, and is expected to remain so for another year or two.¹ Apart from the United States and the U.S.S.R., meat production continued its expansion in 1934 and 1935. Slight setbacks occurred, however, in Africa in 1934 and in Europe in 1935.

The indices given above point to a reversal, since about 1932-1933, of the previous general tendency of a gradual substitution of pig-meat, mutton and lamb for beef and veal. However, as the conditions in 1934 and 1935 were largely exceptional and the information for 1935 is still incomplete, it is difficult to draw any definite conclusions.

The consumption of so perishable a commodity as meat tends to coincide with production. There is little doubt that the aggregate consumption of meat has been well maintained, and even increased, during recent years.

SEA FISH.

The statistics on which the index for sea fish is based relate to fresh fish, crustaceans and shell-fish. The distribution of production among continental groups of countries is, as a rule, based on the nationality of vessels and not geographical divisions. The world index shows a more marked increase, especially since 1932, than do the indices of any other foodstuff, mainly due to the U.S.S.R. and Japan. The North-American fisheries have remained since 1931 below the average pre-depression level, although they have risen since 1933.

DAIRY PRODUCE.

An attempt has been made to compile statistics of world production of milk, which has been, for the first time, included in the world index of primary production. These statistics are, however, still incomplete, and the milk index is largely conjectural in character. An attempt has also been made to compile statistics of world butter production. Table 14 opposite shows indices of production of milk and butter for a number of countries for which statistics have been secured.²

Milk. — The index of the known world production of milk shows a steady progress since the onset of the economic depression, a progress more marked than that shown by the other chief branches of agricultural production. The index conceals, however, a great part of the expansion that has taken place. Owing to the heavy reduction of live-stock to which reference has been made above, the production of the U.S.S.R. fell off sharply between 1929 and 1933 and, although it has since increased, it remains much below the pre-depression level. The United States, which account for nearly 30% of the known world production, have experienced a setback in recent years. If these two countries are excluded, the remaining world production is estimated to have been in 1934 17%, and in 1935 probably about 20%, above the 1925-1929 average. On the other hand, available information

¹ *Report of the Secretary of Agriculture, 1935, pages 69 and 70.*

² *For absolute figures, see Statistical Year-Book of the League of Nations, 1935/36, Tables 18 and 19.*

would seem to suggest that consumption of liquid milk has not increased during recent years.¹ The increased supplies of milk have thus tended to outstrip demand at the prices ruling. In most countries, various milk-marketing schemes have been adopted with a view to regulating and maintaining prices. These schemes have generally resulted in the diversion of more milk into butter and cheese production.

Table 14. — INDICES OF PRODUCTION OF MILK AND BUTTER.
Average 1925-1929 = 100.

| Country | Milk | | | | | | | Butter | | | | | | |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|
| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
| Belgium | 102 | 104 | 104 | 109 | 110 | 110 | ... | 98 | 100 | 101 | 106 | 114 | 101 | 101 |
| Denmark | 108 | 115 | 119 | 117 | 115 | 114 | ... | 112 | 119 | 122 | 118 | 116 | 114 | ... |
| Estonia (F.) | 107 | 125 | 133 | 133 | 130 | 132 | 134 | 128 | 145 | 150 | 136 | 107 | 118 | ... |
| Finland (F.) | 90 | 99 | 101 | 101 | 104 | 107 | ... | 115 | 127 | 132 | 123 | 113 | 116 | ... |
| France * | | | (107) | (109) | (111) | (114) | (119) | | | (120) | (122) | (124) | (135) | (139) |
| Germany | 108 | 114 | 120 | 123 | 126 | 125 | 121 | 112 | 124 | 141 | 147 | 155 | 153 | 145 |
| Hungary (D.) (F.) * | (112) | (125) | (125) | (122) | (133) | (143) | ... | (121) | (165) | (171) | (182) | (241) | (276) | ... |
| Irish Free State (F.) * | | | | | | | | (110) | (107) | (95) | (95) | (105) | (119) | (128) |
| Latvia | | | | | | | | 136 | 166 | 178 | 177 | 149 | 150 | ... |
| Netherlands | | | | | | | | 104 | 105 | 102 | 103 | 106 | 109 | 122 |
| Norway (F.) | 102 | | 105 | | 109 | 109 | ... | 115 | 118 | 182 | 239 | 267 | 279 | *288 |
| Sweden (D.) (F.) | 116 | 126 | 126 | 125 | 128 | 138 | ... | 119 | 135 | 133 | 127 | 136 | 153 | ... |
| Switzerland | 99 | 97 | 96 | 106 | 107 | 106 | 103 | 113 | 122 | 116 | 165 | 183 | 209 | 205 |
| United Kingdom | 103 | 104 | 105 | 108 | 112 | 114 | 116 | | | | | | | |
| U.S.S.R. | 99 | 90 | *78 | 69 | 64 | 68 | 72 | | | | | | | |
| Canada | 99 | 104 | 109 | 110 | 110 | 112 | 112 | 97 | 106 | 124 | 121 | 122 | 130 | 130 |
| United States (F.) | 104 | 105 | 107 | 107 | 108 | 104 | ... | 108 | 108 | 113 | 114 | 119 | 114 | 110 |
| Argentina (D.) (F.) | 89 | 106 | 123 | 123 | 111 | 106 | ... | 90 | 108 | 117 | 119 | 105 | 94 | 88 |
| Brazil (F.) | 106 | 109 | 118 | 121 | 125 | 128 | 133 | 120 | 117 | 111 | 183 | 188 | 228 | 236 |
| Uruguay * | | (100) | (103) | (109) | (112) | ... | ... | (112) | (192) | (198) | (231) | (243) | ... | ... |
| Japan (F.) | 113 | 121 | 131 | 135 | 148 | 164 | ... | 117 | 175 | 175 | 150 | 175 | 208 | ... |
| Southern Rhodesia | | | | | | | | 100 | 114 | 114 | 129 | 100 | 86 | ... |
| Union of South Africa (F.) | | | | | | | | 122 | 138 | 143 | 137 | 124 | 125 | 188 |
| Australia | 104 | 117 | 131 | 136 | 144 | 149 | ... | 107 | 126 | 140 | 151 | 162 | 168 | ... |
| New Zealand (F.) | 116 | 116 | 121 | 139 | ... | ... | ... | 122 | 125 | 132 | 159 | 173 | 168 | ... |
| World | 104 | 105 | 106 | 107 | 107 | 107 | ... | | | | | | | |

* Partly based on estimates.

(D.) Whole milk delivered to dairies and milk factories only. (F.) Factory or creamery butter only.

* Base: * milk: 1925, butter: 1926; * 1927-1929; * 1926-1929; * milk: 1930; butter: 1928-1929.

Milk Products. — The expansion of the dairy industry has generally been more rapid than that of dairy-farming, but it would appear that the rate of increase has been checked during the few past years. The right-hand part of Table 14 brings into light considerable differences in the recent developments of butter production in different countries. All the importing countries have restricted

¹ Data concerning consumption of milk in certain countries are given in the *Documentation prepared by the International Institute of Agriculture for the Mixed Committee on the Problem of Nutrition (League of Nations, document A.12.1936.II.B.)*.

imports by increased tariffs and quotas, and the exporting countries, with the exception of Denmark and New Zealand, have resorted to various systems of export bounties. The effects of the regulation of the British market are reflected in a decline since 1932 in the production of Denmark, Finland, Estonia and Latvia, and in the increase in that of Australia and New Zealand. In Norway and Switzerland, Brazil and Japan, butter production in 1934/35 was, on the average, twice as high as in the pre-depression period.

For certain countries, composite indices of production of milk products are available or may be calculated (average 1925-1929 = 100) :

| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|--------------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Finland (base 1928) ¹ | (113) | (124) | (129) | (124) | (116) | (118) | ... |
| Netherlands ¹ | 106 | 107 | 105 | 99 | 102 | 102 | 106 |
| Switzerland ² | 93 | 85 | 82 | 108 | 121 | 120 | 116 |
| Canada ³ | 94 | 101 | 113 | 111 | 111 | 115 | ... |
| United States ³ | 105 | 106 | 108 | 108 | 106 | 104 | ... |
| Japan ⁴ | 107 | 153 | 122 | 116 | 146 | 178 | ... |
| Australia ⁵ | 104 | 114 | 122 | 132 | 138 | 142 | ... |
| New Zealand ¹ | 118 | 121 | 125 | 149 | 160 | 153 | ... |

As production of cheese has not generally increased as quickly as that of butter, the above composite indices are in most cases lower than those relating to butter production alone.

WINE, BEER AND ALCOHOL.

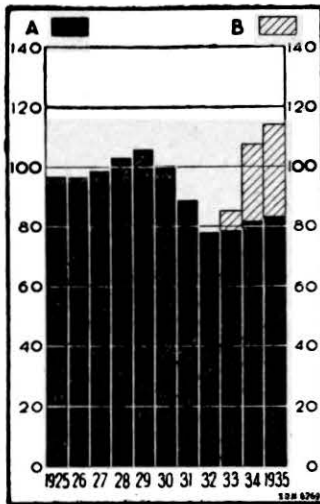
Wine. — The world vintage increased sharply in 1934 and further in 1935. In the latter year, it reached about 211 million hectolitres, which constitutes a new record, 25% above the 1925-1929 average. ⁵ The increase in 1934 was principally due to France and her North-African dependencies, which together produced over 102 million hectolitres. A slight decrease in this area in 1935 was more than offset by a considerable increase in Italy. The world totals exclude the United States, where production amounted to 4.1 million hectolitres in 1933 and 5.1 millions in 1934 and increased further in 1935. On account of the abundant supplies, the depression in the wine markets was accentuated during the commercial years 1934/35 and 1935/36. Most wine-producing countries have been compelled to take further measures to control production, marketing and exports. On the other hand, the use of wine in the distillation of industrial alcohol has increased during recent years, thanks to Government encouragement in several producing countries and to low prices of wine in non-producing importing countries. Nevertheless, supplies have exceeded requirements, prices have continued low and the quantum of international trade in wine in 1934/35 was only about half of what it was in 1928/29. ⁶

Beer. — In Diagram 8, the development of the known world production is shown, excluding the United States, where the manufacture of beer was prohibited during 1920-1932. The United States production is, however, added to the columns for the years 1933-1935. ⁷ As international trade in beer is small in relation to total output and stocks are negligible, world production may be taken as roughly representative of world consumption. Total consumption (excluding the United States) shows the same annual variations as the general business cycle, although within relatively narrow limits. It touched its minimum — 134 million hectolitres — in 1932 and has shown a steady increase since. Production of 1935, however — 143 million hectolitres — still remained 14% below the level of 1925 and 21% below the peak reached in 1929.

¹ Based on production of butter and cheese.
² Based on industrial use of milk.
³ Official indices.
⁴ Based on production of butter and condensed milk.
⁵ See the *Statistical Year-Book of the League of Nations, 1935/36, Table 38.*
⁶ During the first half of the year 1935/36, international trade in wine was practically maintained at the level of the first half of the preceding year.
⁷ For absolute figures, see the *Statistical Year-Book of the League of Nations, 1935/36, Table 37.*

Diagram 8.
WORLD PRODUCTION
OF BEER.

A. World, excl. U.S.A.
B. United States.



The recent developments in the principal producing countries are shown in the left-hand part of Table 15. Production does not in all countries afford an accurate picture of consumption, as some countries export a considerable proportion of their output.¹ Consumption in individual countries is influenced, not only by changes in purchasing power, but also by changes in taxation and habits. Among the countries where consumption fell off in 1935 were Argentina, Austria, Belgium, Czechoslovakia, France, Italy, Netherlands, Switzerland and Yugoslavia.

Alcohol. — Production in certain countries is illustrated in the right-hand part of Table 15. The indices shown refer, as a rule, to the total amount of ethyl and methyl alcohol distilled. The data relating to alcoholic liquor distilled from fruit, when included, are only rough estimates.

Alcohol is used for two chief purposes, viz.: (i) for the preparation of distilled liquor ("potable alcohol") and (ii) for power purposes, and as raw material for various industries ("industrial alcohol"). Data relating to the amounts produced or sold of these two classes of products are given below for a few countries for which statistics are available (in terms of absolute alcohol, hectolitres, 000's):

| | | | | | | | |
|----------------------|-------|-------|-------|-------|-------|-------|-------|
| Belgium : | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
| Potable | 125 | 129 | 111 | 92 | 49 | 49 | 39 |
| Industrial | 67 | 54 | 55 | 61 | 81 | 82 | 97 |
| Czechoslovakia : | | | | | | | |
| Potable | 252 | 240 | 217 | 185 | 147 | 132 | 143 |
| Industrial | 292 | 297 | 306 | 322 | 796 | 768 | 767 |
| France : | | | | | | | |
| Potable | 1,551 | 1,618 | 1,599 | ... | ... | ... | ... |
| Industrial | 1,094 | 1,456 | 1,835 | ... | ... | ... | ... |
| Germany : | | | | | | | |
| Potable | 872 | 480 | 443 | 394 | 498 | 559 | ... |
| Industrial | 1,960 | 1,616 | 1,609 | 2,145 | 2,557 | 3,154 | ... |
| Hungary : | | | | | | | |
| Potable | 186 | 199 | 89 | 40 | 71 | ... | ... |
| Industrial | 77 | 177 | 185 | 162 | 163 | 170 | ... |
| United Kingdom : | | | | | | | |
| Potable | 556 | 530 | 460 | 455 | 443 | 429 | 462 |
| Industrial | 730 | 768 | 846 | 1,011 | 1,501 | 1,538 | 1,818 |
| Canada : | | | | | | | |
| Potable | 168 | 167 | 140 | 112 | 68 | 72 | ... |
| Industrial | 145 | 144 | 159 | 125 | 162 | 173 | ... |
| United States : | | | | | | | |
| Potable | — | — | — | — | 148 | 1,448 | 3,201 |
| Industrial | 3,801 | 3,631 | 3,142 | 2,781 | 2,188 | 3,125 | 3,419 |
| Japan : | | | | | | | |
| Potable | 89 | 71 | 59 | 81 | 108 | 133 | ... |
| Industrial | 119 | 108 | 120 | 135 | 163 | ... | ... |

¹ World exports of beer amounted in 1933 to about 1.15 million hectolitres out of a total known production of 146.2 million hectolitres. They declined slightly in 1934, but increased by some 12% in 1935. The proportion exported has in recent years been about two-thirds in the case of the Irish Free State, about one-eighth in that of Japan, and less than or about 1% in the cases of the United Kingdom and Germany. In absolute amounts, however, the United Kingdom is the largest exporter, while Japan has taken the second place from Germany.

Table 15. — INDICES OF PRODUCTION OF BEER AND ALCOHOL.
Average 1925-1929 = 100.

| Country | Beer | | | | | | | Alcohol | | | | | | |
|----------------------------|-------|-------|------|-------|-------|-------|-------|---------|-------|------|------|------|-------|------|
| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
| Austria | 100 | 97 | 76 | 59 | 44 | 46 | 45 | 106 | 107 | 104 | 78 | 79 | 76 | 71 |
| Belgium | 107 | 115 | 127 | 108 | 102 | 100 | 98 | 114 | 105 | 88 | 76 | 74 | 86 | 90 |
| Czechoslovakia | 113 | 111 | 101 | 93 | 77 | 77 | 75 | 108 | 122 | 111 | 127 | 167 | 167 | 176 |
| Denmark | 99 | 108 | 104 | 92 | 93 | 100 | ... | 107 | 109 | 107 | 115 | 111 | 128 | 132 |
| Estonia * | 90 | 72 | 61 | 55 | 63 | 53 | 52 | (130) | (102) | (92) | (74) | (90) | (135) | ... |
| Finland * | — | — | — | (100) | (134) | (182) | ... | 113 | 102 | 96 | 135 | 136 | 231 | ... |
| France * | 113 | 118 | 120 | 114 | 116 | 108 | 98 | 128 | 155 | 175 | 196 | 214 | ... | ... |
| Germany | 111 | 93 | 71 | 64 | 66 | 71 | 75 | 135 | 120 | 107 | 94 | 125 | 149 | ... |
| Hungary | 99 | 74 | 51 | 30 | 27 | 28 | ... | 108 | 132 | 106 | 68 | 78 | 96 | ... |
| Irish Free State | 90 | 104 | 96 | 85 | 78 | 83 | 84 | 52 | 49 | 45 | 52 | 39 | 61 | ... |
| Italy | 95 | 76 | 57 | 37 | 36 | 31 | 24 | 107 | 103 | 89 | 95 | 79 | 81 | ... |
| Netherlands | 109 | 107 | 99 | 85 | 76 | 71 | 65 | 104 | 101 | 94 | 94 | 95 | 88 | ... |
| Norway | 85 | 87 | 69 | 71 | 66 | 67 | 68 | 167 | 237 | 147 | 160 | 156 | 118 | 152 |
| Poland | 130 | 117 | 90 | 65 | 49 | 55 | ... | 110 | 132 | 100 | 64 | 41 | 68 | 80 |
| Roumania | 92 | 71 | 50 | 42 | 46 | 56 | ... | 48 | 39 | 27 | 29 | 59 | 62 | 39 |
| Spain | 124 | 132 | 143 | 120 | 124 | ... | ... | 103 | 114 | 113 | 98 | ... | ... | ... |
| Sweden | 102 | 112 | 110 | 106 | 86 | 82 | ... | 117 | 135 | 136 | 104 | 157 | 156 | ... |
| Switzerland | 117 | 121 | 121 | 117 | 112 | 114 | 107 | *102 | *98 | *97 | *110 | *98 | *98 | ... |
| United Kingdom | 99 | 94 | 82 | 71 | 79 | 82 | 86 | 118 | 103 | 89 | 90 | 137 | 151 | 176 |
| U.S.S.R. * | 61 | 92 | 138 | 92 | 113 | 139 | 156 | . | . | . | . | . | . | ... |
| Canada | 119 | 115 | 107 | 94 | 73 | 74 | ... | 167 | 167 | 92 | 71 | 43 | 64 | ... |
| United States * | — | — | — | — | (100) | (385) | (462) | 109 | 104 | 90 | 80 | 67 | 131 | 190 |
| Argentina | 104 | 89 | 66 | 56 | 48 | 65 | 65 | . | . | . | . | . | . | . |
| Chile * | (110) | (119) | (80) | (79) | (84) | (96) | (124) | (101) | (88) | (81) | ... | ... | ... | ... |
| Uruguay † | 120 | 114 | 111 | 91 | 77 | 87 | 84 | 111 | 120 | 124 | 98 | 94 | 84 | ... |
| Egypt | 101 | 82 | 69 | 62 | 65 | 72 | 75 | 141 | 149 | 108 | 108 | 140 | 87 | 179 |
| Japan | 106 | 100 | 95 | 92 | 114 | 116 | ... | 115 | 99 | 99 | 120 | 151 | ... | ... |
| Australia * | 102 | 92 | 77 | 69 | 73 | 80 | 88 | 95 | 92 | 46 | 44 | 46 | 51 | ... |
| New Zealand * | 100 | 95 | 78 | 69 | 67 | 74 | 86 | 93 | 88 | 59 | 50 | 49 | 50 | ... |

* Estimates.
 † Beer : production of establishments employing 20 or more workers. — † Estonia (alcohol), Chile (beer and alcohol) : base 1927-1929. — * Beer : base 5.IV.-31.XII.1932. — † Alcohol : including an estimate of alcohol content of spirits produced free of duty. — * Beer : base 1933 ; alcohol : alcohol produced at industrial alcohol plants, since 1933, in addition potable spirits. — † Alcohol : denatured alcohol only. — * Alcohol : consumption of distilled liquors only.

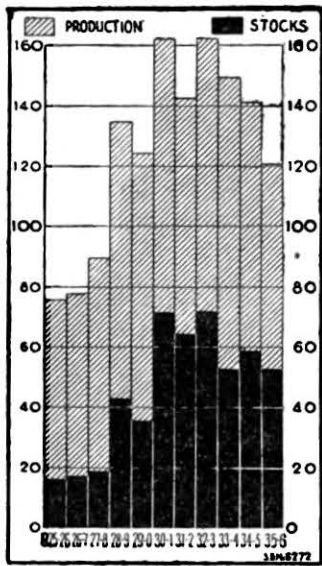
Much the greater part of alcohol distilled in Europe and North America is at present absorbed by industry. Consumption of potable spirits underwent a drastic reduction during the depression and has shown but small signs of increase since, except in Germany and the United States, where special conditions obtain. The use of industrial alcohol in European countries shows a striking upswing throughout the whole period considered. Many European Governments have taken steps to encourage the distillation of alcohol with a view to assisting agriculture, and twenty of them have imposed the use of alcohol as a motor-spirit.

COFFEE, TEA AND COCOA.

Coffee. — The year-to-year changes in world supplies of coffee mainly reflect variations in the Brazilian crop and their subsequent reactions on stocks. The Brazilian production reached its post-war peak with the crop of 1933/34, while that of 1935/36 was the lightest for nine years. Production

Diagram 9 A.

WORLD SUPPLY OF COFFEE.



outside Brazil, on an average one-third of the world total, has remained remarkably stable during the last three years under review. World consumption of coffee has shown an upward trend since 1933/34 but had not, by 1935/36, reached the level at which it was five years earlier. While consumption of non-Brazilian or "mild" coffees has in general kept pace with production, Brazil has accumulated heavy stocks. In order to ease the market, Brazil initiated in 1931 the policy of destroying low-grade coffees, by which method 21.8 million quintals (36.4 million bags) had been eliminated by March 1936. The remaining world stocks, including stocks in the interior of Brazil, amounted on April 1st, 1936, to 18.2 million quintals. The depression in the world market, therefore, continued during

the early months of 1936. The development of production, consumption (excluding coffee deliberately destroyed) and stocks will be seen from the following figures (quintals, 000,000's):¹

| | Average 1925/6- 1929/30 | Average 1930/1- 1934/5 | 1930/1 | 1931/2 | 1932/3 | 1933/4 | 1934/5 | *1935/6 |
|-----------------------------------|-------------------------------|------------------------------|--------|--------|--------|--------|--------|--------------|
| <i>Production</i> : | | | | | | | | |
| Brazil | 12.4 | 15.3 | 16.3 | 13.0 | 15.4 | 17.8 | 14.1 | 10.4 |
| Other | 7.2 | 7.8 | 7.7 | 7.6 | 8.5 | 7.6 | 7.5 | 7.6 |
| World | 19.6 | 23.1 | 24.0 | 20.6 | 23.9 | 25.4 | 21.6 | 18.0 |
| <i>Consumption</i> : | | | | | | | | |
| World | 13.5 | 14.2 | 15.1 | 14.2 | 13.7 | 13.8 | 14.1 | 14.5 |
| <i>End-of-season stocks</i> : | | | | | | | | |
| World | 9.7 | 15.8 | 16.9 | 18.9 | 13.8 | 15.4 | 13.8 | ² |

Tea. — The tea-regulation scheme, embracing India, Ceylon and the Netherlands Indies, came into force on April 1st, 1933. World production of tea (including exports from China), after a drop of 10%, increased from 4.5 million quintals in 1933 to 4.7 millions in 1934. The export quota adopted by the countries parties to the agreement for 1933/34 was fixed at 85% and for the following year at 87.5% of the standard of 3.7 million quintals; actual exports from these countries were below the quotas fixed. Meanwhile, the decline in Chinese exports which had continued since 1886 was brought to a halt in 1933 (they declined again in 1935, however), while exports from Japan and Formosa rose. As consumption in the British Empire — which absorbs over 70% of world exports of tea — failed to expand and declined in North America, during 1934 and the early part of 1935, stocks increased. The International Tea Committee reduced the export quota for 1935/36 to 82.5% of the standard and decided to maintain this percentage also for 1936/37. The situation in the tea market improved towards the end of 1935 and the early months of 1936.

Diagram 9 B.

WORLD CONSUMPTION OF COFFEE.

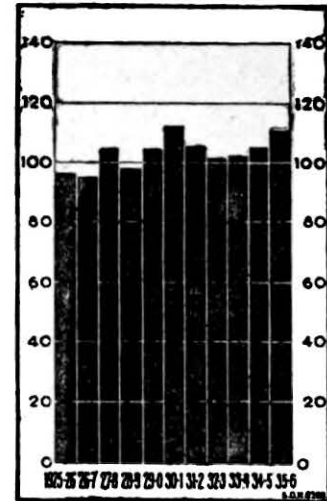
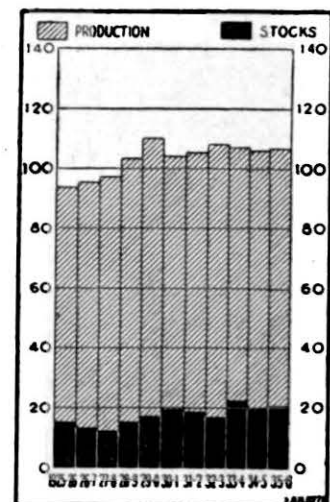


Diagram 10.

WORLD SUPPLY OF TEA.



¹ Production : *Statistical Year-Book of the League of Nations, 1935/36*, Table 31 ; consumption : *South-American Journal* (London) and *Wileman's Brazilian Review* (Rio de Janeiro) ; stocks : see App. I, Table 5.

² Stocks on April 1st, 1935 : 15.5 million quintals, and on April 1st, 1936 : 18.2 million quintals.

Cocoa. — The current supplies of cocoa increased considerably in the three-year period 1932/33 to 1934/35. In the last-named year, they reached 6.9 million quintals, which is a new record 30% above the average level of 1925/26-1929/30. The recent increase in supplies is chiefly due to Africa, while Brazilian output has remained stationary. According to trade estimates, world consumption increased materially in both 1934 and 1935. Nevertheless, visible stocks in Europe and New York were by April 1936 somewhat higher than a year earlier.

TOBACCO AND TOBACCO MANUFACTURE.

Raw Tobacco. — World tobacco crops touched their minimum for the whole decade under review in 1934, when they amounted to about 20 million quintals and were 10% below the 1925-1929 average. In 1935, according to the incomplete information available, they again increased. The United States crop was reduced by 23.5% in 1934 and the excess stocks on hand by about a third, but the crop of 1935 increased again, although not up to the level of 1933. India, the largest grower, reaped a light crop in 1934/35. The combined crops of the Near East (Bulgaria, Greece, Roumania, Turkey and Yugoslavia) were in 1934 as much as 36% below the average level of 1925-1929, but increased by 16% in 1935.

Tobacco Manufacture. — Annual indices relating to the tobacco manufacturing industry in various countries have been inserted in Appendix II, Table 3 (group I), and quarterly indices are given in Table 16 below. They do not always afford an accurate picture of changes in consumption of manufactured tobacco, as several of the countries given export a certain proportion of their output. This applies particularly to the United Kingdom.

Table 16. — QUARTERLY INDICES OF TOBACCO MANUFACTURES.
Average 1925-1929 = 100.

| Country | 1931 | 1932 | 1933 | 1934 | | | | 1935 | | | | 1936 |
|-----------------------|---------------------|-----------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Average of quarters | | | I | II | III | IV | I | II | III | IV | I |
| Belgium | 120 | 109 | 99 | 89 | 99 | 98 | 93 | 87 | 106 | 101 | 99 | 96 |
| Czechoslovakia . . . | 89 | 87 | 88 | 84 | 86 | 83 | 87 | 78 | 78 | 74 | 73 | 76 |
| Estonia * | (96) | (60) | (59) | . | . | . | . | (58) | (74) | (65) | (75) | (77) |
| Germany | 84 | 95 | 101 | 100 | 116 | 115 | 123 | 107 | 113 | 123 | 122 | 113 |
| Greece | 93 | 87 | 93 | 94 | 94 | 95 | 102 | 93 | 106 | 112 | 107 | 105 |
| Italy | ^a 91 | ^a 89 | ^a 86 | 85 | 80 | 84 | 84 | 76 | 81 | 94 | . | . |
| Netherlands * | 121 | 122 | 128 | 128 | 125 | 128 | 122 | 123 | 124 | 135 | 126 | 126 |
| United Kingdom . . . | 112 | 109 | 113 | 122 | 124 | 124 | 128 | 117 | 131 | 125 | 134 | 126 |
| Canada | 110 | 92 | 100 | 100 | 110 | 112 | 115 | 117 | 115 | 119 | 126 | 115 |
| United States | 104 | 94 | 98 | 109 | 109 | 107 | 109 | 112 | 115 | 112 | 119 | 123 |
| Chile * | (78) | (100) | (99) | (103) | (100) | (106) | (107) | (104) | (108) | (108) | (112) | (113) |

* Base : 1927-1929.
^a Year ending June 30th.
^c Approximate consumption index, calculated by weighting the indices for cigarettes, cigars and pipe, etc., tobacco by the relative values of these products in 1930.

In general, output of manufactured tobacco has fluctuated in sympathy with the cycle of economic conditions. Thus it continued to increase during 1935 and the first quarter of 1936 in most countries shown. Czechoslovakia is the only country shown in the above table where the activity of the tobacco industry shows a downward movement. It should be borne in mind, however, that the amount of money spent on smoking-materials has undoubtedly been subject to wider variations than the quantities consumed.

OIL MATERIALS AND OILS.

This group comprises eight vegetable-oil materials, two crude vegetable oils and (as a new item) whale oil. The total supplies of these products have remained comparatively stable during recent years. The year 1934 (1934/35), however, witnessed a drop of 9%, while there would appear to have been an increase of some 5% in 1935 (1935/36). North America and Asia have been chiefly responsible for these movements, but Europe and Africa also increased their production considerably in 1935. The development of the different products has been very different in recent years. Production of linseed, hempseed and olive oil in 1934 and 1935 was below the pre-depression average; that of cottonseed and rapeseed at about that level; that of sesamum, copra and ground-nuts was above; that of palm and palm-kernel oil, considerably above it; while that of whale oil was in 1933-1935 about twice as high as in 1925-1929 on the average.

The aggregate demand for both vegetable and whale oils depends on the development of the margarine and soap industries. The use of different oils in these industries is primarily dependent upon the special properties which they possess, the widened uses for inferior oils opened up by the technical processes, and also upon their relative prices. Thus a tendency towards the substitution of animal fats and marine oils — especially whale oil — for vegetable oils has manifested itself in Europe during recent years. Another important factor operating for a decrease, or against an increase, in the demand for vegetable oils has been the reduced manufacture of margarine, due in turn to the appearance of cheap and plentiful supplies of lard and butter.¹ Several European Governments have taken steps to discourage the manufacture and consumption of margarine in order to favour the marketing of butter. On the other hand, the tendency for oleomargarine to be substituted for butter has recently been noted in the United States. Finally, the decrease in the prices of feeding grains tended to reduce the use of oil-cakes. Comparatively light crops of fodder cereals and the tightening international position of feeding grains have to some extent counteracted this factor

TEXTILES: MATERIALS AND MANUFACTURES.

In order to afford an idea of the relative movements of world production of textile raw materials and textile manufactures, three indices are given below. The first is the textile-material index included in the world index of primary production. As, however, it includes artificial textiles which have masked the general movement of agricultural textiles, another raw-material index which omits rayon and staple fibre is shown. The third index, referring to the activity in the textile manufacturing industry including artificial textiles, is representative of the greater part of the world, but is not fully comparable with the raw-material indices.² The base of all indices is the average for 1925-1929.

| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|---------------------------------------------------|------|------|------|------|------|------|-------|
| Textile materials | 106 | 104 | 105 | 98 | 107 | 105 | 110 |
| Ditto, excluding artificial textiles | 103 | 101 | 101 | 93 | 99 | 94 | 97 |
| Textile manufacturing . . . | 106 | 92 | 93 | 93 | 103 | 104 | 110 |

When comparing the raw-material indices with the industrial index, it should be kept in mind that data for raw materials produced in the Southern Hemisphere refer to years ending on July 31st following the year given; hence the industrial index precedes a part of the data for the raw textiles

¹ For instance, in the United Kingdom consumption of margarine per head of population, compared with the average for 1924-1928, was lower by 33% in 1935, while consumption of butter was higher by 57%.

² Index compiled by the Institut für Konjunkturforschung (Berlin), a weighted average of composite indices of activity in the textile industry of the following seven principal countries (weights in parentheses): the United States (25), the United Kingdom (21), Germany (14), France (12), Japan (10), the U.S.S.R. (9) and India (9).

index. World manufacturing production (which includes artificial textiles) remained almost stationary in 1934, while raw-material supplies available from the 1934 (1934/35) crops shrank. In 1935 (1935/36) both increased, but manufacturing more than raw-material supplies.

The index of textile materials has been extended by the inclusion of three "hard fibres", mohair, and staple fibre. The increase in the output of agricultural textile materials in 1935 (1935/36) was chiefly due to cotton and flax; the wool clip remained unchanged and the jute crop and raw silk production fell off.

The striking differences in the development of textile manufacturing in different countries are shown by the composite indices given in Appendix II, Table 3 (group II). The process of "localisation" of the textile industry is exemplified by the indices for a number of countries whose industries work chiefly for the domestic market and are comparatively young; a composite index for some of these countries is given in Section B, page 39, above.

Recent variations in the activity of the textile industry in certain countries are illustrated by the quarterly indices given, together with a quarterly world index, in Table 17. The upward movement of textile industries taken as a whole started in the middle of 1934 and was checked during the last quarter of 1935. The index for the United States, the most important textile country, shows a different movement: it touched a low point in the third quarter of 1934 and a high point in the fourth quarter of 1935, the turning-points of the last two-year cycle in which the textile industry of that country has been revolving. Variations in the indices for the United Kingdom, Germany and Japan have largely counterbalanced the movements of the American index. The table does not, however, reveal all the factors that have influenced the course of the world index, which includes the U.S.S.R. and India.

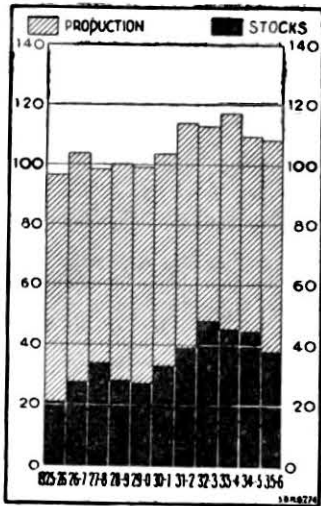
Table 17. — QUARTERLY COMPOSITE INDICES OF ACTIVITY IN THE TEXTILE INDUSTRIES.
Average 1925-1929 = 100.

| Country | 1931 | 1932 | 1933 | 1934 | | | | 1935 | | | | 1936 | |
|------------------------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| | Average of quarters | | | I | II | III | IV | I | II | III | IV | I | II |
| Belgium | 82 | 69 | 71 | 67 | 56 | 56 | 60 | 61 | 75 | 77 | 89 | 92 | ' 82 |
| Czechoslovakia | 87 | 71 | 66 | 80 | 88 | 79 | 72 | 72 | 74 | 74 | 90 | 96 | ' 99 |
| Finland* | (89) | (90) | (105) | (112) | (129) | (136) | (138) | (142) | (140) | (128) | (168) | (127) | (137) |
| France | 78 | 64 | 79 | 80 | 70 | 60 | 62 | 65 | 66 | 72 | 75 | 76 | 69 |
| Germany | 92 | 84 | 96 | 107 | 110 | 102 | 99 | 98 | 95 | 95 | 96 | 102 | ' 105 |
| Greece | 135 | 140 | 157 | 170 | 180 | 170 | 191 | 167 | 171 | 189 | 217 | 202 | ... |
| Hungary | 111 | 95 | 114 | 128 | 139 | 140 | 138 | 149 | 151 | 149 | 155 | 166 | ... |
| Italy* | (82) | (67) | (76) | (66) | (73) | (74) | (83) | (84) | (86) | ' (55) | . | . | ... |
| Poland | 79 | 68 | 71 | 84 | 81 | 74 | 79 | 83 | 83 | 83 | 86 | 84 | 86 |
| Roumania* | (109) | (139) | (159) | (179) | (162) | (204) | (185) | (138) | ... | ... | ... | ... | ... |
| United Kingdom: (Board of Trade)* | (77) | (85) | (90) | (96) | (90) | (87) | (95) | (97) | (95) | (92) | (103) | (103) | (101) |
| (London and Cambridge) | 78 | 88 | 96 | 106 | 98 | 88 | 101 | 105 | 105 | 97 | 111 | 115 | 113 |
| United States | 87 | 76 | 89 | 84 | 78 | 68 | 84 | 92 | 92 | 97 | 101 | 94 | 94 |
| Japan | 110 | 117 | 127 | 127 | 137 | 147 | 152 | 143 | 152 | 157 | 153 | 132 | ' 141 |
| World* | 93 | 93 | 103 | 104 | 102 | 103 | 106 | 106 | 109 | 113 | 113 | ... | ... |

* Base: 1926-1929. * Base: 1928. * Base: 1927-1929. * Base: 1924, 1927-1929.
* Index compiled by the Institut für Konjunkturforschung (Berlin). ' Average of two months.

Diagram 11 A.

WORLD SUPPLY OF COTTON.

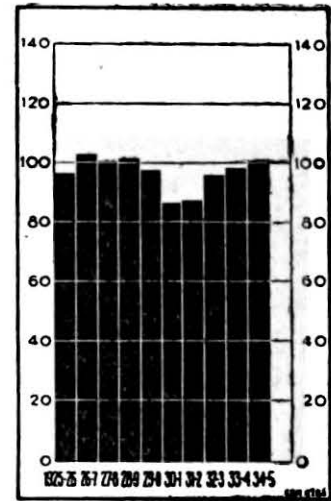


Cotton.

Raw Cotton. — Relatively heavy and light world crops have alternated in recent years ; the crop of 1935/36 exceeded the low crop reaped in the preceding year without reaching the average pre-depression level. The American cotton crop has shown considerably sharper variations than “ outside growths ” taken together. The extremely low crop of 1934 in the United States was due both to severe drought and the operation of the “ Bankhead Act ”. This Act remained in force during 1935, but owing to relatively favourable weather conditions, the crop increased. It was, however, 30% below the average for 1925-1929, while the corresponding crops of “ outside growths ” were 33% above that average. These variations will be seen below (figures refer to ginned cotton in metric tons, 000's) :

Diagram 11 B.

WORLD CONSUMPTION OF COTTON.



| | Average 1925/26 to 1929/30 | Average 1930/31 to 1934/35 | 1930/31 | 1931/32 | 1932/33 | 1933/34 | 1934/35 | *1935/36 |
|---------------------------|----------------------------------|----------------------------------|---------|---------|---------|---------|---------|----------|
| <i>Production :</i> | | | | | | | | |
| American cotton | 3,310 | 2,893 | 3,021 | 3,707 | 2,819 | 2,829 | 2,089 | 2,327 |
| “ Outside growths ” .. | 2,460 | 2,631 | 2,599 | 2,253 | 2,361 | 2,871 | 3,071 | 3,273 |
| Total | 5,770 | 5,524 | 5,620 | 5,960 | 5,180 | 5,700 | 5,160 | 5,600 |

India, Egypt and the U.S.S.R. made a considerable contribution to the increase in “ outside growths ” in 1935/36, and the Argentine and Brazil continued to extend their cotton-growing, while China experienced a setback in her cotton production.

The following figures relating to world cotton-mill consumption of raw cotton, somewhat more restricted in scope than the production statistics, refer to years ending July 31st, and exclude linters. As figures are lacking for Germany since the latter half of 1934, and for Italy since the latter half of 1935, those two countries have been omitted throughout (metric tons 000's) : ¹

| | Average 1925/26 to 1929/30 | 1930/31 | 1931/32 | 1932/33 | 1933/34 | 1934/35 | Half-year ending January 31st, | |
|---------------------------|----------------------------------|---------|---------|---------|---------|---------|-----------------------------------|-------|
| | | | | | | | 1935 | 1936 |
| <i>Mill consumption :</i> | | | | | | | | |
| American cotton | 2,912 | 2,203 | 2,471 | 2,850 | 2,686 | 2,358 | 1,184 | 1,303 |
| “ Outside growths ” ... | 2,106 | 2,204 | 1,938 | 2,000 | 2,242 | 2,718 | 1,351 | 1,393 |
| Total | 5,018 | 4,407 | 4,409 | 4,850 | 4,928 | 5,076 | 2,535 | 2,696 |

Total cotton-mill consumption continued during 1935 the increase begun in 1934. American cotton regained during the first half-year of 1935/36 some of the ground lost to other kinds of cotton during the season 1934/35, when prices of cotton ruled relatively high in the United States.

¹ Total cotton consumption in Germany and Italy was as follows (metric tons, 000's) :

| | Average 1925/26 to 1929/30 | 1930/31 | 1931/32 | 1932/33 | 1933/34 | 1934/35 |
|-------------------|----------------------------------|---------|---------|---------|---------|---------|
| Germany | 310 | 244 | 275 | 279 | 350 | . |
| Italy | 220 | 173 | 181 | 198 | 201 | 180 |

Total world stocks of all kinds of cotton and of American cotton are compared below with the cotton-mill stocks ; figures are in actual bales, regardless of weight, including linters (000's) :

| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|-------------------------------|-------|--------|--------|--------|--------|--------|--------|
| <i>Stocks on August 1st :</i> | | | | | | | |
| Total stocks | 9,625 | 11,715 | 13,835 | 17,046 | 16,076 | 15,879 | 13,591 |
| Of which American cotton | 4,919 | 6,889 | 9,264 | 13,229 | 11,814 | 10,682 | 9,176 |
| Cotton-mill stocks . . . | 4,863 | 4,498 | 4,313 | 4,462 | 5,050 | 5,337 | . |

The reduction in stocks of American cotton (held in the United States and elsewhere) between 1932 and 1935 was 31% ; stocks of other cottons increased between 1932 and 1934, but fell off by 15% in 1935. Cotton-mill stocks, excluding Germany, amounted in 1934 to 5,120,000 bales and in 1935 to 4,558,000 bales.

Cotton Spinning and Weaving. — Annual indices of activity in cotton-spinning and cotton-weaving are given in Appendix II, Table 3 (group III), and quarterly indices in Table 18 below. As the cotton trade is the principal branch of the textile industry, it governs to a large extent the composite textile indices dealt with above. In the United Kingdom, the improvement in the industry in 1935 was almost entirely due to the domestic trade, which has become more important than the export trade. The growing "localisation" of the cotton industries is reflected in the relatively high indices for a number of countries in Northern, Central and South-Eastern Europe, as well as in those for Japan and for two cotton-growing countries — India and China. China's cotton industry was depressed in 1934 and 1935.

Table 18. — QUARTERLY INDICES OF ACTIVITY IN THE COTTON INDUSTRY.
Average 1925-1929 = 100.

| Country | | 1931 | 1932 | 1933 | 1934 | | | | 1935 | | | | 1936 |
|--------------------------|-------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | Average of quarters | | | I | II | III | IV | I | II | III | IV | I |
| Austria : | Spinning . | 88 | 87 | 90 | 109 | 107 | 108 | 124 | 124 | 116 | 128 | 150 | 157 |
| | Weaving . | 117 | 114 | 105 | 145 | 138 | 130 | 124 | 146 | 144 | 147 | 150 | 165 |
| Belgium : | Spinning . | 80 | 69 | 72 | 65 | | 69 | | 83 | | 107 | | ... |
| France : | Spinning . | 64 | 46 | 66 | 70 | 57 | 48 | 43 | 42 | 45 | 52 | 61 | 66 |
| | Weaving . | 77 | 59 | 93 | 104 | 88 | 60 | 46 | 44 | 48 | 61 | 74 | 79 |
| Germany : | Spinning . | 78 | 77 | 94 | 108 | 115 | 102 | 94 | 93 | 94 | 96 | ... | ... |
| Hungary : | Spinning . | 194 | 231 | 291 | 312 | 343 | 294 | 369 | 307 | 295 | 284 | 393 | 346 |
| | Weaving . | 114 | 132 | 164 | 175 | 189 | 165 | 203 | 173 | 164 | 152 | 211 | 182 |
| Italy :* | Spinning . | (80) | (84) | (95) | (95) | (89) | (75) | (84) | (86) | (88) | (79) | . | . |
| | Weaving . | (75) | (76) | (84) | (84) | (83) | (69) | (78) | (80) | (88) | (80) | . | . |
| Poland :* | Spinning . | (78) | (75) | (86) | (101) | (93) | (92) | (94) | (95) | (95) | (101) | (106) | (109) |
| Portugal :* | Spinning . | (82) | (98) | (89) | (89) | (84) | (83) | (84) | (79) | (90) | (81) | (76) | (74) |
| Spain : | Spinning . | 97 | 103 | 96 | 91 | 85 | 79 | 130 | 102 | 91 | 108 | 85 | 95 |
| United Kingdom: Spinning | | | | | | | | | | | | | |
| | (Board of Trade)* . . . | (75) | (83) | (87) | (96) | (90) | (75) | (85) | (90) | (84) | (78) | (96) | (98) |
| | (London and Cambridge). | 72 | 79 | 83 | 87 | 84 | 76 | 83 | 86 | 85 | 80 | 89 | 92 |
| Canada : | Spinning . | 73 | 75 | 95 | 89 | 142 | 106 | 120 | 72 | 83 | 97 | 121 | 115 |
| United States : | Spinning . | 79 | 73 | 91 | 85 | 80 | 72 | 83 | 85 | 76 | 79 | 92 | 92 |
| | Weaving . | . | . | . | (108) | (104) | (83) | (105) | (117) | (97) | (80) | (94) | (90) |
| Chile :* | Weaving . | (100) | (154) | (223) | (276) | (276) | (284) | (300) | (315) | (301) | (313) | (379) | (449) |
| India : | Spinning . | 128 | 134 | 122 | 121 | 112 | 138 | 146 | 110 | 134 | 141 | 145 | ... |
| | Weaving . | 130 | 135 | 125 | 125 | 120 | 144 | 163 | 178 | 140 | 146 | 159 | ... |
| Japan : | Spinning . | 100 | 110 | 121 | 127 | 132 | 134 | 148 | 141 | 143 | 133 | 138 | 136 |
| | Weaving . | 106 | 116 | 126 | 129 | 137 | 135 | 142 | 141 | 144 | 135 | 137 | 134 |

* Base : 1928. * Average of two months. * Base : 1927-1929. * Base : 1930. * Base : 1924, 1927-1929. * Base : 1934.

Flax, Hemp and Hard Fibres.

A considerable part of the flax and practically all the hemp and hard fibres produced go to various uses other than clothing. The development of the industries connected with them has been somewhat different from that of the other textile industries. Indices of world crops of flax, hemp, jute and other hard fibres are given in Appendix I, Table 1, and indices of activity in the connected industries in Appendix II, Table 3 (group IV). For some countries, the most important of which is the United Kingdom, only a composite index for the whole group is available.

Flax and Linen. — The world flax crop in 1935 was the largest since 1925. The U.S.S.R. crop in 1935 was (as it had been in 1931 and 1933) almost double that of 1926. In the rest of Europe, the expansion of flax-growing continued in 1935. Acreage and crops increased in all the major producing countries — most in Germany (155%). This increase was largely caused by the vogue for linen in furnishings, drapery and clothing. The linen industry was very active in 1934 in many countries, and such indices as are available point to further progress realised in 1935. The growth of the linen industry in the principal flax-exporting countries also continued.

Hemp. — The world's hemp crop, after a contraction during six years in succession, recovered slightly in 1935, but still remained far below the average pre-depression level. To this decline the U.S.S.R., the largest supplier, contributed most, and the area under hemp was further reduced in that country in 1935. The total crop of the rest of Europe exceeded that of the U.S.S.R. in 1934 for the first time. The greatest extension of hemp-growing took place in Italy and Yugoslavia.¹

Hard Fibres. — After the Indian restriction scheme had heavily curtailed the *jute* crop in 1931, there was an advance which was only checked in 1935, when the area was reduced, through Government intervention, by 27% and the crop fell off by 25%. This was below the requirements of the consumers. The jute industry in India, which is the most important manufacturer and exporter of jute goods, was also subjected to a restriction scheme in 1931. New jute mills were formed outside the scheme, however, and the looms sealed up in 1931 were gradually unsealed from November 1934 to February 1936, although working hours continued to be subject to restriction.

Sisal hemp (agave)² has been largely substituted for other cordage fibres during the depression. Compared with the 1925-1929 average, production of sisal was in 1935 44% higher, while that of *Manila hemp* was 3%, that of *Mauritius hemp* 49% and that of *New Zealand hemp* (also called flax) 77% lower. Japan, the main consumer of certain varieties of sisal and Manila hemp, continued to increase her purchases in 1935. Activity in the United States sisal (including henequen) industry recovered in that year from the low level reached in the previous year. Imports into Europe fell off slightly in 1935, but there was a general clearance of stocks previously accumulated.

Wool.

Raw Wool. — The estimated production of raw wool (greasy basis) and the stocks of raw wool and of wool tops are shown below. The five "major exporters" are Australia, Argentina, the Union of South Africa, New Zealand and Uruguay. Europe and the United States are the two principal consuming areas which supplement domestic production by imports; production in the U.S.S.R. is given separately, owing to the exceptional reduction of its wool clip. The stocks of raw wool refer to three of the major exporting countries — Australia, New Zealand and South Africa — and those of wool tops to the principal combing establishments in the European continent. The following figures are in metric tons (000's):

¹ Italy decreed a ban on exports of hemp in November 1935.

² For the delimitation of this product, see Appendix I, Table 1.

| | Average 1925/29 | Average 1930/34 | 1930 1930/31 | 1931 1931/32 | 1932 1932/33 | 1933 1933/34 | 1934 1934/35 | *1935 1935/36 |
|------------------------------------------|--------------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| Production (greasy basis) : | | | | | | | | |
| Five major exporters | 868 | 938 | 913 | 946 | 989 | 930 | 912 | 879 |
| Europe (excluding U.S.S.R.) | 261 | 253 | 251 | 254 | 255 | 256 | 250 | 253 |
| United States | 163 | 204 | 197 | 211 | 200 | 209 | 204 | 205 |
| World (excluding U.S.S.R.) | 1,512 | 1,608 | 1,579 | 1,619 | 1,645 | 1,607 | 1,592 | 1,580 |
| U.S.S.R. | 166 | 85 | 137 | 99 | 65 | 62 | 64 | 76 |
| Stocks (July 1st) : | | | | | | | | |
| Raw wool (3 exporters) | | 62 | 55 | 59 | 85 | 44 | 65 | 41 |
| Wool tops (European continent) | | 26 | 19 | 22 | 30 | 31 | 30 | 23 |

During the 1935/36 season, the clips of the major exporters, except the Union of South Africa decreased; those of Europe, including the U.S.S.R., as well as exports from China, increased.

The changes in apparent consumption may be estimated from the statistics relating to the aggregate supplies of raw wool retained in the nine principal consuming countries apart from the U.S.S.R.;¹ the resulting index has been given in Table 13 above. While world production (excluding the U.S.S.R.) decreased slightly from 1933 to 1935, consumption of the nine principal countries in 1935 was 11% above that in 1934, but 7% below that in 1933, which was a record high level. These variations are reflected in the stock figures given above. Germany and Italy were the only major consuming countries where the amount of wool retained² declined in 1935; in both, stringent import control is resulting in the increased use of wool substitutes³ and of mixtures with other fibres and recovered wool. Estimated supplies of wool retained in the U.S.S.R. fell off by 59% between 1929 and 1934, but increased by 24% in 1935.

Recovered Wool. — The above statistics omit wool recovered from rags, which makes an appreciable — and increasing — contribution to the raw material supply. It is estimated that the United Kingdom generally consumes over 45,000 metric tons of recovered wool per annum; between 1933-1935, this amount increased. Germany and Italy have also considerably increased the use of recovered wool. Available supplies in Germany increased from 26,000 tons in 1928 to some 32,000-36,000 in 1935; Italian imports of wool rags increased nearly fourfold between 1932 and 1934. With the scarcity of domestic raw materials resulting from the sharp reduction in sheep population, the U.S.S.R. has also increased her imports of rags.⁴ While sterling prices of raw wool in London in January 1936 were only 20-30% higher than in January 1931, those of various kinds of woollen rags were 30-100% higher.

Mohair. — Of the minor animal fibres, the most important is mohair (the hair of the Angora goat), mainly produced in the United States, British South Africa and Turkey. Mohair production remained during 1930-1934 below the pre-depression level but recovered appreciably in 1935.

Wool Textile Industry. — Annual indices of the activity in the wool textile industry will be found in Appendix II, Table 3 (group V) and quarterly indices for some countries in Table 19 below. These tables do not fully reflect the recent development of the industry in the wool-producing countries, which are now consuming an increasing quantity of their own wool. Australia and Argentina in particular have built up modern industries. Changes of fashion in the East, where woollen goods enjoy a growing popularity, have given an added stimulus to the development of the industry in Japan and China.

¹ The United Kingdom, France, the United States, Germany, Japan, Italy, Belgium, Poland, Czechoslovakia. These countries held, on the average for 1928-1934, 73% of the actual weight of total estimated supplies of wool available in consuming countries. Imperial Economic Committee, *World Consumption of Wool, 1928-1935* (London, 1936), page 296; *Wool Intelligence Notes*, Vol. III, No. 12.

² Net imports plus domestic production.

³ Germany is developing the "Vistra" fibre, a cellulose product, and Italy a new artificial fibre — "Lanital" — obtained from caecium.

⁴ *World Consumption of Wool, 1928-1935*, pages 18, 82, 98, 106.

Table 19. — QUARTERLY INDICES OF ACTIVITY IN THE WOOL INDUSTRY.
Average 1925-1929 = 100.

| Country | 1931 | 1932 | 1933 | 1934 | | | | 1935 | | | | 1936 |
|-------------------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Average of quarters | | | I | II | III | IV | I | II | III | IV | I |
| Belgium | 80 | 66 | 81 | 64 | 20 | 36 | 56 | 60 | 80 | 68 | 92 | 91 |
| Czechoslovakia | 101 | 83 | 84 | 104 | 107 | 83 | 66 | 70 | 78 | 85 | 95 | 107 |
| France | 83 | 73 | 90 | 89 | 70 | 60 | 68 | 71 | 71 | 78 | 80 | 84 |
| Hungary : Spinning ^a | (126) | (134) | (177) | (236) | (233) | (270) | (256) | (232) | (212) | (255) | (230) | (254) |
| Italy ^b | (83) | (76) | (83) | (84) | (80) | (79) | (81) | (86) | (89) | (92) | . | . |
| Spain | 132 | 140 | 117 | 122 | 116 | 109 | 99 | 114 | 116 | 133 | 112 | 113 |
| United States | 85 | 66 | 90 | 78 | 70 | 57 | 77 | 106 | 128 | 134 | 129 | 113 |
| Chile ^d | (228) | (354) | (315) | (249) | (381) | (389) | (298) | (285) | (412) | (395) | (383) | (328) |
| Japan : Spinning | 189 | 205 | 237 | 228 | 232 | 223 | 203 | 192 | 224 | 244 | 244 | 231 |
| Weaving | 99 | 105 | 82 | 62 | 65 | 73 | 77 | 77 | 80 | 79 | 71 | 71 |

^a Base : 1929. ^b Base : 1928-1929. ^c Average of two months. ^d Base : 1927-1929.

Silk.

Raw Silk. — After an increase during three years in succession, the world's raw silk output fell off heavily in 1935. This decrease was mainly due to Japan, whose production normally represents about four-fifths of all silk produced outside China. The European production declined, and was 47% lower in 1935 than in 1932. On the other hand, Chinese exports recovered. Visible stocks were gradually reduced during 1935 and the early part of 1936.

Silk Textile Industry. — The activity in the silk textile industry in the United States, the largest customer of Japanese raw silk, touched a low point in the third quarter of 1934, and, after a subsequent increase, fell back to that low point in the first quarter of 1936. The European silk industry as a whole, stimulated by the low prices of raw silk, continued during 1935 the recovery started in 1934. The progress was, however, slight in the three old silk spinning and weaving countries : France, Italy and Switzerland.

Artificial Textiles.

Rayon. — World production of rayon or artificial silk has made striking headway each year during the depression, increasing from 195,840 metric tons in 1929 to 361,940 tons in 1934 and 462,000 tons in 1935. The United States has remained the largest producer, but Japan has realised the most rapid progress. In 1929, the United States produced 55,100 tons and Japan 11,700 tons ; in 1935, the corresponding figures were 116,400 and 98,600 tons. The major European producers — Italy, the United Kingdom, Germany and France — reached new records in 1935 (judging Italian production on the basis of eight months). Some minor European producers (Austria, Netherlands, Switzerland) experienced a setback. Further noteworthy progress has been made in the utilisation of rayon for dress materials, linings, furnishings, hosiery, etc.

Diagram 12.
WORLD SUPPLY OF RAW SILK.

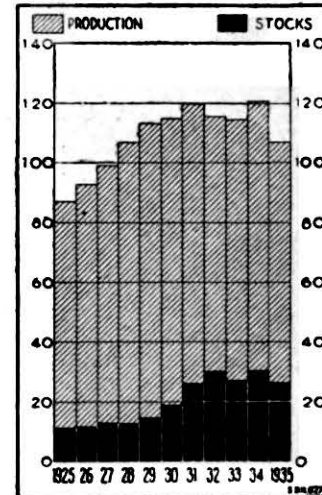


Table 20. — QUARTERLY INDICES OF ACTIVITY IN THE NATURAL SILK INDUSTRY.
Average 1925-1929 = 100.

| Country | 1931 | 1932 | 1933 | 1934 | | | | 1935 | | | | 1936 |
|--------------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Average of quarters | | | I | II | III | IV | I | II | III | IV | I |
| France | 61 | 35 | 42 | 47 | 47 | 42 | 43 | 51 | 50 | 49 | 48 | 40 |
| Greece | 240 | 296 | 288 | 273 | 411 | ... | ... | ... | ... | ... | ... | ... |
| Italy (spinning)* | (83) | (46) | (51) | (25) | (38) | (59) | (70) | (65) | (63) | (14) | ... | ... |
| (weaving)* | (89) | (68) | (79) | (85) | (88) | (76) | (76) | (85) | (80) | (75) | ... | ... |
| Portugal* | (181) | (148) | (265) | (427) | (576) | (625) | ... | (85) | ... | ... | ... | ... |
| Roumania* | (183) | (191) | (274) | (256) | (297) | (300) | (242) | (239) | ... | ... | ... | ... |
| Switzerland | 41 | 28 | 24 | 33 | 32 | 36 | 23 | 30 | 27 | 41 | 51 | 32 |
| United Kingdom* | (119) | (126) | (136) | (157) | (166) | (193) | (182) | (185) | (179) | (183) | (205) | (191) |
| United States (deliveries) | 108 | 100 | 86 | 86 | 83 | 73 | 96 | 93 | 85 | 94 | 90 | 73 |
| Japan (weaving)* | (102) | (108) | (120) | (126) | (129) | (127) | (138) | (125) | (138) | (125) | (106) | (76) |

* Base : 1928. * Average of two months. * Base : 1930. * Base : 1927-1929. * Base : 1924, 1927-1929 (Board of Trade).

Staple Fibre. — The outstanding feature of the artificial textile trade in 1935 was the sharp increase in the production of staple fibre. Staple fibre (also called "fibro") is produced from the same materials as rayon, but instead of being made in continuous filaments is cut into short staples so as to be similar to cotton fibre and suitable for spinning on cotton and worsted machinery. The development in the principal producing countries and in the world will be seen from the following figures, based on unofficial trade estimates:¹

| | 1929 | 1932 | 1933 | 1934 | 1935 |
|--------------------------|-------|-------|--------|--------|--------|
| Italy | 772 | 4,250 | 4,990 | 9,979 | 34,927 |
| Germany | 1,587 | 2,994 | 4,490 | 9,480 | 24,040 |
| Japan | . | 249 | . | 2,141 | 5,443 |
| France | . | 748 | 998 | 1,996 | 3,629 |
| United Kingdom | 1,179 | 998 | 1,247 | 1,497 | 3,223 |
| United States | 227 | 499 | 953 | 998 | 1,814 |
| U.S.S.R. | . | . | . | 520 | ... |
| Poland* | . | 100 | 300 | 400 | 300 |
| World* | 4,100 | 9,800 | 13,000 | 25,400 | 74,000 |

* Provisional estimates.

The growth of the staple fibre industry has been particularly striking in Italy and Germany, where imports of natural textile materials have been restricted. Reduced prices in conjunction with technical progress have undoubtedly favoured the industry in other countries. The price of staple fibre in London, after the removal of the excise duty in September 1935, fell off to that of fine Egyptian cotton and appreciably below the price of wool.

LEATHER.

Hides and Skins. — The statistics available relating to the production of hides and skins are not sufficiently comprehensive to permit the inclusion of these products in the world index of primary production. The United States Department of Commerce has published the following estimate of the number of certain varieties of hides and skins tanned in the world during 1929 and 1934:²

¹ *Textile Organon* (New York).

² U.S. Department of Commerce, *Leather: World Production and International Trade* (Trade Promotion Series No. 157, Washington, 1935).

| | 1929 | 1934 |
|--------------------------------|-------------|-------------|
| | Number | Number |
| Cattle hides | 101,614,000 | 91,897,000 |
| Calf-skins | 74,650,000 | 69,115,000 |
| Goat and kid skins | 120,114,000 | 101,002,000 |
| Sheep and lamb skins | 96,211,000 | 92,016,000 |

Leather and Products. — Marked changes have occurred during the past ten years in the world leather production. Prior to 1925, four countries — the United States, Germany, France and the United Kingdom — were credited with accounting for about 70% of the total world output and accounted for some 80% of the leather entering world trade. In 1934, these four leading producers accounted for less than 55% of the total output. Many countries had in the meantime developed a tanning industry, frequently with direct or indirect Government aid, in order to become self-sufficient in leather. This development caused a heavy contraction in international trade in leather, although an increase was registered between 1931 and 1934. The four leading producers accounted in 1934 for less than 60% of the total world trade.¹

Annual indices relating to the leather industry and the principal consumer, the boot-and-shoe industry, will be found in Appendix II, Table 3 (group VII), and quarterly indices for some countries in Table 21 below.

Separate indices available for the leather and boot-and-shoe industries show that the former has, in general, fared less well than the latter. The production of footwear has been well maintained in most countries during the depression, and increased as a rule in 1935; it contracted, however, in Czechoslovakia (about 7%) and Germany (about 10%).

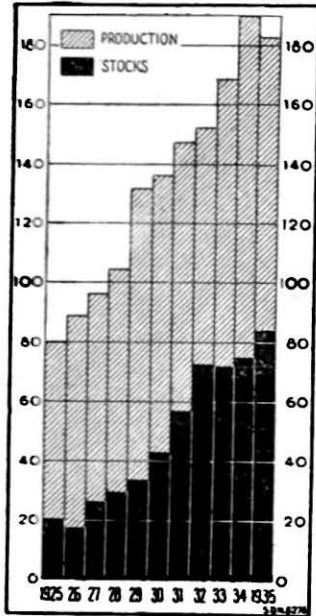
Table 21. — QUARTERLY INDICES OF ACTIVITY IN THE LEATHER AND BOOT-AND-SHOE INDUSTRIES.
Average 1925-1929 = 100.

| Industry and Country | 1931 | 1932 | 1933 | 1934 | | | | 1935 | | | | 1936 |
|--------------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Average of quarters | | | I | II | III | IV | I | II | III | IV | I |
| <i>Leather :</i> | | | | | | | | | | | | |
| Czechoslovakia | 92 | 79 | 81 | 87 | 126 | 110 | 83 | 71 | 74 | 71 | 92 | 98 |
| Denmark * | (94) | (115) | (148) | (144) | (148) | (151) | (158) | (157) | (160) | (161) | (159) | (155) |
| France | 91 | 81 | 93 | 90 | 85 | 81 | 71 | 74 | 77 | 79 | 77 | 80 |
| Greece | 91 | 74 | 88 | 84 | 76 | 96 | 96 | 90 | 82 | 71 | 76 | 89 |
| Poland | 84 | 85 | 91 | 90 | 103 | 109 | 114 | 110 | 113 | 110 | 115 | 117 |
| <i>Leather and Boots and Shoes :</i> | | | | | | | | | | | | |
| Finland * | (90) | (95) | (107) | (122) | (135) | (128) | (136) | (169) | (157) | (160) | (167) | ... |
| United Kingdom * | (97) | (94) | (104) | (110) | (105) | (96) | (107) | (117) | (116) | (110) | (122) | (127) |
| United States | 89 | 84 | 96 | 103 | 111 | 94 | 93 | 107 | 109 | 104 | 111 | 111 |
| <i>Boots and Shoes :</i> | | | | | | | | | | | | |
| Germany | 102 | 93 | 101 | 112 | 118 | 110 | 113 | 103 | 109 | 94 | 101 | ... |
| Portugal * | (81) | (83) | (77) | (54) | (92) | (88) | (106) | (79) | (99) | (91) | (88) | (121) |
| Canada | 89 | 88 | 94 | 85 | 107 | 93 | 82 | 105 | 118 | 108 | 95 | 117 |
| United States | 93 | 92 | 103 | 109 | 121 | 100 | 95 | 113 | 116 | 110 | 116 | 118 |
| Chile * | (57) | (63) | (58) | (49) | (76) | (74) | (80) | (69) | (77) | (64) | (66) | (60) |

* Basis : 1927-1929. * Average of January-February (March, trade dispute). * Basis : 1926-1929.
* Basis : 1924, 1927-1929 (Board of Trade). * Basis : 1930.

¹ U.S. Department of Commerce, *Leather : World Production and International Trade* (Trade Promotion Series No. 157, Washington, 1935).

Diagram 13 A.
WORLD SUPPLY OF
RUBBER.



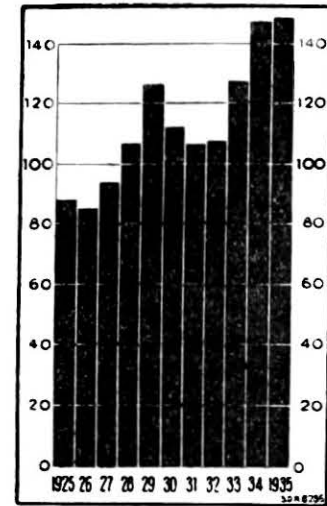
RUBBER.¹

Crude Rubber. — The rubber restriction scheme came into operation on June 1st, 1934. The “exportable amount permissible” worked out at an average of 87.5% of the standard for the last seven months of 1934, at 67.5% for 1935, at 60% for the first half and 65% for the second half of 1936. The control of the production of native rubber in the Netherlands Indies has raised certain difficulties, and, in order to cope with them, the quotas of that country for 1936-1938 were increased.²

World shipments in 1935 were 15% lower than in 1934, the record year, and in the first half of 1936 13% lower than in the corresponding period of 1935. The amount exportable from the regulated area in 1936 works out at about 835,600 metric tons; shipments from unregulated areas are estimated at 25,400 tons, which makes a total of 861,000 tons.

Diagram 13 B.

WORLD CONSUMPTION OF
RUBBER.



World absorption of rubber has increased sharply in recent years. It exceeded the 1929 level in 1933 and reached a new peak in 1935. In contrast with 1934, however, absorption of countries outside the United States declined in 1935. “Absorption” represents actual consumption by manufacturers only in the case of the United States; for the United Kingdom, net imports adjusted for variations in visible stocks are recorded, but for other countries only unadjusted net imports.

| | Metric tons (000's) | | | | | | | | |
|--------------------------------|----------------------|----------------------|------|------|------|------|------|-------|------|
| | Average 1925-1929 | Average 1930-1934 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
| World shipments | 671 | 855 | 882 | 839 | 813 | 720 | 867 | 1,034 | 887 |
| World “absorption” | 646 | 783 | 818 | 726 | 696 | 702 | 836 | 954 | 958 |
| Of which: | | | | | | | | | |
| United States | 412 | 395 | 475 | 382 | 361 | 342 | 419 | 472 | 500 |
| Other countries | 234 | 388 | 343 | 344 | 335 | 360 | 417 | 482 | 458 |
| World stocks (end of year) . . | 270 | 648 | 385 | 511 | 650 | 649 | 674 | 757 | 672 |

As world shipments declined while absorption increased, world stocks (outside and inside regulated areas and afloat) fell off by 11% during 1935. Two-thirds of this decline occurred in the last quarter of the year. Expressed in terms of months’ absorption on the average of the twelve previous months, these stocks decreased from 8.7 at the end of 1934 to 8.5 at the end of 1935, and further to 6.3 at the end of June 1936.

Reclaimed Rubber. — In the United States, consumption of rubber reclaimed from old material has increased slightly during recent years, amounting in 1933 to less than 20%, in 1934 to 22%, and in 1935 to 23% of an increasing amount of crude rubber consumed. The corresponding figure for the United Kingdom in 1935 was 8%.

¹ The data concerning rubber have been taken from the International Rubber Regulation Committee’s *Statistical Bulletin* (London), converting long tons to metric tons.
² Minor concessions have been made also to Siam and India.

Rubber Goods. — National indices given in Appendix II, Table 3 (group VIII), show the rapid growth of the rubber industry during 1935 in the United States, Japan, and several European countries, producing mainly rubber footwear. An increasing proportion of the rubber supplies are being absorbed for purposes other than the manufacture of pneumatic casings and tubes.

WOOD, WOOD PRODUCTS AND PAPER.

Wood. — The available information concerning the total production of wood is far from comprehensive. An estimate of the world "commercial cut" of softwood¹ and its utilisation is shown below. The figures refer to annual averages for the period 1925-1927, which may be considered as "normal" post-war years (cubic metres, 000'000's and percentages):²

| <i>Commercial Cut</i> | | | <i>Utilisation</i> | | |
|-------------------------|--------------|------------|--------------------------------------------------|------------|------------|
| Europe | 175.6 | 37.4 | Sawn wood | 296 | 63.3 |
| North America | 247.2 | 52.5 | Other wood (logs, pit-props, sleepers) | 110 | 23.5 |
| South America | 3.0 | 0.6 | Wood pulp | 62 | 13.2 |
| Africa | 1.0 | 0.2 | | | |
| Asia | 40.9 | 8.7 | | | |
| Oceania | 2.7 | 0.6 | | | |
| World | 470.4 | 100 | Total | 468 | 100 |

The quantum of world trade in wood products (converted to round wood) represented in the period considered about 6% of total production. European soft-wood exports represented about 37% of production.

Wood is represented in the world index of primary production by two semi-manufactured products — sawn and planed soft-wood and wood pulp.

*Sawn and Planed Soft-wood.*³ — The estimate of production of sawn and planed soft-wood, covering about 99% of world production, is based on available production data, except that the variations of European production have had to be estimated on the basis of export statistics.

| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|---------------------------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Europe (excluding U.S.S.R.) | 100 | 83 | 65 | 56 | 69 | 76 | 69 |
| U.S.S.R. | 132 | 174 | 190 | 194 | 181 | 198 | 207 |
| North America | 102 | 74 | 48 | 31 | 41 | 42 | 42 |
| Asia (Japan) | 106 | 100 | 104 | 107 | 120 | 132 | 136 |
| Oceania | 86 | 78 | 48 | 43 | 54 | 67 | 70 |
| World | 103 | 87 | 69 | 57 | 67 | 72 | 71 |

The slight setback in world production in 1935 was mainly due to the contraction of the European timber trade. Exports from the chief producing countries, except the U.S.S.R., were curtailed according to the recommendation of an international conference held at Vienna in October 1934; imports fell off, for various reasons, in France, Switzerland, Germany and Italy.

An international trade Convention concerning the restriction of the European timber exports was agreed upon by the principal European exporters, including the U.S.S.R., in Copenhagen, and entered into operation on December 1st, 1935.⁴ European exports continued to fall off during the first half of 1936. Meanwhile, demand revived in most consuming countries, the heavy stocks accumulated during 1934/35 were reduced, and prices recovered.

¹ By "commercial cut" is understood total cut less fuel wood and wood for rural domestic use, which represent, in the principal wood-producing countries, about 40-50% of the total.

² Estimates of Th. Streyffert in *Betänkande angående råvaruförsörjning, produktion och arbetarantal m.m. vid skogsindustrierna* (Swedish Official Enquiries, 1935/36, Stockholm, 1935).

³ Detailed statistics and information concerning soft-wood will be found in the reports of the International Timber Committee (Vienna), *Monthly Statistical Bulletin* and *Informationsdienst*.

⁴ Norway and the Baltic countries are not parties to this Convention.

National indices of activity in the timber industry will be found in Appendix II, Table 3 (group IX). It should be noted that the scope of these indices varies; however, most of them refer to sawmills.

*Wood Pulp.*¹ — Wood pulp has fared better than sawn wood during recent years, owing to the maintenance of the demand for newsprint, the increased use of paper and paper-board in packing and the steady advance of the artificial textile industry. An annual index of world production is given in Table 13. This index rose above the 1929 level in 1934; according to the incomplete information available, a new peak was reached in 1935. European production has risen more than has North-American, which did not yet reach the 1929 level in 1935. To the increase in Europe, Finland and Sweden have contributed most, but, among the minor producers, France and the United Kingdom have also appreciably expanded their output. In all countries, chemical pulp production has increased more than mechanical. Both the European "Sulphite Pulp Suppliers" and the North-European Mechanical Pulp Cartel restricted production in 1935.

*Paper.*¹ — The general trend of world production of paper and paper-boards shows a rough similarity to that of wood pulp. The similarity is not complete, however: first, because part of wood pulp is absorbed by the artificial textile industry, and secondly, because the paper industry also uses rags and waste, which represented about 19% of total supplies in 1931, and an increasing proportion in later years. The first factor has apparently outweighed the second, as world paper production in 1934 was still 2% below the 1929 level, while world wood-pulp production was 4% above that level.

National indices of activity in the paper and printing industries, given in Appendix II, Table 3 (group X), bear witness to further progress during 1935 in practically all countries covered. The United Kingdom, France, the U.S.S.R., Japan, and a number of minor producing countries, exceeded the 1925-1929 average by 40% or more.

FUELS AND POWER.

The scope of the fuel and power index has been extended by the inclusion of natural gas and of electrical energy derived from water power.² Coal still dominates the index, but its share in the aggregates on which the index is based fell from an average of 66% for 1925-1929 to 57% in 1935. Most of this ground has been gained by petroleum, and, to a lesser extent, by natural gas and hydro-electric energy. Alcohol, not included in the index, has also made considerable headway as a source of power, being either used as such or mixed with petroleum products.

Coal. — The recent changes in the output of coal will be seen from the following figures (metric tons, 000,000's):

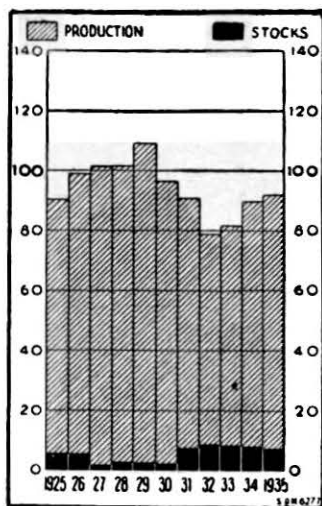
| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1935 | 1936 |
|-------------------------|---------|---------|---------|-------|---------|---------|---------|---------------|-------|
| | | | | | | | | 1st half-year | |
| Europe (excl. U.S.S.R.) | 605.7 | 560.8 | 505.9 | 458.9 | 464.3 | 498.3 | 506.7 | 247.7 | 258.4 |
| U.S.S.R. | 41.8 | 48.8 | 56.8 | 64.4 | 76.0 | 93.6 | 108.9 | 48.4 | 60.2 |
| North America | 564.6 | 497.4 | 409.2 | 333.7 | 355.3 | 387.5 | 390.7 | 201.8 | 211.2 |
| Other areas | 120.5 | 117.4 | 107.9 | 103.3 | 111.9 | 122.6 | 127.7 | 37.4 | 40.3 |
| World . . . | 1,332.6 | 1,224.4 | 1,079.8 | 960.3 | 1,007.5 | 1,102.0 | 1,134.0 | 535.3 | 570.1 |

The rise in world output in 1935 did not exceed 3% against an increase of 9% in the previous year. All the principal areas shown above contributed to the rise, the U.S.S.R. most and North America least. In Europe, where the greater part of production is subject to strict control, relatively great increases in Germany and Spain offset decreases in France, the Netherlands and Poland.

¹ For production statistics, see the *Statistical Year-Book of the League of Nations, 1935/36*, Tables 57 and 58.

² Hydro-electric energy has been weighted, for the purposes of the group index, by the value of coal needed to produce one unit of electrical energy, and not by the actual selling-price.

Diagram 14.
SUPPLY OF COAL
IN CENTRAL EUROPE.



United Kingdom production increased slightly, while that of Belgium and Czechoslovakia remained practically stationary.

Statistics of coal stocks in three important European areas (Germany including the Saar, Belgium and Polish Upper Silesia) show a drop of over 4 million tons or 25% during 1935. Consumption in these areas appears to have again more than kept pace with production. On the other hand, although production fell off in France, stocks increased during most of 1935, though they declined again towards the end of the year. The rise in consumers' stocks in the United States was checked during the first quarter of 1936.

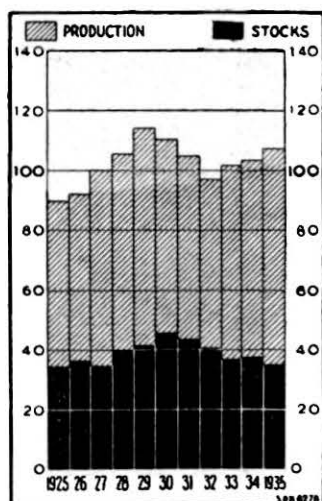
Further progress has been made in the production of motor fuel from coal and lignite by the low-temperature carbonisation and hydrogenation methods. In addition to Germany and the United Kingdom, where the production of synthetic gasoline started earlier, hydrogenation plants were opened or begun during 1935 in France, Italy, Spain and Japan.

Coke. — The manufacture of coke by coke-ovens and gas-works absorbs probably not less than 15% of world coal output. The changes in world output of coke-oven coke are shown below :

| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|-------------------------------------|---------|---------|--------|--------|--------|---------|---------|
| Metric tons (000's) . | 145,650 | 128,500 | 96,300 | 79,250 | 89,900 | 106,500 | 115,300 |
| Percentage of the average 1925-1929 | | 119 | 105 | 79 | 65 | 73 | 87 |
| | | | | | | 87 | 94 |

This class of coke is mainly utilised in metallurgy ; the above index has therefore naturally followed a trend very similar to that of the metal index.

Diagram 15.
PETROLEUM SUPPLY
IN THE U.S.A.



Petroleum. — World output of crude petroleum expanded in 1935 by 8% and exceeded the 1929 level by 10%. In contrast to 1934, the increase in 1935 was chiefly attributable to the United States. Stringent Federal control of production continued in 1935, but the official figures are believed to under-state output. Iraq became for the first time an important factor in world petroleum production. The output of the U.S.S.R. also increased, but exports fell off by 22%. Mexico and Venezuela registered only slight increases, and Roumania a slight setback (1%) for the first time since the war.

| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|---------------------------------|-------------------------|------|------|------|------|------|------|
| | Metric tons (000,000's) | | | | | | |
| <i>Petroleum production :</i> | | | | | | | |
| United States . . . | 138 | 123 | 117 | 108 | 123 | 123 | 135 |
| Other countries . . . | 68 | 73 | 72 | 72 | 74 | 85 | 91 |
| World . . . | 206 | 196 | 189 | 180 | 197 | 208 | 226 |
| Percentage of average 1925-1929 | | 119 | 113 | 109 | 104 | 114 | 120 |
| | | | | | | 120 | 130 |

Natural Gas. — The statistics refer to natural gas actually utilised in lighting and fuel or for the production of natural gasoline, etc. Known world production — of which nearly nine-tenths are attributable to the United States — exceeded the 1929 level by 6% in 1935.

*Petroleum Products and Related Fuels.*¹ — World production and consumption of motor fuel, kerosene, gas and fuel oil, lubricants and miscellaneous petroleum and related products² have moved during the last five years as follows (barrels, 000,000's):

| | World production | World consumption | Excess production over consumption |
|----------------|------------------|-------------------|------------------------------------|
| 1931 | 1,432 | 1,417 | 15 |
| 1932 | 1,362 | 1,348 | 14 |
| 1933 | 1,467 | 1,407 | 60 |
| 1934 | 1,563 | 1,510 | 53 |
| 1935 | 1,691 | 1,593 | 98 |

The consumption figure for 1935 exceeded that for 1934 by 5.5% and was a record. Consumption in the United States increased about 6.1% and in other countries taken together by about 4.1%. Thanks to increased exports, storage in the United States was reduced, but the reduction was 50% less than in 1934. Storage in countries outside the United States increased by more than 25%.

World consumption of motor fuel, which has in recent years represented nearly 40% of all products consumed, rose by 6.1% in 1934 and by a further 6.5% in 1935, when it reached a new peak.

Electricity. — The total output recorded in statistics may be roughly estimated at some 275,000 million kwh. in 1929 and in the neighbourhood of 320,000 million kwh. in 1935.³ The movement of electricity production is shown by the following indices (average 1925-1929 = 100):

| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|-----------------------------------|------|------|------|------|------|------|------|
| Europe (excl. U.S.S.R.) | 120 | 121 | 114 | 112 | 120 | 132 | 141 |
| U.S.S.R. | 143 | 192 | 245 | 310 | 375 | 482 | 504 |
| North America | 122 | 123 | 117 | 114 | 115 | 123 | 123 |
| Oceania | 122 | 130 | 131 | 136 | 145 | 155 | ... |
| World | 122 | 124 | 119 | 119 | 125 | 138 | 141 |

Available information suggests that about 45% of the known total output has been generated by hydro-electric plants in recent years. This part of electricity production is included in the world index of primary production.

The European production of electricity in 1935 exceeded that of 1929 by 18%. The expansion during this six-year period was most rapid in the U.S.S.R. (315%), Finland (110%), and the United Kingdom (49%). The United States output exceeded the 1929 level by about 2½%. Japan's production in 1934 surpassed that of France and Italy and was but little behind that of Canada, the U.S.S.R. and the United Kingdom.

Owing to the steady increase in the use of electricity, the electrical manufacturing industry, especially the light apparatus branch, has increased its activity, as will be seen from Appendix II, Table 3 (group XII).

METALS.

The metal index included in the world index of primary production comprises the pig-iron and ferro-alloys not used for making steel,⁴ crude steel (ingots and castings), and fourteen non-ferrous metals. Steel derived from scrap is included in the statistics of steel output. In the present index, pig-iron and steel together account for about 74% of the basic aggregates.

¹ *The Petroleum Times* (London), March 14th, 1936 (V. R. Garfias and R. V. Whetsel, Cities Service Company).

² Motor spirit and refined oils are derived, in addition to crude petroleum and natural gas, from coal and lignite, shale and alcohol.

³ Cf. *Statistical Year-Book of the League of Nations, 1935/36*, Table 65. The statistics frequently omit the generation of current by industrial establishments for their own use and therefore under-state total output.

⁴ This part varies between 15 and 20% of the total world output.

The recovery in metal production, which began in 1933, continued in 1935, the world index rising by a further 20% to a point almost 82% above the index for 1932, though still about 5% below the quinquennial average 1925-1929. National recovery programmes, particularly large construction schemes, together with rearmament, played an important part in this revival.

The following figures show ferrous and non-ferrous metals separately (average 1925-1929 = 100) :

| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|------------------------|-------|-------|------|------|------|------|------|
| Pig-iron and steel . . | 116.1 | 91.9 | 67.2 | 48.7 | 64.5 | 78.1 | 94.6 |
| Non-ferrous metals . . | 114.9 | 103.0 | 82.7 | 62.2 | 67.4 | 82.5 | 95.1 |

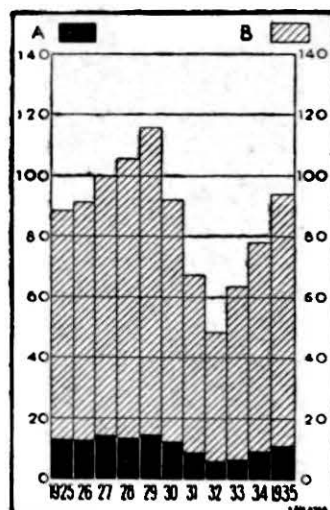
The more even development of non-ferrous metals is due to the fact that they enter to a greater extent into the manufacture of current consumption goods, and also to the heavy accumulation of stocks of non-ferrous metals up to 1932 and their subsequent reduction.

The mine and smelter production of metallic minerals and metals is also included in the national indices of production and consequently in the world industrial index given above. It is therefore convenient to review these industries together with the main metal-working industries.

Diagram 16.

WORLD PRODUCTION OF PIG-IRON (NOT USED FOR STEEL-MAKING) AND CRUDE STEEL.

A. Pig-iron. B. Steel.



Iron and Steel.

The annual world output of pig-iron (including ferro-alloys) and crude steel (ingots and castings) since 1929 has been as follows :

| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|---------------|-------------------------|--------|--------|--------|--------|--------|--------|
| | Metric tons (000's) | | | | | | |
| Pig-iron..... | 98,590 | 80,070 | 55,640 | 39,560 | 49,360 | 62,910 | 73,480 |
| Steel | 120,710 | 94,980 | 69,580 | 50,680 | 68,010 | 82,140 | 99,000 |
| | Average 1925-1929 = 100 | | | | | | |
| Pig-iron..... | 115 | 93 | 65 | 46 | 57 | 73 | 85 |
| Steel | 117 | 92 | 67 | 49 | 66 | 80 | 96 |

Production of steel in 1935 shows a sharper advance (20.5%) than that of pig-iron (16.8%), thus reverting to the long-term trend temporarily interrupted in 1934. The increased use of scrap for steel-making accounts for this trend.

The United States, by far the largest producer, increased pig-iron and steel output in 1935 by 32.4% and 30.8% respectively, thus raising their share in world pig-iron production from 26% to 30% and in world steel production from 32% to 35%. These percentages are still considerably below those of the quinquennium 1925-1929 — namely, 46%

and 49%. The motor-car industry not only continues to be the principal consumer of finished steel, but actually took 24% of all steel rolled — a record figure — against 21% in 1934.

All the major European producers of pig-iron, except France and Luxemburg, and of steel, except Luxemburg, expanded output in 1935. Germany (including the Saar) raised her production of pig-iron by 17%, of steel by over 20%, and is now the third largest pig-iron and second largest steel producing country in the world. The United Kingdom increased pig-iron output by nearly 8% and that of steel by over 11%, the latter being an all-time record, and now occupies second place in Europe (excluding the U.S.S.R.) for both pig-iron and steel production. Belgium registered smaller increases in both pig-iron (3.6%) and steel (2.8%), while Luxemburg experienced a setback, 4.2% for pig-iron and 4.9% for steel. Pig-iron production in France fell by 5.6%, but steel output increased 1.8%. The U.S.S.R. surpassed the record production of 1934 and continues to be the world's second largest producer of pig-iron and third largest producer of steel. In Sweden and in the principal producing countries outside Europe and North America, Japan, India and Australia, output of both pig-iron and steel was higher than in any previous year.

The production covered by the above statements represents an early stage in the process of manufacture. The subsequent phases — rolling and drawing of semi-finished and finished iron and

Table 22. — QUARTERLY INDICES OF PIG-IRON AND CRUDE STEEL PRODUCTION.
Average 1925-1929 = 100.

| Countries | 1932 | 1933 | 1934 | | | | 1935 | | | | 1936 | |
|---------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Average of quarters | | I | II | III | IV | I | II | III | IV | I | II |
| <i>Pig-iron.</i> | | | | | | | | | | | | |
| United States . . . | 22.8 | 34.7 | 43.1 | 59.9 | 33.4 | 30.8 | 51.0 | 51.9 | 53.1 | 64.6 | 61.9 | 80.3 |
| Germany * | 39.3 | 51.4 | 65.3 | 78.1 | 84.0 | 89.3 | 89.8 | 87.3 | 100.4 | 107.5 | 111.0 | 110.3 |
| U.S.S.R. | 214.3 | 250.3 | 315.0 | 367.1 | 385.4 | 394.2 | 405.8 | 434.2 | 449.4 | 452.4 | 487.6 | 505.4 |
| United Kingdom . . | 59.2 | 68.2 | 90.0 | 101.8 | 101.4 | 102.5 | 103.2 | 106.9 | 107.2 | 108.1 | 120.1 | 128.1 |
| France | 58.1 | 66.5 | 64.1 | 64.7 | 64.8 | 65.1 | 61.0 | 60.7 | 60.5 | 61.6 | 65.2 | 65.0 |
| Japan | 113.1 | 153.5 | 177.7 | 187.3 | 179.6 | 199.6 | 197.3 | 205.0 | 199.2 | 210.0 | 204.6 | 211.1 |
| Belgium | 78.4 | 78.3 | 78.3 | 84.8 | 84.5 | 84.1 | 83.3 | 89.2 | 86.9 | 90.0 | 94.0 | 81.7 |
| World | 45.8 | 57.2 | 67.4 | 81.2 | 70.4 | 71.3 | 80.3 | 82.1 | 85.5 | 93.2 | 94.8 | 104.4 |
| <i>Steel.</i> | | | | | | | | | | | | |
| United States . . . | 28.2 | 48.4 | 58.5 | 78.4 | 34.6 | 42.2 | 72.0 | 63.7 | 67.7 | 79.2 | 79.1 | 101.3 |
| Germany * | 44.5 | 57.2 | 74.8 | 85.4 | 88.3 | 93.0 | 94.5 | 93.6 | 106.7 | 110.5 | 114.4 | 115.2 |
| U.S.S.R. | 161.0 | 187.7 | 232.2 | 258.9 | 267.6 | 286.5 | 306.6 | 328.8 | 347.6 | 375.7 | 423.9 | 437.0 |
| United Kingdom . . | 68.7 | 91.6 | 117.8 | 117.8 | 110.9 | 116.7 | 123.9 | 127.2 | 126.5 | 137.2 | 148.0 | 152.3 |
| France | 64.6 | 74.8 | 69.8 | 70.9 | 70.6 | 70.5 | 66.8 | 72.2 | 73.6 | 74.5 | 76.7 | 77.2 |
| Japan | 138.2 | 178.3 | 204.4 | 209.4 | 203.2 | 238.9 | 253.2 | 264.7 | 253.5 | 260.6 | 280.4 | 286.9 |
| Belgium | 79.3 | 78.0 | 78.7 | 86.1 | 84.6 | 86.1 | 83.1 | 87.8 | 84.6 | 89.1 | 93.9 | 77.1 |
| World | 49.5 | 66.5 | 78.5 | 92.1 | 70.8 | 77.2 | 93.0 | 91.2 | 96.1 | 104.9 | 108.7 | 120.1 |

Note. — The absolute figures on which the indices are based are given in the *Monthly Bulletin of Statistics* (League of Nations). "World" covers sixteen countries representing 96.3% of the world's total output of pig-iron and 97.9% of that of crude steel in 1935.

* Including the Saar for purposes of comparability.

steel products — are shown in Table 23.¹ Owing to the exclusion of direct castings and the losses in the rolling process, these figures, despite the inclusion of a small quantity of finished iron, are distinctly lower than those for crude steel. The movement, however, is very similar.

Table 23. — PRODUCTION OF ROLLING-MILL PRODUCTS (FINISHED IRON AND STEEL).

| Country | Metric tons (000's) | | | | | | | Average 1925-1929 = 100 | | | | | | |
|---------------------|---------------------|--------|--------|--------|--------|--------|--------|-------------------------|-------|-------|-------|-------|-------|-------|
| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
| United States . . . | 41,728 | 29,987 | 19,484 | 10,619 | 17,004 | 19,274 | 24,439 | 113.8 | 81.8 | 53.1 | 27.9 | 46.4 | 52.5 | 66.4 |
| Germany * | 12,895 | 9,565 | 6,964 | 5,228 | 6,709 | 9,848 | 11,418 | 109.1 | 80.9 | 58.9 | 44.2 | 56.8 | 83.3 | 96.6 |
| U.S.S.R. | 3,836 | 4,570 | 4,085 | 4,289 | 4,882 | 6,734 | 9,000 | 135.4 | 161.3 | 144.1 | 151.3 | 172.3 | 237.6 | 317.6 |
| United Kingdom . . | 8,015 | 6,435 | 4,900 | 4,627 | 5,424 | 6,707 | 7,292 | 114.7 | 92.1 | 70.1 | 66.2 | 77.6 | 96.0 | 104.4 |
| France | 6,911 | 6,588 | 5,470 | 4,129 | 4,596 | 4,251 | 4,339 | 118.3 | 112.8 | 93.6 | 70.7 | 78.7 | 72.8 | 74.3 |
| Belgium | 3,268 | 2,723 | 2,286 | 2,084 | 2,148 | 2,264 | 2,357 | 118.8 | 99.0 | 83.1 | 75.8 | 78.1 | 82.3 | 85.7 |
| Total | 76,653 | 59,868 | 43,189 | 30,976 | 40,763 | 49,078 | 58,755 | 114.6 | 89.5 | 64.5 | 46.3 | 60.9 | 73.4 | 87.8 |

* Provisional figures.

* Including the Saar for purposes of comparability.

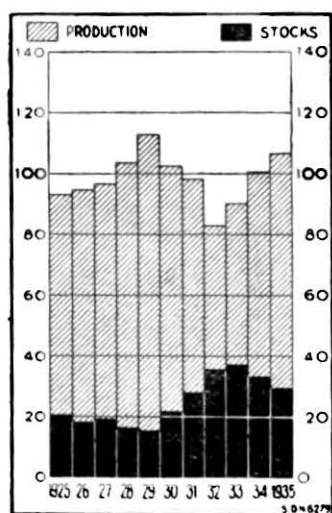
¹ Rolling-mill products comprise girders, railway material, plates, sections, rounds, hoops, strips, galvanised sheets, etc. Finished steel accounts for over 90% of rolling-mill products; in the most recent years, for over 95%, except in the U.S.S.R.

The adhesion of the United Kingdom until 1940 to the International Crude Steel Cartel has been confirmed after a probationary period.¹ The Cartel has also concluded agreements with Poland and the Union of South Africa.

Non-Ferrous Metals.

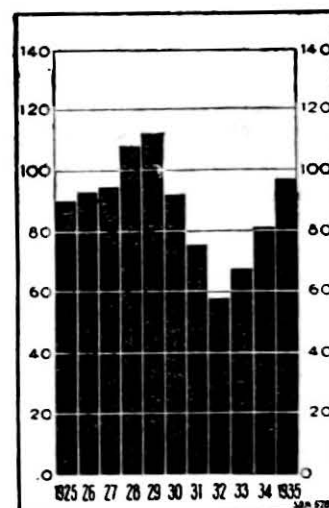
The index of non-ferrous metals has been modified, first, by the substitution of figures relating to metal content of ores mined for those concerning smelter production (except in the case of aluminium, for which figures relating to metal content do not exist), and secondly, by the inclusion of seven "minor metals". The statistics of production of metals in ore differ from those of smelter production in respect of the geographical distribution of output, and also inasmuch as part of the metals mined is not smelted but is transformed into metallic salts. While the statistics of production necessarily exclude metal derived from scrap, data relating to "apparent consumption" are mainly based on refinery production and trade in refined metal, which include a quantity of secondary metal.² For that reason, the consumption statistics are not strictly comparable with production, and indices are given below in preference to absolute figures. Figures of stocks usually refer to visible supplies of metal (whether in ore, in process or finished) with producers, in public warehouses and in transit. They do not always show the movement that would seem to be indicated by the trends of production and consumption.

Diagram 17 A.
WORLD SUPPLY
OF COPPER.



Copper. — The improvement in the world copper situation which started in 1934 continued during 1935. An international agreement providing for a curtailment of production entered into operation on July 1st, 1935.³ World production of copper in ore increased, however, by about 14% in 1935; this increase was due in the first place to the United States, which regained its position as the world's largest producer from Chile, where production only increased slightly, as it did also in Canada and the U.S.S.R. World consumption increased more than production, and stocks at the end of 1935 represented less than four months' supply at the current rate of consumption.

Diagram 17 B.
WORLD CONSUMPTION
OF COPPER.



| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|----------------------------------|------|------|------|------|------|------|-------|
| Average 1925-1929 = 100. | | | | | | | |
| <i>Production :</i> | | | | | | | |
| United States . | 113 | 80 | 60 | 27 | 22 | 27 | 42 |
| Rest of world . | 127 | 119 | 113 | 86 | 107 | 132 | 139 |
| World . | 120 | 99 | 87 | 57 | 65 | 80 | 91 |
| <i>Consumption :⁴</i> | | | | | | | |
| United States . | 120 | 87 | 65 | 36 | 41 | 45 | 62 |
| Rest of world . | 104 | 97 | 88 | 81 | 94 | 118 | 132 |
| World . | 112 | 92 | 76 | 59 | 67 | 81 | 97 |

¹ June 1935-August 1936.

² Secondary production of non-ferrous metals is of great importance in the United States, where secondary production represented the following percentages of primary production (in the case of tin, imports) in 1929, 1933 and 1934 :

1929 : copper 57%, lead 40%, zinc 23%, tin 35%, aluminium 43% ;
1933 : copper 135%, lead 82%, zinc 29%, tin 31%, aluminium 79% ;
1934 : copper 136%, lead 67%, zinc 18%, tin 57%, aluminium 125%.

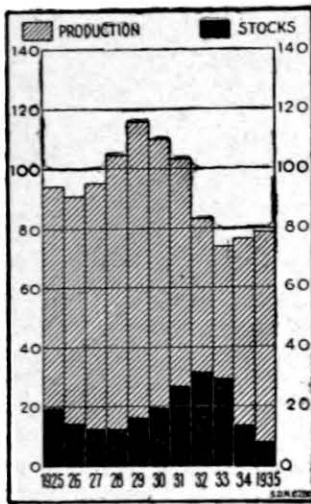
³ The United States, Canada, the U.S.S.R. and Japan are not parties to this agreement, but the first-named two countries have agreed to a reduction in exports.

⁴ Source : *American Bureau of Metal Statistics Year-Book, 1935* (New York, 1936).

Lead. — Although the price of lead and of silver, in conjunction with which lead is commonly mined, increased during 1935 more than the prices of other metals, world production of lead in ore increased in 1935 (about 9%) less than other non-ferrous metals (except quicksilver). This was largely due to an agreement among the principal countries exporting lead to Europe not to increase production without previous negotiations, and also to a labour dispute in the Mexican mines. As in the previous year, apparent world consumption slightly exceeded production in 1935. Refined stocks of domestic lead in the United States declined from the peak reached in July 1934 to June 1936 by about 4%.

Diagram 18 A.

WORLD SUPPLY OF TIN.



Zinc. — World production of zinc in ore rose in 1935 by roughly 10%, due principally to increases in the United States and, to a smaller extent, in the U.S.S.R., Mexico and Canada. Consumption of zinc metal expanded by over 16% and stocks in the United States fell by not less than 30%. Efforts to revive the Zinc Cartel have so far¹ proved unavailing.

Tin. — World output of tin in ore rose again in 1935 to 137,000 metric tons — an increase of 11% over the preceding year. Production continues to be largely controlled by the International Tin Committee (84% of world output in 1935, the original restricting countries accounting for 76%). The following indices illustrate the movement of production and apparent consumption² (1925-1929 = 100):

| | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|---------------------------------------------|-------|-------|------|------|-------|-------|-------|
| Production : | | | | | | | |
| Original restricting countries ³ | 119.9 | 109.0 | 92.4 | 55.0 | 44.8 | 66.0 | 71.7 |
| Rest of world | 93.3 | 92.8 | 75.1 | 91.9 | 105.4 | 129.2 | 150.6 |
| Apparent consumption : | | | | | | | |
| United States | 111.1 | 99.4 | 82.5 | 45.8 | 76.3 | 56.6 | 80.4 |
| Rest of world | 118.6 | 108.8 | 92.2 | 82.4 | 87.8 | 95.1 | 103.1 |

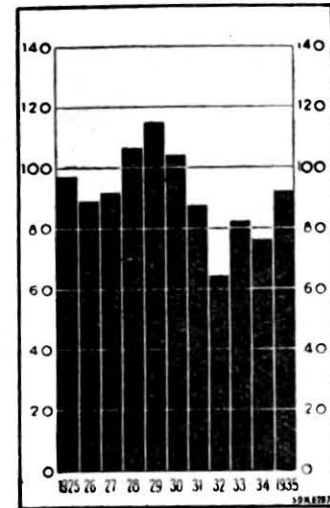
Smelter production expanded in 1935 rather more than mine output — by over 16% — and visible stocks declined by 2,000 metric tons during 1935 to 13,700 tons at the end of that year. The percentage of apparent consumption represented by stocks was then 10% as against 13% in 1934 and 57% in 1932.

Aluminium. — World production of aluminium in 1935 increased by 52% to 257,000 metric tons, a figure only 6% below the record output of 1929. Output expanded in North America by 52%, in Europe by 45%, in the U.S.S.R. by nearly 74% and in Japan, where production began only in 1934, by over 540%. Stocks in both the United States and Europe are reported to have been considerably reduced.⁴

Nickel. — World output in 1935, estimated at about 75,000 metric tons, exceeded the previous year's production by over 10% and that of 1929 by 34%. According to one authority,⁴ world consumption of nickel in all forms approximately equalled production in 1935.

Diagram 18 B.

WORLD CONSUMPTION OF TIN.



¹ July 1936.

² International Tin Research and Development Council, *Statistical Bulletin* (The Hague), July 1936.

³ Bolivia, Malaya, Netherlands Indies, Siam and Nigeria. It was only in 1934 that the United Kingdom (Cornwall), Portugal, French Indo-China and the Belgian Congo joined the restricting countries.

⁴ American Bureau of Metal Statistics, *Year-Book*, 1935.

Minor metals. — *Tungsten, molybdenum* and *vanadium* are principally used in the production of special steels. World output in 1934 of tungsten ore (in terms of tungsten trioxide) was twice as great and that of molybdenum in ore three times as great as the low production of 1932. Over 80% of world molybdenum is obtained from the United States. Production of vanadium fell off after 1932, owing to curtailment of output in South West Africa and Northern Rhodesia, two of the principal producing areas. There would, however, appear to have been some improvement in production in 1935.

World production of *antimony*, which is used largely in alloys with other non-ferrous metals, particularly lead, rose by 18% between 1932 and 1934, and available data point to further expansion in 1935. Nearly 70% of the world's supplies come from China. *Cadmium*, now much employed as a substitute for tin in certain non-ferrous alloys and also for plating, is obtained from electrolytic zinc and lithopone plants. World output in 1935 was 18% above that in the previous year and a record. Over 60% of the world output originates in the United States.

Magnesite is mainly used for the production of a refractory (largely used in the steel industry) and of a building material. Output rose 66% between 1932, the low point, and 1934. The U.S.S.R. and Austria are the principal producers. Output of *quicksilver* reached its low point in 1933 and then recovered 25% in 1934. Production in Spain and Italy, the two principal producing countries, is controlled by the European Cartel (Mercurio Europeo) organised in 1928. Output in the former country was severely restricted in 1930-1933 and in the latter in 1933-1934, and this has resulted in a marked decrease of stocks.

Silver. — World production of silver in ore showed further progress in 1935 for the third successive year. With an increase of nearly 14% over the preceding year, it reached the highest figure — 6,700,000 kg — attained since 1930. The United States, where output rose by 46%, was mainly responsible for this expansion; the greatest relative increase (52%) took place in Peru.

Net imports of silver into the United States in 1935 constituted a new record amounting to 16 million kg or 235% more than in the previous year. The declared value of these imports, \$336 million, far exceeded the whole export surplus of merchandise, \$235 million. The silver policy of the United States led to the abandonment by China, Hong-Kong and Manchuria of their silver currencies.

ENGINEERING.

Owing to the diversity of the products of the engineering industry, measurement of its activity is difficult. Indices are available only for a few countries; they are shown in Appendix II, Table 3 (group XI) (annual) and in Table 24 below (quarterly). These indices, moreover, differ widely in scope. Two important industries — viz., the motor vehicle and shipbuilding industries — which fall entirely or in part under the category of engineering, are reviewed in separate sections below.

The index for France, based on the consumption of steel, suggests that activity in the mechanical industry as a whole has remained practically stationary since the end of 1934. The British (Board of Trade) and Italian indices are also wide in scope, comprising the electrical, motor vehicle and shipbuilding industries. The remarkable progress of the British engineering industry as a whole, which in 1935 surpassed the level of 1929, was fairly well spread among the various sections of the industry. The Italian industry shows a sharp advance during the first eight months of 1935.

The indices for Germany, the U.S.S.R. and Japan are confined to machinery. Machinery manufacturing in Germany, aided by tax exemptions, continued to expand in 1935, when it exceeded the 1929 level, and, at the end of the year, the index for orders stood 22% above the index for deliveries. According to the annual index for the U.S.S.R., production increased almost fivefold between 1929 and 1934. Japan more than doubled her output of machinery between 1930 and 1935.

For the United States, no index covering the whole machinery-manufacturing industry is available; the demand for machine tools and foundry equipment, for which indices are given, is undoubtedly rather more sensitive to change than the activity of the industry as a whole. After a

setback in the middle of 1934, and a vigorous upward movement during 1935, the indices concerned stood higher in the first quarter of 1936 than at any time after the onset of the depression.¹

Table 24. — QUARTERLY INDICES OF ACTIVITY IN THE ENGINEERING INDUSTRY.
Average 1925-1929 = 100.

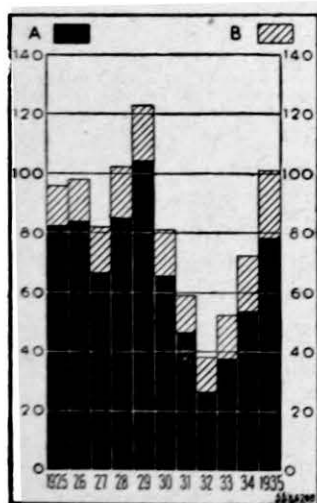
| Country | 1931 | 1932 | 1933 | 1934 | | | | 1935 | | | | 1936 |
|--------------------------------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Average of quarters | | | I | II | III | IV | I | II | III | IV | I |
| France ^{a,b} | 104 | 74 | 82 | 77 | 75 | 76 | 74 | 73 | 73 | 73 | 73 | 75 |
| Germany : ^a | | | | | | | | | | | | |
| Despatch of machines | 72 | 46 | 51 | 61 | 78 | 85 | 85 | 84 | 103 | 104 | 107 | 94 |
| Orders received for machines | 61 | 36 | 43 | 64 | 69 | 76 | 99 | 102 | 123 | 127 | ... | ... |
| Italy ^{b,c} | (83) | (71) | (72) | (72) | (74) | (78) | (79) | (86) | (96) | (107) | ... | ... |
| Poland : Metals and engineering ^a | 68 | 54 | 55 | 60 | 66 | 67 | 73 | 73 | 78 | 80 | 81 | 80 |
| United Kingdom ^{a,b,c} | (85) | (79) | (85) | (94) | (98) | (98) | (109) | (112) | (110) | (109) | (115) | (123) |
| United States : | | | | | | | | | | | | |
| Demand for machine tools | 38 | 18 | 25 | 47 | 40 | 35 | 50 | 56 | 71 | 101 | 93 | 99 |
| Demand for foundry equipment | 34 | 13 | 24 | 39 | 44 | 30 | 44 | 50 | 68 | 73 | 78 | 76 |
| Japan : ^a Machines | (94) | (107) | (138) | (168) | (178) | (174) | (201) | (206) | (210) | (201) | (230) | (233) |

^a Including electrical machines or engineering. ^b Including motor vehicle and shipbuilding industries.
^c Base : 1928. ^d Base : 1924, 1927-1929 (Board of Trade). ^e Base : 1930. ^f Average of two months.

Diagram 19.

WORLD PRODUCTION OF MOTOR VEHICLES.

- A. United States.
- B. Rest of world.



MOTOR-VEHICLE INDUSTRY.

The following figures show the production of motor vehicles since 1929 :

| | 1929 | 1932 | 1933 | 1934 | 1935 |
|-----------------------------------|-------|-------|-------|-------|-------|
| Number of motor vehicles (000's) | | | | | |
| Europe (excl. U.S.S.R.) | 694 | 523 | 646 | 779 | 890 |
| North America | 5,620 | 1,432 | 1,986 | 2,870 | 4,182 |
| World | 6,315 | 1,980 | 2,684 | 3,724 | 5,172 |
| Average 1925-1929 = 100 | | | | | |
| Europe (excl. U.S.S.R.) | 118 | 89 | 110 | 133 | 152 |
| North America | 124 | 31 | 44 | 63 | 92 |
| World | 123 | 39 | 52 | 73 | 101 |

Automobiles rank in the United States almost as a consumers' necessity, and the automobile industry has led the way in the country's industrial recovery. Production reached in 1935 71.6% of the 1929 maximum. The advance made in 1935 was accentuated by the introduction of new models in the autumn instead of in mid-winter. The net addition to motor-vehicle registrations (which was negative in 1931 and 1932) increased from 59,800 in 1933 to 779,600 in 1934 and to 1,115,000 in 1935. The European production attained new record figures in 1935, exceeding those for 1934 by 14% and those for 1929 by 28%. The United Kingdom, with an increase of 17%,

¹ World trade in machinery during 1929-1934 was dealt with in *World Production and Prices, 1925-1934* (Geneva, 1935), page 87.

maintained first rank among producing countries in Europe. Germany, where the Government uses the automobile industry as a pivot of the new industrial policy, took the second place from France, where production dropped to the lowest figure since 1925.

Table 25. — QUARTERLY INDICES OF MOTOR-CAR PRODUCTION.
Average 1925-1929 = 100.

| Country | 1931 | 1932 | 1933 | 1934 | | | | 1935 | | | | 1936 | |
|------------------------------|---------------------|--------|--------|--------|--------|--------|--------|--------|---------|----------------------|--------|-------|-------|
| | Average of quarters | | | I | II | III | IV | I | II | III | IV | I | II |
| France * | 97.5 | 76.6 | 83.5 | 81.6 | 81.8 | 83.3 | 77.9 | 71.8 | 74.8 | 71.5 | 70.5 | 80.1 | 80.7 |
| Germany ^b | 74.2 | 45.4 | 94.9 | 96.9 | 198.3 | 184.0 | 128.5 | 197.3 | 240.7 | 227.5 | 199.1 | 236.7 | 284.6 |
| Italy * | (69.6) | (75.5) | (82.0) | (79.3) | (85.2) | (89.9) | (82.3) | (96.3) | (108.4) | ^c (127.6) | . | . | . |
| United Kingdom. | 109.4 | 120.0 | 142.9 | 196.5 | 178.3 | 132.6 | 179.8 | 226.5 | 198.0 | 177.3 | 204.0 | 247.1 | 243.4 |
| U.S.S.R. | 600 | 3,578 | 7,450 | 9,639 | 10,865 | 10,495 | 12,433 | 12,436 | 13,446 | 15,468 | 16,602 | ... | ... |
| Canada | 36.3 | 28.4 | 31.3 | 54.0 | 76.5 | 55.6 | 22.6 | 92.6 | 88.5 | 54.4 | 102.6 | 83.3 | 89.7 |
| United States ^b . | 54.9 | 32.1 | 44.0 | 63.2 | 74.5 | 58.0 | 51.6 | 95.5 | 89.7 | 73.3 | 101.4 | 94.3 | 110.2 |
| World * | 59.0 | 38.5 | 52.3 | 72.9 | | | | 100.8 | | | | ... | ... |

* Adjusted for seasonal variations. ^b Passenger cars only. ^c Base: 1928. ^d Average of two months.
* Annual index including seventeen countries.

The trend of "motorisation" of different countries has been more uneven during recent years than in the past. The most recent trend is reflected in the following figures showing the percentage increase (or decrease) during the twelve months 1934/35 in the total number of motor vehicles (private cars, passenger buses, goods and other vehicles) registered, and the total number per 1,000 head of population at the end of 1935. The countries are ranged in the order indicated by the latter figures.¹

| Country | Per cent increase | Vehicles per 1,000 population | Country | Per cent increase | Vehicles per 1,000 population |
|----------------------------|-------------------|-------------------------------|--------------------------|-------------------|-------------------------------|
| | 1935 | 1935 | | 1935 | 1935 |
| United States | 5.2 | 204.5 | Finland | 3.7 | 8.5 |
| France | 4.0 | 49.0 | Czechoslovakia | 8.6 | 7.9 |
| United Kingdom | 10.5 | 45.2 | Portugal | 10.9 | 6.0 |
| Denmark | 1.1 | 41.6 | Austria | 17.4 | 5.1 |
| Sweden | . | 24.4 ^a | Estonia | 20.6 | 3.4 |
| Norway | 7.5 | 22.3 | Latvia | 15.5 | 2.0 |
| Switzerland | 1.9 | 21.7 | Hungary | 12.1 | 1.8 |
| Irish Free State | 6.5 | 17.8 | U.S.S.R. | 36.8 | 1.5 |
| Netherlands | (-3.2) | 17.6 | Roumania | 0.4 | 1.4 |
| Germany | 18.3 | 16.1 | Lithuania | 3.7 | 0.8 |
| Italy | 8.5 | 9.5 | Yugoslavia | 7.1 | 0.8 |

Apart from general economic conditions, the main factors which have influenced the growth of the industry have been the amount of direct taxation of motor vehicles and fuels, including the compulsory use of high-priced fuels, and road development.

¹ Bureau permanent international de constructeurs d'automobiles, *Situation du marché de l'automobile*, (Paris, 1936).
^a 1934.

MERCANTILE SHIPBUILDING.¹

The total tonnage launched, including sailing vessels, in the United Kingdom and in the world as a whole (excluding the U.S.S.R.) will be seen from the following figures :

| | Gross tonnage launched (000's) | | | | | Average 1925-1929 = 100 | | | | |
|--------------------------|--------------------------------|------|------|------|-------|-------------------------|------|------|------|------|
| | 1929 | 1932 | 1933 | 1934 | 1935 | 1929 | 1932 | 1933 | 1934 | 1935 |
| United Kingdom | 1,523 | 188 | 133 | 460 | 499 | 129 | 16 | 11 | 39 | 42 |
| World | 2,759 | 726 | 489 | 967 | 1,302 | 120 | 32 | 21 | 42 | 56 |

Actual and prospective activity in the world's shipbuilding yards is brought out more clearly by the following figures, which relate to all vessels over 100 tons, showing tonnage laid down during the quarter ending with the month indicated and tonnage under construction at the end of the months indicated :

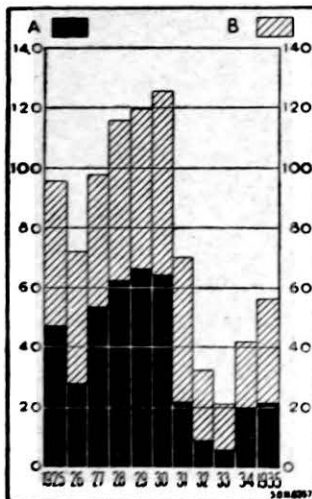
| End of : | Tonnage laid down (000's) | | | | | | |
|---------------------|---------------------------|------|------|------|------|------|------|
| | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 |
| March | 857 | 242 | 80 | 141 | 461 | 322 | 585 |
| June | 581 | 234 | 71 | 121 | 273 | 387 | 673 |
| September | 480 | 173 | 43 | 111 | 258 | 305 | ... |
| December | 421 | 226 | 84 | 145 | 203 | 587 | ... |

| End of : | Tonnage under construction (000's) | | | | | | |
|---------------------|------------------------------------|-------|-------|------|-------|-------|-------|
| | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 |
| March | 3,143 | 2,000 | 1,298 | 741 | 1,079 | 1,270 | 1,820 |
| June | 2,901 | 1,826 | 1,110 | 733 | 1,216 | 1,283 | 1,951 |
| September | 2,569 | 1,531 | 901 | 757 | 1,311 | 1,198 | ... |
| December | 2,326 | 1,404 | 766 | 757 | 1,252 | 1,543 | ... |

Diagram 20.

TONNAGE LAUNCHED IN THE WORLD.

- A. United Kingdom.
- B. Rest of world.



Since the low point was touched in 1933, the shipbuilding industry has witnessed a pronounced revival. Despite the completion in 1935 of a tonnage 35% above that of the previous year, there was a further increase in the tonnage laid down, so that the tonnage under construction remained, during each quarter of 1935 except the third, above that recorded in 1934. This progress continued at an accelerating pace during the first half of 1936.

The total tonnage launched in the United Kingdom reached 48% of the world total in 1934 and 38% in 1935. But the industry continued to work at greatly reduced capacity, only 30% of the berths being occupied. There was, however, in the late autumn a considerable revival which continued in the first quarter of 1936.

Among the other leading shipbuilding countries, Germany, Denmark, Sweden, Netherlands, France and the United States increased their tonnage launched during 1935, while Japan and Italy experienced setbacks. Japan lost her second rank, reached in 1933, to Germany.

The replacement of obsolete vessels has been accelerated during recent years. The gross tonnage of the world merchant marine decreased from 70.1 millions on June 30th, 1931 (the peak), to 64.9 millions on June 30th, 1935, but increased again to 65.1 millions on June 30th, 1936.

The tonnage of steam vessels has decreased since 1933, while that of motor vessels has increased. At the same time, tonnage laid up decreased from about 13 millions at the end of 1932 to 6.5 millions at the end of 1934 and 4.2 millions at the end of 1935. The world merchant marine still remained in excess of the shrunken freight requirements.

The international tanker pool, constituted in May 1934, pays compensation for vessels laid up or scrapped. The total tonnage of tankers launched and tonnage afloat nevertheless increased in 1935.

¹ The source of the shipbuilding statistics is *Lloyds Register (Shipbuilding Returns)*. Tables showing tonnage under construction (end-of-year figures), tonnage launched and tonnage afloat are given in the *Statistical Year-Book of the League of Nations, 1935/36*. Tables 109-111.

Table 26. — QUARTERLY INDICES OF SHIPBUILDING (TONNAGE UNDER CONSTRUCTION AT END OF QUARTER).
Average 1925-1929 = 100.

| Countries | 1931 | 1932 | 1933 | 1934 | | | | 1935 | | | | 1936 | |
|---------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Average of quarters | | | I | II | III | IV | I | II | III | IV | I | II |
| Denmark | 109.9 | 28.5 | 35.1 | 68.8 | 89.9 | 100.9 | 105.9 | 89.7 | 88.6 | 73.5 | 82.3 | 74.6 | 96.5 |
| France | 133.0 | 84.7 | 64.3 | 70.5 | 71.4 | 82.6 | 82.7 | 82.6 | 34.1 | 31.8 | 38.3 | 33.9 | 31.0 |
| Germany | 36.5 | 27.8 | 11.7 | 24.9 | 27.5 | 36.4 | 42.1 | 58.8 | 71.5 | 80.9 | 76.7 | 95.6 | 110.2 |
| Italy | 90.9 | 73.2 | 16.6 | 25.4 | 25.4 | 20.2 | 19.7 | 19.6 | 19.1 | 12.9 | 13.6 | 13.6 | 5.5 |
| Netherlands | 61.4 | 28.1 | 22.8 | 32.2 | 34.3 | 44.3 | 30.3 | 37.8 | 47.3 | 39.3 | 65.4 | 91.7 | 92.8 |
| Sweden | 153.6 | 104.8 | 97.3 | 62.1 | 64.3 | 84.7 | 78.9 | 109.2 | 124.0 | 116.8 | 124.4 | 148.0 | 163.1 |
| United Kingdom | 43.3 | 23.3 | 24.6 | 40.3 | 49.1 | 50.6 | 50.0 | 46.5 | 46.9 | 44.4 | 62.2 | 70.5 | 71.0 |
| United States | 289.8* | 160.6 | 17.8 | 31.7 | 32.1 | 25.8 | 23.3 | 21.5 | 30.1 | 19.5 | 38.8 | 57.7 | 104.9 |
| Japan | 57.9 | 60.9 | 101.0 | 149.9 | 167.9 | 183.2 | 127.9 | 97.2 | 80.7 | 75.0 | 145.0 | 184.2 | 191.8 |
| Other countries | 52.2 | 29.2 | 30.7 | 36.3 | 28.4 | 25.4 | 25.7 | 29.9 | 40.5 | 24.8 | 29.3 | 39.8 | 50.9 |
| World | 66.7 | 40.2 | 29.5 | 42.6 | 48.0 | 51.7 | 49.4 | 50.1 | 50.6 | 47.2 | 60.9 | 71.8 | 77.0 |

* Excluding shipbuilding on Great Lakes which ceased in 1932.

NON-METALLIC MINERALS.

The commodities included in this group find their main use in widely different branches of industry : (1) Cement and asbestos in construction, (2) graphite in the chemical, and mica in the electrical, industry (these two are new items in the group), and (3) sulphur, natural phosphates, natural guano, nitrate of soda (Chile), potash and basic slag in agriculture.

Cement is the most important single item included in the group concerned. The decline in world cement production between 1929 and 1933 (the low point), amounting to 36% in all, and its subsequent recovery, up to 1935, about 22%, reflect largely the changes in the activity of the building and construction industries.

Manufactured nitrates and superphosphates of lime, previously included in the index of primary production, have been omitted from the revised index. As a consequence, no special "fertiliser index" can be given. Reference is to be made, however, to the most important part of the fertiliser industry — viz., nitrates.

Nitrates. — The production and consumption of Chile saltpetre and manufactured nitrogen are shown below in terms of pure nitrogen (metric tons, 000's) :

| | 1925/26 | 1929/30 | 1930/31 | 1931/32 | 1932/33 | 1933/34 | 1934/35 |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|
| <i>Chilian nitrates :</i> | | | | | | | |
| Production | 399.4 | 464.0 | 250.0 | 170.0 | 70.8 | 84.3 | 178.4 |
| Consumption | 324.2 | 363.9 | 244.3 | 138.2 | 127.2 | 163.6 | 194.4 |
| <i>Manufactured nitrogen :</i> | | | | | | | |
| Production | 934.3 | 1,739.5 | 1,444.3 | 1,415.2 | 1,606.1 | 1,708.0 | 1,863.0 |
| Consumption | 934.3 | 1,586.9 | 1,377.0 | 1,417.1 | 1,619.7 | 1,714.0 | 1,836.5 |

Sulphate of ammonia continues to be the most important of these fertilisers and accounted for over 45% of the fertiliser nitrogen production and consumption.

The largest increase in nitrogen consumption in 1934/35 has been in Germany, the U.S.S.R., Japan, the United States and Italy, and the greatest decrease in France. The agreements between the European producers and between European and the Chilian industries were renewed.¹

¹ The British Sulphate of Ammonia Federation, Ltd. : *Annual Report for 1934/35.*

II. WORLD TRADE AND SHIPPING.

"QUANTUM" CHANGES IN INTERNATIONAL TRADE.

It would fall outside the purpose of the present volume to enter upon any detailed analysis of international trade such as is made in the annual *Review of World Trade*.¹ It is of particular interest, however, to examine to what extent the changes in the production of primary goods and in industrial activity, as discussed in the preceding chapter, are reflected in changes in the quantum of international trade. For this purpose, a few data concerning the movement of the value and quantum of international trade are given below. The percentage movement of the value of the total trade (imports plus exports) of each continental group, and of the world as a whole, during the period under review was as follows:

Table 1. — PERCENTAGE MOVEMENT OF THE GOLD VALUE OF TRADE.

Average 1925-1929 = 100.

| Continental groups | 1925 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|------------------------------------------|-------|-------|------|------|------|------|------|------|
| Europe, excluding U.S.S.R. | 98.0 | 106.1 | 90.3 | 66.5 | 43.6 | 39.5 | 37.8 | 37.0 |
| Europe, including U.S.S.R. | 97.8 | 106.2 | 91.3 | 67.8 | 44.5 | 39.8 | 37.8 | 37.1 |
| North America | 97.8 | 104.1 | 76.6 | 49.6 | 32.9 | 27.1 | 26.1 | 29.2 |
| Latin America | 97.4 | 106.9 | 79.1 | 53.2 | 35.1 | 33.1 | 33.3 | 35.0 |
| Africa | 93.4 | 109.5 | 93.0 | 70.4 | 57.6 | 54.9 | 51.5 | 55.0 |
| Asia, excluding Asiatic Russia | 103.5 | 98.6 | 75.0 | 53.6 | 37.7 | 35.1 | 35.4 | 36.2 |
| Oceania | 104.3 | 95.6 | 69.3 | 39.9 | 34.7 | 35.4 | 33.8 | 36.9 |
| World | 98.6 | 104.6 | 84.7 | 60.5 | 40.9 | 36.8 | 35.5 | 36.1 |

The above figures show the changes in the value of trade and cannot therefore be compared with the world indices of the volume of production given earlier. For a number of countries, representing about three-quarters of world trade, calculations are made with a view to showing the variations in the quantum of imports and exports. On the basis of these data, it is possible to calculate rough world indices of the movement of prices and the quantum of goods entering into international trade (average 1925-1929 = 100):²

| | 1925 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935* |
|-------------------------|------|-------|-------|------|------|------|------|-------|
| Prices (gold) | 108 | 95 | 82.5 | 64.5 | 50 | 44.5 | 41 | 40 |
| Value (gold) | 98.5 | 104.5 | 84.5 | 60.5 | 41 | 37 | 35.5 | 36 |
| Quantum | 91.5 | 110 | 102.5 | 94 | 82 | 83 | 86.5 | 90 |

* Provisional figures.

While, owing to declining prices, the gold value of trade declined until 1934, the lowest point in the quantum of world trade, as in production, was reached in 1932; since 1932, trade has increased — by about 1.5% in 1933, 4% in 1934 and about 4.5% in 1935.

The information concerning the fluctuations in prices and in the volume of trade is not sufficient to allow indices of the kind given above to be calculated for imports and

¹ Last issue, *Review of World Trade, 1935*, League of Nations, Geneva, 1936.

² The calculations are subject to certain qualifications (cf. *Review of World Trade, 1935*).

exports of each continental group of countries. Such information can be given only for Europe and North America, as shown in Table 2.

Table 2. — INDICES OF THE PRICES AND QUANTUM OF GOODS ENTERING INTO
THE TRADE OF EUROPE AND NORTH AMERICA.

Average 1925-1929 = 100.

| Continental groups | Imports | | | | | | | | Exports | | | | | | | |
|--------------------|---------|-------|-------|-------|------|------|------|-------|---------|-------|------|------|------|------|------|-------|
| | 1925 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 | 1925 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
| Europe : | | | | | | | | | | | | | | | | |
| Prices (gold) . | 107 | 97 | 84.5 | 66 | 50.5 | 46 | 43 | 43 | 105.5 | 96.5 | 89 | 73.5 | 58 | 52.5 | 49 | 46.5 |
| Quantum . . . | 92.5 | 108.5 | 106.5 | 102.5 | 89 | 87 | 88 | 86.5 | 91.5 | 111.5 | 104 | 92.5 | 75.5 | 76 | 77 | 79 |
| North America : | | | | | | | | | | | | | | | | |
| Prices (gold) . | 108.5 | 91.5 | 76 | 58.5 | 46 | 36.5 | 33 | 33 | 110 | 96 | 84.5 | 64.5 | 53.5 | 44.5 | 40.5 | 41.5 |
| Quantum . . . | 88 | 115 | 102 | 86 | 70 | 72.5 | 73 | 87 | 90.5 | 107.5 | 90 | 76 | 63 | 62.5 | 69 | 71.5 |

* Provisional figures.

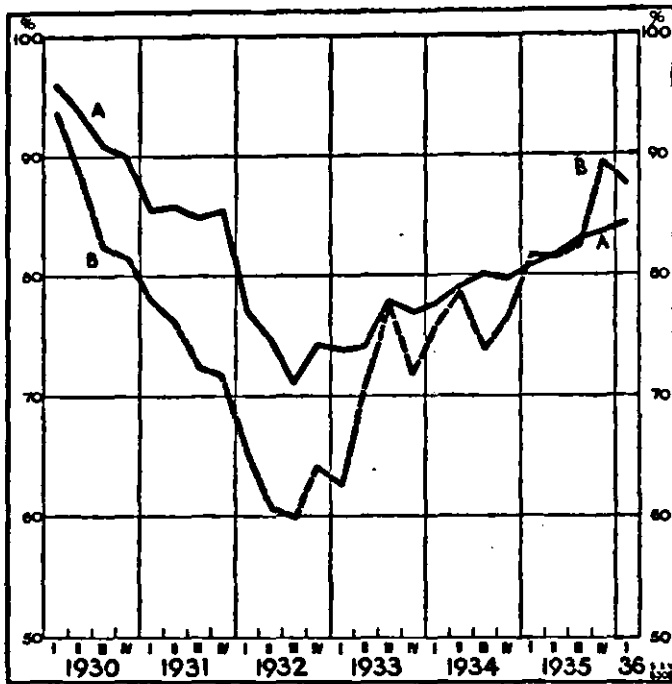
The diagram given on page 7 shows that the quantum of world trade during the early part of the depression fell much more rapidly than primary production, though somewhat less rapidly than general industrial activity. Since 1932, however, the revival of industrial activity has been much more marked than the recovery of trade; in the diagram just referred to, the curve representing the quantum of trade, though its trend is upward, moves on a substantially lower level after 1932 than the curves representing primary production and industrial activity. (The course of the industrial activity curve there shown, however, is much influenced by the exceptionally rapid expansion of industrial production in the Union of Soviet Socialist Republics.) Among the factors responsible for the "lag" of the movement of trade behind the recovery of world production, the increase in trade barriers in recent years — promoting the industrialisation of agricultural countries and encouraging the agricultural production of industrial countries — has probably been the most important. Moreover, certain countries with "overvalued" currencies, being unwilling or unable to lower either the exchange value of their currencies or the level of their internal costs and prices, have been driven to correct an unfavourable tendency of their balance of payments by drastic restrictions of imports; and, in some of these countries, this policy has helped to stimulate production for the domestic market. To a considerable extent, the divergent movement of world production and trade is accounted for by the absence of capital movements. It may also be due, to some extent, to the fact that large stocks of primary commodities, accumulated in the early years of the depression, were available in industrial centres where productive activity has revived. In so far as the recent decline in world stocks has been due to a reduction of stocks held in the consuming countries, the revival in the consumption of foodstuffs and industrial raw materials has naturally failed to reflect itself adequately in the volume of international trade in these commodities.

In order to facilitate a somewhat closer comparison of the changes in world trade and industrial activity, the diagram on the following page has been drawn on the basis of quarterly figures.

QUARTERLY MOVEMENT OF THE QUANTUM OF WORLD TRADE AND INDUSTRIAL ACTIVITY.
1929 = 100.

Note. — The curve for the quantum of trade has been roughly adjusted for seasonal variations, in order to render it more comparable with that for industrial activity, based on national indices, most of which are thus adjusted.

- A Quantum of world trade.
- B Industrial activity : world, excluding U.S.S.R.



autumn of 1934 has been accompanied by a similar movement in world trade may perhaps indicate that the volume of trade is beginning to respond more readily to the increase in production.

It may be of interest to compare in some detail the changes since 1929 in production and trade by main categories of goods. In that year, foodstuffs (including live animals) represented about one-quarter, raw materials somewhat more than one-third, and manufactured articles nearly two-fifths of the value of all goods entering into trade. Estimates of the changes since 1929 in the quantum of world trade in goods belonging to the three groups in question are reproduced below, together with the indices of world production by groups given in Chapter I. To facilitate comparison, the latter indices have been calculated on the basis of 1929.

Indices of the Quantum of World Trade.
1929 = 100.

| | 1932 | 1933 | 1934 | 1935 |
|-----------------------------------|------|------|------|------|
| (1) Foodstuffs . . . | 90.5 | 84.5 | 84 | 86 |
| (2) Raw materials ¹ . | 82 | 87.5 | 89.5 | 93.5 |
| (3) Manufactured articles | 58 | 59.5 | 65.5 | 68.5 |

Indices of World Production.
1929 = 100.

| | 1932 | 1933 | 1934 | 1935 |
|----------------------------------------------------|-------|-------|------|------|
| (1) Crude foodstuffs ² | 100.7 | 101.2 | 99.9 | 99.7 |
| (2) Raw materials . | 71.1 | 78.6 | 84.9 | 91.9 |
| (2a) Ditto, excluding pig-iron and crude steel . . | 78.8 | 84.8 | 89.6 | 94.8 |
| (3) Manufacturing : World, excluding U.S.S.R. . | 62.7 | 71.0 | 76.6 | 84.3 |

¹ Group (2) of the trade indices refers to the articles which in the international (Brussels) classification of 1913 are described as "Materials, raw or partly manufactured". As, however, according to this classification, the bulk of the semi-manufactures which are included with group (3) of the production indices are, in fact, also included in group (3) of the trade indices, it has been thought appropriate in this volume to classify group (2) of the trade indices as "Raw materials".

² Including fodder crops.

As the Union of Soviet Socialist Republics weighs but slightly in the index of world trade, while its inclusion in any international index of industrial activity very markedly affects the general course and level of such an index during the period here considered, that country has not been included in the index represented by curve B in the diagram.

The comparability of the two curves of the diagram is obviously limited by the fact that the one refers to world trade in all goods and the other only to manufacturing and mining production. But the diagram may nevertheless be useful for comparing the trends of trade and industrial activity.

The difference in level between the two curves up to 1932 is largely explained by the fact that foodstuffs (mainly crude), the trade in which was relatively well maintained during the first years of depression, account for a considerably larger share in the trade index than does food preparation in the index of industrial activity.

It will be noted that the lowest point of both world trade and industrial activity was reached in the third quarter of 1932. After 1932, industrial activity approached the level of world trade and, in 1935, exceeded it. The fact, however, that the sharp rise in industrial activity since the

The trade and production indices are not strictly comparable. Thus, manufactured food products are included in group (1) of the trade indices (Foodstuffs), not in group (3) (Manufactured articles). Further, it has not proved possible, in allocating semi-manufactured articles, to employ the same principles throughout. The more important intermediate products — such as yarns or rolled and hammered iron and steel — are, however, considered in the trade indices for manufactured articles as well as in the indices for manufacturing activity. In spite of this lack of correspondence, the figures given may serve as a basis for a rough comparison between the trend of production and trade.

Foodstuffs. — While the production of crude foodstuffs remained from 1932 to 1935 practically at the level of 1929, the trade in foodstuffs in 1934 was 16% and in 1935 — according to the provisional estimate available — 14% lower than in 1929. Of the three groups of articles, foodstuffs shared least in the advance in the quantum of total trade which occurred in 1935; and the quantum of foodstuffs traded still remained well below the level of 1932, the year in which the quantum of world trade as a whole reached its lowest point. The divergence between the movement of production and trade is to be attributed largely to measures directed towards increased self-sufficiency in a number of industrial countries. Thus, the development of cereal production in several European industrial countries has been accompanied by a decrease in European imports of wheat; total wheat exports of non-European countries decreased from an annual average of 17.3 million metric tons in the period 1924-1928 to one of about 13.5 million tons in 1931-1935, while the corresponding figures for exports of European countries (including the Union of Soviet Socialist Republics) show an increase from 1.4 to 2.6 million tons. The trade in sugar has been influenced by similar tendencies towards national self-sufficiency, reflected in an increase in the share of beet sugar in total world production. Coffee, butter and frozen and chilled meat were the only important foodstuffs of which larger quantities entered international trade in 1935 than in 1932. The modest increase in the total quantum of foodstuffs entering into world trade in 1935 appears to have been mainly, if not wholly, due to the United States, which as a result of the drought in 1934, increased its imports of foodstuffs by some 20%. The United Kingdom, which is the greatest importer of foodstuffs, reduced the quantum of its purchases in 1935, as did Germany and France.

Raw Materials. — Two production indices have been calculated above, one for raw materials in the aggregate and the other for such materials exclusive of pig-iron and crude steel. The reason for giving the latter index is that pig-iron and crude steel weigh heavily in the production index, as they represent the raw material for all more advanced iron and steel products, while their importance in world trade is relatively small and the proportion of raw iron and steel produced which enters into trade is much smaller than the corresponding proportion of most other raw materials. As a comparison of the two production indices shows, the production of iron and steel fell more heavily than that of the aggregate of other raw materials in the early years of the depression, but recovered more rapidly after 1932.

The quantum of raw materials entering international trade in 1935 was nearer to its 1929 level than that of the other two groups. During the whole period 1932-1935, in fact, it was the trade in raw materials which most nearly kept pace with the recovery of production. The policy of national self-sufficiency pursued in many countries has naturally affected the trade in raw materials least. But, in certain cases, it has reduced the volume of trade; the fact, for example, that the annual average of cotton exports from India and China in the years 1933-1935 was lower by about 20 and 40% respectively than in the period 1929-1931 is undoubtedly due to a large extent to the development of domestic textile manufactures in these countries. Among the raw materials of which larger quantities entered into international trade in 1935 than in 1932, wool, rubber, copper, tin, mineral oils and coal were the most important; the trade in coal, however, still remained some

30% below the level of 1929, while the other commodities named came near to or even exceeded that level. As in the case of foodstuffs, the revival of demand in the United States — the largest importer of raw materials — was of decisive importance for the advance in the quantum of trade in 1935; imports of raw materials into that country rose by over 20% in quantum. Besides benefiting a number of typical raw-material-producing countries, the expansion of the United States demand stimulated in particular Japanese exports of raw silk, which rose by 30% in gold value and thus compensated to some extent for the relative slackening in Japanese exports of cotton piece-goods in 1935.

Manufactured Articles. — As the products of the manufacturing industry of the Union of Soviet Socialist Republics are almost entirely disposed of in the domestic market, the comparison between the index of trade in manufactured articles and that of manufacturing has been made for the world, minus the Union of Soviet Socialist Republics.

In 1935, the former index was 31.5% and the latter only 15.7% lower than in 1929. The discrepancy between the two indices, though it narrowed slightly between 1933 and 1934, has on balance greatly increased between 1932 and 1935. The marked "lag" of trade behind production in this group is in large measure attributable to the policy of certain countries which, in order to maintain the gold parity of their currency, have restricted their foreign trade but have, at the same time, stimulated domestic production by various means. It is also due to the tendency towards industrialisation which has prevailed in many non-industrial debtor countries in recent years. The effects of this industrialisation are most marked in the textile industry and may be illustrated by the following indices of textile manufacturing in six agricultural debtor countries (1929 = 100):

| | 1932 | 1934 | 1935 | | 1932 | 1934 | 1935 |
|------------------|------|------|------|--------------|------|------|------|
| Chile (wool) ... | 284 | 265 | 297 | Greece | 120 | 153 | 159 |
| Denmark ... | 112 | 143 | 140 | Hungary ... | 94 | 129 | 123 |
| Finland | 89 | 127 | 141 | Roumania... | 129 | 169 | . |

The failure of the trade in manufactured goods to keep pace with the recovery in the production of such goods may be illustrated by the following indices for manufacturing activity and the quantum of exports of six of the principal exporters of manufactured articles (1929 = 100):

| | United States of America | | | United Kingdom | | | Japan ¹ | | |
|-------------------------------------------------------------|-----------------------------|------|------|-------------------|------|-------|--------------------|-------|-------|
| | 1932 | 1934 | 1935 | 1932 | 1934 | 1935 | 1932 | 1934 | 1935 |
| Manufacturing activity | 52.9 | 65.5 | 75.6 | 82.3 | 99.9 | 107.4 | 98.2 | 131.3 | 145.4 |
| Quantum of manu- factured articles exported | 35 | 48 | 53.5 | 61.5 | 68.5 | 74 | (117) | (174) | (192) |
| | Germany | | | France | | | Italy ² | | |
| | 1932 | 1934 | 1935 | 1932 | 1934 | 1935 | 1932 | 1934 | 1935 |
| Manufacturing activity | 60.2 | 84.2 | 95.3 | 65.6 | 70.6 | 68.4 | 66.2 | 78.1 | 93.1 |
| Quantum of manu- factured articles exported | 59 | 49.5 | 56 | 56 | 54.5 | 48.5 | 76 | 68 | 72 |

¹ The export indices for Japan are rough estimates.

² Averages for the first eight months of each year.

The export indices are in each case, excepting Japan and — in 1932 — Italy, much lower than the production indices, which implies that the countries in question disposed of a much smaller share of their industrial production abroad than in 1929. Comparing 1932 with 1934, a greater proportionate increase took place in production than in exports in the United Kingdom; in Germany, France and Italy, exports declined while production increased. From 1934 to 1935, on the other hand, a slightly higher rate of increase in exports than in production is shown by the indices for the United Kingdom and Germany; exports increased also in Italy — though less than production — but continued to fall (indeed, at an accelerated rate) in France. In the United States, where exports had fallen to a lower level than in any other country here considered, they recovered more rapidly than production throughout the period 1932-1935. The fact that Japan's export index — which, however, represents only a rough estimate — already stood above the production index in 1932 and has since risen by 64% as compared with a rise of 48% in the production index, may in part be explained by the sharp reduction in the purchasing power of the domestic peasant population resulting from the collapse of the United States market for raw silk, which set free a larger share of Japan's industrial output for export abroad. It is interesting to observe that, in 1935, when silk prices recovered considerably, the advance in Japan's industrial production appears to have been at a slightly higher rate than the increase in her exports of manufactured products.

The divergent movement of world production and trade in recent years has been most marked in the case of consumption goods. True, the rate of increase in production has been considerably higher for capital goods than for consumption goods.¹ But the trade in consumption goods seems scarcely to have expanded at all, and the recovery in the quantum of total trade appears on the whole to have been confined to capital goods. The increase in the relative importance of capital goods in international trade may be illustrated by the following figures, obtained from a rough calculation of the trade values of the most typical capital goods² in the imports and exports of twenty-four countries accounting together for 73% of total world trade in 1935:

| | Percentage movement of gold value | | | Percentage share in total trade | | |
|-------------------------|--------------------------------------|-------|-------|------------------------------------|------|------|
| | 1932 | 1934 | 1935 | 1932 | 1934 | 1935 |
| Capital goods | 100 | 101.9 | 107.2 | 19.2 | 23.0 | 23.9 |
| Other goods | 100 | 81.1 | 81.2 | 80.8 | 77.0 | 76.1 |
| Total | 100 | 85.1 | 86.2 | 100 | 100 | 100 |

These figures suggest that the trade in capital goods rose in gold value by over 7% between 1932 and 1935, while the trade in other goods declined on balance by nearly 20%. Moreover, since in the tripartite classification of trade by foodstuffs, raw materials and manufactured articles, most capital goods are included in the latter group, in which the fall in prices since 1933 has been greatest, it is probable that the trade in capital goods has recently expanded even more in quantum than in value. Mention may also be made of certain characteristic changes which have recently taken place in the geographical direction of that trade. Before the depression, a substantial proportion of the total trade in capital goods was conducted by the main industrial countries *inter se*; while recent tendencies in commercial policy, combined with the process of industrialisation pursued in most agricultural countries, have progressively transformed that trade into a bilateral exchange of capital goods from the industrial countries against primary commodities from the agricultural countries. The import trade in capital goods since 1932 has been

¹ Cf. page 54 above.

² Building materials, ores, iron and steel and other base metals, metal manufactures, instruments, electrical goods, machinery, vehicles.

particularly active in the overseas agricultural countries. Seven of these¹ were included in the calculation of the above figures; their imports of capital goods rose by 36% between 1932 and 1935, while those of other goods declined by 5%, and the share of capital goods in their total import trade rose from 23% in 1932 to 35% in 1935. It is, of course, an open question to what extent the industrialisation of the agricultural countries represents merely a reaction to the deterioration of their terms of trade which occurred in the early years of the depression, and to what extent it may therefore prove a temporary phenomenon if the demand for primary products continues to expand.

MERCHANT SHIPPING.

It is interesting to compare the movement of the quantum of world trade with the fluctuations in shipping activities as reflected in the tonnage of ships entering or clearing in oversea traffic. Owing to the defectiveness of the information available for numerous countries, it is not possible to compile such complete world statistics for shipping as for trade; but the indices of shipping activity given in the following table, calculated on the basis of the gross tonnage of the ships cleared in the ports of forty-two countries representing together 83% of world trade, may be taken as representative of the changes which have taken place. In the case of countries for which figures covering the whole period under review were available for all ships (with cargo and in ballast), as well as for ships with cargo only, those for all ships were employed. In the case of a few countries, figures for 1935 had to be estimated on the basis of partial information available for that year. At the foot of the table, two other series have been added for purposes of comparison, the one showing the changes of the *active* tonnage of the world's merchant marine (that is, the tonnage of existing merchant vessels less the tonnage of ships laid up),² and the other showing the movement of the quantum of world trade, as given above.

Table 3. — NET TONNAGE OF SHIPS CLEARED IN FORTY-TWO COUNTRIES, COMPARED WITH THE ACTIVE GROSS TONNAGE OF THE WORLD'S MERCHANT MARINE, AND THE QUANTUM OF WORLD TRADE.

Average 1925-1929 = 100.

| | 1925 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|--------------------------------------------------------------------|------|-------|-------|-------|------|-------|-------|-------|
| <i>Tonnage of ships cleared in the ports of:</i> | | | | | | | | |
| Europe | 89 | 112.5 | 113 | 103.5 | 95.5 | 99.5 | 103 | 104 |
| North America | 91 | 106 | 105.5 | 97 | 87.5 | 87 | 90.5 | 93 |
| Latin America | 87 | 114.1 | 108.5 | 100 | 88 | 94 | 97 | 102.5 |
| Africa | 92.5 | 112.5 | 114 | 108 | 107 | 113.5 | 121 | 128 |
| Asia | 87.5 | 113 | 113 | 102.5 | 99 | 103.5 | 111 | 120.5 |
| Oceania | 100 | 101.5 | 101 | 101 | 104 | 109 | 103 | 109.5 |
| Total | 89 | 111.5 | 111.5 | 102 | 94 | 98 | 102.5 | 106 |
| <i>Active tonnage of the world's merchant marine, June 30th. .</i> | 95.5 | 106 | 105 | 97.5 | 91.5 | 92.5 | 95.5 | 98 |
| <i>Quantum of world trade.</i> | 91.5 | 110 | 102.5 | 94 | 82 | 83 | 86.5 | 90 |

¹ The Argentine, Australia, China, Egypt, India, New Zealand and the Union of South Africa.

² The gross tonnage of existing merchant vessels rose from 64.6 million tons in 1925 to 70.1 million tons in 1931 and fell to 64.9 million tons in 1935; that of ships laid up fell from 6.6 million tons in 1925 to 3.4 million tons in 1929, rose to 14 million tons in 1932 and fell again to 5.3 million tons in 1935. The figures refer to the tonnage on June 30th of each year.

Between 1929 and 1932, the tonnage of ships cleared fell by 16%, the active tonnage of the world's merchant marine by 14%, but the quantum of world trade by as much as 25%. As was shown above, however, the trade in manufactured articles fell most in quantum; the reduction in the quantum of primary products entering into trade was approximately the same as the fall in the tonnage of ships cleared or in the total tonnage of merchant vessels in use. It is naturally the quantum of these products, whose volume is great in relation to their value, which determines the shipping activity, particularly as the greater fall in the quantum of manufactured articles affects shipping from industrial countries alone and is thus largely reflected, not in the tonnage of ships employed, but in the extent to which these ships are loaded on their outward journeys (from industrial countries to countries exporting primary products). That the average utilisation of the loading capacity has fallen during the depression is proved by available figures concerning the tonnage of ships passing through the Suez and Panama canals and the weight of the goods forwarded by these ships. The following figures show the average weight of the goods forwarded per register ton of these ships in the years 1930-1935, as percentage of the corresponding figures for 1929 :

| | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|--------------------------------------------------|------|------|------|------|------|------|
| Ships passing through the Suez Canal | 87 | 82 | 81 | 85 | 87 | 78 |
| Ships passing through the Panama Canal | 92 | 83 | 77 | 81 | 86 | 89 |

According to these figures, each register-ton carried, on an average, about 20% less goods in 1932 than in 1929. Between 1932 and 1935, the extent to which ships were loaded increased by 16% in the case of the Panama Canal. The corresponding figures for the Suez Canal, after rising by 7% from 1932 to 1934, show a sharp drop in 1935; this appears to be partly due to special factors unconnected with merchandise trade, but partly also to the relative stagnation of European trade.

The figures given in the above table indicate that the tonnage of ships cleared in ports rose by 13% between 1932 and 1935, while the increase in the quantum of world trade was rather less than 10%. The discrepancy is largely due to recent changes in the geographical distribution of trade, which have tended to increase the demand for shipping services. It is the trade between continents other than Europe that has expanded the most in recent years, and the average distances of shipping transport are thus likely to have increased. While the quantum of trade of the continents outside Europe was by 20% higher in 1935 than in 1932, the quantum of total European trade had barely recovered above the level of 1932. Further, the decline in the relative importance of European trade is mainly due to the contraction of intra-European trade, for which railway and ships engaged in short routes are the chief means of transport.

III. PRICE MOVEMENTS.

1935 was a year of rising prices. In most countries, price indices were higher at the end of 1935 than a year earlier; the world market prices of most important commodities rose during the year; and further progress was made towards the restoration of more workable price relationships.

MOVEMENTS OF THE GENERAL LEVEL OF WHOLESALE PRICES.

Table 1 below shows the net percentage change in the wholesale-price indices of forty-one countries during 1933, 1934 and 1935. In each case the change is measured from January to January. The countries are ranged in order of the rise in wholesale prices during 1935 — *i.e.*, from January 1935 to January 1936. All measurements are in terms of national currency.

Table 1. — NET PERCENTAGE CHANGE IN WHOLESALE-PRICE INDICES, 1933, 1934 AND 1935.

| | 1933 | 1934 | 1935 | | 1933 | 1934 | 1935 |
|-----------------------|-------|-------|--------------------|-----------------------|-------|-------|--------------------|
| Danzig | + 1.9 | — 1.2 | +55.5 | Germany | + 5.9 | + 5.0 | + 2.4 |
| Italy | — 6.2 | + 0.7 | +24.4* | United States . . . | +18.4 | + 9.1 | + 2.3 |
| Belgium | — 7.0 | — 2.5 | +23.1 | Canada | +10.8 | + 1.1 | + 2.1 |
| Albania | —23.0 | — 0.3 | +20.0 | Chile | — 4.9 | + 5.4 | + 2.0 |
| Roumania | —11.3 | +14.5 | +15.9 ^b | Bulgaria | — 7.0 | + 9.3 | + 2.0 |
| Yugoslavia | — 7.0 | + 2.6 | +10.3 | Argentina | +13.9 | + 0.6 | + 1.1 |
| Turkey | — 6.8 | +15.6 | + 9.9 | Australia | + 8.5 | + 0.1 | + 1.1 |
| Hungary | —13.4 | +21.1 | + 9.3 | Czechoslovakia . . . | — 2.1 | + 8.2 | + 0.8 |
| Estonia | + 7.3 | — 5.7 | + 8.5 | Finland | + 0 | + 0 | + 0 |
| Japan | — 5.2 | + 3.4 | + 5.8 | Latvia | + 1.6 | + 4.7 | + 0 |
| China | —10.5 | + 2.3 | + 4.9 | Austria | + 1.2 | + 0.1 | — 1.1 |
| Norway | — 1.7 | + 4.2 | + 4.8 | Indo-China | — 9.9 | — 5.0 | — 1.1 |
| New Zealand | + 5.5 | + 0.7 | + 4.4 | Poland | — 2.6 | — 8.8 | — 1.1 |
| Union of S. Africa . | +21.4 | —10.0 | + 4.2 | Netherlands | + 5.3 | — 1.3 | — 1.3 |
| United Kingdom . . | + 4.9 | — 0.6 | + 4.0 | Mexico | + 8.7 | + 1.7 | — 1.9 |
| Denmark | +13.6 | + 4.3 | + 3.4 | India | + 2.2 | + 4.5 | — 2.2 |
| Switzerland | + 0.5 | — 3.8 | + 3.2 | Netherlands Indies . | — 9.5 | — 1.3 | — 3.1 |
| France | — 1.5 | —13.6 | + 2.7 | Spain | + 0.6 | + 2.0 | — 3.6 ^c |
| Sweden | + 5.7 | + 2.6 | + 2.7 | Egypt | + 2.9 | +33.2 | — 8.0 |
| Peru | + 8.5 | — 0.3 | + 2.6 | Portugal | + 5.4 | — 2.0 | — 9.4 |
| Greece | — 2.2 | + 1.0 | + 2.5 | | | | |

* January to October 1935. ^b January to December 1935. ^c January to September 1935.

Of the forty-one countries included in the table, wholesale prices in 1935 rose, on balance, in twenty-nine, fell in ten, and were unchanged in two. In 1934 the wholesale-price index fell in fourteen countries, and in 1933 in eighteen. Of the ten countries where prices fell in 1935, the decline was very much less than the increase which had taken place in the previous two years in three — namely, Egypt, India and Mexico; and less also in Austria. In Spain, the price decline in 1935 was moderate and followed two years of gently rising prices; it was more serious in Portugal, where a considerable decline in the price of wheat and other vegetable foodstuffs produced a fall of nearly 10% in the general index. The only countries where prices declined in each of the years 1933, 1934 and 1935 are Indo-China, Poland and the Netherlands Indies; in the first two countries, the decline in 1935 was less than in either of the two preceding years, while in the Netherlands Indies it was somewhat greater in 1935 than in 1934, but substantially less than in 1933.

The most remarkable rise in wholesale prices in 1935 was one of more than 55% in Danzig. At the beginning of May 1935, the gold value of the Danzig gulden was reduced by 42.37% to a level equivalent with the Polish zloty. As practically all goods in Danzig are supplied from outside, the effect on wholesale prices was instantaneous: the official index rose from 64.3% of its 1929 level in April to 85.7% in May, and 101% at the beginning of 1936. The sharp rise in the Belgian index is also to be attributed to the effects of the devaluation in March and the expansionist monetary policy subsequently pursued. Further reference is made below to the important changes in the internal structure of prices which followed the devaluation of these currencies.

Between January and October 1935, when publication in Italy of practically all official economic data was suspended, the Italian general index of wholesale prices rose by nearly 25%. It will be recalled that Italy instituted a control of foreign exchange in 1934. The nature of the rise in prices in 1935 is reflected in the generality with which the principal components of the index were affected. From the beginning of the year to September 1935, ¹ national products rose in price by 22%, imported products by 19% and exported products by 31%; national agricultural products rose by 20%; industrial raw materials rose by 25%, semi-manufactures by 18% and finished goods by 20%.

Apart from Danzig, Italy and Belgium, the general level of wholesale prices rose most in 1935 in Albania (20%) and in Roumania, Yugoslavia, Turkey and Hungary (15-10%). Various factors of a special nature affected the movement of prices in these countries, such, for example, as the changes in the premia paid to exporters for foreign exchange by the central banks of Hungary and Roumania, and the purchase by Italy of Hungarian wheat at prices higher than the world level in execution of the Rome Agreement of 1934. An important general influence affecting prices in the four countries grouped together above and in Bulgaria was the very sharp rise in German purchases of foodstuffs and/or raw materials in 1935. This increase was due to a change in German exchange policy. Hitherto, this policy had been broadly directed to securing a surplus of exports with countries with free exchange and the utilisation of this exchange for purchases of raw materials and foodstuffs in the world market. Part of this exchange was claimed by creditors, however, and, as no fresh credits were available, German policy in 1935 sought to secure as much of her foodstuff and raw-material requirements as possible without the use of "free" foreign exchange. In pursuance of this policy, Germany provisioned herself to an increasing extent with foodstuffs and raw materials from the countries of South-Eastern Europe. This is brought out clearly in the following statement of German imports in 1935 compared with 1934:

| | German imports of foodstuffs | | German imports of raw materials | |
|---------------------------|------------------------------|--------------|---------------------------------|--------------|
| | 1934 | 1935 | 1934 | 1935 |
| | RM (000,000's) | | RM (000,000's) | |
| Turkey | 31.0 | 43.6 | 34.9 | 47.8 |
| Hungary | 28.1 | 43.0 | 25.7 | 21.9 |
| Yugoslavia | 13.0 | 24.8 | 21.8 | 33.4 |
| Bulgaria | 13.4 | 20.2 | 19.9 | 20.5 |
| Roumania | 26.6 | 16.0 | 28.7 | 59.8 |
| Total | 112.1 | 147.6 | 131.0 | 183.4 |
| Other countries | 954.8 | 848.3 | 2,469.3 | 2,369.4 |

German imports of foodstuffs from these five countries were over 30% higher in 1935 than in 1934, while from other countries they were more than 10% lower; raw-material imports from the group were 40% higher and from other countries over 4% lower. The increased importance of German purchases is even more striking if regarded from the

¹ Data regarding the group indices are not available later than this month.

point of view of the five countries: their exports to Germany in 1935 rose by over a third in terms of gold (valuing the Reichsmark at par), while their exports to other countries were practically unchanged.

The exchange required by German importers to effect purchases in these countries was made available through clearing arrangements which were based on the par values of the respective currencies. As the "real" depreciation of the Reichsmark was greater than that of the currencies of South-Eastern Europe,¹ this implied an "over-valuation" of the German currency. In other words, German importers got a relatively large amount of lei, dinars, pengö, etc., for their Reichsmarks and were in consequence able to offer high prices, in terms of national currency, for the raw materials and foodstuffs produced in these countries. The effect was, of course, to raise prices there. A detailed examination of the price statistics shows that in many cases the commodities directly affected by German purchases rose most markedly. Thus, for example, exports of mineral oils from Roumania to Germany increased from RM 13.7 to 37.3 million between 1934 and 1935, and the price of crude oil, in terms of lei, doubled in the latter year. Exports of meat from Hungary to Germany doubled, and the "agriculture and breeding" division of the general index rose by 20%, considerably more than any other division.

The other side of the "over-valuation" of the Reichsmark in these agreements was, of course, that German manufactured goods were relatively expensive in the countries concerned. In consequence, the agreements resulted in all cases in large uncleared Reichsmark balances to the credit of the South-Eastern European States. The result of this exchange policy was, in short, that Germany borrowed foodstuffs and raw materials from the debtor countries of South-Eastern Europe; and that these borrowings could only be liquidated by the purchase of German industrial products which, as already noted, were relatively high in price. A further consequence was that the currencies of these countries were weakened through the establishment of a relatively high domestic level of prices.

In Germany itself, the official index discloses a very moderate rise in wholesale prices in 1935: 2½%, compared with 5% in 1934 and 6% in 1933. In view of the rise in world prices,² the restriction of imports under the New Plan, the increasing use of expensive domestic substitutes for foreign raw materials, and the extent of the credit expansion in Germany,³ the smallness of the rise in prices is somewhat surprising. It must be borne in mind, however, that the index is based on official prices, which may in certain cases be lower than those actually prevailing in the market.⁴

¹ This is shown both in the "free" market rates quoted for the respective currencies and by a comparison of price levels. At the end of 1934, the general index of wholesale prices was 73.6% of its 1929 level in Germany, compared with 54.6% in Bulgaria, 55.9% in Turkey, 59% in Roumania, 61.9% in Yugoslavia, and 69.4% in Hungary.

² See next section of this chapter.

³ See League of Nations, *Money and Banking, 1935/36*: Volume I — *Monetary Review* (Geneva, 1936), page 39.

⁴ A Reich Commissioner for the Supervision of Prices was set up by Law of November 5th, 1934, with the function of keeping prices as low as possible. Two principal Decrees have been issued to date, one of November 12th, 1934, "concerning price-fixing and against the rise in price of the necessities of life", and the second of December 11th, 1934, "concerning the supervision of prices". Steps had previously been taken to limit the rise in prices. Thus, by the Decree against Price-increases of May 16th, 1934, the increase in the prices of cartellised products was made dependent on official consent. Decrees were issued concerning the prices of textiles (July 19th, 1934, September 6th, 1934, April 21st, 1935, December 6th, 1935), base metals (July 31st, 1934), foreign goods (September 22nd, 1934), leather goods (April 20th and November 14th, 1934), old rubber and rubber waste (November 26th, 1934). The Reich Commissioner for the Supervision of Prices has, *inter alia*, enforced the observation of the requirement, dating from 1931, that bakers, butchers and barbers display their prices; supervised prices in the building industry, and regulated margins in the trade in oils and fats, and electric batteries. The Price Commissioner issued 112 instructions in 1935 which were circulated to the forty-nine district officials charged with their enforcement and to the various industrial groups and associations. In addition, the nineteen organisations concerned with the marketing of German food products and the twenty-seven bodies supervising the imports of particular commodities have in certain cases fixed maximum prices.

Apart from Estonia, where the index was more than 8% higher at the beginning of 1936 than at the beginning of 1935, the general indices of wholesale prices of the countries forming the sterling bloc showed moderate rises during the year. The increase in the Estonian index was principally due to foodstuffs, which rose by 10%, while raw materials and industrial products were up by 5%. In the other parts of the sterling group, wholesale prices rose by less than 5%; generally, the rise was somewhat greater than in 1934, though less than in 1933. In the United States, on the other hand, the wholesale-price index rose by less than 2½% in 1935, compared with 9% in 1934 and 18% in 1933.

As the gold value of the American dollar and of the currencies of the United Kingdom, the British Dominions, the Scandinavian countries and Japan was practically the same in January 1936 as in January 1935, the last column of Table 1 can be taken as reflecting the movement of wholesale prices in terms of gold in these countries in 1935, and compared directly with the movement of wholesale prices in the countries of the gold bloc. Wholesale prices in France and Switzerland turned upwards in 1935 and their net rise during that year was of the same order of magnitude as the rise in prices in the United States and United Kingdom, so that the price-exchange position was not substantially altered.¹ On the other hand, prices continued to fall in the Netherlands and Poland.

The important question of the relationship between price movements and exchange rates in the United Kingdom, the United States and France requires more detailed examination. Diagram 1 below shows the fortnightly movements of various price indices for the United Kingdom and the United States since September 1931; for each country, two price indices are shown: one covers only primary products and the other is a general wholesale-price index. All the indices have been compiled by the London *Economist* except the wholesale-price index for the United States, which is compiled by the Irving Fisher Institute. Diagram 2 compares the changes in the value of the pound in terms of dollars with the changes in the relationship between wholesale prices in the United States and wholesale prices in the United Kingdom, taking this relationship in September 1931 as 100. Both diagrams are drawn on a logarithmic scale.

Diagram 1. — WHOLESALE PRICE MOVEMENTS
IN THE UNITED KINGDOM AND U.S.A.

September 18th, 1931 = 100.

- A. *Economist* index for U.K.
- B. Sterling prices of primary products.
- C. Irving Fisher index for U.S.A.
- D. Dollar prices of primary products.

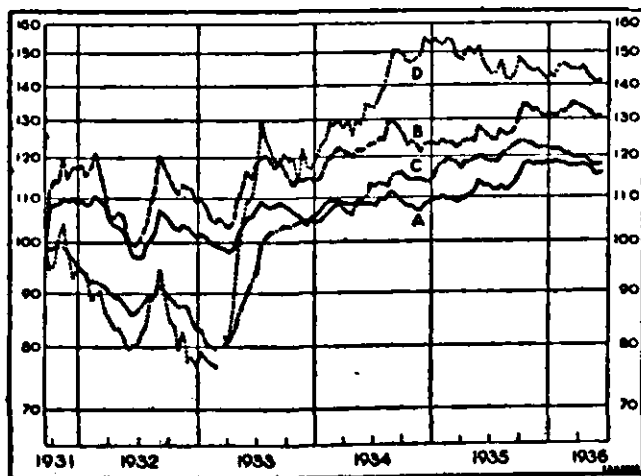
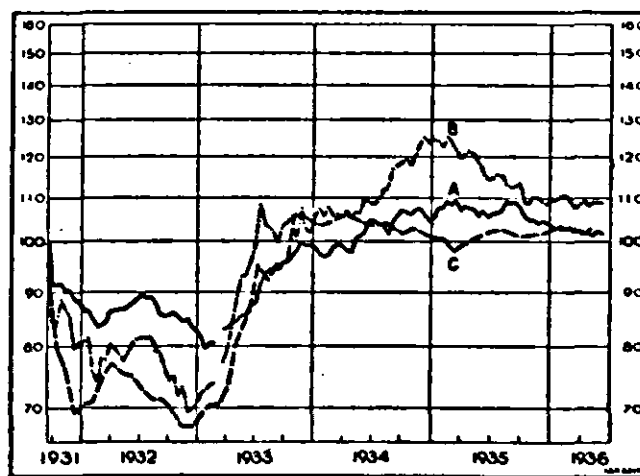


Diagram 2. — RELATIVE PRICE MOVEMENTS
AND EXCHANGE RATES.

September 18th, 1931 = 100.

- A. U.S.A. wholesale-price index as % of U.K. index.
- B. Dollar prices of primary products as % of sterling prices.
- C. Value of £ in terms of \$.



¹ See, however, below.

The detailed movements of these indices up to 1934 have been analysed in previous editions of this volume and need not be recapitulated here. At the beginning of 1935, American prices (which had risen much more rapidly than British during the latter part of 1933 and throughout 1934) were somewhat higher in relation to British prices than would have been expected on the basis of the exchange rate (taking the relationship on September 18th, 1931, as 100).

In 1935, much of this discrepancy was eliminated. The sterling prices of primary products rose during the first three quarters of the year, while the trend of the American index was down; and, during the second half of the year, the complete *Economist* index rose more rapidly than the complete Irving Fisher index. The movements of the two groups of indices were similar during the first months of 1936. At the end of June 1936, the complete *Economist* index was 16% and the Irving Fisher index 20% above the level of September 18th, 1931, while British prices of primary products were 33% and American prices 47% higher. The relationship between the complete indices corresponded almost exactly to the exchange rate (taking the relationship in September 1931 as base), while American prices of primary products were about 7% higher than the "exchange-rate level".

Further light is thrown on the nature of the divergences of the British and American indices in 1935 by a study of indices of the prices of various groups of primary products in the two countries compiled by the Bank of England:

Table 2. — PRICE INDICES OF PRIMARY PRODUCTS,* UNITED KINGDOM AND UNITED STATES.
Week ended September 19th, 1931 = 100.

| Date | Foods | | Metals | | Other industrial materials | | General index | |
|--------------------|-------|--------|--------|--------|----------------------------|--------|---------------|--------|
| | U.K. | U.S.A. | U.K. | U.S.A. | U.K. | U.S.A. | U.K. | U.S.A. |
| Jan. 6th, 1934 . . | 110.9 | 105.9 | 130.0 | 131.5 | 145.7 | 147.4 | 128.1 | 127.1 |
| Jan. 5th, 1935 . . | 114.3 | 150.8 | 134.7 | 132.2 | 152.2 | 158.3 | 132.8 | 146.7 |
| Jan. 4th, 1936 . . | 119.3 | 143.8 | 150.0 | 140.7 | 166.4 | 173.0 | 143.8 | 151.8 |
| May 16th, 1936 . . | 119.0 | 138.3 | 149.2 | 139.3 | 173.8 | 166.9 | 145.6 | 147.6 |

* Unweighted geometric averages of fifteen comparable commodities.

The very sharp rise in the prices of primary products in the United States in 1934 to which reference has been made above was clearly due to foods. In 1935, on the other hand, food prices fell slightly in the United States and continued their gradual rise in the United Kingdom. The principal reason for the sharper rise in the general British index in that year was, however, the much greater rise in the price of metals. Between the beginning of 1936 and the middle of May, there was little net change in the British indices, while in the United States the tendency was to decline. However, on May 16th, 1936, the prices of primary products as a whole were still somewhat higher in relation to September 1931 in the United States than in the United Kingdom.

The use of September 1931 as base period in the preceding analysis must, of course, not be taken to imply that price relationships were in equilibrium at that date. The depreciation of sterling is itself presumptive evidence to the contrary. Nor should these price comparisons be limited to one or two sets of wholesale-price indices. Table 3 below compares the levels of various elements of the price structure of the United Kingdom and United States at recent dates. To avoid the imputation of equilibrium to any one base period, three have been compared, and the "purchasing-power parity" exchange rates worked out for each element of the price structure in each period.

Table 3. — ELEMENTS IN PRICE STRUCTURE OF THE UNITED KINGDOM AND THE UNITED STATES OF AMERICA.

| Month : | March 1934 | March 1935 | March 1936 |
|-----------------------------------------------------------------|---------------|---------------|---------------|
| Assumption 1. | | | |
| <i>Price and Exchange Equilibrium in 1913/14.</i> | | | |
| (1) Wholesale prices in U.S.A. as % of U.K. (1913 = 100) . . . | 101.7 % | 109.4 % | 104.0 % |
| (2) Cost of living in U.S.A. as % of U.K. (1913/14 = 100) . . . | 96.8 % | 101.0 % | 96.5 % |
| (3) Theoretical exchange rate represented by (1) | \$4.95 | \$5.32 | \$5.06 |
| (4) Theoretical exchange rate represented by (2) | \$4.71 | \$4.92 | \$4.70 |
| (5) Actual exchange rate | \$5.09 | \$4.78 | \$4.97 |
| Assumption 2. | | | |
| <i>Price and Exchange Equilibrium in 1929.</i> | | | |
| (6) Wholesale prices in U.S.A. as % of U.K. (1929 = 100) . . . | 100.1 % | 109.3 % | 104.0 % |
| (7) Cost of living in U.S.A. as % of U.K. (1929 = 100) | 91.6 % | 95.5 % | 91.3 % |
| (8) Theoretical exchange rate represented by (6) | \$4.86 | \$5.31 | \$5.05 |
| (9) Theoretical exchange rate represented by (7) | \$4.45 | \$4.64 | \$4.43 |
| (10) Actual exchange rate | \$5.09 | \$4.78 | \$4.97 |
| Assumption 3. | | | |
| <i>Price and Exchange Equilibrium in 1930.</i> | | | |
| (11) Wholesale prices in U.S.A. as % of U.K. (1930 = 100) . . . | 96.7 % | 105.6 % | 100.4 % |
| (12) Cost of living in U.S.A. as % of U.K. (1930 = 100) | 91.6 % | 95.6 % | 91.3 % |
| (13) Manufactured goods in U.S.A. as % of U.K. (1930 = 100) . . | 91.9 % | 98.2 % | 95.3 % |
| (14) Theoretical exchange rate represented by (11) | \$4.70 | \$5.13 | \$4.88 |
| (15) Theoretical exchange rate represented by (12) | \$4.45 | \$4.65 | \$4.44 |
| (16) Theoretical exchange rate represented by (13) | \$4.47 | \$4.77 | \$4.63 |
| (17) Actual exchange rate | \$5.09 | \$4.79 | \$4.97 |

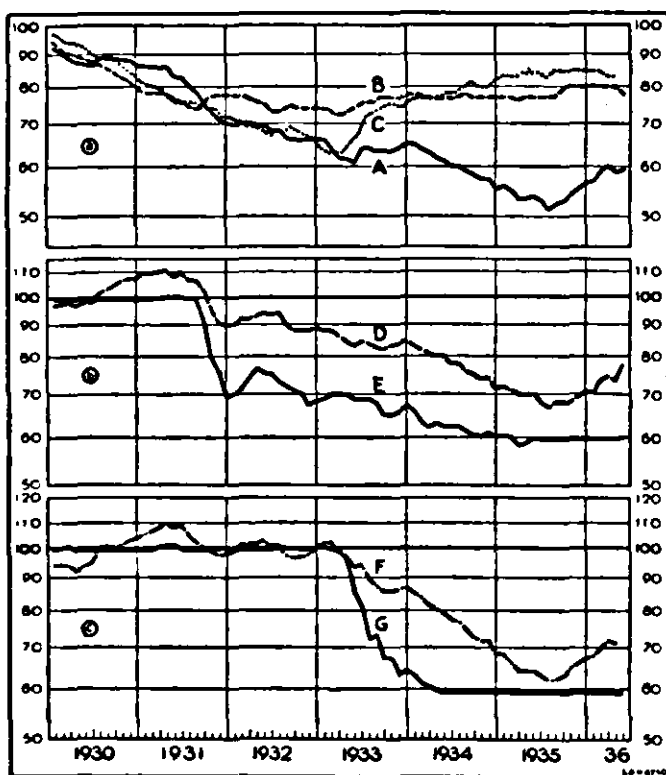
Where prices in the United States were higher during the months shown at the top in relation to prices in the United Kingdom than they were in the base period, the "theoretical" exchange value of sterling in terms of dollars was naturally greater than parity; and *vice versa*. An examination of the figures for March 1936, when the exchange value of sterling was \$4.97, shows that the range of theoretical exchange rates was from \$4.43 to \$5.06. The theoretical was higher than the actual rate only on the basis of comparative wholesale prices, on the assumption that prices and exchange rates were in equilibrium in 1913 and 1929. The next highest "theoretical" rate is \$4.88, derived on the basis of wholesale-price indices on the assumption that 1930 was a position of "equilibrium". It is, however, generally assumed that the pound was over-valued in that year and, if that was in fact the case, the figure just mentioned would appear to represent the upper limit of the "true" value of the pound in March 1936. The cost-of-living indices give lower "theoretical" exchange rates on all three base periods, ranging from \$4.43 to \$4.70, and a comparison of the movement of manufactured goods prices in the two countries since 1930 suggests an "equilibrium" rate of \$4.63 in March 1936. The simple average of the seven "theoretical" exchange rates shown in Table 3 for March 1936 works out at \$4.74 and the average of five "theoretical" rates, excluding those derived from a comparison of wholesale-price indices based on 1913 and 1929, works out at \$4.62.¹

¹ For a discussion of the limitations of the purchasing-power-parity method of determining the "true" value of currencies and of the reservations which must be attached to the choice of any year as an "equilibrium" period, see League of Nations, *Commercial Banks, 1929-1934*, page LXXIII.

The relationship between price and exchange movements in France and the two great Anglo-Saxon countries may now be considered on the basis of Diagram 3 below. Part (a) of this diagram shows the monthly movements of the official wholesale-price indices since 1930 on the basis 1929 = 100. Part (b) compares the changes in the relationship between French and British, and part (c) between French and American, prices (taking the ratio in 1929 as 100) with the changes in the respective exchange rates. All the diagrams are drawn on a logarithmic scale.

Diagram 3. — RELATIVE WHOLESALe-PRICE MOVEMENTS AND EXCHANGE RATES.
1929 = 100.

- A. Wholesale prices in France.
- B. Wholesale prices in U.K.
- C. Wholesale prices in U.S.A.
- D. Wholesale prices in France as % of U.K.
- E. Value of £ in terms of francs.
- F. Wholesale prices in France as % of U.S.A.
- G. Value of \$ in terms of francs.



In 1934 and the first half of 1935, a large part of the previous under-valuation of the Anglo-Saxon currencies in relation to the franc was eliminated. An intensification of the deflationary pressure was successful in reducing the general level of wholesale prices in France by more than 20% in eighteen months, while at the same time prices continued to rise in the United States (although more slowly) after the stabilisation of the dollar in January 1934, and they were stable in the United Kingdom. In July 1935, the general level of wholesale prices in France was 61.7% of the level in the United States, taking the relationship in 1929 as 100, and the value of the dollar in terms of francs was 59.4% of the old parity. This suggests — subject to the limitations of (a) the method and (b) the selection of 1929 as base year — that the under-valuation of the dollar in relation to the franc did not exceed 5%. The under-valuation of sterling appears greater (about 10%), but in this case it is necessary to make allowance for the probable over-valuation of sterling in the base period.

During the latter part of 1935 and first quarter of 1936, a new and important price development took place. The French wholesale-price index rose by 17% between July 1935 and March 1936, while the British index, after rising by 4% between July and October 1935, remained stable, and the American index, after rising slightly in August, was also remarkably steady. The monetary basis of this rise in prices is discussed in another publication;¹ it was most marked for agricultural products, in particular wheat, but practically all groups of the index were affected. Exchange rates were stable during this period, and the result of these price movements, as Diagrams 3 (b) and (c) show, was of course to increase again the "under-valuation" of the Anglo-Saxon currencies. If it were assumed

¹ League of Nations *Money and Banking 1935/36* : Volume I — *Monetary Review*, pages 48 and 49.

that 1929 was a position of equilibrium and that the wholesale-price indices adequately measure the changes in the internal purchasing power of the various currencies, it might be suggested, on the basis of Diagram 3, that the under-valuation of the Anglo-Saxon currencies in relation to the French franc was of the order of magnitude of 20% in March 1936.

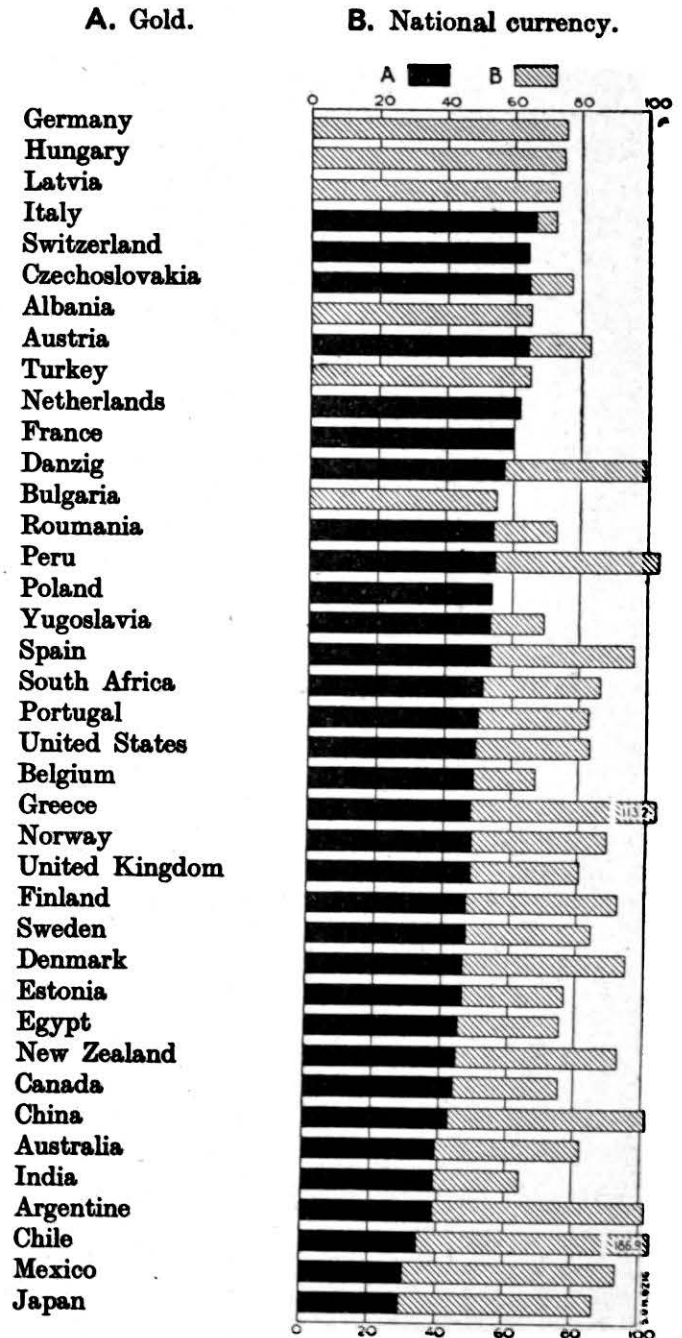
The cost-of-living indices of these three countries in terms of gold during the first quarter of 1936, on a pre-war and 1930 base, are shown below:

| | 1913/14 = 100 | 1930 = 100 |
|--------------------------|---------------|------------|
| France | 99 | 84 |
| United Kingdom | 88 | 56 |
| United States | 84 | 50 |

Measured on the pre-war base, the cost of living in France in terms of gold was only 10-15% higher than in the Anglo-Saxon countries in 1936. The discrepancy is as much as 25-35% if measured on the 1930 base. It would seem likely, however, that, even in that year, the cost of living in France was relatively low and had not yet completely adapted itself to the low level at which the franc was stabilised in 1928. The real discrepancy is therefore probably less than the latter figure.

Space is not available for a detailed analysis of price and exchange relationships in other countries. ¹ Diagram 4 opposite gives, however, a cross-section picture of the wholesale-price situation of the world in March 1936 as compared with 1929. For each country, the full bar in that diagram represents the percentage which wholesale prices in terms of national currencies were of their 1929 level in March 1936 (or the most recent month for which data are available at the time of writing). For the countries which maintained the gold standard in unrestricted operation in March 1936, this full bar is shown in black. For the countries whose currencies depreciated in relation to gold, the black part shows the percentage which "gold" prices — taking account, that is, of the depreciation of the currency — were of their 1929 level. For the countries whose currencies were officially maintained at par but where exchange transactions were subjected to restrictions, the full bar is hatched.

Diagram 4. — WHOLESALE-PRICE INDICES IN MARCH 1936² AS PERCENTAGE OF 1929.



¹ For an analysis of recent price movements in China and their relationship to changes in the price of silver and the external value of the Chinese currency, see League of Nations *Money and Banking 1935/36*: Volume II — *Commercial Banks*, page 50.

² Spain: July 1935; Italy: October 1935; Roumania and Turkey: December 1935; Mexico: January 1936; Latvia and Danzig: February 1936.

In terms of national currency, the general level of wholesale prices in March 1936 ranged from nearly twice as high as 1929 in Chile to only slightly more than half the 1929 level in Poland. The deflationary effort involved in this enormous reduction of prices in Poland could not be sustained and control of foreign-exchange transactions was instituted in April 1936.

In addition to Chile, wholesale prices in terms of national currency were higher than in 1929 in Greece, Peru, the Argentine and China and — as a result of the rapid rise in prices after devaluation — just at the 1929 level in Danzig. In most countries of the sterling *bloc*, prices were 10-20% lower than in 1929, in the United States they were 17% lower, and in France, the Netherlands and Switzerland they were 35-40% lower.

In terms of gold, the range of wholesale-price indices in March 1936¹ was from about 65% of 1929 in Switzerland to 30% in Japan. The countries with exchange control come high in Diagram 4, but most of these countries have devised systems of export subsidies, premia for foreign exchange sold to the National Bank, surcharges on foreign exchange purchased, etc., which amount in effect to a depreciation of the currency. The depreciation is, however, not uniform. It varies according to the purpose for which foreign exchange is required, and in some cases even according to the country in which it is to be spent. The prices indicated for these countries cannot therefore be regarded as gold prices. Gold prices are highest in relation to 1929 in the countries which had neither allowed their currencies to depreciate nor instituted exchange control, and in the countries where the currency depreciation was least.² Gold prices were lowest in relation to 1929 levels (about 30%) in Japan and Mexico, and were also very low in Chile and the Argentine; in all these countries, the currency depreciation was great.³ In the great majority of countries where the exchange was depreciated and subject to no restrictions, gold prices were 50 to 60% lower in March 1936 than in 1929.

PRICE MOVEMENTS OF INDIVIDUAL COMMODITIES.

Table 4 on the next page shows the net percentage change in the sterling prices of thirty-six important commodities (1) during 1935 and (2) during the first four months of 1936; the table also shows (3) the sterling price of each commodity at the end of April 1936 as a percentage of the average⁴ price in 1929. The commodities are placed in order of the rise in price during 1935.

The sterling price of gold was practically the same at the end of 1935 as a year earlier and showed little net change during the first four months of 1936; the percentage price changes shown in columns (1) and (2) of the following table can therefore be taken as changes in the *gold* prices of the commodities to which they relate. It will be observed that, during 1935, price increases outnumbered declines: excluding gold, seventeen products rose in price, seven were unchanged, and eleven fell.

¹ For Italy and Spain, Diagram 4 shows the position at a considerably earlier date. See footnote² on preceding page.

² In Czechoslovakia, the gold content of the currency was reduced by 16 $\frac{2}{3}$ % in February 1934 and in Austria the depreciation was 22.4% in March 1936. In the former country, exchange restrictions remained in force, while in Austria they had been practically abolished by the middle of 1935.

³ About 66% in Japan and Mexico. The rates of exchange used in the calculation of wholesale prices in terms of gold for Chile and the Argentine in Diagram 4 are the "free" rates, which show a depreciation in March 1936 of 81 and 62% respectively. If the official rates, which show a depreciation of 75 and 52% respectively, were used, the gold-price level for both Chile and the Argentine would be 47% of 1929 instead of 35 and 38% respectively, as shown in the diagram.

⁴ For silk, the price at the end of April 1936 is shown as a percentage of the price at the end of 1929.

Table 4. — CHANGES IN STERLING PRICES OF COMMODITIES.

| Commodity | Percentage change end of 1934 to end of 1935 | Percentage change end of 1935 to end of April 1936 | End of April 1936 as % of 1929 | Commodity | Percentage change end of 1934 to end of 1935 | Percentage change end of 1935 to end of April 1936 | End of April 1936 as % of 1929 |
|-----------------------|----------------------------------------------|----------------------------------------------------|--------------------------------|-----------------------|----------------------------------------------|----------------------------------------------------|--------------------------------|
| Hemp | + 77.4 | — 14.9 | 58.0 | Cocoa | + 0 | + 0 | 67.1 |
| Wool | + 40.9 | + 9.7 | 55.5 | Petroleum | + 0 | + 0 | 79.8 |
| Lead | + 40.0 | + 4.3 | 74.2 | Steel rails | + 0 | + 0 | 97.1 |
| Silk | + 37.0 | + 0 | 49.3 | Timber | + 0 | + 0 | 81.3 |
| Linseed oil | + 34.9 | — 1.7 | 79.5 | Coal | + 0 | — 0.6 | 96.5 |
| Spelter | + 27.1 | + 0.4 | 60.8 | Iron bars | + 0 | + 4.2 | 103.1 |
| Hides | + 25.0 | + 8.0 | 93.7 | Mutton | + 0 | + 0 | 78.6 |
| Copper | + 24.6 | + 5.4 | 48.2 | Barley | — 1.0 | — 12.0 | 73.9 |
| Flour | + 23.4 | + 0 | 75.7 | Sugar | — 2.0 | — 0.7 | 79.1 |
| Wheat | + 20.7 | + 12.9 | 66.4 | Bacon | — 2.2 | + 8.0 | 80.8 |
| Rice | + 16.7 | — 6.5 | 63.2 | Cement | — 2.5 | + 0 | 84.8 |
| Jute | + 13.9 | — 4.4 | 62.5 | Tin | — 4.5 | — 4.5 | 102.8 |
| Tea | + 9.9 | + 1.0 | 80.2 | Silver | — 8.6 | — 9.7 | 83.1 |
| Butter | + 5.8 | — 19.5 | 57.2 | Beef | — 10.0 | + 2.2 | 79.3 |
| Flax | + 5.6 | — 23.7 | 78.1 | Cotton | — 10.8 | + 1.4 | 63.7 |
| Rubber | + 4.0 | + 15.4 | 73.1 | Oats | — 12.5 | + 1.4 | 67.6 |
| Pig-iron | + 2.9 | + 8.5 | 102.4 | Maize | — 16.9 | + 10.1 | 51.3 |
| Gold | + 0.1 | — 0.3 | 165.7 | Coffee | — 18.4 | . | . |

In the following paragraphs, some of the special factors affecting the prices of particular commodities are briefly summarised. Among the general factors tending to support and raise commodity prices in 1935, the most important was doubtless the continued expansion of industrial activity in most countries and the slight revival of international trade. The statistical position of many commodities was substantially improved and visible stocks in the hands of producers fell very materially in the case of wool, silk, zinc, wheat, sugar, tea, copper and tin. This was due, not only to increased consumption, but also in many cases to the replenishment of consumers' stocks, which had been allowed to sink to abnormally low levels. The uncertainties of the international situation and fear of its unfavourable development resulted, from time to time, in heavy purchases of certain key products, but it is doubtful whether, over the year as a whole, this factor was of decisive influence in price movements. Unfavourable weather restricted the supplies of some products, notably wheat and hemp, and the supplies of others were restricted by organised producers' controls.

The most striking price rise during 1935 was one of over 75% for *Manila hemp*, which had fallen almost steadily until the early months of 1935, when its sterling price was nearly 65% lower than in 1929. With the exception of American cotton, the other textiles as a group also rose in 1935. The improvement in the *wool* position was very striking; prices regained the ground lost in the previous year when the large speculative position built up in 1933 had been liquidated. Production in the 1935/36 season was the lowest for several years in the principal producing countries, and a clearing arrangement between South Africa and Germany (whose withdrawal from the wool auctions was an important factor in the collapse of prices in 1934), under which Germany was to obtain £2¼ million of wool in the course of the 1935/36 season, diverted large quantities from world markets. The price of *silk*, which — partly under the pressure of increased *rayon* competition — had fallen steadily from 1928 to the end of 1934, rose substantially in 1935, largely on account of the damage to the Japanese crop. *Jute* supplies were limited by Government propaganda for restricted sowings. After a very marked rise in January 1935, the price of *flax* fell steadily until October, when, in the face of

a revival of demand, the Russian and Latvian monopolies limited individual sales to one or two thousand tons and gradually increased prices. The price of *American cotton* fell by over 10% in 1935; at the beginning of the crop season, the United States Government decided to reduce the basic loan figure from 12 to 10 cents per pound. On the other hand, the price of *Egyptian cotton*, which also fell during the first part of the year, rose considerably in November and was more than 5% higher at the end of the year than at the beginning.

The non-ferrous metals are prominent among the products the prices of which rose appreciably in 1935; lead was up by 40% and spelter and copper by about 25%. In addition to the revival of ordinary investment activity, the growth of armaments was no doubt partly responsible for the increased demand for these metals. The production of *lead* — partly as a result of a strike in Mexico — did not keep pace with the increase in consumption and stocks were reduced. The dissolution of the International Zinc Cartel at the beginning of 1935 had little effect on prices and the rise in demand in the latter part of the year, particularly for high-grade qualities, far exceeded production, with the result that stocks were considerably reduced and prices rose. The fall in the price of *copper* in 1934 led to renewed attempts on the part of producers to regulate supplies by agreement. An arrangement among producers controlling 90% of mining output (excluding Japanese and Russian production) was reached in March 1935 and the price of electrolytic copper in London rose from £30 12s. 6d. per long ton at the end of February to £36 10s. per long ton at the end of May. The copper market, like the lead and zinc market, was temporarily shaken by the Supreme Court decision holding the N.R.A. unconstitutional and price-fixing illegal. The control of these industries through the codes had to be abandoned, but buying was well maintained and the price reaction was only temporary; as in the case of the other non-ferrous metals mentioned, stocks of copper were considerably reduced and the rise in prices caused no slackening of consumption.

The sterling price of *silver*, which had risen by over 80% between the low point of the depression and May 1935 — chiefly as a result of the United States Government's silver-buying policy — fell steadily during the last seven months of 1935, and was nearly 10% lower at the end of that year than at the end of 1934. A very large speculative position in silver was built up in 1934 and early 1935, based evidently upon the assumption that it was the intention of the United States Government to drive the world price of silver up to \$1.29 per ounce. After May, however (when the Chinese Government, in an attempt to counteract the deflationary effects of the steady drain of silver to London and the appreciation of the exchange rate, took steps to loosen the connection between the Chinese currency and silver), the United States Government appears to have reduced its purchases. Speculative stocks were thrown on the market and taken over by the United States Treasury only at successive price reductions. In November 1935, China abandoned the silver standard. In December 1935, the United States Government completely withdrew from the market and for several days it was impossible to fix a price. During 1935, the United States is estimated to have bought 390 million ounces of silver in London and about 80 million ounces from other sources. From the inauguration of the silver-buying policy until December 15th, 1935, it bought 762 million ounces of silver in all. As monetary gold stocks at that date were about \$10,000 million, the requirement of the Silver Purchase Act that silver stocks constitute a third of gold stocks would require further silver purchases of about 1,150 million ounces of silver (valued at \$1.29 per ounce).

The slight fall in the price of *tin* in 1935 by no means reflects the acute shortage of that metal that prevailed during the greater part of the year. In the first quarter, consumption was considerably larger than production, and in April the production quotas of the countries adhering to the Tin Restriction Scheme were raised from 40 to 45% of standard tonnages. Further increases in quotas were made during the rest of the year; in December, the quota was fixed at 90% for the first quarter of 1936. The reduction in the price of tin in spite of the notable increase in demand may be partly explained by the tendency on the part of consumers to seek less expensive substitutes. It will be observed that, at the end of April 1936, the price of tin was much higher in relation to 1929 levels than the price of the other non-ferrous metals.

The sharp rise in the price of *linseed oil* in 1935 is to be ascribed largely to the prolonged drought in the Argentine. The demand for *hides* was stimulated through rearmament and prices rose, on balance, by 25% in 1935. In spite of a large increase in the consumption of *rubber*, its price was very

weak during the first nine months of 1935, chiefly on account of the difficulties experienced in enforcing native-production control in the Netherlands Indies. But the ground lost was recovered in the last quarter of the year, after the International Committee had made certain adjustments in the standard tonnage allotted to this country and reduced general export quotas.

Iron and steel products showed their customary price stability in 1935, but the British steel industry was working very close to capacity — the output of steel ingots and castings being greater than in any year since 1917 — and towards the end of the year and in 1936 a firmer price tendency became evident for certain products. An agreement was signed at the end of July 1935 between the British steel industry and the International Steel Cartel limiting imports into the United Kingdom and securing the British industry a fixed share in foreign markets. In 1936, it was necessary to increase the import quotas for some classes of semi-finished materials to prevent a rapid rise in prices.

During the 1934/35 season, surplus *wheat* stocks had been considerably reduced, but world prices remained low on account of the shrinkage of the world market and intense competition among exporters. The 1935/36 season was also marked by relatively short crops, particularly in the Argentine, and prices rose quite sharply in the second half of the year. In December 1935, the average price of all wheat c.i.f. British ports (6.48 shillings per hundredweight) was higher than in any corresponding month since 1929 (when it was 10.64 shillings). Stocks in the exporting countries were reduced, but uncertainty regarding Canada's selling policy continued to exercise a depressing influence on the market. The price of *rice* was also affected by short crops in 1935. *Tea* prices rose by about 10% in that year, partly under the influence of the International Tea Restriction Scheme. Apart from the three products previously mentioned in this paragraph and *butter*, the prices of the other foodstuffs included in Table 4 either fell or showed no net change in 1935. Foodstuffs are, indeed, prominent at the foot of that table, accounting for seven of the eleven price declines recorded last year. The most striking decline was for *coffee*, which fell very sharply in the first half of the year under the influence of very high crops in Brazil and the temporary withdrawal of Government support from the market. Some recovery occurred in the second half of the year, but prices were 18% lower at the end of 1935 than a year earlier. *Maize*, *oats* and *barley* were also weak, under the influence of plentiful supplies. The continued restriction of the international market in *sugar* through subsidies and high import duties in some importing countries exercised a depressing influence on prices in 1935. Much of the loss suffered in the early part of the year was, however, recuperated later. There was an increased demand for sugar in certain areas for the manufacture of alcohol and for non-human consumption and at the same time production was reduced in Cuba and Java ; stocks fell quite sharply.

Commodity prices in terms of sterling were, on balance, somewhat weaker in the first four months of 1936 than in 1935. The hard fibres, which had all risen in price in 1935, reacted in 1936 ; the fall was particularly serious for flax. The sterling price of silver fell by 20% and butter by almost as much. On the other hand, wheat continued to rise and most other foods were firmer in price than they had been in 1935. Tin fell slightly, but the other non-ferrous metals (with the exception of silver) continued firm. Pig-iron and iron bars show significant increases, wool was up by a further 10% and rubber by 15%.

At the end of April 1936, only pig-iron, iron bars and tin were quoted at prices as high, in terms of sterling, as in 1929. As the sterling price of gold was 65% higher, the gold price of these commodities was about 40% lower than in 1929.¹ The sterling prices of most cereals was about 30% lower than in 1929; maize was almost 50% lower. The decline in the price of tea was only about 20%, that in the price of cocoa about a third. The sterling prices of most animal foodstuffs were about 20% lower at the end of April 1936 than in 1929. The textiles as a group were lower than any other important category of goods, prices in general prevailing 40-50% below 1929, though flax — in spite of its sharp decline in the first months of 1936 — was only 22% lower. The non-ferrous metal group ranged from less than half the 1929 prices for copper to slightly above the 1929 level for tin, with silver also relatively high and lead and zinc in intermediate positions. Coal and iron-and-steel products were only slightly lower in price at the end of April 1936 than in 1929.

¹ The percentage which the *gold* price of any commodity at the end of April 1936 was of 1929 can be obtained by dividing the figures shown in the third column of Table 4 by 1.657.

INEQUALITIES IN RECENT PRICE MOVEMENTS.

During 1935, further progress was made towards the restoration of profitable price relationships. The years of depression had witnessed — were, indeed, largely caused by — a profound distortion in the structure of prices ; wholesale prices fell much more than the cost of living, raw materials more than manufactured goods, farm products more than industrial products, consumption goods more than investment goods. As a result of these divergent movements, the balance of economic relationships between producers and consumers and between different classes of producers was destroyed and a log-jam developed which prevented the movement of goods and generation of purchasing power.

Since 1933, as previous editions of this volume have shown, there has been a well-marked tendency in many parts of the world towards better price relationships. In most cases, this has been the result of a considerable rise in the prices of those commodity-groups which fell most during the depression, accompanied by relative stability in the prices of those groups which fell least. In other words, in revival as in depression, the movement of prices has tended to pivot around those prices which are relatively inflexible.

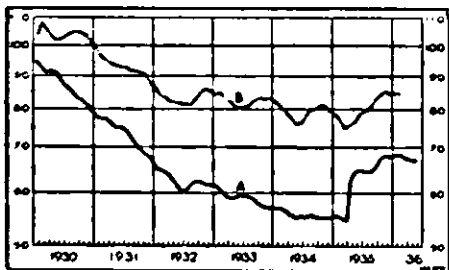
Wholesale and Retail Prices.

The relative rigidity of the cost of living in most countries was the subject of much discussion during the depression period. The same factors which kept the cost of living from falling as much as wholesale prices — for example, the greater importance of fixed costs, the stability of rents and certain institutional prices — remained operative when wholesale prices began to rise, with the result that the cost of living rose considerably less. This was the case, not only in such countries as the United Kingdom and Sweden, where the rise in wholesale prices was itself rather moderate, but also in the United States, where wholesale prices rose considerably, and even in Belgium and Danzig, where, as a result of a sudden and drastic devaluation of the currency, wholesale prices rose very sharply in a short space of time.

Diagram 5. — WHOLESALE PRICES AND COST OF LIVING IN BELGIUM.

1929 = 100.

- A. Wholesale prices.
- B. Cost of living.



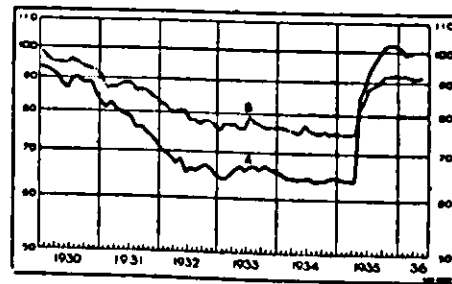
The experience of Belgium and Danzig is, indeed, instructive ; Diagrams 5 and 6 show the monthly movement of wholesale prices and the cost of living in these countries from 1930 to 1936. The diagrams are drawn on a logarithmic scale.

These diagrams require very little comment. At the low

Diagram 6. — WHOLESALE PRICES AND COST OF LIVING IN DANZIG.

1929 = 100.

- A. Wholesale prices.
- B. Cost of living.



point of the depression, in March 1935, wholesale prices in Belgium were more than 45% lower than in 1929 and the cost of living was only 25% lower. The belga was devalued in March 1935 and, during the next twelve months, wholesale prices rose by about 25% and the cost of living by less than half as much. It should be observed, moreover, that the cost-of-living curve shows the same tendency as the wholesale-price curve to flatten out in the last quarter of 1935 and first quarter of 1936. In Danzig, where the devaluation was greater and foreign products relatively more important, the price movements during 1935/36 were more violent, but the relationships the same. Unlike Belgium, however, the wholesale-price curve in Danzig crossed the cost-of-living curve in 1935.

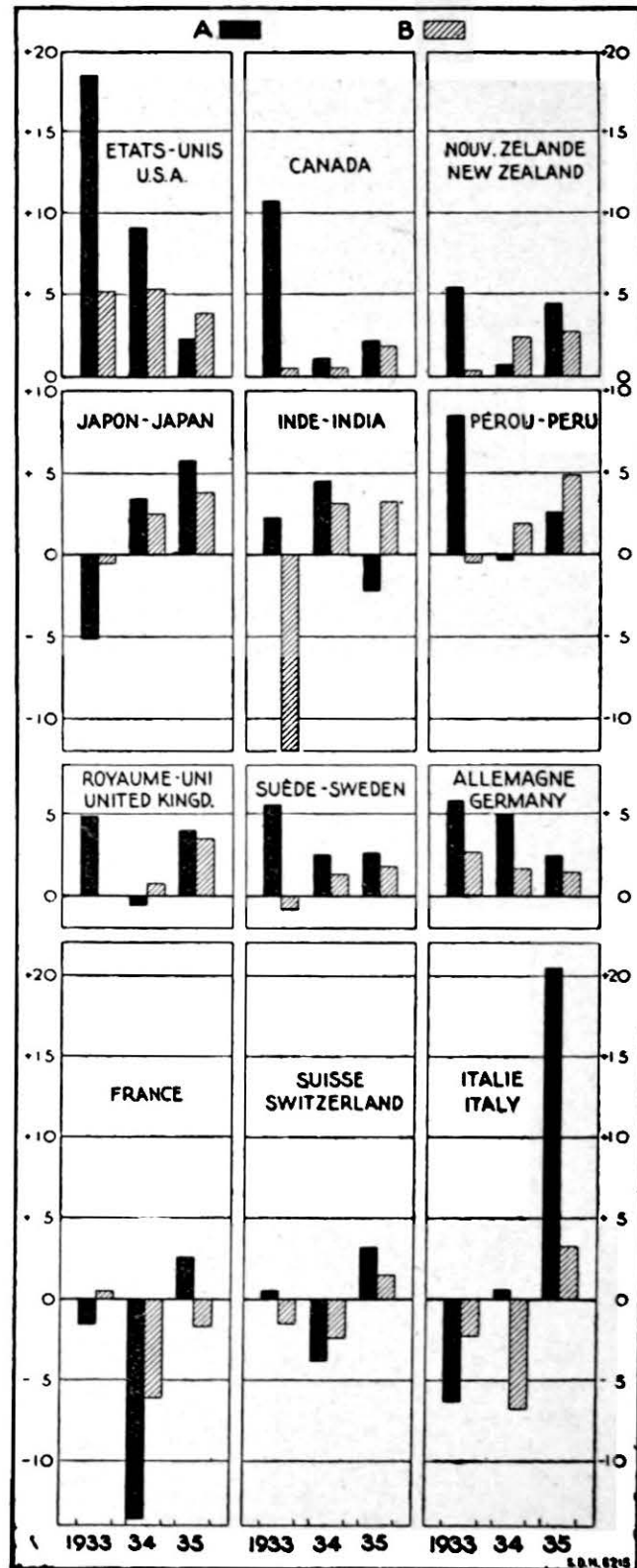
Diagram 7 compares the net percentage change in wholesale prices and in the cost of living in twelve representative countries during each of the past three years.¹

By and large, this diagram confirms the observation that as a rule cost of living moves considerably less than wholesale prices. Between January and September 1935, for example, the Italian cost-of-living index rose by only 3½% compared with a 20% rise in the index of wholesale prices. Exceptions to this rule are not numerous: in 1934, the cost of living rose slightly in the United Kingdom, while wholesale prices fell somewhat; in the same year, the cost of living rose more than wholesale prices in New Zealand; and, in 1935, the cost of living rose while wholesale prices fell in India. On the other hand, the cost of living fell in spite of a rise in wholesale prices in France in 1935;² and the same thing happened in Italy in 1934 and in Switzerland, India and Peru in 1933. These divergent movements of the two indices must be attributed to time-lags; it is well known that, on account of the imperfect nature of competition in the retail trade, the existence of stocks, etc., it takes time for any change in wholesale prices to be reflected in the retail-price indices.

In Canada, Denmark, India, Japan, New Zealand, Peru, Sweden and the United Kingdom, the increase in the cost of living was greater in 1934 than in 1933, and greater again in 1935 than in 1934. In all these countries, however, the net increase in the cost of living was considerably less than the net increase in wholesale prices. In the United Kingdom, for example, the net increase in wholesale prices between January 1933 and January 1936 was 8½% and the net increase in the cost of living 4%. Practically the whole of this increase in the cost of living took place in 1935. It was chiefly due to a rise of 5% in the retail prices of foodstuffs during that year. Bread, flour, butter and margarine were principally responsible.

Diagram 7. — ANNUAL CHANGE IN WHOLESALE PRICES AND COST OF LIVING, 1933, 1934 AND 1935.

A. Wholesale prices. B. Cost of living.



¹ The measurements are from January to January in all cases except Italy in 1935, where they are from January to September.

² The cost of living in Paris shows a slight upward tendency, however, after the third quarter of 1935. The index rose from 84.4% of the 1929 level to 86.0% in the fourth quarter of 1935 and 87.4% in the first quarter of 1936.

In contrast with the United Kingdom, the cost of living in the United States rose less in 1935 than in the previous years. For Germany, the increase in the official cost-of-living index shows a progressive tapering-off since 1933, the rise for that and the two succeeding years being 2.8, 1.7 and 1.5% respectively. The fact that the index rose by only 1½% in 1935 may be regarded as somewhat surprising, in view of the acute scarcity during the second half of the year of certain important foodstuffs, including meat (especially pork), fats, butter and eggs. The component parts of the cost-of-living index show the following changes from January 1935 to January 1936: food, +2.4%; clothing, +1.5%; rent +0.1%; heat and light, -0.4%; miscellaneous +0.5%. It must be borne in mind that, for commodities whose price is officially "controlled",¹ adequate supplies were frequently not forthcoming at the legal minimum prices and part of the demand had to be covered by resort to the relatively expensive "uncontrolled" goods. The following statement, which is taken from an official source,² shows the difference between the retail-price movements of certain meats whose prices are officially controlled (left-hand column) and those where no control exists (right-hand column). The increase between the second half of December 1934 and the same period of 1935 is shown:

| | | | |
|-------------------------|-----|---------------------------|------|
| | % | | % |
| Stewing beef | 8.2 | Veal, prime cuts. | 28.1 |
| Pork loins | 3.3 | Mutton | 19.7 |
| Bacon | 4.5 | Cooked ham | 18.0 |
| Liver sausage | 6.1 | | |

At certain periods of the year, the scarcity of butter was so pronounced that an unofficial but general system of rationing was enforced.

In spite of the fact that wholesale prices rose more rapidly than the cost of living in most countries during the years 1933-1935, the cost of living was still, at the beginning of 1936, higher in relation to 1929 levels than wholesale prices in all but a few exceptional cases. Indeed, apart from Danzig, which has already been mentioned, the only exceptions among the forty or more countries for which these indices are published regularly in the *Monthly Bulletin of Statistics* are the following (1929 = 100):

| January 1936 | Wholesale prices | Cost of living |
|----------------------|------------------|----------------|
| Australia | 81.8 | 81.6 |
| Finland | 91.8 | 81.0 |
| Japan | 87.3 | 86.4 |
| Yugoslavia | 70.7 | 63.3 |

Raw Materials and Manufactured Goods.

Table 5 on the next page shows the percentage changes in the prices of raw materials and manufactured products in 1933, 1934 and 1935 in eight countries for which these indices are available. The measurements in each case are from January to January. The level of prices of the two groups in March 1936 is shown as a percentage of 1929. The countries are ranged in order of the rise in raw-material prices in 1935.

This table indicates a further closing of the price-scissors between raw materials and manufactured products in 1935. In seven of the eight countries, the prices of raw materials rose more than the prices of finished goods; in Canada, the prices of manufactured articles even fell slightly, in spite of a 5% rise in raw-material prices. In the eighth country, Poland, raw-material prices fell slightly, but finished products fell even more.

The discrepancy in these price movements was particularly striking in Belgium, where a 54% rise in raw-material prices during 1935 produced a rise of only 18% in prices of manufactured goods. As most raw materials are imported, the depreciation of the belga

¹ See page 102, footnote 4, above.

² *Wirtschaft und Statistik*, No. 1, 1936, page 7.

Table 5. — PRICE MOVEMENTS OF RAW MATERIALS AND MANUFACTURED GOODS.

| Country | Raw materials | | | Manufactured goods | | | Price indices in March 1936 | |
|-------------------------|-------------------|-------|-------|--------------------|-------|-------|-----------------------------|--------------------|
| | 1933 | 1934 | 1935 | 1933 | 1934 | 1935 | Raw materials | Manufactured goods |
| | Percentage change | | | Percentage change | | | 1929 = 100 | |
| Belgium. | - 3.0 | - 4.1 | +54.3 | - 3.0 | - 8.2 | +18.0 | 63.9 ^a | 68.6 ^a |
| Italy | - 5.3 | + 1.6 | +25.3 | - 8.2 | - 4.0 | +20.1 | 64.6 ^b | 73.1 ^b |
| United Kingdom. | +29.6 | - 6.7 | +11.3 | + 2.2 | + 0.1 | + 1.4 | 96.9 ^c | 96.5 ^c |
| Canada | +19.1 | + 6.4 | + 4.6 | + 8.6 | + 1.0 | - 1.2 | 69.0 | 77.5 |
| Sweden | + 0.9 | + 3.7 | + 2.7 | + 7.5 | + 0.9 | + 0 | 85.2 | 82.4 |
| United States | +27.7 | +19.5 | + 2.0 | +13.9 | + 6.3 | + 2.0 | 79.4 | 84.5 |
| Germany | + 3.0 | + 2.1 | + 1.7 | + 1.0 | + 4.6 | + 0.3 | 71.1 | 76.3 |
| Poland | + 0.5 | -10.7 | - 0.5 | - 5.9 | - 5.0 | - 2.5 | 56.6 | 58.3 |

^a January 1936.

^b For Italy, no figures later than September 1935 are available. The movements shown for 1935 are from January to September, and the last two columns show the indices in September 1935 as a percentage of 1929.

^c Base : 1930 = 100.

was fully reflected in their prices ; indeed, their increase in 1935 reflects both the depreciation of the currency and the rise in world gold prices of raw materials. Very important elements of fixed and semi-fixed costs were, however, not directly affected by the depreciation ; and, as demand revived, manufacturers were able to increase their output without raising their prices by much more than the increase in their raw-material costs. Finished goods rose during 1935 by a third as much as raw-material prices, and this proportion would appear to correspond roughly to the relative importance of raw materials in total costs.

In Italy, on the other hand, the prices of finished products rose by nearly as much as the prices of raw materials during the first nine months of 1935. Here the impact of the increase in the monetary circulation resulting from large State expenditures was immediately felt on the prices of finished goods.

Apart from the two countries mentioned, the United Kingdom is the only country included in Table 5 in which the prices of raw materials rose more in 1935 than in 1934. In the United States and Canada, where raw-material prices had risen considerably in previous years, the net change in 1935 was much less than in the United Kingdom.

It is of interest to observe that, in spite of the upward trend of the indices of manufacturing production in the United Kingdom, Canada, Sweden, the United States and Germany during the years 1933-1935 to which reference has been made in a previous chapter, the prices of manufactured goods in those countries show no cumulative tendency to increase. Indeed, in the United States, Canada and Sweden, the increase (if any) in the prices of manufactured goods was progressively less in each year after 1933 ; in Sweden, they showed no net change in 1935, and in Canada — as mentioned above — even fell slightly. The increase in output, great though it was, still remained within the limits of the existing unused productive resources and permitted the thinner spreading of overhead costs over a larger number of units of output. In the United Kingdom, the increase in finished goods prices was greater in 1935 than in 1934, but here, too, it was very moderate, particularly in view of the considerable rise in raw-material prices.

In spite of the improvement in the purchasing power of raw materials over manufactured goods during the past few years — reflected, for example, in the fact that, in March 1936, the price index of manufactured goods in the United States (1929=100) was only 5% higher than the index of raw materials, while at the low point of the depression it was 38% higher — the prices of raw materials were still, in March 1936, somewhat lower in relation to 1929 levels than the prices of finished products in most countries included in Table 5.

No special significance is to be attached to the price relationships between raw materials and manufactured goods in 1929. There is no obvious reason for assuming that the relationship between the prices of raw materials and finished products was "normal" in that year. Nor is there any reason to suppose that a relationship which was "normal" in 1929 remained "normal" in 1936: the underlying conditions of cost, demand, etc., have themselves changed so much since 1929 that it is likely that the "norm" of an equilibrium relationship between the prices of raw materials and manufactured goods has shifted, though it is impossible to say in what direction or by how much. There is, however, little reason to doubt that the fact that the price indices have moved closer together since 1933 has been an important factor in the improvement in business conditions since that year.

Agricultural and Non-agricultural Prices.

Table 6 below shows the net percentage change during the years 1933, 1934 and 1935 in price indices relating to agriculture in ten countries. The measurements are from January to January in each case; and a final column gives the various indices in March 1936 as a percentage of 1929. The countries are ranged in order of the increase in the price of agricultural products in 1935.

Table 6. — AGRICULTURAL AND NON-AGRICULTURAL PRICE INDICES.

| Country | Index number of | Net percentage change in | | | Price index in March 1936 (1929=100) |
|----------------------------|---------------------------------------------|--------------------------|-------|--------|--------------------------------------------|
| | | 1933 | 1934 | 1935 | |
| Italy | National agricultural products | — 8.4 | + 9.5 | *+20.4 | *74.7 |
| | Wholesale prices (general) | — 6.2 | + 0.7 | *+20.6 | *70.1 |
| Chile | National agricultural products | — 8.2 | +16.9 | +13.0 | 150.3 |
| | National industrial products | — 5.7 | + 5.9 | +10.1 | 184.7 |
| Argentina | Agricultural products | +24.7 | + 6.0 | *+11.2 | *76.6 |
| | Wholesale prices (general) | +13.9 | + 0.6 | + 1.1 | 101.9 |
| Roumania | Agricultural products | —19.8 | +14.5 | + 9.9 | *65.5 |
| | Wholesale prices (general) | —11.3 | +14.5 | +15.9 | *73 |
| Canada | Canadian agricultural products | +26.8 | +11.0 | + 7.3 | 65.0 |
| | Fertilisers | + 5.4 | — 0.5 | + 0 | 80.2 |
| | Consumers' goods other than foods | + 1.3 | — 1.2 | — 1.7 | 83.2 |
| Germany | Agricultural products | +14.8 | + 8.0 | + 4.9 | 80.3 |
| | Wholesale prices (general) | + 5.9 | + 5.0 | + 2.5 | 75.5 |
| Irish Free State | Agricultural products | — 6.3 | — 0.4 | *+ 4.0 | *63.0 |
| United States | Prices received by farmers | +28.3 | +39.0 | + 1.9 | 71.2 |
| | Prices paid by farmers | +14.7 | + 7.7 | — 3.2 | 79.1 |
| | Farm products | +37.8 | +32.2 | + 0.8 | 73.0 |
| | Non-agricultural commodities | +15.6 | + 5.2 | + 2.5 | 84.6 |
| United Kingdom | Agricultural products | + 6.5 | + 2.6 | + 1.7 | 80.6 |
| | Wholesale prices (general) | + 4.9 | — 0.6 | + 4.0 | 80.3 |
| Poland | Agricultural products | — 2.6 | —11.9 | — 1.2 | 45.8 |
| | Goods bought by farmers | — 4.0 | — 6.2 | — 3.8 | 64.1 |

* September 1935. † To December 1935. * Based on fourth quarter 1929.

These figures disclose a very considerable improvement in the price position of agricultural producers during the years 1933-1935. In most countries, their goods rose much more than commodities in general, and more than industrial products or the specific commodities bought by farmers for use or exploitation. As a rule, the rate of improvement was more marked in 1933 and/or 1934 than in 1935, but also in that year some further improvement occurred. In the United Kingdom, however, the Ministry of Agriculture index number of agricultural prices rose less than the Board of Trade general index number of wholesale prices in 1935. More significant, perhaps, was the fact that agricultural prices in Roumania rose considerably less than wholesale prices in general. The index of the latter was much influenced by the rise in the price of petroleum and wood resulting in large part from the increased sales to Germany referred to in the first section of this chapter. Poland is the only country included in Table 6 in which agricultural prices fell in 1935, but the prices of goods bought by farmers fell more, so their terms of exchange were somewhat improved.

The improvement in the price position of farmers in 1935 was particularly striking in Canada, where agricultural products rose by more than 7%, while fertilisers were unchanged and the wholesale prices of consumers' goods other than foodstuffs even fell slightly. The increase in the real purchasing power of farmers during the past few years is illustrated in the following index numbers compiled by the Canadian Bank of Commerce (1929 = 100):

| Year | Money income of farmers | Farm costs | Real farm purchasing power |
|----------------|----------------------------|------------|-------------------------------|
| 1933 | 43.7 | 70.4 | 62.2 |
| 1934 | 52.3 | 72.8 | 71.8 |
| 1935 | 55.1 | 74.2 | 74.3 |

In the United States, prices received by farmers, which had fallen from 146% of their average pre-war (1909-1914) level in 1929 to 55% in February and March 1933, rose to 109% of the pre-war level in January 1936, an increase of 100%. The rise in the Bureau of Labor Statistics index number of wholesale prices of agricultural products was of the same magnitude. The increase in farm prices was particularly rapid in 1933 and 1934; the revaluation of the dollar and serious droughts contributed to the upward movement. Money income of farmers rose very considerably, though not by as much as farm prices, as the following official estimates of gross farm income (excluding Agricultural Adjustment Administration benefit payments) show (\$000,000's):

| | | | |
|----------------|--------|-----------------|-------|
| 1929 | 11,941 | 1934 | 6,671 |
| 1932 | 9,337 | 1935* | 7,630 |
| 1933 | 6,128 | | |

* Preliminary.

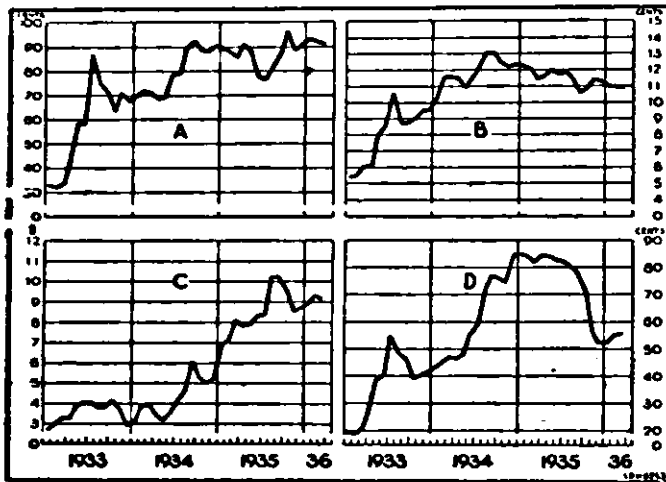
It is of interest to observe that, in spite of the fact that prices received by farmers rose by 39% in 1934 and only 2% in 1935, farm income rose more in the latter than in the former year. This demonstrates the inadequacy of price movements as a sole criterion of prosperity; the volume of output must be taken into account as well as the terms of exchange between agricultural and non-agricultural products. The latter have turned very considerably in favour of the American farmer since 1933; the prices of goods bought by farmers rose much less than the prices of farm products in 1933 and 1934 and even fell slightly in 1935. The unit purchasing power of farm products over articles bought, which had fallen to 46% of the 1929 level in 1933, had recovered to 93% of that level by the beginning of 1936, when it was higher than at any time since 1930.

It is not possible to say what part the Agricultural Adjustment Administration played in the rise in farm prices and income after 1933 and what part of that rise was due to the depreciation of the dollar, the expansion of the monetary circulation, the industrial revival, the droughts, etc. The benefits paid to farmers by the A.A.A. amounted to \$278, \$594 and \$480¹ million in 1933, 1934 and 1935 respectively; these figures should be added

¹ Provisional figure.

Diagram 8. — PRICES OF FOUR AGRICULTURAL PRODUCTS IN THE UNITED STATES.

- A. Wheat (cents per bushel). C. Hogs (\$ per 100 lb.).
 B. Cotton (cents per lb.). D. Corn (cents per bushel).



to those shown above to determine total gross farm income in those years. Diagram 8 opposite shows the monthly changes since the beginning of 1933 in the prices received by producers of four products affected by the A.A.A.

It is not necessary to comment in detail on the movements of these curves. A very interesting feature of Diagram 8 is the fact that the invalidation of the Agricultural Adjustment Act by the Supreme Court early in January 1936 on the ground of its unconstitutionality exercised no marked depressing influence on the price of these commodities. Wheat, hogs and corn were higher in March 1936 than in December 1935 and cotton was very slightly lower. The removal of production control had, of course,

some bearish influence on prices, but the threat of increased supplies related to the future rather than to the present. Moreover, to whatever extent the processing taxes were in fact absorbed by the producers through lower prices for their products their removal acted as a bullish influence on prices. Finally, the prompt enactment of the Soil Conservation Act, which seeks to attain much the same objects¹ as the Agricultural Adjustment Act, may have been instrumental, for psychological reasons, in keeping the prices of basic commodities from falling to lower levels.

Tendency towards Guaranteed Prices.

The defunct Agricultural Adjustment Act and its successor, the Soil Conservation Act, are interesting examples of the endeavour made in many parts of the world in recent years to impose by State intervention prices regarded as "fair" or "just". Their particular interest lies in the fact that they seek to re-establish and maintain a *price relationship* (the ratio between prices received by farmers and prices paid by them) or even an income relationship, while the other measures are confined, as a rule, to guaranteeing the *prices* of particular specified goods without taking into account changes in the prices of other goods.

Interferences with the free functioning of the price system are by no means a new development; and it would be a serious error to contrast the rigidities of the present price system with a perfect flexibility attributed to some earlier period. Perfect flexibility in fact probably never existed. There can, however, be little doubt that in recent years an ever-increasing segment of prices has come to represent "administered", predetermined, prices and not "functional" prices actually determined in the market by the free interaction of supply and demand. The "administration", of course, necessarily involves at least a

¹ Whereas the Agricultural Adjustment Act sought to re-establish the pre-war purchasing power of agricultural commodities, defined as the ratio of the average prices received by the farmer for the commodities produced to the average prices paid by the farmer for goods purchased, the Soil Conservation Act seeks to re-establish the pre-war ratio between the purchasing power of the net income per person on farms and that of the net income per person not on farms. It is obvious that the essential difference between the two measures of "parity" is that the latter takes into account variations in output, while the former is exclusively concerned with price relationships.

partial control over supply. Two broad classes of "administered" prices may be distinguished, according to whether the control is exercised by private organisations or by the State. This division is to some extent artificial, because, without the protection or encouragement of the State, most of the private arrangements among producers to control prices would break down.

In previous editions of this volume, it was shown that cartels and private producers' associations in many countries were successful in maintaining the prices of their products at a relatively high level during the depression; and the evidence in this respect need be only briefly summarised:

| | Austria | | Germany | | Poland | |
|------------------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|
| | Cartellised prices | Free prices | Cartellised prices | Free prices | Cartellised prices | Free prices |
| 1929 | 100 | 100 | 100 | 100 | 100 | 100 |
| Lowest point | 90(IX/31) | 69(IX/32) | 78(VI/35) | 46(VII/32) | 71(I/36) | 50(VI/35) |
| January 1936 | 94 | 77 | 79 | 63 | 71 | 52 |

The stability of cartellised prices during revival is very marked in Germany, where the index of free prices rose by over 35% between its low point in 1932 and the beginning of 1936, while the cartellised prices fell very gradually until the middle of 1935 and then were only slightly increased.

Interference by the State in determining the prices of individual commodities is generally directed to securing high prices for producers. It may, of course, also be directed to securing low prices for consumers. In a previous section, reference has been made to the steps taken in Germany to prevent the scarcity of certain products and the abundance of the monetary supply from resulting in "unduly" high prices. This type of price control is, however, relatively rare at present.

A survey of the measures taken by the various States to keep producers' prices high reveals the fact that, in the great majority of cases, the particular commodities affected are of agricultural origin. The reason for this would appear to be twofold: in the first place, the highly individualistic character of most agricultural production tends to make the supply inelastic during a period of falling prices, as each individual producer reckons that the contribution of his particular output to the determination of price is nil and may even seek to maintain his gross income by expanding output. In consequence, the natural corrective force of falling prices frequently tends to work very slowly in agriculture, if at all. The second reason is a non-economic one — namely, the desire to maintain a prosperous peasantry for reasons connected with the social structure of the State or its security.

The character of the measures differs according to whether they are taken by States which normally have an import surplus or an export surplus of the agricultural commodities concerned. The procedure is, of course, less complicated and the control of prices easier when domestic production is insufficient to satisfy domestic needs and a surplus must be imported. By restricting imports through tariffs, quotas, etc., the State enables producers to maintain prices at high levels. In recent years, wheat has provided the classic example of this form of interference. The differences between prices in exporting and importing countries to which this policy gives rise are illustrated in the following statement, which shows the price of wheat in cents per bushel of 60 lb. in nine countries in January 1936; the four countries in the left-hand column are exporting countries and the five countries in the right-hand column normally importing countries.

| | Cents per bushel | | Cents per bushel |
|-------------------------|------------------|--------------------------|------------------|
| Argentina | 93 | France | 155 |
| Australia | 99 | Austria | 185 |
| Canada | 101 | Czechoslovakia | 197 |
| United States | 106 | Germany | 229 |
| | | Italy | 247 |

In some of the countries in the right-hand column, the State, in addition to affording protection to wheat-producers through tariffs, milling regulations, has guaranteed minimum prices by offering to buy all domestic produce at a specified figure. The stimulus to domestic production involved in the high prices was so great in some countries (including France) that the price control was threatened through the appearance of an export surplus. Examples of agricultural protectionism and of the price discrepancies to which it gives rise could be multiplied almost indefinitely, but the phenomenon is too well known to require exhaustive treatment here. Some special reference should, however, be made to a rather uncommon form of price control — namely, that exercised through the British Agricultural Marketing Boards. The Agricultural Marketing Act of 1931 provides that a marketing scheme approved by a substantial majority of producers of a certain commodity should be enforceable on all producers of that commodity. This was supplemented in 1933 by an Act authorising the quantitative restriction of imports of agricultural produce, and the regulation of the quantities of the corresponding home-grown products sold in the United Kingdom. Marketing schemes for hops, pigs, bacon, milk and potatoes have been instituted on the basis of these Acts and measures taken to regulate imports and, in most cases, to control domestic production. Other branches of agriculture have been affected by the Wheat Act, 1932, and the Cattle Industry (Emergency Provisions) Act, 1934. In the case of hops, an agreed price of £9 per cwt. has been fixed until 1939; the schemes relating to pigs and milk provide for the periodic fixing or negotiation of prices; while only in the case of potatoes does the Board aim exclusively at regulating supplies and allow prices to be determined in the market.

In some ways, the most noteworthy aspect of this tendency towards guaranteed prices in recent years is its extension to "export commodities". The attempts made at various periods by the Canadian, United States and Argentine Governments to influence the domestic price are well known, as is the activity of the Brazilian Government in endeavouring to maintain coffee prices. Where this intervention has been accompanied by an offer to buy or loan against the commodity in question at fixed prices, they have generally resulted in the accumulation of surplus stocks. The Agricultural Adjustment Act sought to counteract the tendency of higher prices to lead to an expansion of production by connecting the higher prices with an undertaking on the part of the producer to control production. It is not possible, for reasons of space, to give an exhaustive list of all the measures taken by Governments to control the prices of export products, but a few more examples may be quoted to illustrate the tendency. In Australia, the Dairy Produce Act, in operation since 1934,¹ seeks to ensure producers of butter and cheese a "reasonable" return notwithstanding any adverse conditions in world markets. The representatives of the industry have formed themselves into a public company known as the Dairy Products Equalisation Committee, which enters into agreements with manufacturers under which the latter agree not to sell butter or cheese on the domestic market at prices lower than those fixed by the Committee. The agreement ensures to manufacturers equal rates of return on butter sold at home and abroad and provides for cash adjustments in cases where manufacturers "over-sell" or "under-sell" on the domestic market. Somewhat similar schemes, which aim at guaranteeing a fixed price in the domestic market while enabling competition to be met in foreign markets, are in force in Austria, Estonia, Finland, France, the Irish Free State, Latvia, Netherlands, Norway, Poland, South Africa and Sweden. Finally, an Act passed by the New Zealand legislature in May 1936 carried this tendency towards guaranteed prices a stage further. Under this Act, the State undertakes as a permanent measure to buy at guaranteed prices in New Zealand currency the whole of the dairy produce of the country. The purchases are to be financed by an advance to the State

¹ From January 1926 to May 1934 a voluntary scheme known as the "Paterson Plan" was in operation and had the effect of stabilising the price of butter in Australia. A levy was paid on all butter produced in Australia sufficient to pay an export bounty ranging from 3d. to 4½d. per pound. The domestic price was raised by the amount of the bounty.

by the Reserve Bank, which is to be repaid out of the sale proceeds. It is apparent that the State takes the whole risk of price fluctuations on world markets.¹ No provision is made for any control of production.

Import and Export Prices.

The rise in the prices of raw materials and foodstuffs relatively to those of manufactured goods described in preceding sections naturally resulted in an improvement in the terms of trade of the raw-material-producing States. This is illustrated in Table 7 below, which shows the annual changes in the import, export and, where available, home-market price indices of a large number of countries during the past three years. The change is measured from January to January in each case. The countries shown in the left-hand column are States whose exports consist predominantly of foodstuffs and/or raw materials, while the exports of the countries shown on the right are predominantly manufactured goods.

Table 7. — NET PERCENTAGE CHANGE IN PRICES OF IMPORT (I.), DOMESTIC (D.) AND EXPORT (E.) GOODS.

| Country | 1933 | | | 1934 | | | 1935 | | | Country | 1933 | | | 1934 | | | 1935 | | |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | I. | D. | E. | I. | D. | E. | I. | D. | E. | | I. | D. | E. | I. | D. | E. | I. | D. | E. |
| Bulgaria... | - 5.1 | + 3.3 | - 8.0 | - 6.0 | - 7.8 | +25.9 | - 1.4 | + 2.1 | +15.2 | Belgium .. | + 3.0 | . | + 1.0 | -10.6 | . | -14.1 | +55.9 | . | +30.6 |
| Canada ... | . | . | . | + 2.6 | . | + 4.6 | + 1.5 | . | + 4.4 | Czechoslov | + 2.0 | - 3.7 | . | + 6.0 | + 8.0 | . | + 3.7 | + 2.0 | . |
| Denmark . | +13.1 | + 4.1 | +25.6 | + 2.2 | + 7.1 | +17.5 | ± 0 | + 3.7 | + 5.8 | France ... | + 4.8 | - 2.7 | . | - 4.6 | -12.2 | . | + 5.2 | + 3.9 | . |
| Finland ... | - 2.3 | . | +14.1 | + 3.5 | . | - 4.9 | - 1.1 | . | ± 0 | Germany . | + 9.8 | + 0.7 | . | + 4.8 | + 1.2 | . | + 6.3 | - 0.1 | . |
| Greece.... | - 3.7 | + 0.3 | . | + 1.1 | + 1.0 | . | ± 0 | + 5.9 | . | Italy *.... | - 3.4 | - 7.7 | - 4.2 | - 1.3 | + 1.6 | - 0.9 | +18.5 | +21.6 | +31.4 |
| Netherl. | | | | | | | | | | Sweden .. | + 2.1 | + 7.5 | +12.4 | + 1.1 | + 4.4 | - 1.7 | + 5.2 | + 5.0 | ± 0 |
| Indies | - 9.4 | . | - 4.4 | - 4.0 | . | + 9.3 | ± 0 | . | -10.6 | | | | | | | | | | |
| N. Zealand | + 4.2 | + 6.8 | +25.8 | - 2.7 | + 3.6 | - 6.0 | + 0.9 | + 7.5 | +17.7 | | | | | | | | | | |
| Norway... | - 2.5 | ± 0 | . | + 3.4 | + 4.1 | . | + 3.4 | + 7.1 | . | | | | | | | | | | |
| Peru | + 2.2 | +10.1 | +21.5 | + 2.6 | + 1.8 | - 7.8 | - 2.5 | + 3.6 | +19.6 | | | | | | | | | | |
| Turkey ... | - 7.5 | - 7.8 | - 6.0 | + 1.2 | +32.4 | +15.9 | + 1.9 | +10.9 | +14.4 | | | | | | | | | | |
| Yugoslavia | - 1.2 | . | - 0.7 | - 6.7 | . | + 5.7 | + 6.0 | . | + 9.9 | | | | | | | | | | |

* January to September 1935.

The table requires but little comment. The improvement in the terms of trade of the States exporting raw products was quite general during the three years covered. Finland and New Zealand were exceptions in 1934 and the Netherlands Indies was the sole exception in 1935. In that year, the increase in export prices was particularly striking in Bulgaria, Turkey and Yugoslavia. The effect on the price structure of the closer trade connections of these countries with Germany has been described in a previous section. Apart from South-Eastern Europe, the increase in export prices in 1935 was especially notable in Peru, chiefly due to better prices for cotton, and in New Zealand, as a result of better prices for dairy products. Imports into most of the highly industrialised States on the right-hand side of the table rose more (or fell less) in price than exports and/or domestic goods in each year since 1933. The greatest change in 1935 was in Belgian prices, the import prices of industrial goods² rising by over 55% and their export prices by 30%. In considering the magnitude of the rise in export prices, it should be borne in mind that a special effort was made by the Belgian Government to limit the

¹ There are two possible compensations : either the State can pay producers prices less than those prevailing in world markets at the beginning of the scheme and so accumulate large reserve funds ; or, when the world market price of dairy products falls seriously, it can depreciate the New Zealand pound and so increase the proceeds, in that currency, of the sterling acquired from the sales abroad.

² Import prices of agricultural products rose by only 30% between January 1935 and January 1936.

competition of Belgian merchandise in the gold *bloc* by inducing exporters to keep their gold prices in terms of gold unchanged after the depreciation. With the exception of Italy, where special conditions already referred to influenced the price development in 1935, all the highly industrialised States show a greater increase in the prices of imports in that year than in the prices of exports or of domestic goods. It should, however, be pointed out that the 17% rise in the French general wholesale-price index which occurred between July 1935 and March 1936 and to which reference has been made in an earlier section was principally due to domestic goods. The price index of national products rose by 18% during the period mentioned, while the index of imported goods increased by less than 3%.

Prices of Investment and Consumption Goods.

An unusual feature of the price movements which occurred during the recent economic depression was the greater fall in the prices of consumption goods than of investment goods. For most earlier periods of depression for which statistical records are available, the decline in investment was accompanied by a sharp decline in the prices of the corresponding goods, while consumption goods remained relatively high in price. The relationship which developed between the prices of the two categories of goods was thus of a nature to stimulate a revival of investment activity. Since the Great War, however, the prices of many important investment materials — such, for example, as iron-and-steel products — have come under the control of powerful producers' associations, and their maintenance at a level high in relation to that of consumption goods has restricted the operation of this natural force of recovery.

Table 8 below shows the annual changes in the prices of various categories of investment and consumption goods in several countries during 1933, 1934 and 1935. The measurements in each case are from January to January. The table also shows the levels of the different indices in March 1936 in relation to 1929.

Table 8. — PRICE MOVEMENTS OF INVESTMENT AND CONSUMPTION GOODS.

| Country | Index number of | Net percentage change in | | | Price index in March 1936 (1929=100) |
|-------------------|---------------------------------------|--------------------------|-------|-------|--------------------------------------|
| | | 1933 | 1934 | 1935 | |
| Canada | Producers' equipment | - 1.4 | + 3.7 | + 0.3 | 95.5 |
| | Consumers' goods | + 6.5 | - 1.1 | + 1.1 | 77.9 |
| | Food, beverages and tobacco | +16.5 | - 0.9 | + 5.5 | 70.8 |
| | Other | + 1.3 | - 1.2 | - 1.7 | 83.2 |
| Germany | Producers' goods (finished) | - 1.0 | - 0.1 | - 0.6 | 81.5 |
| | Consumers' goods (finished) | + 2.5 | + 8.1 | + 0.9 | 73.2 |
| Japan | Producers' goods | - 7.3 | + 5.8 | + 1.3 | 79.0 |
| | Consumers' goods | - 6.3 | +17.1 | + 3.1 | 93.0 |
| Poland | Industrial equipment | - 4.9 | - 3.4 | - 6.1 | 73.4 |
| | Consumers' goods | - 6.2 | - 5.0 | - 1.4 | 55.4 |

The price of producers' equipment showed the same relative rigidity when the general movement of prices was upward as during the downward swing. The greater rise in the selling-prices of consumers' goods than in the prices of the machines, etc., required to produce them was, of course, a factor tending to encourage investment in the first three countries during this period. To some extent, the rise in the price of consumption goods

in Germany must be attributed to their relative scarcity : as has been pointed out in an earlier chapter, a strict control has been exercised over private investment, and the output of consumption goods was lower in 1935 than in 1934. In Poland, consumers' goods (which had already fallen by 36% between 1929 and the beginning of 1933, compared with a decline of only 15% in the price of industrial equipment) continued to fall more in price than industrial equipment in 1933 and 1934. In the latter part of 1935, however, a strenuous effort at price adjustment was undertaken. In particular, cartellised prices were forced down, and this is partly reflected in the substantial fall in the price of industrial equipment in that year. The adjustment was not continued in the first months of 1936, however, and, in March of that year, the prices of consumers' goods were still very much lower in relation to 1929 levels than were the prices of industrial equipment.

APPENDICES.

Appendix I.

METHOD OF CALCULATION OF THE COMPOSITE WORLD INDEX OF PRIMARY PRODUCTION.

The index is composed of eighty-one commodities. It is compiled by the aggregative method, the mathematical formula of which is :

$$I = \frac{q^{1'} p' + q^{1''} p'' + q^{1'''} p''' + \dots + q^{1^n} p^n}{q^{0'} p' + q^{0''} p'' + q^{0'''} p''' + \dots + q^{0^n} p^n} = \frac{\Sigma(q^1 p)}{\Sigma(q^0 p)}$$

The quantity of each commodity produced each year (q' , q'' , q''' , etc.) is multiplied by the price of that commodity in a given year (p' , p'' , p''' , etc.) and the resulting totals for all commodities are summed. The aggregates thus obtained for each year are then converted into percentages of the aggregate for the basic period. As the prices are constant, variations in the index represent changes in the quantities produced and not in the values.

The prices used as weights are representative " world " prices ruling in 1930, expressed in terms of gold dollars according to the average annual rates of exchange. The base is the average annual production in the quinquennium 1925-1929. The indices refer to quantities produced per calendar year, except as regards certain agricultural products in the Northern Hemisphere and the whole agricultural production in the Southern Hemisphere, the data for which relate to periods of twelve months ending in the July, August or September following the year stated.

The eighty-one commodities of which the general index is composed are shown in Table I of this Appendix. The absolute figures relating to most of these commodities will be found in the *Statistical Year-Book of the League of Nations, 1935/36*. For many commodities, however, the statistics available are incomplete and have had to be supplemented by estimates. This applies in particular to the production of meat, milk, pig-iron not used for steel-making, and hydro-electric energy. Moreover, for certain commodities, data have been drawn from sources other than the *Year-Book*.¹

Sub-indices have been calculated for certain groups of commodities. For this purpose, the commodities considered have been classed according to three different criteria :

(a) According to their nature, into fifteen commodity groups as shown in Table I of this Appendix.

(b) According to their origin, into :

(1) Agricultural products — i.e., the first forty-three commodities of the list given in Table I, thus including two products of marine origin : sea fish and whale oil ;

(2) Non-agricultural products — i.e., the remaining thirty-eight commodities of the list given in Table I, thus comprising products of forest origin (including artificial textiles and rubber) and mineral origin.

(c) According to the main use to which they are put, into :

(1) Foodstuffs — i.e., food crops, meat, sea fish, milk, beverages, tobacco, as well as part of the group of oil materials and oils ; this group thus includes partly crude foodstuffs ready for consumption and partly raw materials of the food, drink and tobacco industries ;

(2) Fodder crops, as shown in Table I ;

(3) Raw materials — i.e., the remaining commodities ; this group thus includes raw materials of agricultural origin, except those of the food, drink and tobacco industries.

All figures for 1935 (1935/36) and certain figures for earlier years are partly based on estimates and are subject to revision.

¹ Sisal hemp, Mauritius hemp and New Zealand hemp : *The Economist* "Commercial History" numbers (London). Mohair : national production statistics. Staple fibre : *Textile Organon* (New York). Sawn and planed softwood : national production statistics supplemented by trade statistics published by the International Timber Committee (Vienna) and estimates.

Appendix I. Table 1.

INDICES OF WORLD PRODUCTION OF PRIMARY COMMODITIES.

Average Annual Production in 1925-1929 = 100.

| Products | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|-------------------------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| <i>Food crops :¹</i> | | | | | | | | | | | |
| Wheat | 95 | 99 | 101 | 109 | 97 | 110 | 104 | 103 | 108 | 103 | 104 |
| Rye | 105 | 97 | 102 | 96 | 100 | 107 | 94 | 103 | 110 | 96 | 101 |
| Rice | 100 | 99 | 98 | 102 | 101 | 101 | 104 | 104 | 106 | 99 | 97 |
| Potatoes | 95 | 88 | 102 | 104 | 111 | 112 | 110 | 113 | 111 | 120 | 121 |
| Beet sugar | 90 | 93 | 100 | 109 | 109 | 132 | 102 | 92 | 103 | 113 | 117 |
| Cane sugar | 94 | 94 | 99 | 108 | 107 | 99 | 101 | 92 | 91 | 90 | 97 |
| <i>Fodder crops :¹</i> | | | | | | | | | | | |
| Barley | 94 | 92 | 91 | 107 | 115 | 111 | 94 | 105 | 104 | 98 | 109 |
| Oats | 97 | 99 | 94 | 108 | 102 | 103 | 88 | 96 | 91 | 87 | 102 |
| Maize | 106 | 100 | 98 | 96 | 100 | 89 | 102 | 109 | 95 | 79 | 94 |
| <i>Meat :¹</i> | | | | | | | | | | | |
| Beef * | 99 | 100 | 100 | 99 | 102 | 102 | 95 | 94 | 101 | 116 | ... |
| Veal * | 99 | 99 | 98 | 99 | 105 | 107 | 101 | 102 | 104 | 117 | ... |
| Pig-meat, (pork, bacon, hams, lard) * | 92 | 93 | 101 | 109 | 105 | 103 | 106 | 105 | 108 | 106 | ... |
| Mutton, lamb, goat-flesh * | 92 | 97 | 102 | 102 | 107 | 119 | 110 | 98 | 95 | 93 | ... |
| Sea fish. | 93 | 95 | 98 | 104 | 110 | 116 | 112 | 114 | 126 | 131 | ... |
| Milk * ¹ | 96 | 98 | 100 | 103 | 104 | 105 | 106 | 107 | 107 | 107 | ... |
| <i>Wine and hops :</i> | | | | | | | | | | | |
| Wine | 108 | 79 | 97 | 109 | 107 | 92 | 102 | 107 | 99 | 121 | 125 |
| Hops | 89 | 89 | 99 | 99 | 124 | 95 | 74 | 62 | 80 | 88 | 96 |
| <i>Coffee, tea, cocoa :</i> | | | | | | | | | | | |
| Coffee | 80 | 82 | 95 | 124 | 119 | 123 | 105 | 122 | 130 | 110 | 92 |
| Tea | 92 | 97 | 100 | 104 | 109 | 99 | 102 | 107 | 99 | 101 | 101 |
| Cocoa. | 96 | 93 | 104 | 99 | 107 | 104 | 108 | 112 | 120 | 118 | 129 |
| Tobacco (raw) ¹ | 101 | 98 | 98 | 97 | 104 | 109 | 107 | 92 | 98 | 90 | ... |
| <i>Oil materials and oils :</i> | | | | | | | | | | | |
| Cotton-seed | 105 | 105 | 90 | 101 | 99 | 98 | 102 | 90 | 100 | 92 | 101 |
| Linseed | 106 | 103 | 108 | 100 | 83 | 110 | 111 | 89 | 84 | 94 | 84 |
| Rape-seed | 122 | 93 | 103 | 90 | 93 | 111 | 101 | 101 | 103 | 100 | 104 |
| Hemp-seed | 104 | 101 | 104 | 107 | 84 | 80 | 69 | 65 | 51 | 66 | ... |
| Sesamum | 88 | 92 | 107 | 105 | 108 | 123 | 115 | 114 | 112 | 98 | 110 |
| Soya beans | 92 | 101 | 103 | 102 | 102 | 114 | 115 | 96 | 113 | 81 | ... |
| Copra. | 86 | 95 | 91 | 112 | 116 | 100 | 99 | 97 | 120 | 119 | 116 |
| Ground-nuts | 87 | 91 | 106 | 111 | 105 | 121 | 104 | 126 | 130 | 101 | ... |
| Palm and palm-kernel oil (crude) | 100 | 96 | 99 | 101 | 105 | 112 | 106 | 118 | 124 | 125 | 141 |
| Olive oil (crude) | 78 | 68 | 125 | 80 | 149 | 54 | 101 | 103 | 92 | 99 | 98 |
| Whale oil (crude) | 79 | 87 | 90 | 100 | 143 | 212 | 230 | 69 | 197 | 195 | 204 |
| <i>Textile fibres :</i> | | | | | | | | | | | |
| Cotton (ginned) | 105 | 106 | 90 | 100 | 99 | 98 | 103 | 90 | 99 | 89 | 97 |
| Flax (fibre) | 103 | 95 | 86 | 101 | 115 | 119 | 129 | 113 | 128 | 130 | 146 |
| Hemp (fibre) | 106 | 97 | 101 | 100 | 96 | 90 | 72 | 62 | 61 | 59 | 62 |
| Manila hemp (Abaca) | 97 | 98 | 93 | 96 | 115 | 105 | 87 | 70 | 73 | 97 | ... |
| Sisal hemp (Agave) ² | 93 | 92 | 103 | 107 | 105 | 109 | 100 | 112 | 129 | 136 | 144 |
| Mauritius hemp | 85 | 59 | 68 | 85 | 203 | 110 | 42 | 42 | 42 | 42 | 51 |
| New Zealand hemp (Phormium). | 93 | 150 | 110 | 76 | 71 | 59 | 16 | 20 | 32 | 25 | 23 |
| Jute (fibre) | 87 | 118 | 99 | 96 | 100 | 109 | 54 | 69 | 78 | 83 | 62 |

Appendix I. Table 1 (concluded).

INDICES OF WORLD PRODUCTION OF PRIMARY COMMODITIES.

Average Annual Production in 1925-1929 = 100.

| Products | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|------------------------------------------------------------|------|------|------|------|-------|------|-------|-------|-------|-------|--------|
| <i>Textile fibres (continued) :</i> | | | | | | | | | | | |
| Wool (sheep's, greasy) | 92 | 98 | 100 | 104 | 106 | 102 | 102 | 102 | 99 | 99 | 99 |
| Mohair | 80 | 105 | 107 | 103 | 103 | 95 | 93 | 96 | 97 | 89 | 108 |
| Silk (raw) | 87 | 93 | 99 | 108 | 113 | 110 | 107 | 97 | 100 | 103 | 92 |
| Rayon (artificial silk) | 63 | 72 | 99 | 121 | 145 | 150 | 168 | 180 | 231 | 268 | 343 |
| Staple fibre* | . | . | . | . | (100) | (90) | (110) | (240) | (320) | (640) | (1800) |
| <i>Rubber (crude)</i> | 80 | 95 | 93 | 100 | 131 | 125 | 121 | 107 | 129 | 154 | 132 |
| <i>Wood products :</i> | | | | | | | | | | | |
| Softwood (sawn and planed) | 97 | 98 | 102 | 100 | 103 | 87 | 69 | 57 | 67 | 72 | 71 |
| Mechanical pulp | 88 | 96 | 98 | 104 | 114 | 112 | 103 | 96 | 103 | 118 | ... |
| Chemical pulp | 84 | 93 | 100 | 104 | 119 | 115 | 103 | 99 | 115 | 124 | ... |
| <i>Fuels and power :</i> | | | | | | | | | | | |
| Coal | 95 | 95 | 103 | 100 | 107 | 98 | 87 | 77 | 81 | 88 | 91 |
| Lignite | 91 | 91 | 98 | 106 | 113 | 96 | 88 | 82 | 83 | 89 | 94 |
| Petroleum | 86 | 88 | 101 | 106 | 119 | 113 | 109 | 104 | 114 | 120 | 130 |
| Natural gas (consumption) | 80 | 88 | 97 | 106 | 129 | 132 | 117 | 109 | 110 | 126 | ... |
| Hydro-electric energy* | 81 | 89 | 100 | 112 | 118 | 120 | 115 | 120 | 127 | 136 | 148 |
| <i>Metals :</i> | | | | | | | | | | | |
| Pig-iron (other than for steel-making)* | 95 | 92 | 107 | 99 | 107 | 92 | 65 | 44 | 50 | 68 | 80 |
| Steel (ingots and castings) | 88 | 90 | 99 | 106 | 117 | 92 | 67 | 49 | 66 | 80 | 96 |
| Copper (metal content of ores mined) | 89 | 91 | 94 | 106 | 120 | 100 | 87 | 57 | 65 | 80 | ... |
| Lead (metal content of ores mined) | 94 | 99 | 103 | 100 | 105 | 101 | 82 | 73 | 72 | 81 | ... |
| Zinc (metal content of ores mined) | 86 | 101 | 103 | 101 | 109 | 99 | 77 | 60 | 76 | 89 | ... |
| Tin (metal content of ores mined) | 88 | 89 | 98 | 108 | 117 | 107 | 90 | 60 | 53 | 74 | 82 |
| Aluminium (smelter production) | 81 | 90 | 96 | 109 | 124 | 121 | 99 | 70 | 64 | 77 | 117 |
| Nickel (metal content of ores mined) | 88 | 80 | 82 | 118 | 132 | 128 | 84 | 52 | 107 | 160 | 177 |
| Silver (metal content of ores mined) | 96 | 99 | 100 | 101 | 104 | 97 | 77 | 66 | 66 | 74 | 84 |
| Tungsten (trioxide content of ores mined) | 73 | 98 | 103 | 91 | 135 | 127 | 69 | 62 | 102 | 128 | ... |
| Molybdenum (metal content of ores mined) | 52 | 59 | 88 | 139 | 162 | 154 | 121 | 102 | 234 | 391 | ... |
| Vanadium | 72 | 115 | 116 | 71 | 127 | 113 | 96 | 75 | 5 | 113 | ... |
| Antimony (metal content of ores mined) | 90 | 104 | 103 | 103 | 101 | 78 | 93 | 64 | 68 | 75 | ... |
| Cadmium | 42 | 55 | 67 | 142 | 195 | 202 | 128 | 103 | 189 | 241 | ... |
| Magnesite (crude) | 83 | 85 | 97 | 113 | 123 | 97 | 81 | 81 | 103 | 134 | ... |
| Quicksilver | 76 | 85 | 110 | 109 | 119 | 80 | 73 | 60 | 43 | 54 | ... |
| <i>Non-metallic minerals :</i> | | | | | | | | | | | |
| Cement | 86 | 93 | 101 | 107 | 113 | 107 | 93 | 93 | 73 | 85 | 89 |
| Asbestos | 90 | 98 | 95 | 102 | 116 | 97 | 68 | 57 | 76 | 83 | 103 |
| Salt ¹ | 90 | 94 | 99 | 104 | 113 | 109 | 104 | 97 | 104 | 111 | ... |
| Graphite | 86 | 95 | 108 | 106 | 106 | 85 | 55 | 49 | 60 | 78 | ... |
| Mica | 112 | 84 | 86 | 114 | 105 | 89 | 89 | 91 | 96 | 102 | ... |
| Sulphur (incl. sulphur content of pyrites mined) | 84 | 98 | 105 | 101 | 112 | 114 | 97 | 71 | 89 | 91 | 91 |
| Natural phosphates (crude) | 89 | 97 | 103 | 103 | 107 | 125 | 89 | 76 | 88 | 101 | 109 |
| Natural guano | 112 | 78 | 88 | 104 | 118 | 106 | 78 | 109 | 126 | 125 | ... |
| Chile nitrate of soda (saltpetre) | 101 | 80 | 64 | 126 | 129 | 97 | 45 | 28 | 17 | 45 | ... |
| Potash | 94 | 83 | 96 | 109 | 118 | 110 | 76 | 65 | 80 | 101 | ... |
| Basic slag | 82 | 90 | 102 | 108 | 118 | 96 | 74 | 54 | 66 | 79 | ... |

* Partly based on estimates, subject to revision.

¹ Excluding China, but including certain crops, meat and salt produced in Manchuria.

² Including Mexican benequen, West Indian sisal, West and East African sisal, Java and Sumatra sisal and cantala, Philippines maguey.

Appendix I. Table 2.

WORLD INDICES OF PRIMARY PRODUCTION, WEIGHTED BY 1930 PRICES.

Average Annual Production in 1925-1929 = 100.

| Continents and Groups of Products | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|--------------------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| WORLD. | | | | | | | | | | | |
| GENERAL INDEX | 96 | 96 | 99 | 103 | 106 | 104 | 100 | 97 | 100 | 101 | 103 |
| <i>Agricultural products</i> | 97 | 97 | 99 | 103 | 103 | 104 | 103 | 103 | 104 | 102 | 102 |
| <i>Non-agricultural products</i> | 89 | 92 | 100 | 104 | 114 | 102 | 87 | 75 | 84 | 95 | 104 |
| <i>Foodstuffs</i> | 96 | 97 | 100 | 104 | 103 | 106 | 104 | 104 | 106 | 106 | 104 |
| <i>Raw materials</i> | 91 | 94 | 99 | 104 | 112 | 102 | 91 | 79 | 88 | 95 | 103 |
| Food crops | 98 | 97 | 100 | 104 | 101 | 107 | 103 | 104 | 108 | 102 | 104 |
| Fodder crops | 102 | 99 | 96 | 101 | 102 | 95 | 97 | 104 | 95 | 83 | 97 |
| Meat * | 95 | 97 | 100 | 104 | 104 | 105 | 102 | 100 | 103 | 109 | 97 |
| Sea fish. | 93 | 95 | 98 | 104 | 110 | 116 | 112 | 114 | 126 | 131 | ... |
| Milk * | 96 | 98 | 100 | 103 | 104 | 105 | 106 | 107 | 107 | 107 | ... |
| Wine and hops | 109 | 79 | 96 | 109 | 107 | 92 | 101 | 105 | 99 | 125 | 128 |
| Coffee, tea, cocoa | 87 | 89 | 98 | 112 | 113 | 111 | 104 | 115 | 116 | 108 | 101 |
| Tobacco | 101 | 98 | 98 | 97 | 104 | 109 | 107 | 92 | 98 | 90 | ... |
| Oil materials and oils | 95 | 94 | 104 | 100 | 107 | 103 | 107 | 101 | 107 | 98 | 103 |
| Textile fibres | 96 | 100 | 95 | 103 | 106 | 104 | 105 | 98 | 107 | 105 | 110 |
| Rubber | 80 | 95 | 93 | 100 | 131 | 125 | 121 | 107 | 129 | 154 | 132 |
| Wood products | 88 | 95 | 100 | 103 | 114 | 107 | 95 | 88 | 100 | 110 | ... |
| Fuel and power | 92 | 93 | 102 | 103 | 111 | 104 | 94 | 87 | 92 | 99 | 105 |
| Metals | 88 | 91 | 99 | 106 | 116 | 95 | 71 | 52 | 65 | 79 | 95 |
| Non-metallic minerals | 88 | 92 | 98 | 108 | 114 | 107 | 86 | 70 | 73 | 85 | ... |
| EUROPE (excl. U.S.S.R.). | | | | | | | | | | | |
| GENERAL INDEX | 96 | 91 | 100 | 104 | 110 | 105 | 104 | 104 | 106 | 110 | 111 |
| <i>Agricultural products</i> | 97 | 93 | 98 | 103 | 108 | 105 | 108 | 111 | 112 | 113 | 113 |
| <i>Non-agricultural products</i> | 90 | 84 | 105 | 106 | 115 | 104 | 89 | 80 | 87 | 97 | 104 |
| <i>Foodstuffs</i> | 97 | 92 | 99 | 105 | 107 | 106 | 109 | 112 | 114 | 115 | 115 |
| <i>Raw materials</i> | 90 | 85 | 105 | 105 | 115 | 102 | 90 | 80 | 87 | 97 | 103 |
| ✓ Food crops | 104 | 87 | 96 | 102 | 110 | 107 | 104 | 110 | 119 | 113 | 109 |
| Fodder crops | 99 | 103 | 90 | 91 | 117 | 100 | 100 | 112 | 108 | 106 | 98 |
| Meat * | 92 | 94 | 101 | 108 | 105 | 106 | 112 | 112 | 111 | 114 | 113 |
| Sea fish. | 97 | 97 | 96 | 103 | 106 | 111 | 102 | 104 | 107 | 103 | ... |
| Milk * | 96 | 96 | 99 | 104 | 105 | 109 | 112 | 115 | 117 | 117 | 120 |
| Wine and hops | 112 | 78 | 97 | 107 | 107 | 90 | 100 | 99 | 92 | 115 | 121 |
| Tobacco | 101 | 99 | 102 | 88 | 110 | 115 | 105 | 89 | 94 | 93 | 100 |
| Oil materials and oils | 80 | 72 | 122 | 82 | 145 | 72 | 117 | 96 | 99 | 106 | 110 |
| ✓ Textile fibres | 89 | 91 | 100 | 106 | 115 | 109 | 104 | 106 | 118 | 123 | 136 |
| Wood products | 87 | 92 | 103 | 103 | 115 | 111 | 96 | 97 | 111 | 123 | ... |
| Fuels and power. | 95 | 82 | 105 | 105 | 113 | 105 | 96 | 88 | 90 | 97 | 99 |
| Metals | 87 | 84 | 106 | 107 | 116 | 96 | 76 | 61 | 72 | 86 | 98 |
| Non-metallic minerals | 86 | 91 | 101 | 107 | 115 | 107 | 88 | 77 | 83 | 95 | ... |
| EUROPE (incl. U.S.S.R.). | | | | | | | | | | | |
| GENERAL INDEX | 94 | 93 | 100 | 104 | 109 | 107 | 102 | 100 | 104 | 108 | 111 |
| <i>Agricultural products</i> | 96 | 95 | 99 | 103 | 107 | 107 | 103 | *103 | *106 | *107 | *108 |
| <i>Non-agricultural products</i> | 88 | 84 | 105 | 107 | 117 | 108 | 96 | 88 | 96 | 110 | 120 |
| <i>Foodstuffs</i> | 96 | 95 | 100 | 104 | 106 | 108 | 104 | *104 | *106 | *107 | *109 |
| <i>Raw materials</i> | 88 | 85 | 104 | 106 | 116 | 107 | 98 | 89 | 96 | 109 | 119 |
| Food crops | 101 | 95 | 99 | 101 | 104 | 110 | 102 | 106 | 119 | 114 | 116 |
| Fodder crops | 97 | 103 | 90 | 96 | 114 | 103 | 97 | 104 | 110 | 111 | ... |
| Meat * | 90 | 93 | 101 | 108 | 108 | 111 | 105 | *102 | *99 | *101 | ... |
| Sea fish. | 94 | 97 | 97 | 104 | 108 | 120 | 115 | 113 | 115 | 114 | ... |
| Milk * | 95 | 97 | 100 | 104 | 104 | 104 | 104 | 103 | 104 | 105 | 108 |
| Wine and hops | 112 | 78 | 97 | 107 | 107 | 90 | 100 | 99 | 92 | 115 | 121 |
| Tobacco | 108 | 106 | 99 | 86 | 101 | 107 | 109 | 95 | 97 | 101 | ... |
| Oil materials and oils | 83 | 76 | 116 | 88 | 137 | 82 | 122 | 102 | 102 | 107 | 113 |
| Textile fibres | 90 | 90 | 99 | 108 | 114 | 113 | 113 | 108 | 116 | 120 | 135 |
| Wood products | 86 | 92 | 102 | 103 | 116 | 116 | 103 | 104 | 116 | 130 | ... |
| Fuels and power. | 93 | 82 | 105 | 105 | 115 | 110 | 105 | 98 | 101 | 111 | 116 |
| Metals | 85 | 84 | 106 | 108 | 117 | 101 | 82 | 69 | 81 | 101 | 117 |
| Non-metallic minerals | 85 | 90 | 101 | 108 | 116 | 111 | 93 | 83 | 89 | 102 | ... |

* Partly based on estimates, subject to revision.

Appendix I. Table 2 (continued).

WORLD INDICES OF PRIMARY PRODUCTION, WEIGHTED BY 1930 PRICES.

Average Annual Production in 1925-1929 = 100.

| Continents and Groups of Products | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|--------------------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| NORTH AMERICA. | | | | | | | | | | | |
| GENERAL INDEX | 96 | 99 | 98 | 103 | 103 | 96 | 93 | 87 | 86 | 84 | 87 |
| <i>Agricultural products</i> | 99 | 100 | 99 | 104 | 99 | 97 | 102 | 101 | *95 | *88 | *88 |
| <i>Non-agricultural products</i> | 91 | 99 | 97 | 102 | 111 | 95 | 76 | 59 | 69 | 75 | 84 |
| <i>Foodstuffs</i> | 95 | 99 | 101 | 104 | 100 | 102 | 103 | 100 | *101 | *105 | *90 |
| <i>Raw materials</i> | 93 | 101 | 96 | 101 | 109 | 94 | 82 | 63 | 72 | 74 | 83 |
| Food crops | 85 | 98 | 109 | 117 | 91 | 106 | 100 | 96 | 68 | 66 | 76 |
| Fodder crops | 107 | 95 | 99 | 105 | 94 | 86 | 95 | 107 | 82 | 52 | 87 |
| Meat * | 99 | 100 | 99 | 102 | 101 | 97 | 99 | 98 | *109 | *123 | *83 |
| Sea fish. : | 92 | 93 | 95 | 106 | 115 | 107 | 88 | 84 | 91 | 95 | ... |
| Milk | 95 | 99 | 101 | 102 | 104 | 105 | 108 | 108 | 108 | 105 | ... |
| Wine and hops | 82 | 98 | 97 | 107 | 116 | 85 | 98 | 86 | 129 | 471 | 514 |
| Tobacco | 101 | 95 | 90 | 102 | 113 | 121 | 117 | 77 | 101 | 78 | 96 |
| Oil materials and oils | 104 | 110 | 93 | 96 | 96 | 95 | 108 | 87 | 81 | 68 | 89 |
| Textile fibres | 102 | 113 | 87 | 97 | 101 | 97 | 118 | 93 | 99 | 79 | 89 |
| Wood products | 91 | 98 | 97 | 103 | 111 | 98 | 86 | 70 | 83 | 88 | ... |
| Fuels and power. | 91 | 100 | 100 | 100 | 109 | 98 | 86 | 75 | 81 | 86 | 91 |
| Metals | 92 | 98 | 93 | 104 | 114 | 86 | 57 | 32 | 46 | 54 | 69 |
| Non-metallic minerals | 92 | 97 | 101 | 104 | 106 | 101 | 81 | 51 | 51 | 58 | 60 |
| LATIN AMERICA. | | | | | | | | | | | |
| GENERAL INDEX | 96 | 98 | 100 | 105 | 102 | 105 | 100 | 97 | 102 | 108 | 105 |
| <i>Agricultural products</i> | 97 | 99 | 101 | 104 | 99 | 104 | 102 | 100 | 106 | 110 | 105 |
| <i>Non-agricultural products</i> | 87 | 87 | 90 | 113 | 123 | 108 | 88 | 71 | 75 | 95 | 104 |
| <i>Foodstuffs</i> | 97 | 98 | 101 | 105 | 99 | 102 | 101 | 100 | 106 | 105 | 101 |
| <i>Raw materials</i> | 91 | 92 | 94 | 108 | 116 | 107 | 93 | 79 | 87 | 107 | 110 |
| Food crops | 89 | 95 | 105 | 120 | 91 | 93 | 93 | 92 | 102 | 94 | 79 |
| Fodder crops | 100 | 104 | 100 | 97 | 97 | 116 | 110 | 103 | 102 | 130 | 116 |
| Meat * | 102 | 101 | 101 | 98 | 98 | 100 | 97 | 95 | 102 | 106 | ... |
| Sea fish. | 92 | 99 | 99 | 105 | 105 | 114 | 118 | 164 | 192 | 184 | 199 |
| Milk * | 101 | 103 | 98 | 100 | 97 | 110 | 121 | 122 | 117 | 113 | ... |
| Wine and hops | 79 | 80 | 115 | 123 | 103 | 91 | 58 | 114 | 117 | 117 | ... |
| Coffee, tea, cocoa | 81 | 83 | 94 | 123 | 119 | 122 | 104 | 119 | 129 | 109 | 91 |
| Tobacco | 92 | 93 | 104 | 100 | 111 | 108 | 111 | 86 | 89 | 102 | ... |
| Oil materials and oils | 102 | 108 | 109 | 104 | 77 | 107 | 120 | 86 | 96 | 120 | 91 |
| Textile fibres | 95 | 99 | 98 | 99 | 109 | 102 | 99 | 96 | 117 | 134 | 134 |
| Rubber | 117 | 103 | 120 | 83 | 77 | 50 | 40 | 23 | 33 | 30 | 43 |
| Fuels and power. | 88 | 87 | 91 | 110 | 124 | 123 | 108 | 107 | 110 | 128 | 137 |
| Metals | 81 | 89 | 99 | 110 | 121 | 100 | 85 | 53 | 60 | 82 | 88 |
| Non-metallic minerals | 98 | 80 | 67 | 125 | 130 | 100 | 54 | 40 | 34 | 59 | ... |
| AFRICA. | | | | | | | | | | | |
| GENERAL INDEX | 96 | 94 | 97 | 103 | 109 | 106 | 103 | 103 | 110 | 114 | 118 |
| <i>Agricultural products</i> | 96 | 95 | 97 | 103 | 109 | 105 | 103 | 104 | 111 | 113 | 116 |
| <i>Non-agricultural products</i> | 90 | 93 | 98 | 106 | 113 | 116 | 98 | 87 | 100 | 124 | 133 |
| <i>Foodstuffs</i> | 98 | 94 | 100 | 102 | 108 | 106 | 106 | 116 | 111 | 118 | 122 |
| <i>Raw materials</i> | 95 | 95 | 93 | 105 | 112 | 111 | 96 | 90 | 112 | 113 | 122 |
| Food crops | 104 | 89 | 100 | 97 | 110 | 103 | 103 | 128 | 114 | 124 | 123 |
| Fodder crops | 89 | 96 | 99 | 106 | 110 | 96 | 104 | 81 | 103 | 104 | 95 |
| Meat * | 92 | 97 | 104 | 105 | 103 | 103 | 104 | 96 | 99 | 98 | ... |
| Sea fish. | 72 | 58 | 114 | 94 | 158 | 144 | 144 | 200 | 272 | 372 | 28 |
| Milk * | 96 | 98 | 98 | 100 | 107 | 104 | 108 | 108 | 102 | 107 | ... |
| Wine and hops | 103 | 79 | 76 | 123 | 119 | 125 | 142 | 169 | 156 | 202 | 180 |
| Coffee, tea, cocoa | 94 | 92 | 107 | 96 | 111 | 111 | 115 | 123 | 132 | 129 | ... |
| Tobacco | 99 | 101 | 121 | 94 | 85 | 94 | 96 | 94 | 88 | 104 | ... |
| Oil materials and oils | 97 | 96 | 94 | 102 | 112 | 109 | 88 | 104 | 113 | 114 | 119 |
| Textile fibres | 97 | 96 | 89 | 105 | 112 | 109 | 99 | 96 | 117 | 106 | 117 |
| Rubber | 97 | 122 | 110 | 97 | 73 | 61 | 49 | 24 | 25 | 37 | 61 |
| Fuels and power. | 94 | 101 | 99 | 102 | 104 | 99 | 87 | 78 | 83 | 95 | 104 |
| Metals | 89 | 86 | 92 | 110 | 123 | 126 | 112 | 96 | 121 | 165 | 173 |
| Non-metallic minerals | 86 | 92 | 109 | 104 | 109 | 128 | 89 | 87 | 92 | 99 | ... |

* Partly based on estimates, subject to revision.

Appendix I. Table 2 (concluded).

WORLD INDICES OF PRIMARY PRODUCTION, WEIGHTED BY 1930 PRICES.

Average Annual Production in 1925-1929 = 100.

| Continents and Groups of Products | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|--------------------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| ASIA. | | | | | | | | | | | |
| GENERAL INDEX | 97 | 97 | 100 | 103 | 104 | 106 | 103 | 103 | 108 | 105 | 106 |
| <i>Agricultural products</i> | 98 | 98 | 100 | 102 | 102 | 104 | 102 | 103 | 106 | 101 | 100 |
| <i>Non-agricultural products</i> | 86 | 92 | 98 | 105 | 118 | 117 | 110 | 108 | 122 | 143 | 154 |
| <i>Foodstuffs</i> | 98 | 98 | 100 | 102 | 102 | 104 | 105 | 105 | 108 | 101 | 101 |
| <i>Raw materials</i> | 92 | 94 | 100 | 105 | 109 | 111 | 98 | 100 | 111 | 117 | 120 |
| Food crops | 99 | 99 | 99 | 101 | 101 | 103 | 105 | 104 | 106 | 99 | 99 |
| Fodder crops | 100 | 100 | 100 | 94 | 106 | 97 | 96 | 96 | 93 | 92 | ... |
| Meat * | 97 | 97 | 99 | 103 | 104 | 103 | 103 | 106 | 105 | 106 | ... |
| Sea fish. | 93 | 95 | 100 | 103 | 110 | 116 | 122 | 132 | 161 | 173 | ... |
| Milk * | 99 | 99 | 100 | 101 | 102 | 104 | 105 | 111 | 106 | 102 | ... |
| Wine and hops | 73 | 111 | 107 | 109 | 100 | 96 | 59 | 89 | 70 | 70 | ... |
| Coffee, tea, cocoa | 91 | 96 | 100 | 104 | 108 | 98 | 101 | 108 | 98 | 100 | ... |
| Tobacco | 101 | 99 | 100 | 100 | 101 | 104 | 97 | 102 | 99 | 90 | ... |
| Oil materials and oils | 95 | 93 | 104 | 106 | 101 | 113 | 103 | 109 | 119 | 96 | 102 |
| Textile fibres | 96 | 95 | 99 | 106 | 104 | 106 | 88 | 94 | 104 | 113 | 111 |
| Rubber | 78 | 94 | 92 | 101 | 135 | 130 | 126 | 112 | 135 | 162 | 138 |
| Wood products | 82 | 94 | 101 | 108 | 115 | 113 | 107 | 107 | 121 | 135 | ... |
| Fuels and power. | 93 | 93 | 99 | 105 | 109 | 110 | 104 | 104 | 112 | 122 | 134 |
| Metals | 84 | 91 | 101 | 105 | 119 | 118 | 100 | 91 | 103 | 123 | 140 |
| Non-metallic minerals | 82 | 93 | 100 | 106 | 119 | 108 | 105 | 106 | 124 | 136 | 142 |
| OCEANIA. | | | | | | | | | | | |
| GENERAL INDEX | 95 | 99 | 99 | 104 | 103 | 110 | 112 | 122 | 122 | 123 | 124 |
| <i>Agricultural products</i> | 94 | 99 | 98 | 105 | 103 | 112 | 115 | 126 | 125 | *126 | *126 |
| <i>Non-agricultural products</i> | 99 | 99 | 106 | 98 | 98 | 89 | 74 | 81 | 89 | 97 | 109 |
| <i>Foodstuffs</i> | 95 | 99 | 98 | 105 | 103 | 115 | 118 | 130 | 130 | *131 | *133 |
| <i>Raw materials</i> | 94 | 101 | 101 | 103 | 102 | 97 | 98 | 104 | 103 | 106 | 105 |
| Food crops | 86 | 110 | 93 | 114 | 97 | 144 | 133 | 147 | 128 | 104 | 107 |
| Fodder crops | 94 | 97 | 108 | 100 | 101 | 106 | 95 | 100 | 107 | 103 | ... |
| Meat | 101 | 98 | 100 | 101 | 100 | 100 | 103 | 115 | 119 | *130 | ... |
| Sea fish. | 95 | 88 | 95 | 100 | 123 | 118 | 106 | 104 | 104 | *106 | ... |
| Milk | 93 | 94 | 99 | 104 | 109 | 117 | 126 | 137 | *145 | *145 | ... |
| Wine and hops | 91 | 113 | 99 | 105 | 92 | 75 | 80 | 91 | 79 | 84 | ... |
| Coffee, tea, cocoa | 79 | 96 | 101 | 109 | 113 | 119 | 116 | 118 | 126 | 126 | ... |
| Tobacco | 119 | 83 | 100 | 100 | 100 | 93 | 476 | 476 | 183 | ... | ... |
| Oil materials and oils | 87 | 93 | 95 | 111 | 115 | 111 | 98 | 93 | 100 | 98 | ... |
| Textile fibres | 91 | 101 | 98 | 106 | 103 | 101 | 109 | 114 | 110 | 110 | 104 |
| Wood products | 107 | 114 | 99 | 94 | 86 | 78 | 47 | 43 | 53 | 67 | ... |
| Fuels and power. | 104 | 104 | 107 | 97 | 88 | 83 | 73 | 74 | 77 | 81 | ... |
| Metals | 97 | 97 | 106 | 97 | 103 | 92 | 75 | 90 | 103 | 113 | 126 |
| Non-metallic minerals | 84 | 91 | 101 | 112 | 111 | 101 | 70 | 65 | 70 | 81 | ... |

* Partly based on estimates, subject to revision.

Appendix I. Table 3.

**PERCENTAGE DISTRIBUTION OF AGGREGATE PRODUCTION OF PRIMARY COMMODITIES,
WEIGHTED BY 1930 PRICES, BY CONTINENTAL GROUPS.**

World Totals = 100.

| Groups of Products and Continents | Average 1925/29 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|---------------------------------------|--------------------|------|------|------|------|------|------|------|------|------|------|-------|
| TOTAL PRODUCTION : | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) | 33.1 | 33.1 | 31.4 | 33.3 | 33.3 | 34.4 | 33.6 | 34.5 | 35.5 | 35.4 | 36.0 | 35.6 |
| Europe (including U.S.S.R.) | 43.3 | 42.8 | 42.0 | 43.6 | 43.5 | 44.6 | 44.9 | 44.5 | 44.9 | 45.4 | 46.4 | 46.6 |
| North America | 30.4 | 30.6 | 31.3 | 30.0 | 30.2 | 29.5 | 28.3 | 28.4 | 27.1 | 26.2 | 25.2 | 25.6 |
| Latin America | 7.6 | 7.7 | 7.8 | 7.7 | 7.8 | 7.4 | 7.7 | 7.7 | 7.6 | 7.8 | 8.2 | 7.8 |
| Africa | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.5 | 2.6 | 2.7 | 2.8 | 2.8 |
| Asia | 14.0 | 14.2 | 14.1 | 14.0 | 13.8 | 13.8 | 14.2 | 14.4 | 14.9 | 15.1 | 14.6 | 14.4 |
| Oceania | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.2 | 2.4 | 2.5 | 2.9 | 2.8 | 2.8 | 2.8 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| AGRICULTURAL PRODUCTS : | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) | 32.3 | 32.3 | 30.9 | 32.0 | 32.3 | 33.8 | 32.7 | 33.8 | 34.8 | 34.9 | 35.8 | 35.5 |
| Europe (including U.S.S.R.) | 44.5 | 43.9 | 43.6 | 44.4 | 44.4 | 46.0 | 45.8 | 44.7 | 44.7 | 45.5 | 46.7 | 47.1 |
| North America | 25.6 | 26.1 | 26.3 | 25.6 | 25.7 | 24.5 | 24.0 | 25.3 | 25.1 | 23.4 | 22.1 | 22.1 |
| Latin America | 8.5 | 8.5 | 8.7 | 8.7 | 8.6 | 8.1 | 8.5 | 8.4 | 8.3 | 8.6 | 9.2 | 8.7 |
| Africa | 2.8 | 2.8 | 2.7 | 2.7 | 2.8 | 3.0 | 2.8 | 2.8 | 2.8 | 3.0 | 3.1 | 3.2 |
| Asia | 15.9 | 16.1 | 16.0 | 16.0 | 15.8 | 15.8 | 16.0 | 15.8 | 15.9 | 16.3 | 15.7 | 15.6 |
| Oceania | 2.7 | 2.6 | 2.7 | 2.6 | 2.7 | 2.6 | 2.9 | 3.0 | 3.2 | 3.2 | 3.2 | 3.3 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| NON-AGRICULTURAL PRODUCTS : | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) | 36.2 | 36.4 | 33.2 | 38.0 | 36.8 | 36.5 | 36.7 | 37.3 | 38.8 | 37.5 | 37.2 | 36.1 |
| Europe (including U.S.S.R.) | 39.0 | 38.3 | 35.8 | 40.9 | 40.0 | 39.9 | 41.4 | 43.3 | 46.2 | 44.8 | 45.4 | 44.9 |
| North America | 47.7 | 48.7 | 51.1 | 46.4 | 46.4 | 46.4 | 44.1 | 41.7 | 37.5 | 39.1 | 37.6 | 38.3 |
| Latin America | 4.5 | 4.4 | 4.2 | 4.0 | 4.9 | 4.9 | 4.8 | 4.5 | 4.3 | 4.0 | 4.5 | 4.5 |
| Africa | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | 1.2 | 1.3 | 1.3 |
| Asia | 6.8 | 6.5 | 6.8 | 6.7 | 6.8 | 7.0 | 7.8 | 8.6 | 9.8 | 9.9 | 10.2 | 10.0 |
| Oceania | 1.0 | 1.1 | 1.1 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 1.0 | 1.0 | 1.0 | 1.0 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| FOODSTUFFS : | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) | 36.2 | 36.5 | 34.5 | 35.8 | 36.6 | 37.5 | 36.5 | 38.0 | 38.9 | 38.8 | 39.0 | 40.0 |
| Europe (including U.S.S.R.) | 49.3 | 49.1 | 48.4 | 49.2 | 49.4 | 50.4 | 50.3 | 49.3 | 49.2 | 49.4 | 49.6 | 51.6 |
| North America | 21.6 | 21.4 | 22.2 | 21.8 | 21.7 | 21.0 | 20.9 | 21.4 | 20.9 | 20.5 | 21.3 | 18.8 |
| Latin America | 8.6 | 8.7 | 8.7 | 8.7 | 8.7 | 8.2 | 8.3 | 8.3 | 8.3 | 8.6 | 8.5 | 8.4 |
| Africa | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.4 | 2.3 | 2.4 | 2.5 |
| Asia | 15.7 | 16.1 | 16.0 | 15.7 | 15.5 | 15.6 | 15.5 | 15.9 | 16.0 | 16.0 | 15.0 | 15.4 |
| Oceania | 2.6 | 2.5 | 2.6 | 2.5 | 2.6 | 2.6 | 2.8 | 2.9 | 3.2 | 3.2 | 3.2 | 3.3 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

* Partly based on estimates, subject to revision.

Appendix I. Table 3 (continued).

**PERCENTAGE DISTRIBUTION OF AGGREGATE PRODUCTION OF PRIMARY COMMODITIES,
WEIGHTED BY 1930 PRICES, BY CONTINENTAL GROUPS.**

World Totals = 100.

| Groups of Products and Continents | Average 1925/29 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|-----------------------------------|--------------------|------|------|------|------|------|------|------|------|------|------|-------|
| RAW MATERIALS : | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) . . . | 29.7 | 29.3 | 26.8 | 31.5 | 30.1 | 30.6 | 29.8 | 29.4 | 30.1 | 29.4 | 30.4 | 29.9 |
| Europe (including U.S.S.R.) . . . | 33.8 | 32.6 | 30.5 | 35.6 | 34.5 | 35.2 | 35.5 | 36.4 | 38.0 | 37.1 | 38.8 | 39.1 |
| North America | 42.9 | 43.8 | 46.1 | 41.4 | 41.7 | 41.8 | 39.7 | 38.7 | 34.2 | 35.1 | 33.3 | 34.5 |
| Latin America | 5.1 | 5.1 | 5.0 | 4.9 | 5.4 | 5.3 | 5.4 | 5.3 | 5.1 | 5.1 | 5.8 | 5.5 |
| Africa | 2.6 | 2.7 | 2.7 | 2.4 | 2.6 | 2.6 | 2.8 | 2.8 | 3.0 | 3.3 | 3.1 | 3.1 |
| Asia | 13.3 | 13.4 | 13.2 | 13.3 | 13.5 | 12.9 | 14.4 | 14.3 | 16.6 | 16.7 | 16.4 | 15.5 |
| Oceania | 2.3 | 2.4 | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 | 2.5 | 3.1 | 2.7 | 2.6 | 2.3 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Food crops : | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) . . . | 28.7 | 30.5 | 25.9 | 27.4 | 28.3 | 31.4 | 28.8 | 28.9 | 30.4 | 31.7 | 31.8 | 30.2 |
| Europe (including U.S.S.R.) . . . | 45.5 | 47.0 | 44.7 | 44.8 | 44.0 | 46.9 | 47.0 | 45.1 | 46.1 | 50.1 | 50.8 | 51.1 |
| North America | 11.9 | 10.4 | 12.1 | 12.9 | 13.4 | 10.8 | 11.8 | 11.6 | 11.0 | 7.6 | 7.7 | 8.8 |
| Latin America | 5.2 | 4.7 | 5.1 | 5.4 | 6.0 | 4.7 | 4.5 | 4.7 | 4.6 | 4.9 | 4.8 | 4.0 |
| Africa | 1.8 | 1.9 | 1.7 | 1.8 | 1.7 | 2.0 | 1.8 | 1.8 | 2.2 | 1.9 | 2.2 | 2.1 |
| Asia | 34.0 | 34.6 | 34.6 | 33.6 | 33.2 | 34.1 | 32.8 | 34.8 | 33.9 | 33.6 | 32.9 | 32.4 |
| Oceania | 1.6 | 1.4 | 1.8 | 1.5 | 1.7 | 1.5 | 2.1 | 2.0 | 2.2 | 1.9 | 1.6 | 1.6 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Fodder crops : | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) . . . | 24.1 | 23.3 | 25.2 | 22.6 | 21.8 | 27.6 | 25.4 | 24.7 | 26.0 | 27.4 | 30.6 | 24.5 |
| Europe (including U.S.S.R.) . . . | 33.8 | 32.1 | 35.1 | 31.5 | 32.2 | 37.8 | 36.5 | 33.7 | 33.8 | 39.4 | 45.2 | 37.1 |
| North America | 48.1 | 50.6 | 46.4 | 49.6 | 50.2 | 44.2 | 43.3 | 46.9 | 49.5 | 41.6 | 30.1 | 43.3 |
| Latin America | 8.9 | 8.7 | 9.3 | 9.3 | 8.6 | 8.4 | 10.8 | 10.0 | 8.8 | 9.5 | 13.9 | 10.6 |
| Africa | 3.6 | 3.1 | 3.5 | 3.7 | 3.7 | 3.8 | 3.6 | 3.8 | 2.7 | 3.9 | 4.5 | 3.5 |
| Asia | 5.3 | 5.2 | 5.4 | 5.6 | 5.0 | 5.5 | 5.5 | 5.3 | 4.9 | 5.3 | 5.9 | 5.2 |
| Oceania | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Meat : | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) . . . | 36.1 | 34.9 | 35.1 | 36.3 | 37.6 | 36.5 | 36.5 | 39.6 | 40.5 | 38.7 | 37.7 | ... |
| Europe (including U.S.S.R.) . . . | 46.6 | 44.1 | 44.9 | 46.8 | 48.2 | 48.5 | 49.5 | 48.0 | 47.3 | 44.6 | 43.0 | |
| North America | 30.0 | 31.2 | 31.1 | 29.6 | 29.4 | 29.1 | 28.0 | 29.2 | 29.5 | 31.6 | 33.8 | ... |
| Latin America | 14.9 | 15.9 | 15.4 | 15.0 | 14.0 | 14.0 | 14.2 | 14.1 | 14.1 | 14.6 | 14.4 | ... |
| Africa | 1.8 | 1.8 | 1.8 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.7 | 1.8 | 1.6 | ... |
| Asia | 3.2 | 3.3 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.3 | 3.4 | 3.3 | 3.1 | ... |
| Oceania | 3.5 | 3.7 | 3.6 | 3.5 | 3.4 | 3.4 | 3.3 | 3.6 | 4.0 | 4.1 | 4.1 | ... |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | ... |
| Sea fish : | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) . . . | 39.2 | 40.8 | 39.9 | 38.6 | 38.9 | 37.9 | 37.5 | 35.6 | 35.8 | 33.3 | 30.7 | ... |
| Europe (including U.S.S.R.) . . . | 47.0 | 47.5 | 47.6 | 46.6 | 46.9 | 46.2 | 48.4 | 47.9 | 46.6 | 42.8 | 41.1 | ... |
| North America | 18.7 | 18.3 | 18.3 | 18.1 | 19.1 | 19.5 | 17.1 | 14.7 | 13.7 | 13.4 | 13.5 | ... |
| Latin America | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | ... |
| Africa | 0.1 | 0.1 | — | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | ... |
| Asia | 33.7 | 33.5 | 33.5 | 34.6 | 33.4 | 33.6 | 33.8 | 36.7 | 39.0 | 43.0 | 44.6 | ... |
| Oceania | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | ... |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | ... |

* Partly based on estimates, subject to revision.

Appendix I. Table 3 (continued).

**PERCENTAGE DISTRIBUTION OF AGGREGATE PRODUCTION OF PRIMARY COMMODITIES,
WEIGHTED BY 1930 PRICES, BY CONTINENTAL GROUPS.**

World Totals = 100.

| Groups of Products and Continents | Average 1925/29 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|---------------------------------------|--------------------|------|------|------|------|------|------|------|------|------|------|-------|
| <i>Milk :</i> | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) | 46.4 | 46.4 | 45.4 | 46.0 | 46.9 | 47.0 | 48.0 | 48.9 | 49.8 | 50.6 | 50.8 | 51.1 |
| Europe (including U.S.S.R.) | 61.4 | 61.1 | 61.0 | 61.3 | 62.0 | 61.4 | 60.9 | 59.9 | 59.4 | 59.6 | 60.4 | 61.1 |
| North America | 25.9 | 25.9 | 26.1 | 26.1 | 25.5 | 25.9 | 25.9 | 26.2 | 26.1 | 26.2 | 25.5 | 25.0 |
| Latin America | 4.0 | 4.2 | 4.2 | 3.9 | 3.9 | 3.8 | 4.2 | 4.5 | 4.6 | 4.4 | 4.2 | 4.1 |
| Africa | 1.4 | 1.4 | 1.4 | 1.3 | 1.3 | 1.4 | 1.3 | 1.4 | 1.4 | 1.3 | 1.4 | 1.4 |
| Asia | 3.9 | 4.1 | 4.0 | 4.0 | 3.8 | 3.9 | 3.9 | 3.9 | 4.1 | 3.9 | 3.7 | 3.7 |
| Oceania | 3.4 | 3.3 | 3.3 | 3.4 | 3.5 | 3.6 | 3.8 | 4.1 | 4.4 | 4.6 | 4.8 | 4.7 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Wine and hops :</i> | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) | 85.3 | 87.7 | 84.7 | 85.6 | 83.6 | 84.8 | 83.1 | 85.1 | 80.7 | 79.9 | 79.1 | 80.3 |
| Europe (including U.S.S.R.) | 85.3 | 87.7 | 84.7 | 85.6 | 83.6 | 84.8 | 83.1 | 85.1 | 80.7 | 79.9 | 79.1 | 80.3 |
| North America | 0.9 | 0.6 | 1.1 | 0.9 | 0.8 | 0.9 | 0.8 | 0.8 | 0.7 | 1.1 | 3.3 | 3.5 |
| Latin America | 5.9 | 4.3 | 6.0 | 7.1 | 6.7 | 5.7 | 5.8 | 3.4 | 6.4 | 7.0 | 5.5 | 5.6 |
| Africa | 7.2 | 6.8 | 7.2 | 5.7 | 8.2 | 7.9 | 9.7 | 10.2 | 11.6 | 11.4 | 11.6 | 10.1 |
| Asia | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Oceania | 0.5 | 0.5 | 0.8 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Coffee, tea, cocoa :</i> | | | | | | | | | | | | |
| Europe (including U.S.S.R.) | — | — | — | — | — | — | — | — | — | 0.1 | 0.1 | ... |
| Latin America | 47.0 | 43.9 | 43.7 | 45.1 | 51.6 | 49.1 | 51.7 | 47.1 | 48.9 | 52.1 | 47.7 | ... |
| Africa | 10.6 | 11.5 | 10.9 | 11.5 | 9.1 | 10.4 | 10.6 | 11.7 | 11.3 | 12.0 | 12.7 | ... |
| Asia | 42.2 | 44.4 | 45.2 | 43.2 | 39.1 | 40.3 | 37.5 | 41.0 | 39.6 | 35.6 | 39.3 | ... |
| Oceania | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | ... |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | ... |
| <i>Tobacco :</i> | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) | 14.0 | 14.0 | 14.1 | 14.6 | 12.6 | 14.7 | 14.7 | 13.7 | 13.6 | 13.4 | 14.4 | ... |
| Europe (including U.S.S.R.) | 20.5 | 21.8 | 22.1 | 20.7 | 18.1 | 19.7 | 20.1 | 20.9 | 21.2 | 20.3 | 23.0 | ... |
| North America | 28.6 | 28.4 | 27.5 | 26.3 | 29.8 | 30.8 | 31.6 | 31.4 | 24.1 | 29.5 | 24.6 | ... |
| Latin America | 9.2 | 8.4 | 8.7 | 9.8 | 9.5 | 9.8 | 9.1 | 9.6 | 8.7 | 8.4 | 10.4 | ... |
| Africa | 2.8 | 2.8 | 2.9 | 3.5 | 2.7 | 2.3 | 2.5 | 2.6 | 2.9 | 2.5 | 3.3 | ... |
| Asia | 38.8 | 38.5 | 38.8 | 39.6 | 39.8 | 37.3 | 36.7 | 35.3 | 42.9 | 39.2 | 38.5 | ... |
| Oceania | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.2 | 0.1 | 0.2 | ... |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | ... |
| <i>Oil materials and oils :</i> | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) | 15.3 | 12.8 | 11.7 | 17.9 | 12.4 | 20.7 | 10.6 | 16.7 | 14.4 | 14.1 | 16.4 | 16.2 |
| Europe (including U.S.S.R.) | 20.0 | 17.5 | 16.2 | 22.3 | 17.5 | 25.5 | 15.9 | 22.7 | 20.0 | 19.1 | 21.8 | 21.8 |
| North America | 15.6 | 17.1 | 18.2 | 14.0 | 14.9 | 14.0 | 14.4 | 15.7 | 13.4 | 11.9 | 10.8 | 13.4 |
| Latin America | 8.9 | 9.5 | 10.2 | 9.4 | 9.3 | 6.4 | 9.2 | 10.0 | 7.5 | 8.0 | 10.9 | 7.9 |
| Africa | 11.6 | 11.8 | 11.8 | 10.4 | 11.7 | 12.2 | 12.3 | 9.6 | 11.9 | 12.3 | 13.4 | 13.3 |
| Asia | 43.1 | 43.3 | 42.8 | 43.1 | 45.7 | 41.0 | 47.3 | 41.3 | 46.4 | 47.9 | 42.3 | 42.8 |
| Oceania | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Textile fibres :</i> | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) | 11.8 | 10.9 | 10.6 | 12.4 | 12.1 | 12.7 | 12.3 | 11.6 | 12.7 | 13.0 | 13.9 | 14.5 |
| Europe (including U.S.S.R.) | 19.8 | 18.5 | 17.7 | 20.6 | 20.7 | 21.3 | 21.5 | 21.3 | 21.8 | 21.5 | 22.7 | 24.2 |
| North America | 30.7 | 32.5 | 34.7 | 28.1 | 29.0 | 29.4 | 28.7 | 34.4 | 29.1 | 28.4 | 23.3 | 24.8 |
| Latin America | 6.3 | 6.2 | 6.2 | 6.5 | 6.0 | 6.4 | 6.1 | 5.9 | 6.1 | 6.9 | 8.1 | 7.6 |
| Africa | 6.2 | 6.3 | 6.0 | 5.9 | 6.4 | 6.6 | 6.5 | 5.8 | 6.0 | 6.8 | 6.3 | 6.6 |
| Asia | 29.5 | 29.3 | 27.8 | 31.0 | 30.2 | 29.0 | 29.9 | 24.8 | 28.2 | 28.7 | 31.7 | 29.7 |
| Oceania | 7.5 | 7.2 | 7.6 | 7.9 | 7.7 | 7.3 | 7.3 | 7.8 | 8.8 | 7.7 | 7.9 | 7.1 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

* Partly based on estimates, subject to revision.

Appendix I. Table 3 (concluded).

PERCENTAGE DISTRIBUTION OF AGGREGATE PRODUCTION OF PRIMARY COMMODITIES,
WEIGHTED BY 1930 PRICES, BY CONTINENTAL GROUPS.

World Totals = 100.

| Groups of Products and Continents | Average 1925/29 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|-----------------------------------|--------------------|------|------|------|------|------|------|------|------|------|------|-------|
| <i>Rubber :</i> | | | | | | | | | | | | |
| Latin America | 4.5 | 6.6 | 4.9 | 5.8 | 3.7 | 2.6 | 1.9 | 1.5 | 1.0 | 1.2 | 0.9 | 1.5 |
| Africa | 1.3 | 1.5 | 1.6 | 1.5 | 1.2 | 0.7 | 0.6 | 0.5 | 0.3 | 0.2 | 0.3 | 0.6 |
| Asia | 94.2 | 91.9 | 93.5 | 92.7 | 95.1 | 96.7 | 97.5 | 98.0 | 98.7 | 98.6 | 98.8 | 97.9 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Wood products :</i> | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) . . | 44.7 | 44.3 | 43.3 | 45.9 | 44.7 | 45.2 | 46.3 | 45.6 | 49.6 | 49.2 | 50.1 | ... |
| Europe (including U.S.S.R.) . . | 47.4 | 46.3 | 45.8 | 48.6 | 47.6 | 48.6 | 51.2 | 51.6 | 56.2 | 54.9 | 56.0 | ... |
| North America | 47.7 | 49.1 | 49.3 | 46.5 | 47.4 | 46.6 | 43.8 | 43.2 | 38.2 | 39.5 | 38.3 | ... |
| Latin America | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | ... |
| Asia | 4.4 | 4.1 | 4.3 | 4.4 | 4.6 | 4.4 | 4.6 | 4.9 | 5.3 | 5.3 | 5.4 | ... |
| Oceania | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | ... |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | ... |
| <i>Fuels and Power :</i> | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) . . | 32.8 | 34.1 | 29.0 | 34.1 | 33.5 | 33.3 | 33.2 | 33.5 | 33.5 | 32.2 | 32.0 | 31.0 |
| Europe (including U.S.S.R.) . . | 35.9 | 36.2 | 31.8 | 37.2 | 37.0 | 37.0 | 38.0 | 39.8 | 40.8 | 39.8 | 40.3 | 39.9 |
| North America | 52.3 | 52.0 | 56.4 | 51.5 | 50.8 | 51.1 | 49.4 | 47.5 | 45.4 | 46.4 | 45.5 | 45.5 |
| Latin America | 3.8 | 3.6 | 3.6 | 3.4 | 4.1 | 4.3 | 4.5 | 4.3 | 4.7 | 4.5 | 4.9 | 5.0 |
| Africa | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 |
| Asia | 6.4 | 6.5 | 6.5 | 6.3 | 6.6 | 6.3 | 6.8 | 7.1 | 7.7 | 7.9 | 7.9 | 8.2 |
| Oceania | 0.8 | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.6 |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Metals :</i> | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) . . | 36.9 | 36.3 | 34.1 | 39.7 | 37.4 | 36.9 | 37.6 | 39.3 | 43.3 | 40.8 | 40.2 | ... |
| Europe (including U.S.S.R.) . . | 39.7 | 38.1 | 36.7 | 42.6 | 40.5 | 40.3 | 42.5 | 45.7 | 52.8 | 49.5 | 50.5 | ... |
| North America | 47.9 | 50.0 | 51.0 | 44.8 | 47.0 | 47.0 | 43.2 | 38.2 | 29.1 | 33.9 | 32.4 | ... |
| Latin America | 5.0 | 4.6 | 4.9 | 5.1 | 5.2 | 5.2 | 5.3 | 6.0 | 5.1 | 4.6 | 5.2 | ... |
| Africa | 1.2 | 1.2 | 1.1 | 1.1 | 1.2 | 1.3 | 1.6 | 1.9 | 2.2 | 2.2 | 2.5 | ... |
| Asia | 4.8 | 4.6 | 4.8 | 4.9 | 4.8 | 5.0 | 6.0 | 6.8 | 8.4 | 7.6 | 7.5 | ... |
| Oceania | 1.4 | 1.5 | 1.5 | 1.5 | 1.3 | 1.2 | 1.4 | 1.4 | 2.4 | 2.2 | 1.9 | ... |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | ... |
| <i>Non-metallic minerals :</i> | | | | | | | | | | | | |
| Europe (excluding U.S.S.R.) . . | 45.1 | 44.1 | 44.8 | 46.4 | 44.8 | 45.4 | 45.2 | 46.1 | 50.1 | 50.9 | 50.3 | ... |
| Europe (including U.S.S.R.) . . | 47.8 | 45.8 | 47.1 | 49.1 | 47.7 | 48.8 | 49.6 | 52.0 | 57.0 | 57.9 | 57.1 | ... |
| North America | 33.0 | 34.4 | 34.8 | 34.2 | 31.8 | 30.5 | 31.2 | 31.0 | 24.0 | 23.0 | 22.4 | ... |
| Latin America | 9.6 | 10.6 | 8.3 | 6.5 | 11.0 | 10.9 | 9.0 | 6.0 | 5.5 | 4.4 | 6.6 | ... |
| Africa | 2.3 | 2.3 | 2.3 | 2.6 | 2.2 | 2.2 | 2.8 | 2.4 | 2.9 | 2.9 | 2.7 | ... |
| Asia | 6.4 | 6.0 | 6.6 | 6.6 | 6.3 | 6.7 | 6.5 | 7.8 | 9.7 | 10.9 | 10.3 | ... |
| Oceania | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 0.9 | 0.9 | 0.9 | ... |
| World | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | ... |

* Partly based on estimates, subject to revision.

Appendix I. Table 4.

PERCENTAGE DISTRIBUTION OF AGGREGATE PRODUCTION OF PRIMARY COMMODITIES,
WEIGHTED BY 1930 PRICES, BY GROUPS OF PRODUCTS.

Total Production of Each Continent = 100.

| Continents and Groups of Products | 1925/29 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|--------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| WORLD. | | | | | | | | | | | | |
| <i>Agricultural products</i> | 78.5 | 79.9 | 79.4 | 78.4 | 78.3 | 76.8 | 78.8 | 81.2 | 83.5 | 81.9 | 79.8 | 78.2 |
| <i>Non-agricultural products</i> | 21.5 | 20.1 | 20.6 | 21.6 | 21.7 | 23.2 | 21.2 | 18.8 | 16.5 | 18.1 | 20.2 | 21.8 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Foodstuffs</i> | 61.5 | 62.0 | 61.7 | 61.9 | 61.6 | 60.1 | 62.7 | 64.3 | 65.8 | 65.3 | 64.9 | 62.1 |
| <i>Fodder crops</i> | 10.2 | 10.9 | 10.5 | 9.8 | 9.9 | 9.9 | 9.3 | 9.9 | 11.0 | 9.7 | 8.4 | 9.6 |
| <i>Raw materials</i> | 28.3 | 27.1 | 27.8 | 28.3 | 28.5 | 30.0 | 28.0 | 25.8 | 23.2 | 25.0 | 26.7 | 28.3 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Food crops | 19.2 | 19.7 | 19.4 | 19.4 | 19.4 | 18.4 | 19.9 | 19.9 | 20.7 | 20.8 | 19.6 | ... |
| Fodder crops | 10.2 | 10.9 | 10.5 | 9.8 | 9.9 | 9.9 | 9.4 | 9.9 | 11.0 | 9.7 | 8.4 | ... |
| Meat | 18.7 | 18.6 | 18.8 | 18.9 | 18.8 | 18.5 | 18.9 | 19.2 | 19.4 | 19.4 | 20.3 | ... |
| Sea fish | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | ... |
| Milk | 17.7 | 17.8 | 18.1 | 17.9 | 17.7 | 17.4 | 18.0 | 19.0 | 19.6 | 19.0 | 18.9 | ... |
| Wine and hops | 1.2 | 1.3 | 1.0 | 1.1 | 1.2 | 1.2 | 1.0 | 1.2 | 1.3 | 1.2 | 1.5 | ... |
| Coffee, tea, cocoa | 1.0 | 0.9 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.1 | ... |
| Tobacco | 1.4 | 1.5 | 1.4 | 1.4 | 1.3 | 1.4 | 1.5 | 1.5 | 1.3 | 1.4 | 1.2 | ... |
| Oil materials and oils | 2.7 | 2.7 | 2.6 | 2.8 | 2.6 | 2.7 | 2.7 | 2.9 | 2.8 | 2.9 | 2.6 | ... |
| Textile fibres | 5.9 | 5.9 | 6.2 | 5.6 | 5.9 | 5.9 | 5.9 | 6.2 | 6.0 | 6.3 | 0.1 | ... |
| Rubber | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | ... |
| Wood products | 1.2 | 1.1 | 1.2 | 1.2 | 1.1 | 1.2 | 1.2 | 1.1 | 1.0 | 1.2 | 1.3 | ... |
| Fuels and power | 10.1 | 9.7 | 9.7 | 10.3 | 10.0 | 10.6 | 10.1 | 9.6 | 9.0 | 9.2 | 9.9 | ... |
| Metals | 7.7 | 7.1 | 7.3 | 7.7 | 7.9 | 8.5 | 7.1 | 5.5 | 4.1 | 5.0 | 6.1 | ... |
| Non-metallic minerals | 1.9 | 1.8 | 1.8 | 1.9 | 2.0 | 2.1 | 2.0 | 1.7 | 1.4 | 1.4 | 1.6 | ... |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| EUROPE (excl. U.S.S.R.). | | | | | | | | | | | | |
| <i>Agricultural products</i> | 76.5 | 77.9 | 78.3 | 75.3 | 76.0 | 75.4 | 76.8 | 79.7 | 81.9 | 80.9 | 79.1 | 78.0 |
| <i>Non-agricultural products</i> | 23.5 | 22.1 | 21.7 | 24.7 | 24.0 | 24.6 | 23.2 | 20.3 | 18.1 | 19.1 | 20.9 | 22.0 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Foodstuffs</i> | 67.1 | 68.4 | 67.9 | 66.6 | 67.7 | 65.4 | 68.1 | 70.9 | 72.3 | 71.7 | 70.3 | 69.6 |
| <i>Fodder crops</i> | 7.4 | 7.6 | 8.4 | 6.7 | 6.5 | 7.9 | 7.1 | 7.1 | 8.0 | 7.5 | 7.2 | 6.6 |
| <i>Raw materials</i> | 25.5 | 24.0 | 23.7 | 26.7 | 25.8 | 26.7 | 24.8 | 22.0 | 19.7 | 20.8 | 22.5 | 23.8 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Food crops | 16.7 | 18.2 | 16.0 | 16.0 | 16.5 | 16.8 | 17.0 | 16.7 | 17.7 | 18.6 | 17.3 | ... |
| Fodder crops | 7.4 | 7.6 | 8.4 | 6.7 | 6.5 | 7.9 | 7.1 | 7.1 | 8.0 | 7.5 | 7.1 | ... |
| Meat | 20.4 | 19.7 | 21.0 | 20.6 | 21.3 | 19.6 | 20.6 | 22.0 | 22.1 | 21.2 | 21.2 | ... |
| Sea fish | 1.0 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 | 1.0 | 0.9 | 1.0 | 1.0 | 0.9 | ... |
| Milk | 24.8 | 24.9 | 26.1 | 24.7 | 25.0 | 23.8 | 25.8 | 26.9 | 27.5 | 27.3 | 26.6 | ... |
| Wine and hops | 3.0 | 3.5 | 2.6 | 2.9 | 3.1 | 3.0 | 2.6 | 3.0 | 2.9 | 2.6 | 3.2 | ... |
| Tobacco | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | ... |
| Oil materials and oils | 1.2 | 1.0 | 1.0 | 1.5 | 1.0 | 1.6 | 0.8 | 1.4 | 1.1 | 1.2 | 1.2 | ... |
| Textile fibres | 2.1 | 1.9 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.3 | 2.4 | ... |
| Wood products | 1.6 | 1.4 | 1.6 | 1.6 | 1.4 | 1.5 | 1.7 | 1.5 | 1.5 | 1.6 | 1.7 | ... |
| Fuels and power | 10.0 | 10.0 | 9.0 | 10.6 | 10.1 | 10.3 | 10.0 | 9.3 | 8.5 | 8.4 | 8.8 | ... |
| Metals | 8.6 | 7.8 | 8.0 | 9.2 | 8.8 | 9.1 | 7.9 | 6.3 | 5.1 | 5.8 | 6.8 | ... |
| Non-metallic minerals | 2.6 | 2.4 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 2.2 | 1.9 | 2.0 | 2.3 | ... |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

* Partly based on estimates, subject to revision.

Appendix I. Table 4 (continued).

**PERCENTAGE DISTRIBUTION OF AGGREGATE PRODUCTION OF PRIMARY COMMODITIES,
WEIGHTED BY 1930 PRICES, BY GROUPS OF PRODUCTS.**

Total Production of Each Continent = 100.

| Continents and Groups of Products | 1925/29 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|--------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| EUROPE (incl. U.S.S.R.). | | | | | | | | | | | | |
| <i>Agricultural products</i> | 80.6 | 82.0 | 82.5 | 79.7 | 80.1 | 79.2 | 80.5 | 81.7 | 83.0 | 82.2 | 80.2 | 79.1 |
| <i>Non-agricultural products</i> | 19.4 | 18.0 | 17.5 | 20.3 | 19.9 | 20.8 | 19.5 | 18.3 | 17.0 | 17.8 | 19.8 | 20.9 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Foodstuffs</i> | 70.0 | 71.1 | 71.1 | 69.8 | 70.0 | 68.0 | 70.3 | 71.3 | 72.1 | 71.2 | 69.5 | 68.7 |
| <i>Fodder crops</i> | 7.9 | 8.2 | 8.7 | 7.1 | 7.4 | 8.3 | 7.6 | 7.5 | 8.2 | 8.4 | 8.2 | 7.6 |
| <i>Raw materials</i> | 22.1 | 20.7 | 20.2 | 23.1 | 22.6 | 23.7 | 22.1 | 21.2 | 19.7 | 20.4 | 22.3 | 23.7 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Food crops | 20.2 | 21.6 | 20.7 | 20.0 | 19.6 | 19.4 | 20.8 | 20.2 | 21.3 | 22.9 | 21.5 | ... |
| Fodder crops | 7.9 | 8.2 | 8.7 | 7.1 | 7.3 | 8.3 | 7.6 | 7.5 | 8.2 | 8.4 | 8.2 | ... |
| Meat | 20.1 | 19.2 | 20.1 | 20.3 | 20.9 | 20.1 | 20.9 | 20.7 | 20.4 | 19.0 | 18.8 | ... |
| Sea fish | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 | ... |
| Milk | 25.1 | 25.4 | 26.2 | 25.1 | 25.2 | 24.0 | 24.5 | 25.6 | 25.9 | 25.0 | 24.6 | ... |
| Wine and hops | 2.3 | 2.7 | 2.0 | 2.2 | 2.4 | 2.3 | 1.9 | 2.3 | 2.3 | 2.1 | 2.5 | ... |
| Tea | — | — | — | — | — | — | — | — | — | — | — | ... |
| Tobacco | 0.7 | 0.7 | 0.8 | 0.6 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | ... |
| Oil materials and oils | 1.2 | 1.1 | 1.0 | 1.4 | 1.1 | 1.6 | 0.9 | 1.5 | 1.3 | 1.2 | 1.2 | ... |
| Textile fibres | 2.7 | 2.6 | 2.6 | 2.7 | 2.8 | 2.8 | 2.8 | 3.0 | 2.9 | 3.0 | 3.0 | ... |
| Wood products | 1.3 | 1.1 | 1.2 | 1.3 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.4 | 1.5 | ... |
| Fuels and power | 8.4 | 8.2 | 7.4 | 8.8 | 8.5 | 8.8 | 8.6 | 8.6 | 8.2 | 8.1 | 8.6 | ... |
| Metals | 7.1 | 6.4 | 6.4 | 7.5 | 7.3 | 7.6 | 6.7 | 5.7 | 4.9 | 5.5 | 6.6 | ... |
| Non-metallic minerals | 2.1 | 1.9 | 2.0 | 2.1 | 2.2 | 2.3 | 2.2 | 1.9 | 1.7 | 1.8 | 2.0 | ... |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| NORTH AMERICA. | | | | | | | | | | | | |
| <i>Agricultural products</i> | 66.3 | 68.1 | 66.5 | 66.7 | 66.7 | 63.6 | 66.9 | 72.5 | 77.1 | 73.1 | 69.9 | 67.4 |
| <i>Non-agricultural products</i> | 33.7 | 31.9 | 33.5 | 33.3 | 33.3 | 36.4 | 33.1 | 27.5 | 22.9 | 26.9 | 30.1 | 32.6 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Foodstuffs</i> | 43.8 | 43.3 | 43.7 | 44.8 | 44.3 | 42.8 | 46.4 | 48.4 | 50.7 | 51.2 | 54.7 | 45.6 |
| <i>Fodder crops</i> | 16.1 | 17.9 | 15.5 | 16.3 | 16.5 | 14.7 | 14.4 | 16.4 | 20.0 | 15.4 | 10.0 | 16.2 |
| <i>Raw materials</i> | 40.1 | 38.8 | 40.8 | 38.9 | 39.2 | 42.5 | 39.2 | 35.2 | 29.3 | 33.4 | 35.3 | 38.2 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Food crops | 7.6 | 6.7 | 7.5 | 8.4 | 8.6 | 6.7 | 8.3 | 8.2 | 8.4 | 6.0 | 6.0 | ... |
| Fodder crops | 16.2 | 17.9 | 15.5 | 16.2 | 16.5 | 14.7 | 14.3 | 16.4 | 20.0 | 15.4 | 10.1 | ... |
| Meat | 18.5 | 19.0 | 18.6 | 18.6 | 18.3 | 18.2 | 18.7 | 19.8 | 21.1 | 23.4 | 27.2 | ... |
| Sea fish | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | ... |
| Milk | 15.1 | 15.0 | 15.1 | 15.5 | 15.0 | 15.3 | 16.5 | 17.5 | 18.8 | 19.0 | 19.1 | ... |
| Wine and hops | — | — | — | — | — | — | — | — | — | — | — | ... |
| Tobacco | 1.3 | 1.4 | 1.3 | 1.2 | 1.3 | 1.4 | 1.6 | 1.6 | 1.2 | 1.5 | 1.2 | ... |
| Oil materials and oils | 1.4 | 1.5 | 1.5 | 1.3 | 1.3 | 1.3 | 1.4 | 1.6 | 1.4 | 1.3 | 1.1 | ... |
| Textile fibres | 6.0 | 6.3 | 6.8 | 5.3 | 5.6 | 5.9 | 6.0 | 7.5 | 6.4 | 6.9 | 5.7 | ... |
| Wood products | 1.8 | 1.7 | 1.8 | 1.8 | 1.8 | 2.0 | 1.9 | 1.7 | 1.5 | 1.8 | 1.9 | ... |
| Fuels and power | 17.3 | 16.4 | 17.5 | 17.7 | 16.8 | 18.4 | 17.7 | 16.0 | 15.1 | 16.4 | 17.9 | ... |
| Metals | 12.2 | 11.6 | 11.9 | 11.4 | 12.2 | 13.5 | 10.8 | 7.4 | 4.4 | 6.5 | 7.8 | ... |
| Non-metallic minerals | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 1.8 | 1.2 | 1.3 | 1.4 | ... |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

* Partly based on estimates, subject to revision.

Appendix I. Table 4 (continued).

PERCENTAGE DISTRIBUTION OF AGGREGATE PRODUCTION OF PRIMARY COMMODITIES,
WEIGHTED BY 1930 PRICES, BY GROUPS OF PRODUCTS.

Total Production of Each Continent = 100.

| Continents and Groups of Products | 1925/29 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|--------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| LATIN AMERICA. | | | | | | | | | | | | |
| <i>Agricultural products</i> | 87.3 | 88.5 | 88.7 | 88.6 | 86.4 | 84.7 | 86.9 | 88.9 | 90.6 | 90.7 | 88.9 | 87.4 |
| <i>Non-agricultural products</i> | 12.7 | 11.5 | 11.3 | 11.4 | 13.6 | 15.3 | 13.1 | 11.1 | 9.4 | 9.3 | 11.1 | 12.6 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Foodstuffs</i> | 69.1 | 69.7 | 69.5 | 70.2 | 69.4 | 67.0 | 67.5 | 69.4 | 71.8 | 72.0 | 67.0 | 66.8 |
| <i>Fodder crops</i> | 11.8 | 12.3 | 12.6 | 11.9 | 10.9 | 11.3 | 13.1 | 12.9 | 12.6 | 11.7 | 14.2 | 13.1 |
| <i>Raw materials</i> | 19.1 | 18.0 | 17.9 | 17.9 | 19.7 | 21.7 | 19.4 | 17.7 | 15.6 | 16.3 | 18.8 | 20.1 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Food crops</i> | 13.1 | 12.1 | 12.8 | 13.8 | 15.0 | 11.8 | 11.6 | 12.1 | 12.5 | 13.1 | 11.4 | ... |
| <i>Fodder crops</i> | 11.8 | 12.3 | 12.6 | 11.9 | 11.0 | 11.3 | 13.1 | 12.9 | 12.6 | 11.7 | 14.2 | ... |
| <i>Meat</i> | 36.3 | 38.5 | 37.5 | 36.8 | 34.0 | 35.2 | 34.8 | 35.3 | 35.9 | 36.2 | 35.4 | ... |
| <i>Sea fish</i> | — | — | — | — | — | — | — | — | — | — | — | ... |
| <i>Milk</i> | 9.3 | 9.8 | 9.8 | 9.1 | 8.9 | 8.9 | 9.8 | 11.2 | 11.8 | 10.7 | 9.7 | ... |
| <i>Wine and hops</i> | 0.9 | 0.8 | 0.7 | 1.1 | 1.1 | 0.9 | 0.8 | 0.5 | 1.1 | 1.0 | 1.0 | ... |
| <i>Coffee, tea, cocoa</i> | 6.2 | 5.3 | 5.3 | 5.9 | 7.3 | 7.3 | 7.2 | 6.5 | 7.7 | 7.8 | 6.3 | ... |
| <i>Tobacco</i> | 1.7 | 1.6 | 1.6 | 1.7 | 1.6 | 1.8 | 1.7 | 1.9 | 1.5 | 1.5 | 1.6 | ... |
| <i>Oil materials and oils</i> | 3.1 | 3.3 | 3.5 | 3.4 | 3.1 | 2.4 | 3.2 | 3.7 | 2.8 | 3.0 | 3.4 | ... |
| <i>Textile fibres</i> | 4.9 | 4.8 | 4.9 | 4.8 | 4.8 | 5.2 | 4.7 | 4.8 | 4.8 | 5.6 | 6.0 | ... |
| <i>Rubber</i> | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | — | — | — | ... |
| <i>Wood products</i> | — | — | — | — | — | — | — | — | — | — | — | ... |
| <i>Fuels and power</i> | 5.0 | 4.6 | 4.5 | 4.6 | 5.2 | 6.1 | 5.9 | 5.4 | 5.5 | 5.4 | 5.9 | ... |
| <i>Metals</i> | 5.1 | 4.3 | 4.7 | 5.1 | 5.3 | 6.0 | 4.8 | 4.3 | 2.8 | 3.0 | 3.8 | ... |
| <i>Non-metallic minerals</i> | 2.4 | 2.4 | 1.9 | 1.6 | 2.8 | 3.0 | 2.3 | 1.3 | 1.0 | 1.0 | 1.3 | ... |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| AFRICA. | | | | | | | | | | | | |
| <i>Agricultural products</i> | 91.0 | 91.5 | 91.2 | 91.0 | 90.8 | 90.7 | 90.2 | 91.5 | 92.4 | 91.8 | 90.3 | 89.9 |
| <i>Non-agricultural products</i> | 9.0 | 8.5 | 8.8 | 9.0 | 9.2 | 9.3 | 9.8 | 8.5 | 7.6 | 8.2 | 9.7 | 10.1 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Foodstuffs</i> | 54.4 | 55.6 | 53.9 | 55.6 | 53.6 | 53.6 | 54.3 | 56.1 | 61.4 | 55.0 | 56.1 | 56.3 |
| <i>Fodder crops</i> | 15.0 | 14.0 | 15.3 | 15.3 | 15.4 | 15.1 | 13.7 | 15.2 | 11.8 | 14.0 | 13.7 | 12.1 |
| <i>Raw materials</i> | 30.6 | 30.4 | 30.8 | 29.1 | 31.0 | 31.3 | 32.0 | 28.7 | 26.8 | 31.0 | 30.2 | 31.6 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Food crops</i> | 14.3 | 15.6 | 13.5 | 14.7 | 13.5 | 14.4 | 14.0 | 14.4 | 17.8 | 14.8 | 15.5 | ... |
| <i>Fodder crops</i> | 15.1 | 14.0 | 15.3 | 15.3 | 15.3 | 15.1 | 13.7 | 15.3 | 11.8 | 14.0 | 13.7 | ... |
| <i>Meat</i> | 14.1 | 13.5 | 14.5 | 15.0 | 14.3 | 13.2 | 13.6 | 14.2 | 13.2 | 12.7 | 12.1 | ... |
| <i>Sea fish</i> | — | — | — | — | — | — | — | — | — | — | 0.1 | 0.1 |
| <i>Milk</i> | 10.0 | 10.1 | 10.4 | 10.1 | 9.7 | 9.8 | 9.8 | 10.6 | 10.5 | 9.3 | 9.3 | ... |
| <i>Wine and hops</i> | 3.5 | 3.8 | 2.9 | 2.7 | 4.2 | 3.8 | 4.1 | 4.8 | 5.7 | 5.0 | 6.2 | ... |
| <i>Coffee, tea, cocoa</i> | 4.4 | 4.4 | 4.3 | 4.9 | 4.1 | 4.5 | 4.6 | 5.0 | 5.2 | 5.3 | 5.0 | ... |
| <i>Tobacco</i> | 1.6 | 1.7 | 1.7 | 2.0 | 1.5 | 1.2 | 1.5 | 1.5 | 1.4 | 1.3 | 1.5 | ... |
| <i>Oil materials and oils</i> | 12.9 | 13.0 | 13.1 | 12.4 | 12.6 | 13.2 | 13.3 | 11.1 | 13.0 | 13.2 | 12.8 | ... |
| <i>Textile fibres</i> | 15.2 | 15.4 | 15.5 | 13.8 | 15.5 | 15.5 | 15.6 | 14.6 | 14.0 | 16.2 | 14.1 | ... |
| <i>Rubber</i> | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | — | — | — | ... |
| <i>Fuels and power</i> | 3.2 | 3.2 | 3.4 | 3.2 | 3.1 | 3.1 | 3.0 | 2.7 | 2.4 | 2.4 | 2.6 | ... |
| <i>Metals</i> | 3.8 | 3.5 | 3.4 | 3.6 | 4.3 | 4.3 | 4.5 | 4.1 | 3.5 | 4.2 | 5.5 | ... |
| <i>Non-metallic minerals</i> | 1.8 | 1.7 | 1.8 | 2.1 | 1.8 | 1.8 | 2.2 | 1.6 | 1.5 | 1.5 | 1.6 | ... |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

* Partly based on estimates, subject to revision.

Appendix I. Table 4 (concluded).

PERCENTAGE DISTRIBUTION OF AGGREGATE PRODUCTION OF PRIMARY COMMODITIES,
WEIGHTED BY 1930 PRICES, BY GROUPS OF PRODUCTS.

Total Production of Each Continent = 100.

| Continents and Groups of Products | 1925/29 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | *1935 |
|--------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| ASIA. | | | | | | | | | | | | |
| <i>Agricultural products</i> | 89.6 | 90.7 | 90.1 | 89.7 | 89.3 | 88.2 | 88.4 | 88.8 | 89.2 | 88.2 | 85.8 | 84.8 |
| <i>Non-agricultural products</i> | 10.4 | 9.3 | 9.9 | 10.3 | 10.7 | 11.8 | 11.6 | 11.2 | 10.8 | 11.8 | 14.2 | 15.2 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Foodstuffs</i> | 69.2 | 70.4 | 70.0 | 69.2 | 68.7 | 67.9 | 68.2 | 70.8 | 70.5 | 69.0 | 66.6 | 66.1 |
| <i>Fodder crops</i> | 3.9 | 4.0 | 4.0 | 3.9 | 3.6 | 3.9 | 3.6 | 3.6 | 3.6 | 3.4 | 3.4 | 3.5 |
| <i>Raw materials</i> | 26.9 | 25.6 | 26.0 | 26.9 | 27.7 | 28.2 | 28.2 | 25.6 | 25.9 | 27.6 | 30.0 | 30.4 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Food crops | 46.9 | 48.1 | 47.7 | 46.6 | 46.4 | 45.6 | 45.8 | 48.1 | 46.9 | 46.1 | 44.2 | ... |
| Fodder crops | 3.9 | 4.0 | 4.0 | 3.9 | 3.6 | 4.0 | 3.6 | 3.6 | 3.6 | 3.4 | 3.4 | ... |
| Meat | 3.9 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.2 | 4.4 | 4.4 | 4.2 | 4.4 | ... |
| Sea fish | 2.0 | 1.9 | 1.9 | 2.0 | 1.9 | 2.1 | 2.1 | 2.3 | 2.5 | 2.9 | 3.2 | ... |
| Milk | 5.0 | 5.0 | 5.1 | 5.0 | 4.9 | 4.9 | 4.9 | 5.1 | 5.4 | 4.9 | 4.9 | ... |
| Wine | — | — | — | — | — | — | — | — | — | — | — | ... |
| Coffee, tea, cocoa | 3.1 | 2.9 | 3.0 | 3.1 | 3.1 | 3.2 | 2.9 | 3.0 | 3.2 | 2.8 | 2.9 | ... |
| Tobacco | 3.9 | 4.0 | 3.9 | 3.9 | 3.8 | 3.7 | 3.8 | 3.7 | 3.8 | 3.6 | 3.3 | ... |
| Oil materials and oils | 8.4 | 8.2 | 8.0 | 8.6 | 8.6 | 8.1 | 8.9 | 8.3 | 8.7 | 9.1 | 7.6 | ... |
| Textile fibres | 12.5 | 12.3 | 12.2 | 12.4 | 12.8 | 12.5 | 12.5 | 10.7 | 11.3 | 12.0 | 13.3 | ... |
| Rubber | 1.8 | 1.4 | 1.8 | 1.6 | 1.8 | 2.3 | 2.2 | 2.2 | 1.9 | 2.3 | 2.7 | ... |
| Wood products | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | ... |
| Fuels and power | 4.6 | 4.5 | 4.4 | 4.6 | 4.8 | 4.9 | 4.8 | 4.7 | 4.7 | 4.8 | 5.4 | ... |
| Metals | 2.7 | 2.3 | 2.5 | 2.7 | 2.7 | 3.0 | 3.0 | 2.6 | 2.3 | 2.5 | 3.1 | ... |
| Non-metallic minerals | 0.9 | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 | 0.9 | 0.9 | 0.9 | 1.0 | 1.1 | ... |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| OCEANIA. | | | | | | | | | | | | |
| <i>Agricultural products</i> | 90.9 | 90.5 | 90.9 | 90.3 | 91.4 | 91.4 | 92.6 | 94.0 | 93.9 | 93.4 | 92.9 | 92.5 |
| <i>Non-agricultural products</i> | 9.1 | 9.5 | 9.1 | 9.7 | 8.6 | 8.6 | 7.4 | 6.0 | 6.1 | 6.6 | 7.1 | 7.5 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| <i>Foodstuffs</i> | 69.7 | 69.9 | 69.4 | 69.1 | 69.9 | 70.0 | 72.9 | 73.5 | 74.2 | 74.4 | 74.0 | 74.7 |
| <i>Fodder crops</i> | 1.3 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.3 | 1.1 | 1.1 | 1.2 | 1.1 | 1.1 |
| <i>Raw materials</i> | 29.0 | 28.8 | 29.3 | 29.5 | 28.8 | 28.7 | 25.8 | 25.4 | 24.7 | 24.4 | 24.9 | 24.2 |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Food crops | 13.2 | 12.0 | 14.6 | 12.4 | 14.4 | 12.5 | 17.3 | 15.7 | 16.0 | 13.8 | 11.2 | ... |
| Fodder crops | 1.3 | 1.3 | 1.3 | 1.5 | 1.3 | 1.3 | 1.3 | 1.1 | 1.1 | 1.2 | 1.1 | ... |
| Meat | 28.8 | 30.8 | 28.6 | 29.1 | 27.9 | 28.1 | 26.3 | 26.7 | 27.3 | 28.2 | 29.5 | ... |
| Sea fish | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | ... |
| Milk | 26.6 | 26.2 | 25.2 | 26.6 | 26.5 | 28.3 | 28.3 | 30.1 | 30.0 | 31.5 | 32.3 | ... |
| Wine and hops | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | ... |
| Coffee, tea, cocoa | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | ... |
| Tobacco | — | — | — | — | — | — | — | 0.1 | 0.1 | — | 0.1 | ... |
| Oil materials and oils | 1.0 | 0.9 | 0.9 | 0.9 | 1.0 | 1.1 | 1.1 | 0.9 | 0.8 | 0.8 | 0.8 | ... |
| Textile fibres | 19.4 | 18.8 | 19.9 | 19.3 | 19.7 | 19.5 | 17.9 | 19.0 | 18.3 | 17.4 | 17.4 | ... |
| Rubber | — | — | — | — | — | — | — | — | — | — | — | ... |
| Wood products | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | ... |
| Fuels and power | 3.5 | 3.8 | 3.6 | 3.8 | 3.2 | 3.0 | 2.6 | 2.3 | 2.1 | 2.2 | 2.3 | ... |
| Metals | 4.6 | 4.7 | 4.5 | 4.9 | 4.3 | 4.7 | 3.9 | 3.1 | 3.4 | 3.9 | 4.3 | ... |
| Non-metallic minerals | 0.8 | 0.7 | 0.7 | 0.8 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.5 | 0.5 | ... |
| TOTAL PRODUCTION | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

* Partly based on estimates, subject to revision.

Appendix I. Table 5.

STOCKS OF PRIMARY COMMODITIES.

| Product | | Unit | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 |
|----------------------|---------------------------------------------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| FOODSTUFFS | | | | | | | | | | |
| 1. | Wheat: Total stocks | m.t. (000's) | a) 14,370 | a) 16,630 | a) 17,610 | a) 19,160 | a) 26,430 | a) 25,100 | a) 27,410 | a) 27,170 |
| 2. | 4 chief exporters | " | 6,342 | 6,451 | 7,513 | 9,418 | 14,780 | 14,971 | 16,876 | 17,775 |
| 3. | Lower Danube | " | 544 | 1,089 | 1,252 | 681 | 2,042 | 1,198 | 1,552 | 1,334 |
| 4. | European importers | " | 4,491 | 5,607 | 5,498 | 5,798 | 6,560 | 5,907 | 5,008 | 5,008 |
| 5. | World exportable stocks | " | | | a) 6,000 | a) 6,600 | a) 12,300 | a) 11,800 | a) 13,600 | a) 14,200 |
| 6. | World visible supply | " | 6,315 | 6,691 | 7,872 | 9,770 | 13,128 | 13,574 | 14,582 | 14,240 |
| 7. | Rye: Visible supply | " | . | . | . | 263 | 423 | 716 | 698 | 501 |
| 8. | Germany | " | . | . | . | . | . | . | . | . |
| 9. | Barley: Visible supply | " | . | . | . | 628 | 880 | 1,043 | 748 | 425 |
| 10. | Germany | " | . | . | . | . | . | . | . | . |
| 11. | Oats: Visible supply | " | . | . | . | 442 | 697 | 638 | 535 | 540 |
| 12. | Germany | " | . | . | . | . | . | . | . | . |
| 13. | Maize: Visible supply | " | . | . | . | 1,396 | 1,166 | 994 | 1,398 | 1,465 |
| 14. | Argentine | " | . | . | . | . | 204 | 268 | 407 | 366 |
| 15. | Sugar: Total stocks | " | a) 7,270 | a) 7,925 | a) 7,765 | a) 8,291 | a) 9,398 | a) 10,725 | a) 12,560 | a) 12,263 |
| 16. | Visible supply | " | 2,533 | 3,756 | 3,222 | 3,977 | 4,689 | 5,690 | 7,611 | 8,357 |
| 17. | Wine: France | hl. (000's) | . | . | . | 10,541 | 11,466 | 12,381 | 12,162 | 11,458 |
| 18. | Coffee: World stocks | m.t. (000's) | 316 | 536 | 629 | 1,106 | 1,097 | 1,793 | 1,908 | 2,091 |
| 19. | Tea: United Kingdom | " | 89.4 | 82.2 | 82.0 | 97.0 | 106.7 | 115.6 | 112.0 | 108.3 |
| 20. | Amsterdam | " | . | b) 1.4 | b) 2.6 | b) 2.9 | 4.0 | 4.6 | 4.1 | 3.3 |
| 21. | Cocoa: Europe and New York | " | 64.1 | 59.1 | 52.0 | 69.9 | 90.0 | 91.0 | 74.5 | 92.0 |
| RAW MATERIALS | | | | | | | | | | |
| 22. | Cotton: Total world stocks | bales (000's) | a) 7,535 | a) 9,801 | a) 12,087 | a) 10,135 | a) 9,625 | a) 11,715 | a) 13,835 | a) 17,046 |
| 23. | World visible supply | " | 4,579 | 5,627 | 6,732 | 5,791 | 5,925 | 7,256 | 8,667 | 9,203 |
| 24. | Of which Am. cotton | " | 3,265 | 4,210 | 5,240 | 4,007 | 3,880 | 4,955 | 6,482 | 7,357 |
| 25. | Mill stocks | " | a) 4,267 | a) 4,498 | a) 5,407 | a) 4,787 | a) 4,863 | a) 4,498 | a) 4,313 | a) 4,462 |
| 26. | Wool: raw: 3 exporting countries | m.t. (000's) | . | . | . | d) 16.7 | d) 23.4 | d) 55.4 | d) 59.3 | d) 84.5 |
| 27. | Wool: Europe (continent) | " | . | . | . | 23.3 | 25.2 | 21.4 | 22.7 | 25.4 |
| 28. | Raw silk: Visible supply | " | 7.0 | 7.1 | 8.1 | 8.0 | 9.1 | 13.7 | 15.2 | 15.2 |
| 29. | Rubber: World stocks | " | . | b) 155.8 | b) 234.6 | b) 267.7 | b) 305.4 | b) 385.1 | b) 511.1 | b) 650.3 |
| 30. | U.S.A. stocks | " | . | b) 52.0 | b) 73.7 | b) 100.9 | b) 66.5 | b) 120.5 | b) 204.2 | b) 327.2 |
| 31. | U.K. stocks | " | . | b) 6.4 | b) 52.1 | b) 67.3 | b) 22.9 | b) 74.3 | b) 120.4 | b) 129.2 |
| 32. | Coal: 4 European countries | " | 13,173 | 9,078 | 5,278 | 6,047 | 3,919 | 13,765 | 19,390 | 20,653 |
| 33. | France, pithead stocks | " | | | | | 1,240 | 2,053 | 4,090 | 4,573 |
| 34. | U.S.A., consumers' stocks | " | 40,279 | 39,750 | 57,032 | 40,340 | 34,038 | 31,881 | 29,223 | 26,367 |
| 35. | Petroleum: U.S.A. total | brls. (000's) | 499,482 | 484,839 | 521,898 | 567,396 | 613,592 | 624,762 | 575,244 | 540,129 |
| 36. | Of which motor spirit | " | 38,461 | 40,169 | 41,871 | 34,382 | 41,658 | 47,340 | 41,472 | 36,602 |
| 37. | Iron Ore: U.S.A. | m.t. (000's) | 30,910 | 30,339 | 32,762 | 30,277 | 30,085 | 32,199 | 34,615 | 33,702 |
| 38. | France | " | 1,914 | 2,007 | 2,155 | 2,483 | 2,705 | 3,090 | 3,974 | 4,385 |
| 39. | N. Africa | " | 654 | 849 | 899 | 594 | 544 | 779 | 1,249 | 1,341 |
| 40. | Copper: World stocks | " | 369.7 | 365.7 | 354.8 | 288.7 | 319.4 | 519.6 | 568.6 | b) 692.7 |
| 41. | Refined, N. + S. America | " | 75.0 | 66.6 | 87.8 | 60.0 | 80.5 | 283.6 | 393.2 | b) 502.5 |
| 42. | Lead: U.S.A. total | " | e) 89.8 | e) 103.7 | e) 140.1 | e) 145.2 | e) 149.4 | 106.1 | 173.7 | 220.9 |
| 43. | refined | " | e) 14.8 | e) 15.7 | e) 37.0 | e) 43.8 | e) 52.3 | 54.1 | 118.7 | 155.1 |
| 44. | United Kingdom | " | b) 0.1 | b) 0.0 | 2.4 | 1.4 | 0.9 | 6.3 | 13.9 | 15.6 |
| 45. | Zinc: Cartel + European outsiders | " | . | . | . | . | . | . | . | . |
| 46. | U.S.A. + U.K. visible supply | " | 17 | 17 | 34 | 41 | 44 | 109 | a) 204.0 | 166.4 |
| 47. | Tin: World stocks | " | 32.8 | 25.0 | 23.2 | 25.7 | 33.0 | 47.1 | 60.9 | 61.2 |
| 48. | Silver: North America | m.t. | 28 | 43 | 34 | 39 | 50 | 37 | 119 | 238 |
| 49. | Shanghai | " | b) 2,637 | 3,779 | 3,969 | 3,766 | 5,635 | 6,923 | 6,461 | 7,924 |
| 50. | India | " | b) 8,635 | 9,863 | 11,572 | 11,190 | 11,225 | 12,222 | 13,628 | 12,186 |
| 51. | Cement: U.S.A. | m.t. (000's) | 3,945 | 4,757 | 5,047 | 5,673 | 5,982 | 6,386 | 6,150 | 5,237 |

For footnotes, see page 140.

Appendix I. Table 5.
STOCKS OF PRIMARY COMMODITIES.

| 1933 | 1934 | | | | 1935 | | | | 1936 | | |
|-----------|----------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|----|
| | Jan. | April | July | Oct. | Jan. | April | July | Oct. | Jan. | April | |
| a) 29,940 | . | . | a) 31,520 | . | . | . | a) 24,090 | . | . | . | 1 |
| 20,300 | . | . | 18,863 | . | . | . | 13,664 | . | . | . | 2 |
| 735 | . | . | 1,470 | . | . | . | 544 | . | . | . | 3 |
| 6,370 | . | . | 8,710 | . | . | . | 7,431 | . | . | . | 4 |
| a) 16,900 | . | . | a) 15,700 | . | . | . | a) 10,000 | . | . | . | 5 |
| 14,590 | 14,504 | 14,508 | 12,298 | 13,778 | 13,864 | 12,127 | 9,321 | 11,380 | 13,173 | 10,347 | 6 |
| 435 | 474 | 486 | 400 | 420 | 429 | 432 | 425 | 383 | 351 | 325 | 7 |
| 736 | 1,027 | 1,080 | 829 | 1,183 | 1,409 | 1,621 | 1,291 | 1,379 | 1,239 | 1,089 | 8 |
| 658 | 841 | 780 | 569 | 860 | 754 | 632 | 340 | 721 | 779 | 681 | 9 |
| 149 | 259 | 170 | 35 | 232 | 244 | 112 | 126 | 234 | 149 | 91 | 10 |
| 803 | 1,074 | 902 | 561 | 645 | 656 | 527 | 270 | 816 | 848 | 801 | 11 |
| 75 | 98 | 84 | 37 | 58 | 86 | 113 | 124 | 176 | 176 | 157 | 12 |
| 2,090 | 2,763 | 2,328 | 1,781 | 2,599 | 2,077 | 1,184 | 1,140 | 1,000 | 1,214 | 1,046 | 13 |
| 335 | 400 | 125 | 320 | 420 | 300 | 110 | 460 | . | . | . | 14 |
| g) 10,738 | . | . | . | 10,150 | . | . | . | 9,137 | . | . | 15 |
| 8,186 | 8,467 | 8,175 | 7,621 | 5,783 | 8,014 | 8,187 | 6,269 | 4,763 | 6,337 | 6,778 | 16 |
| 11,883 | 12,346 | 12,675 | 11,751 | 11,444 | 19,977 | 12,874 | 12,282 | 12,436 | 13,734 | 13,644 | 17 |
| 1,557 | . | . | 1,536 | 1,344 | 1,149 | 1,554 | 1,380 | 1,632 | 1,794 | 1,824 | 18 |
| 129.7 | 134.7 | 125.2 | 105.8 | 116.3 | 139.2 | 133.2 | 112.3 | 107.8 | 123.2 | 115.8 | 19 |
| 4.4 | 3.4 | 3.1 | 3.8 | 4.0 | 3.4 | 4.0 | 4.2 | 2.9 | 2.2 | 3.5 | 20 |
| 121.5 | 119.6 | 142.3 | 142.9 | 120.1 | 103.4 | 131.6 | 126.8 | 111.6 | 119.5 | 154.8 | 21 |
| a) 16,076 | . | . | a) 15,879 | . | . | . | a) 13,591 | . | . | . | 22 |
| 9,148 | 10,060 | 8,868 | 7,362 | 7,210 | 7,819 | 6,881 | 4,998 | 5,205 | 7,768 | 6,825 | 23 |
| 7,417 | 8,255 | 6,516 | 5,040 | 5,225 | 5,962 | 4,715 | 3,253 | 3,968 | 6,363 | 4,992 | 24 |
| a) 5,050 | c) 5,268 | . | c) 5,337 | . | . | . | c) 4,800 | . | . | . | 25 |
| d) 43.8 | . | . | 65.2 | . | . | . | 40.8 | . | . | . | 26 |
| 30.4 | 29.8 | 29.3 | 30.4 | 27.8 | 24.0 | 24.1 | 23.1 | 23.6 | . | . | 27 |
| 15.7 | 18.9 | 17.2 | 15.5 | 17.1 | 16.3 | 13.4 | 11.4 | 14.2 | 13.4 | 12.3 | 28 |
| b) 649.3 | 674.2 | 681.3 | 688.4 | 711.5 | 756.6 | 738.7 | 736.6 | 723.9 | 661.1 | 617.3 | 29 |
| b) 385.1 | 370.9 | 356.7 | 363.9 | 365.4 | 358.3 | 344.1 | 325.6 | 331.5 | 300.2 | 271.8 | 30 |
| b) 94.2 | 87.9 | 95.9 | 101.3 | 114.9 | 137.1 | 164.6 | 174.1 | 177.7 | 166.8 | 150.1 | 31 |
| 20,411 | 18,874 | 18,574 | 18,792 | 18,420 | 17,016 | 17,166 | 16,792 | 16,175 | 12,731 | 13,176 | 32 |
| 4,330 | 3,987 | 4,135 | 4,531 | 4,732 | 4,346 | 4,610 | 4,722 | 5,002 | 4,154 | 4,154 | 33 |
| 26,082 | 29,792 | 25,738 | 26,756 | 30,007 | 31,276 | 34,966 | 37,310 | 37,107 | 33,581 | 25,476 | 34 |
| 519,682 | 519,089 | 508,332 | 509,765 | 507,764 | 484,112 | 487,712 | 481,679 | 469,476 | 459,672 | 463,646 | 35 |
| 32,851 | 35,752 | 42,805 | 35,531 | 30,295 | 29,647 | 41,998 | 35,244 | 29,926 | 32,973 | 47,971 | 36 |
| 31,792 | 35,229 | 29,461 | 27,477 | 35,474 | 34,925 | 27,364 | 27,435 | 34,006 | 31,845 | 23,301 | 37 |
| 4,175 | 4,031 | 3,899 | 3,752 | 3,754 | 3,781 | 3,709 | 3,671 | 3,680 | 3,501 | 3,349 | 38 |
| 948 | 1,067 | 979 | 936 | 973 | 1,090 | 1,106 | 1,186 | 1,299 | 1,269 | ... | 39 |
| b) 724.5 | 648.8 | . | 340.3 | 329.2 | 579.6 | 288.5 | 291.4 | 249.2 | 547.4 | ... | 40 |
| 477.7 | 426.9 | 402.3 | 340.3 | 329.2 | 818.3 | 288.5 | 291.4 | 249.2 | 231.2 | ... | 41 |
| 249.4 | 268.3 | 270.6 | 282.2 | 285.1 | 284.7 | 286.9 | 289.7 | 292.5 | 284.9 | 287.4 | 42 |
| 165.7 | 184.2 | 200.9 | 216.1 | 208.9 | 212.3 | 207.4 | 209.6 | 204.1 | 201.7 | 202.7 | 43 |
| 26.4 | 29.6 | 30.5 | 27.4 | 20.3 | 19.7 | 19.2 | 17.4 | 9.4 | 7.1 | 6.4 | 44 |
| 137.7 | 134.2 | 123.8 | 111.0 | 113.1 | 110.8 | 112 | 113 | 106 | 84 | 81 | 45 |
| 118 | 102 | 107 | 101 | 108 | 120 | 112 | 113 | 106 | 84 | 81 | 46 |
| 46.0 | 27.0 | 22.1 | 18.7 | 17.3 | 15.7 | f) 19.5 | 14.6 | 11.7 | 13.7 | 16.8 | 47 |
| 230 | 219 | 398 | 328 | 255 | 121 | 154 | 133 | 107 | 53 | 78 | 48 |
| 11,071 | 13,665 | 13,751 | 13,879 | 10,838 | 8,135 | 8,043 | 8,156 | 8,049 | . | . | 49 |
| 11,513 | 10,823 | 10,477 | 10,388 | 10,537 | 10,166 | 9,662 | . | . | . | . | 50 |
| 4,609 | 4,308 | 4,731 | 4,780 | 4,726 | 4,712 | 4,713 | 5,087 | 4,801 | 4,798 | 4,558 | 51 |

For footnotes, see page 140.

NOTES to Appendix I. Table 5.

General Note. Unless otherwise stated, annual figures are yearly averages and those for the months of 1934-1936 refer to the beginning of the month indicated.

* Estimate or provisional figure. — a) I.VIII. — b) Beginning of year. — c) End of month. — d) 30.VI. — e) Including stocks in Mexico. — f) Includes "Buffer" stock of 7,596 metric tons. — g) I.IX.

Wheat: 1. World wheat stocks less Russia covering U.S.A., Canada, Australia, Argentine (4 chief exporters), Lower Danube, India, North Africa, European importers, Afloat to Europe and Afloat to ex-Europe, Japan. — 5. Stocks of old crop wheat on August 1st (including flour in terms of wheat) in the 4 principal exporting countries and Afloat, less the minimum carry-over. — 6. Broomhall's world visible supply, which includes wheat in second hands and flour converted into terms of wheat; stocks in Australia were added as from September 1925.

Rye: 7. Stocks in North America and Afloat. — 8. Stocks in commercial elevators and mills.

Barley: 9. Stocks in North America, Afloat, and U.K. ports. — 10. Stocks in commercial elevators and mills.

Oats: 11. Stocks in North America, Afloat and U.K. ports. — 12. Stocks in commercial elevators and mills.

Maize: 13. Stocks in North America, Afloat and U.K. ports.

Sugar: 15. Total world end-of-season stocks of raw sugar. — 16. Stocks in Germany, Czechoslovakia, France, Netherlands, Belgium, Poland, United Kingdom, U.S. ports, Cuba ports and, since July 1926, Cuba Interior.

Wine: 17. Wholesalers' stocks.

Coffee: 18. Visible supply in Europe, U.S.A., Brazil (Rio, Santos, Bahia), plus, since January 1926, stocks in Interior of São Paulo, since July 1928, stocks in Interior of Rio de Janeiro and, since April 1930, the São Paulo Government stocks.

Tea: 19. Prior to April 1929, official statistics for tea in bond; since then, figures compiled by the "Tea Brokers' Association of London" (representing about 90 per cent of the trade), increased by 10 per cent to obtain a comparable series.

Cocoa: 21. Stocks in France, United Kingdom, Sweden, Lisbon and New York.

Cotton: 22. Series includes, for American cotton, stocks in consuming establishments, public storage, and elsewhere in the U.S.A., linters in U.S.A., stocks in Liverpool, Manchester and continental ports, in mills outside the U.S.A., Afloat to Europe, in Japan and China ports and Afloat; for other kinds of cotton, mill stocks, and visible supply at the principal ports of Europe, Asia and Africa. — 23. Visible supply covering all types at Liverpool, London, Manchester, Hamburg, Bremen, Havre, Barcelona, Rotterdam, Genoa, Ghent, Antwerp, Alexandria, Bombay, Afloat to Europe, U.S. ports, interior towns and exports on day of report. — 25. Estimated mill stocks (of American, East Indian, Egyptian and "Sundries") in eighteen countries in Europe, including an estimate for the U.S.S.R., in India, Japan, China, U.S.A., Canada, Mexico, Brazil and elsewhere.

Wool: 26. Raw wool stocks at end of season in Australia (in stores and selling centres), in New Zealand (all centres) and in the ports of the Union of S. Africa (sold and unsold). — 27. Stocks of wool tops in the combing establishments of Belgium, France, Germany and Italy. Figures for Italy not available since October 1935. Stocks in Belgium, France and Germany (metric tons): 1935, April—22,351; July—21,983; October—22,582; 1936, January—19,085; April—17,775.

Raw Silk: 28. Stocks in U.S.A., Japan, Canton, Shanghai, London and Milan.

Rubber: 29. Stocks outside "regulated" areas, viz. at Singapore and Penang (dealers and Port), at Para and Manaus, in the U.K. and the U.S.A., and Afloat, plus, since 1928, stocks, inside "regulated" areas, viz. dealers' and estate stocks in Malaya, Netherlands Indies, Ceylon, India (excl. Burma), North Borneo, Sarawak and French Indo-China (dealers', brokers' and merchants' stocks only). — 30. Stocks with manufacturers, importers, dealers, etc. — 31. Stocks in public warehouses in London and Liverpool.

Coal: 32. Stocks in Germany and the Saar (including coke in terms of coal), Belgium and Poland (Upper Silesia only): these stocks are believed to have represented about 66 per cent of total European stocks at the end of 1931. — 33. Series includes coke and briquettes in terms of coal. — 34. Stocks of bituminous coal in the hands of commercial consumers (electric power utilities, by-product coke ovens, steel and rolling mills, cement mills, coal-gas retorts, other industrial plants and railroads), and retail dealers.

Petroleum: 35. Stocks of crude and refined oils (liquid products only) in the U.S.A., which is believed to hold about 80 per cent of the world's stocks.

Iron Ore: 37. Stocks at furnaces and on Lake Erie docks. — 38. Stocks at mines. — 39. Stocks at mines in Algeria and Tunisia.

Copper: 40. Stocks in N. and S. America (blister copper at smelteries, refineries, in process and in transit to U.S.A., and refined copper), in official warehouses in U.K. and Le Havre, and in Japan (bonded stock excluded).

Lead: 42. Stocks of lead in the U.S.A. (and Mexico up to 1929) in ore, matte, base bullion, in process at, and in transit to, smelteries and refineries, together with refined pig and antimonial lead derived from domestic ore. — 43. Stocks of refined pig and antimonial lead of domestic origin. — 44. Stocks in official warehouses only which have never represented anything like the total reserves in the country.

Zinc: 45. Series cover the principal producers with the notable exception of the U.S.A.; the European outsiders' stocks amount to only 2-3 per cent of the total. The Cartel was dissolved on December 31st, 1934. — 46. Stocks in public warehouses.

Tin: 47. Visible supply as reported by the London Metal Exchange, comprising stocks in U.K., U.S.A., and Netherlands, tin Afloat to U.K., and the U.S.A. and Europe from the Straits, Batavia and Australia and Afloat to U.K. and U.S.A. from China; together with the "tin" estimate of Straits stocks.

Silver: 48. Stocks at refineries in the U.S.A. and Canada. — 49. Stocks in sycee, Mexican dollars and bars expressed in terms of fine silver. — 50. Currency returns showing reserve in silver coin and bullion, here expressed in terms of fine silver.

Cement: 51. Stocks of finished cement and of "clinker" (unground cement).

Sources: 1-4, Stanford University (U.S.A.), *Wheat Studies*; 5, International Institute of Agriculture (Rome), *Monthly Crop Report and Agricultural Statistics*; 6, 34-37, 51, U.S. Dept. of Commerce, *Survey of Current Business*; 7-14, *Statistisches Jahrbuch für das Deutsche Reich* and International Institute of Agriculture (Rome), *Monthly Crop Report and Agricultural Statistics*; 15, Lamborn's estimate, *International Sugar Journal* (London); 16, 18-19, 44, 46-47, London and Cambridge Economic Service; 17, *Bulletin de la Statistique générale de la France*; 20, *Economisch-Statistisch Kwartaalbericht* (Rotterdam); 21, 28, 32, *Statistisches Jahrbuch für das Deutsche Reich and Wirtschaft und Statistik*; 22-24, *Commercial and Financial Chronicle* (New York); 25, *International Cotton Bulletin* (Manchester); 26, *The Economist* (London); 27, *The Wool Record and Textile World* (Bradford); 29-31, *Statistical Bulletin of the International Rubber Regulation Committee* (London); 33, 38-39, *Annales des Mines* (Paris); 40-43, 48-50, The American Bureau of Metal Statistics, *Year Book and Reports*; 45, *The Metal Bulletin* (London).

Appendix II. Table 1.

WORLD INDEX OF INDUSTRIAL ACTIVITY.

Base: 1929 = 100.

| Mining and manufacturing | | | | | | Manufacturing only | | | | | | | | | |
|---------------------------------------|--------|-----------------|------|------|------|--------------------|----------------|--------|-----------------|------|------|------|------|-------|-------|
| Annual indices | Months | Monthly indices | | | | | Annual indices | Months | Monthly indices | | | | | | |
| | | 1932 | 1933 | 1934 | 1935 | 1936 | | | 1932 | 1933 | 1934 | 1935 | 1936 | | |
| <i>World.</i> | | | | | | | | | | | | | | | |
| 1925 | 81.8 | I | 72.4 | 69.5 | 80.9 | 90.7 | 101.8 | 1925 | 81.9 | I | 71.1 | 68.3 | 80.1 | 90.5 | 101.7 |
| 1926 | 83.4 | II | 71.1 | 69.0 | 82.7 | 91.1 | 101.2 | 1926 | 83.5 | II | 70.1 | 67.9 | 82.3 | 91.0 | 100.7 |
| 1927 | 89.2 | III | 70.0 | 69.0 | 86.0 | 92.0 | ... | 1927 | 89.1 | III | 68.6 | 67.2 | 85.3 | 91.7 | ... |
| 1928 | 93.7 | IV | 67.6 | 71.6 | 85.7 | 91.3 | ... | 1928 | 94.2 | IV | 66.6 | 71.2 | 85.8 | 91.8 | ... |
| 1929 | 100.0 | V | 65.9 | 76.9 | 86.7 | 91.6 | ... | 1929 | 100.0 | V | 65.3 | 76.6 | 86.9 | 91.9 | ... |
| | | VI | 65.4 | 82.6 | 85.5 | 90.8 | ... | | | VI | 64.8 | 83.5 | 85.9 | 90.6 | ... |
| 1930 | 88.6 | VII | 63.2 | 85.3 | 81.4 | 89.8 | ... | 1930 | 88.2 | VII | 62.8 | 86.3 | 81.2 | 90.4 | ... |
| 1931 | 79.8 | VIII | 64.5 | 83.2 | 80.4 | 91.9 | ... | 1931 | 79.0 | VIII | 64.3 | 83.5 | 80.5 | 92.5 | ... |
| 1932 | 69.2 | IX | 69.5 | 82.5 | 81.3 | 95.0 | ... | 1932 | 68.8 | IX | 69.0 | 82.3 | 80.9 | 96.4 | ... |
| 1933 | 77.7 | X | 70.2 | 79.4 | 83.6 | 99.8 | ... | 1933 | 77.5 | X | 69.5 | 79.5 | 83.5 | 100.3 | ... |
| 1934 | 84.8 | XI | 69.8 | 77.5 | 85.2 | 102.2 | ... | 1934 | 84.7 | XI | 68.6 | 76.7 | 85.3 | 102.8 | ... |
| 1935 | 94.7 | XII | 71.9 | 78.6 | 89.8 | 105.4 | ... | 1935 | 95.3 | XII | 70.2 | 77.7 | 89.9 | 105.6 | ... |
| <i>World, excluding the U.S.S.R.</i> | | | | | | | | | | | | | | | |
| 1925 | 84.1 | I | 66.5 | 62.8 | 73.5 | 81.6 | 88.4 | 1925 | 84.0 | I | 65.1 | 61.6 | 72.6 | 81.3 | 88.2 |
| 1926 | 84.9 | II | 65.0 | 62.5 | 75.4 | 81.3 | 87.3 | 1926 | 85.0 | II | 64.0 | 61.2 | 75.0 | 81.1 | 86.7 |
| 1927 | 90.6 | III | 64.1 | 62.3 | 78.5 | 81.8 | 86.9 | 1927 | 90.5 | III | 62.6 | 60.4 | 77.8 | 81.3 | 87.2 |
| 1928 | 94.5 | IV | 61.6 | 65.1 | 78.6 | 81.6 | ... | 1928 | 95.0 | IV | 60.6 | 64.6 | 78.7 | 82.1 | ... |
| 1929 | 100.0 | V | 60.4 | 71.0 | 79.3 | 81.7 | ... | 1929 | 100.0 | V | 59.8 | 70.7 | 79.6 | 81.9 | ... |
| | | VI | 59.5 | 76.4 | 77.6 | 81.1 | ... | | | VI | 58.8 | 77.3 | 78.0 | 80.8 | ... |
| 1930 | 86.4 | VII | 58.0 | 80.4 | 74.9 | 81.2 | ... | 1930 | 86.0 | VII | 57.6 | 81.5 | 74.6 | 81.8 | ... |
| 1931 | 75.0 | VIII | 58.9 | 77.2 | 73.5 | 82.3 | ... | 1931 | 74.6 | VIII | 58.6 | 77.6 | 73.6 | 82.9 | ... |
| 1932 | 63.1 | IX | 62.4 | 74.8 | 72.9 | 83.5 | ... | 1932 | 62.7 | IX | 61.9 | 74.7 | 72.5 | 84.9 | ... |
| 1933 | 71.2 | X | 63.8 | 72.1 | 74.0 | 87.2 | ... | 1933 | 71.0 | X | 63.2 | 72.2 | 74.0 | 87.6 | ... |
| 1934 | 76.7 | XI | 63.9 | 71.1 | 75.2 | 89.1 | ... | 1934 | 76.6 | XI | 62.7 | 70.3 | 75.4 | 89.6 | ... |
| 1935 | 83.8 | XII | 64.4 | 72.3 | 79.7 | 91.7 | ... | 1935 | 84.3 | XII | 63.2 | 71.3 | 79.6 | 91.9 | ... |
| <i>Europe, excluding the U.S.S.R.</i> | | | | | | | | | | | | | | | |
| 1925 | 81.6 | I | 71.7 | 69.5 | 79.4 | 84.4 | 92.5 | 1925 | 81.0 | I | 69.6 | 68.4 | 79.0 | 84.6 | 92.9 |
| 1926 | 79.2 | II | 71.0 | 70.6 | 80.8 | 85.3 | 93.1 | 1926 | 79.7 | II | 69.6 | 69.5 | 80.7 | 85.7 | 93.8 |
| 1927 | 92.8 | III | 70.1 | 71.9 | 83.9 | 87.0 | 92.7 | 1927 | 92.7 | III | 69.2 | 71.2 | 84.1 | 87.7 | 93.4 |
| 1928 | 96.0 | IV | 69.0 | 72.6 | 83.0 | 87.9 | ... | 1928 | 96.4 | IV | 68.3 | 72.4 | 83.3 | 88.9 | ... |
| 1929 | 100.0 | V | 68.5 | 74.3 | 83.1 | 88.7 | ... | 1929 | 100.0 | V | 67.7 | 74.4 | 83.6 | 89.8 | ... |
| | | VI | 67.1 | 74.4 | 82.2 | 87.0 | ... | | | VI | 66.5 | 74.6 | 82.8 | 87.9 | ... |
| 1930 | 91.8 | VII | 65.0 | 75.0 | 82.5 | 86.9 | ... | 1930 | 91.7 | VII | 64.6 | 75.3 | 83.1 | 88.0 | ... |
| 1931 | 81.8 | VIII | 64.9 | 75.3 | 81.8 | 87.5 | ... | 1931 | 81.1 | VIII | 64.8 | 75.8 | 82.4 | 88.5 | ... |
| 1932 | 70.4 | IX | 67.1 | 76.4 | 82.6 | 89.3 | ... | 1932 | 70.1 | IX | 66.7 | 75.7 | 83.1 | 90.3 | ... |
| 1933 | 76.2 | X | 69.3 | 77.3 | 82.9 | 91.0 | ... | 1933 | 76.3 | X | 68.5 | 77.4 | 83.3 | 91.9 | ... |
| 1934 | 83.9 | XI | 71.1 | 78.7 | 84.6 | 92.1 | ... | 1934 | 84.4 | XI | 69.9 | 78.4 | 84.5 | 92.8 | ... |
| 1935 | 89.1 | XII | 70.8 | 78.6 | 84.4 | 92.2 | ... | 1935 | 90.0 | XII | 69.7 | 77.9 | 84.3 | 92.4 | ... |
| <i>North America.</i> | | | | | | | | | | | | | | | |
| 1925 | 86.9 | I | 60.7 | 54.7 | 65.9 | 76.7 | 82.6 | 1925 | 87.7 | I | 59.8 | 52.9 | 64.1 | 75.6 | 81.5 |
| 1926 | 90.5 | II | 58.4 | 53.0 | 68.4 | 75.3 | 79.7 | 1926 | 90.5 | II | 57.4 | 51.2 | 67.4 | 74.2 | 77.5 |
| 1927 | 88.9 | III | 56.8 | 50.8 | 71.2 | 74.2 | 78.8 | 1927 | 88.9 | III | 54.4 | 47.4 | 69.2 | 72.4 | 78.5 |
| 1928 | 93.4 | IV | 53.3 | 55.8 | 72.0 | 73.1 | 84.8 | 1928 | 94.2 | IV | 51.6 | 54.7 | 71.6 | 72.7 | 83.6 |
| 1929 | 100.0 | V | 51.9 | 65.7 | 73.2 | 72.6 | 85.7 | 1929 | 100.0 | V | 50.5 | 64.8 | 73.0 | 71.6 | 84.5 |
| | | VI | 50.7 | 76.5 | 70.6 | 73.1 | ... | | | VI | 49.8 | 77.9 | 70.4 | 71.3 | ... |
| 1930 | 80.9 | VII | 49.6 | 83.6 | 65.0 | 73.2 | ... | 1930 | 80.0 | VII | 48.8 | 85.1 | 63.4 | 73.0 | ... |
| 1931 | 68.4 | VIII | 51.1 | 76.9 | 62.7 | 75.0 | ... | 1931 | 67.4 | VIII | 50.4 | 76.8 | 61.8 | 74.7 | ... |
| 1932 | 54.4 | IX | 56.0 | 71.9 | 61.2 | 75.6 | ... | 1932 | 53.4 | IX | 55.0 | 70.4 | 59.4 | 76.9 | ... |
| 1933 | 64.3 | X | 56.6 | 64.7 | 62.6 | 80.7 | ... | 1933 | 63.3 | X | 55.7 | 64.5 | 61.6 | 80.3 | ... |
| 1934 | 67.3 | XI | 55.0 | 61.3 | 63.4 | 83.5 | ... | 1934 | 66.2 | XI | 53.3 | 59.6 | 63.2 | 83.4 | ... |
| 1935 | 76.4 | XII | 55.8 | 63.8 | 71.9 | 88.1 | ... | 1935 | 76.1 | XII | 54.1 | 62.0 | 71.7 | 87.8 | ... |

Note. — The annual averages of the monthly indices for Europe and the world are slightly lower than the corresponding annual indices. The difference, which in the case of Europe amounts to somewhat over 2% for certain years, is due to the fact that, while the monthly indices of certain countries are less comprehensive in scope than their annual indices, the average level of the additional industries (food industries in particular) included in the latter was higher than that of the industries covered by the former.

Italy and Sweden, for which countries no monthly indices are available since June and September 1935 respectively, are excluded from the indices since the beginning of that year. These exclusions, however, only affect the movement of the relevant indices in a minor degree (in no month up to September 1935 to the extent of more than a few decimal points).

Source. — Calculation of the Economic Intelligence Service of the Secretariat of the League of Nations.

Appendix II. Table 2.

GENERAL INDICES OF INDUSTRIAL ACTIVITY.

Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|-----------------------------------------------|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| <i>Africa:</i> | | | | | | | | | | | |
| Union of South Africa (annual) ^a 1 | 84 | 94 | 98 | 108 | 116 | 124 | . | . | 116 | 144 | ... |
| <i>America:</i> | | | | | | | | | | | |
| Canada (monthly) | 83 | 93 | 98 | 109 | 118 | 100 | 84 | 68 | 71 | 87 | 96 |
| United States (monthly) | 95 | 99 | 97 | 101 | 109 | 88 | 74 | 58 | 69 | 72 | 82 |
| Chile (monthly) (o) ² | . | . | (86) | (94) | (117) | (118) | (91) | (102) | (112) | (123) | (140) |
| <i>Asia:</i> | | | | | | | | | | | |
| Japan (monthly) ³ | . | . | 97 | 105 | 117 | 111 | 107 | 114 | 133 | 150 | 166 |
| <i>Europe:</i> | | | | | | | | | | | |
| Austria (monthly) | 89 | 89 | 100 | 110 | 113 | 96 | 84 | 72 | 74 | 81 | 90 |
| Belgium: | | | | | | | | | | | |
| Annual index | 82 | 95 | 103 | 109 | 111 | 98 | 90 | 77 | 79 | 80 | 89 |
| Monthly index | 80 | 96 | 99 | 112 | 112 | 95 | 85 | 71 | 75 | 74 | 81 |
| Czechoslovakia (monthly) | 90 | 87 | 101 | 109 | 114 | 101 | 92 | 72 | 68 | 75 | 79 |
| Denmark (annual) (o) ⁴ | . | . | (100) | (108) | (117) | (127) | (117) | (106) | (122) | (136) | (141) |
| Estonia (monthly) (o) ⁵ | . | . | (94) | (103) | (103) | (102) | (94) | (81) | (85) | (100) | (110) |
| Finland (monthly) | 79 | 92 | 104 | 113 | 111 | 101 | 89 | 92 | 106 | 129 | 138 |
| France (monthly) | 88 | 103 | 90 | 104 | 114 | 115 | 102 | 79 | 88 | 81 | 77 |
| Germany: | | | | | | | | | | | |
| Annual index | 91 | 84 | 106 | 110 | 110 | 95 | 77 | 64 | 72 | 91 | ... |
| Quarterly index | 89 | 85 | 109 | 108 | 109 | 96 | 79 | 63 | 71 | 90 | 103 |
| Greece (monthly) | 95 | 90 | 100 | 106 | 108 | 112 | 116 | 109 | 119 | 136 | 152 |
| Hungary (quarterly) (o) ⁴ | . | . | (100) | (101) | (103) | (97) | (90) | (79) | (87) | (101) | (115) |
| Italy (monthly) (o) ⁶ | . | . | . | (100) | (109) | (100) | (85) | (73) | (80) | (88) | d)(105) |
| Netherlands (monthly) | 86 | 89 | 99 | 112 | 115 | 105 | 91 | 72 | 79 | 80 | 76 |
| Norway (annual) | 101 | 90 | 92 | 102 | 114 | 115 | 89 | 105 | 107 | 111 | 120 |
| Poland (monthly) | 84 | 82 | 102 | 116 | 115 | 95 | 80 | 62 | 64 | 73 | 77 |
| Roumania (monthly) | 77 | 89 | 102 | 112 | 120 | 116 | 122 | 106 | 123 | 149 | e)146 |
| Spain (monthly) (o) ⁶ | . | . | . | (100) | (112) | (111) | (104) | (99) | (95) | (96) | (97) |
| Sweden: ⁷ | | | | | | | | | | | |
| Kommerskollegium (annual) | 87 | 95 | 98 | 104 | 117 | 116 | 111 | 105 | 112 | 135 | ... |
| Sveriges Industriförbund (monthly) | 91 | 94 | 97 | 105 | 112 | 108 | 94 | 88 | 91 | 112 | f)125 |
| United Kingdom: | | | | | | | | | | | |
| Board of Trade (quarterly) ⁸ | c)(94) | . | (101) | (100) | (105) | (97) | (88) | (88) | (93) | (104) | (111) |
| London and Cambridge (quarterly) | 99 | 76 | 109 | 104 | 112 | 100 | 85 | 86 | 92 | 103 | 110 |
| <i>U.S.S.R.</i> (annual) ⁹ | 58 | 82 | 94 | 118 | 148 | 193 | 238 | 270 | 294 | 352 | 431 |
| <i>Oceania:</i> | | | | | | | | | | | |
| New Zealand (annual) b) ¹⁰ | 93 | 102 | 102 | 98 | 106 | 112 | 110 | 116 | 119 | 118 | ... |

Note. — For details concerning the scope, composition and original base of the above indices (except those for the Union of South Africa and New Zealand), see the *Statistical Year-Book of the League of Nations 1935/36*, Table 108.

(o) Original base has not been changed, as figures for the whole period 1925-1929 are not available.

a) b) Twelve months ending a) 30.VI; b) 31.III of following year. — c) 1924. — d)-f) Estimates based on d) 8 months; e) 9 months; f) 5 months.

¹ Union of South Africa: index of volume of output in all classes of industry.

² Chile: base average 1927-1929.

³ Japan: figures for 1927-1929 calculated by linking the official index given with that of the Mitsubishi Economic Research Bureau.

⁴ Denmark, Hungary: base 1927.

⁵ Estonia: base 1927-1931.

⁶ Italy, Spain: base 1928.

⁷ Sweden: Kommerskollegium index: index of values of production in all classes of industry at 1913 prices. — Industriförbund index: sample of important industries.

⁸ United Kingdom: Board of Trade index: base average 1924 and 1927-1929.

⁹ U.S.S.R.: index of values of production in all classes of industry at 1926/27 prices.

¹⁰ New Zealand: index of values added by manufacture in all classes of industry at 1925/26 prices.

Sources. — See page 156.

Appendix II. Table 3.

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.
Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|----------------------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| I. Tobacco Industry. | | | | | | | | | | | |
| <i>America :</i> | | | | | | | | | | | |
| Canada ¹ | 80 | 85 | 98 | 112 | 126 | 123 | 110 | 92 | 100 | 109 | 119 |
| United States | 89 | 94 | 99 | 105 | 113 | 110 | 104 | 94 | 98 | 108 | 114 |
| Chile ² | . | . | (93) | (100) | (107) | (103) | (78) | (99) | (99) | (104) | (108) |
| <i>Europe :</i> | | | | | | | | | | | |
| Belgium (c) | 91 | 92 | 97 | 106 | 113 | 121 | 120 | 109 | 99 | 95 | 98 |
| Czechoslovakia | 112 | 103 | 99 | 95 | 92 | 88 | 89 | 87 | 88 | 85 | 76 |
| Denmark ³ | 97 | 101 | 101 | 103 | 99 | 107 | 109 | 112 | 121 | 131 | 136 |
| Estonia ⁴ | . | . | (97) | (99) | (103) | (100) | (96) | (60) | (59) | (60) | (72) |
| Finland ⁵ | 96 | 95 | 100 | 102 | 106 | 108 | 86 | 87 | 89 | 94 | ... |
| France (c) | 103 | 90 | 98 | 102 | 107 | 109 | 108 | 106 | 105 | ... | ... |
| Germany | 98 | 91 | 100 | 105 | 105 | 111 | 84 | 95 | 101 | 113 | 116 |
| Greece | 115 | 98 | 96 | 94 | 97 | 94 | 93 | 87 | 93 | 96 | 104 |
| Italy (a) | . | 94 | 101 | 98 | 102 | 106 | 91 | 89 | 86 | 84 | 81 |
| Netherlands (c) ⁴ | 91 | 108 | 102 | 101 | 97 | 100 | 106 | 111 | 110 | 91 | 91 |
| Norway ⁵ | . | . | (98) | (98) | (105) | (109) | (101) | (101) | (101) | (104) | ... |
| Sweden ⁶ | 94 | 100 | 96 | 101 | 109 | 117 | 121 | 129 | 119 | 123 | ... |
| Turkey | 81 | 101 | 102 | 106 | 111 | 100 | 87 | 117 | ... | ... | ... |
| United Kingdom | 89 | 92 | 97 | 106 | 116 | 118 | 112 | 109 | 113 | 124 | 127 |
| <i>Oceania :</i> | | | | | | | | | | | |
| Australia (a) ⁵ | 97 | 100 | 100 | 100 | 103 | 103 | 88 | 88 | 90 | 91 | ... |
| II. Textile Industries (Composite indices). | | | | | | | | | | | |
| <i>America :</i> | | | | | | | | | | | |
| Canada | 84 | 95 | 103 | 110 | 108 | 101 | 99 | 94 | 102 | 113 | ... |
| United States | 96 | 96 | 104 | 99 | 106 | 84 | 87 | 76 | 89 | 78 | 96 |
| <i>Asia :</i> | | | | | | | | | | | |
| Japan | 89 | 95 | 101 | 103 | 111 | 105 | 110 | 117 | 127 | 141 | 151 |
| <i>Europe :</i> | | | | | | | | | | | |
| Belgium | 82 | 93 | 107 | 112 | 107 | 88 | 81 | 69 | 69 | 52 | 75 |
| Czechoslovakia | 93 | 85 | 111 | 106 | 105 | 95 | 87 | 71 | 66 | 80 | 78 |
| Denmark ¹ | . | . | (92) | (96) | (112) | (114) | (116) | (126) | (148) | (160) | (156) |
| Estonia ¹ | . | . | (93) | (104) | (103) | (99) | (82) | (78) | (77) | (93) | (108) |
| Finland ² | . | (89) | (104) | (105) | (102) | (95) | (89) | (90) | (105) | (129) | (144) |
| France | 97 | 104 | 95 | 106 | 98 | 91 | 76 | 64 | 79 | 67 | 69 |
| Germany { Monthly | 95 | 87 | 115 | 106 | 98 | 95 | 92 | 84 | 96 | 104 | 96 |
| Annual | 96 | 85 | 117 | 106 | 96 | 93 | 88 | 80 | 91 | 105 | ... |

I. (c) Indices of *consumption* of manufactured tobacco.
a) Twelve months ending 30.VI of the year stated.
¹ Canada : tobacco released.
² Chile, Estonia, Norway : base 1927-1929.
³ Denmark, Finland, Norway, Australia : indices based on factory consumption of raw tobacco.
⁴ Netherlands : index calculated by weighting the separate indices for cigarettes, cigars, and pipe, etc., tobacco by the relative values of production in 1930.
⁵ Sweden : index of values of production at 1913 prices.

II. ¹ Denmark, Estonia : base 1927-1929.
² Finland : base 1926-1929.

Appendix II. Table 3 (continued).

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.
Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|----------------------------------------------------------------|---------|------|--------|-------|-------|-------|-------|-------|-------|-------|--------|
| II. Textile Industries (Composite indices) (continued). | | | | | | | | | | | |
| <i>Europe (continued):</i> | | | | | | | | | | | |
| Greece | 75 | 92 | 101 | 116 | 117 | 128 | 135 | 140 | 157 | 178 | 186 |
| Hungary ¹ | 95 | 89 | 100 | 108 | 108 | 110 | 111 | 95 | 114 | 136 | 151 |
| Italy ² | | | | (100) | (102) | (91) | (82) | (67) | (76) | (74) | b)(78) |
| Netherlands ¹ | 91 | 95 | 102 | 105 | 107 | 102 | 93 | 81 | 84 | 84 | ... |
| Norway | 102 | 89 | 96 | 99 | 114 | 125 | 106 | 138 | 139 | 153 | *158 |
| Poland ³ | 82 | 78 | 115 | 118 | 108 | 83 | 79 | 68 | 71 | 80 | 84 |
| Roumania ⁴ | | | (103) | (90) | (108) | (114) | (109) | (139) | (159) | (182) | ... |
| Sweden ⁵ { (i) | 86 | 96 | 103 | 108 | 108 | 114 | 105 | 118 | 121 | 148 | ... |
| (ii) | 89 | 98 | 102 | 107 | 105 | 107 | 94 | 114 | 115 | 139 | ... |
| United Kingdom { Board of Trade ⁶ | a)(100) | | (102) | (100) | (99) | (80) | (77) | (85) | (90) | (92) | (97) |
| London & Cambridge: Quarterly | 106 | 92 | 105 | 98 | 99 | 79 | 78 | 88 | 96 | 98 | 105 |
| Annual | 104 | 96 | 104 | 98 | 98 | 79 | 82 | 87 | 94 | 96 | 102 |
| U.S.S.R. | 61 | 83 | 101 | 119 | 140 | 139 | 145 | 162 | 173 | 192 | ... |
| III. Cotton Industry. † ✓ | | | | | | | | | | | |
| <i>America:</i> | | | | | | | | | | | |
| Canada { Raw cotton imports | 89 | 102 | 104 | 102 | 103 | 77 | 73 | 75 | 95 | 114 | 93 |
| Spinning | 90 | 99 | 108 | 100 | 103 | 86 | 79 | 82 | 89 | 103 | ... |
| Spinning and weaving ¹ | 82 | 103 | 106 | 109 | 101 | 89 | 87 | 84 | 105 | 115 | ... |
| United States { Spinning ² | 94 | 98 | 108 | 97 | 103 | 79 | 79 | 73 | 91 | 79 | 82 |
| Weaving: Printed ³ | | | b)(79) | (94) | (106) | (84) | (96) | (97) | (116) | | |
| White, dyed, printed | 99 | 102 | 106 | 94 | 100 | 66 | 62 | 57 | 68 | | |
| Bleached, dyed, printed ³ | | | | | | | | | | (100) | (97) |
| Chile: Weaving ⁴ | | | (94) | (96) | (110) | (122) | (100) | (154) | (223) | (284) | (327) |
| <i>Asia:</i> | | | | | | | | | | | |
| China ⁵ { Spinning | (88) | | (103) | (108) | | (121) | (113) | (112) | (115) | (112) | ... |
| Weaving | (43) | | (98) | (159) | | (160) | (157) | (196) | (195) | (227) | ... |
| India ^{a)} { Spinning | 91 | 107 | 107 | 86 | 110 | 115 | 128 | 134 | 122 | 132 | 140 |
| Weaving | 90 | 104 | 110 | 86 | 109 | 114 | 130 | 135 | 125 | 143 | 148 |
| Japan { Spinning | 95 | 102 | 99 | 96 | 109 | 98 | 100 | 110 | 121 | 135 | 139 |
| Weaving | 89 | 93 | 98 | 104 | 116 | 105 | 106 | 116 | 126 | 136 | 139 |

II. * Provisional figure. — a) 1924, — b) First eight months.

¹ Hungary, Netherlands: index based on number of workers employed.

² Italy: base 1928.

³ Poland: index based on number of hours worked.

⁴ Roumania: base 1927-1929.

⁵ Sweden: (i) general index, including hosiery and clothing; (ii) index of production of yarn and tissues.

⁶ United Kingdom: Board of Trade index: base 1924, 1927-1929.

III. (†) Unless otherwise stated, the indices for spinning refer to cotton-yarn production, and those for weaving to cotton-cloth production.

a) Twelve months ending 31.III of following year; b) Second half-year.

¹ Canada: index of production of cotton yarn and cotton tissues.

² United States: indices based on cotton-mill consumption of raw cotton.

³ United States: printed: base 1928-1929; bleached, dyed and printed: base 1934.

⁴ Chile: base 1927-1929.

⁵ China: base 1925, 1927, 1928.

Appendix II. Table 3 (continued).

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.

Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | |
|--------------------------------------------|----------------------------------|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| III. Cotton Industry † (continued). | | | | | | | | | | | | |
| <i>Europe :</i> | | | | | | | | | | | | |
| Austria | Spinning | 102 | 87 | 108 | 102 | 101 | 94 | 88 | 87 | 90 | 112 | 130 |
| | Weaving ¹ | 99 | 89 | 110 | 100 | 101 | 106 | 117 | 114 | 105 | 134 | 147 |
| Belgium | Spinning ^{a)} | 86 | 92 | 101 | 115 | 107 | 95 | 80 | 69 | 72 | 67 | 95 |
| | Weaving | 79 | 88 | 102 | 117 | 114 | 91 | 84 | 72 | 72 | 62 | 82 |
| Bulgaria ² | Spinning | . | . | . | . | (100) | (169) | (204) | (241) | (344) | (536) | (476) |
| | Weaving | . | . | . | . | (100) | (94) | (97) | (133) | (119) | (134) | (125) |
| Czechoslovakia | Spinning ³ | 108 | 79 | 117 | 99 | 97 | 89 | 73 | 64 | 56 | 62 | 62 |
| Denmark | Spinning | 89 | 87 | 105 | 102 | 116 | 115 | 123 | 133 | 167 | 187 | 178 |
| | Weaving | 106 | 94 | 95 | 92 | 112 | 110 | 111 | 118 | 142 | 157 | 148 |
| Estonia | Spinning | 103 | 82 | 111 | 97 | 107 | 101 | 61 | 58 | 52 | 75 | ... |
| | Weaving ⁴ | . | . | (93) | (106) | (101) | (88) | (61) | (54) | (49) | (65) | (73) |
| Finland | Spinning | 92 | 99 | 109 | 109 | 90 | 89 | 86 | 89 | 108 | 145 | ... |
| | Weaving ⁵ | 92 | 96 | 111 | 111 | 90 | 87 | 86 | 84 | 103 | 132 | ... |
| France | Spinning | 97 | 99 | 98 | 104 | 102 | 94 | 64 | 46 | 66 | 54 | 50 |
| | Weaving | 96 | 99 | 100 | 101 | 103 | 104 | 77 | 59 | 93 | 72 | 56 |
| Germany | General index | 103 | 88 | 113 | 104 | 92 | 90 | 87 | 86 | 104 | 109 | 99 |
| | Spinning | 105 | 83 | 117 | 104 | 90 | 85 | 78 | 77 | 94 | 105 | 94 |
| | Weaving ⁴ | . | . | (105) | (101) | (93) | (93) | (95) | (95) | (112) | (112) | ... |
| Greece | Spinning | 90 | 99 | 104 | 102 | 105 | 124 | 130 | 130 | 145 | c)166 | ... |
| | Weaving | 73 | 84 | 98 | 111 | 133 | 156 | 164 | 164 | 328 | c)361 | ... |
| Hungary | Spinning | 59 | 69 | 92 | 113 | 167 | 193 | 194 | 231 | 291 | 330 | 320 |
| | Weaving ⁵ | 73 | 86 | 117 | 105 | 119 | 116 | 114 | 132 | 164 | 183 | 175 |
| Irish Free State | Weaving ⁶ | . | 87 | . | . | (113) | . | (106) | (163) | (170) | (192) | ... |
| Italy | Raw-cotton imports | 102 | 103 | 90 | 100 | 105 | 88 | 73 | 82 | 95 | 81 | ... |
| | Spinning ⁷ | . | . | . | (100) | (105) | (89) | (80) | (84) | (95) | (86) | d) (85) |
| | Weaving ⁷ | . | . | . | (100) | (105) | (86) | (75) | (76) | (84) | (79) | d) (83) |
| Latvia ² | Spinning | . | . | . | . | (100) | (100) | (58) | (75) | (118) | (147) | ... |
| | Weaving | . | . | . | . | (100) | (180) | (111) | (164) | (285) | (317) | ... |
| Netherlands ⁸ | Spinning | . | (87) | (97) | (106) | (110) | (108) | (96) | (72) | (83) | (84) | ... |
| | Weaving ¹ | . | (91) | (98) | (104) | (107) | (98) | (82) | (63) | (61) | (63) | ... |
| Norway ⁴ | Spinning | . | . | (87) | (100) | (113) | (100) | (100) | (148) | (148) | (164) | ... |
| | Weaving | . | . | (94) | (97) | (109) | (127) | (97) | (158) | (139) | (153) | ... |
| Poland ⁴ | Spinning | . | . | (109) | (104) | (88) | (81) | (78) | (75) | (86) | (96) | (98) |
| | Weaving | . | . | (109) | (103) | (89) | (80) | (70) | (61) | (72) | (82) | ... |
| Portugal | Spinning ⁹ | . | . | . | . | (100) | (82) | (98) | (89) | (85) | (82) | ... |
| Roumania | Spinning | 80 | 100 | 89 | 107 | 124 | 123 | 115 | 135 | 137 | 190 | ... |
| | Weaving | 63 | 65 | 85 | 137 | 151 | 175 | 167 | 203 | 268 | 294 | ... |
| Spain | Spinning ¹⁰ | 105 | 93 | 109 | 96 | 97 | 104 | 97 | 103 | 96 | 96 | 99 |
| Sweden | Spinning | 84 | 99 | 104 | 110 | 103 | 107 | 95 | 118 | 118 | 138 | ... |
| | Weaving | 83 | 99 | 105 | 106 | 107 | 112 | 101 | 129 | 112 | 129 | ... |
| United Kingdom | Board of Trade | b)(94) | . | (108) | 100 | (99) | (72) | (75) | (83) | (87) | (86) | (87) |
| | London & Cambridge | 112 | 94 | 105 | 95 | 94 | 68 | 74 | 76 | 82 | 83 | 88 |
| U.S.S.R. | Spinning ¹² | . | . | . | . | . | . | (100) | (103) | (109) | (107) | ... |
| | Weaving | 67 | 91 | 104 | 115 | 123 | 86 | 83 | 109 | 109 | 109 | 105 |

III. (†) Unless otherwise stated, the indices for spinning refer to cotton-yarn production, and those for weaving, to cotton-cloth production.

a) Twelve months ending 31.I of following year; b) 1924; c) first half-year; d) first eight months.

¹ Austria, Netherlands (weaving): indices based on consumption of yarn by weavers.

² Bulgaria, Latvia: base 1929.

³ Czechoslovakia: indices based on cotton-mill consumption of raw cotton.

⁴ Estonia (weaving), Germany (weaving), Norway, Poland: base 1927-1929.

⁵ Finland, Hungary (weaving): index of output of weaving mills.

⁶ Irish Free State: base 1926 and 1929.

⁷ Italy: base 1928.

⁸ Netherlands: base 1926-1929.

⁹ Portugal: base 1930.

¹⁰ Spain: index based on cotton yarn sold at Barcelona.

¹¹ United Kingdom: Board of Trade index: base 1924, 1927-1929; raw cotton delivered to mills. — London and Cambridge Economic Service: annual index based on yarn produced and yarn manufactured.

¹² U.S.S.R. (spinning): base 1932.

Appendix II. Table 3 (continued).

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.
Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|---------------------------------------------------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|---------|
| IV. Linen, Hemp and Jute Industries, etc. | | | | | | | | | | | |
| <i>America:</i> | | | | | | | | | | | |
| ✓ Canada : Linen, hemp and jute | 87 | 94 | 101 | 108 | 109 | 93 | 83 | 77 | 75 | 85 | ... |
| Jute | 80 | 85 | 114 | 112 | 109 | 76 | 80 | 36 | 64 | 64 | 81 |
| Flax | 95 | 123 | 81 | 100 | 102 | 119 | 56 | 63 | 84 | 82 | 91 |
| ✓ United States ¹ } Hemp | 156 | 112 | 83 | 82 | 68 | 71 | 50 | 25 | 31 | 33 | 45 |
| Sisal and henequen | 106 | 92 | 92 | 105 | 105 | 67 | 69 | 131 | 98 | 61 | 98 |
| Manila | 103 | 114 | 85 | 78 | 119 | 106 | 51 | 42 | 54 | 69 | 72 |
| Kapok | 116 | 96 | 111 | 90 | 86 | 98 | 95 | 94 | 76 | 77 | 150 |
| Total | 99 | 96 | 97 | 100 | 108 | 79 | 69 | 82 | 78 | 64 | 89 |
| <i>Asia:</i> | | | | | | | | | | | |
| ✓ India : Jute industry ² | 93 | 96 | 99 | 104 | 107 | 95 | 73 | 76 | 76 | 75 | 83 |
| ✓ Japan : Hemp, jute and flax yarns . . . | 84 | 76 | 59 | 114 | 167 | 143 | 127 | 141 | 173 | 173 | ... |
| <i>Europe:</i> | | | | | | | | | | | |
| Belgium : Linen industry ³ | 78 | 92 | 99 | 126 | 105 | 84 | 64 | 66 | 54 | 55 | 86 |
| Czechoslovakia ⁴ } Jute industry | 99 | 82 | 107 | 102 | 110 | 116 | 101 | 49 | 78 | 110 | 115 |
| Linen-spinning | 94 | 94 | 125 | 92 | 94 | 88 | 80 | 69 | 61 | 92 | 77 |
| Denmark } Linen-weaving | 80 | 83 | 104 | 97 | 136 | 158 | 213 | 209 | 249 | 332 | 280 |
| Jute-spinning | 78 | 68 | 158 | 115 | 81 | 105 | 159 | 181 | 232 | 209 | 213 |
| Estonia ⁵ } Linen industry | . | . | (92) | (97) | (111) | (119) | (122) | (104) | (90) | (98) | (105) |
| Linen-weaving | 60 | 101 | 111 | 84 | 144 | 110 | 101 | 106 | 86 | 99 | ... |
| Jute-weaving | 44 | 71 | 81 | 66 | 237 | 232 | 229 | 251 | 196 | 227 | ... |
| Linen-spinning | 90 | 77 | 114 | 118 | 101 | 87 | 65 | 57 | 66 | 86 | ... |
| Finland } Linen-weaving | 106 | 105 | 102 | 97 | 90 | 68 | 50 | 44 | 56 | 67 | ... |
| Jute-spinning ⁶ | . | . | (60) | (116) | (123) | (98) | (84) | (119) | (129) | (154) | ... |
| Jute-weaving ⁶ | . | . | (50) | (114) | (136) | (91) | (72) | (111) | (114) | (135) | ... |
| Germany } Linen industry | 124 | 81 | 133 | 85 | 78 | 69 | 61 | 58 | 66 | 111 | 118 |
| Linen-spinning | 128 | 84 | 133 | 82 | 72 | 68 | 59 | 61 | 69 | 103 | 120 |
| Linen-weaving | 120 | 79 | 131 | 88 | 82 | 66 | 56 | 49 | 53 | 86 | ... |
| Hemp-spinning | 87 | 82 | 118 | 107 | 106 | 86 | 73 | 64 | 74 | 92 | 92 |
| Jute-spinning | 102 | 80 | 102 | 113 | 103 | 73 | 61 | 50 | ... | ... | ... |
| Hungary : Jute-weaving | 86 | 62 | 105 | 117 | 130 | 120 | 75 | 61 | 90 | 67 | 125 |
| Irish Free State ⁷ } Linen-weaving | . | (80) | . | . | (120) | . | (102) | (130) | (118) | (119) | ... |
| Jute-weaving | . | (82) | . | . | (118) | . | (79) | (75) | (102) | (82) | ... |
| Italy ⁷ } Linen- and hemp-spinning | . | . | . | (100) | (97) | (83) | (77) | (84) | (90) | (84) | a)(106) |
| Linen- and hemp-weaving | . | . | . | (100) | (104) | (92) | (82) | (73) | (74) | (75) | a)(88) |
| Jute-spinning | . | . | . | (100) | (105) | (92) | (81) | (70) | (78) | (90) | a)(91) |
| Jute-weaving | . | . | . | (100) | (105) | (90) | (79) | (66) | (75) | (88) | a)(90) |
| Latvia ⁸ : Linen-spinning | . | . | . | . | (100) | (78) | (60) | (55) | (82) | (114) | ... |
| Norway ⁸ } Hemp-spinning | . | . | (88) | (105) | (107) | (112) | (94) | (118) | (131) | (136) | ... |
| Linen- and jute-weaving | . | . | (86) | (92) | (122) | (110) | (61) | (104) | (105) | (106) | ... |
| Poland ⁸ } Linen-spinning | . | . | (82) | (111) | (107) | (84) | (90) | (130) | (169) | (267) | ... |
| Jute-spinning | . | . | (80) | (105) | (115) | (82) | (58) | (50) | (48) | (56) | (57) |
| Hemp-spinning | . | . | (52) | (162) | (86) | (83) | (84) | (57) | (61) | (86) | ... |
| Linen-weaving | . | . | (79) | (115) | (107) | (93) | (90) | (135) | (216) | (279) | ... |
| Jute-weaving | . | . | (81) | (103) | (115) | (86) | (58) | (47) | (45) | (56) | (58) |
| Hemp-weaving | . | . | (10) | (167) | (124) | (194) | (176) | (161) | (96) | (142) | ... |
| Roumania : Linen, hemp and jute . . . | 102 | 92 | 68 | 159 | 79 | 280 | 364 | 459 | 535 | 636 | ... |
| Sweden } Linen- and hemp-spinning | 99 | 101 | 103 | 107 | 90 | 89 | 80 | 97 | 82 | 111 | ... |
| Linen- and hemp-weaving | 98 | 93 | 102 | 106 | 102 | 100 | 86 | 96 | 95 | 122 | ... |
| Jute-spinning | 94 | 91 | 97 | 105 | 113 | 112 | 87 | 104 | 129 | 155 | ... |
| Jute-weaving | 99 | 89 | 98 | 103 | 110 | 110 | 92 | 115 | 128 | 155 | ... |
| ✓ United Kingdom : Jute, hemp, linen ⁹ . | 97 | 73 | 121 | 101 | 107 | 78 | 78 | 75 | 87 | 101 | 94 |
| U.S.S.R. : Linen-weaving ⁸ | . | . | (97) | (93) | (111) | (115) | (112) | (76) | (81) | (89) | (124) |

IV. a) First eight months.

¹ United States : indices based on imports of unmanufactured fibres.

² India : index of exports of jute bags and tissues.

³ Belgium : index based on imports of flax.

⁴ Czechoslovakia : indices based on imports of jute and production of linen yarn.

⁵ Estonia, Finland (jute), Norway, Poland, U.S.S.R. : base 1927-1929.

⁶ Irish Free State : base 1926 and 1929.

⁷ Italy : base 1928.

⁸ Latvia : base 1929.

⁹ United Kingdom : index based on quantities of raw material retained plus home crops.

Appendix II. Table 3 (continued).

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.

Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | | |
|------------------------------|------|--------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| V. Wool Industry. † | | | | | | | | | | | | | |
| <i>America :</i> | | | | | | | | | | | | | |
| Canada | { | General index ¹ | 93 | 110 | 101 | 112 | 85 | 69 | 75 | 71 | 132 | 126 | 132 |
| | | Spinning | 84 | 94 | 103 | 107 | 111 | 81 | 85 | 99 | 125 | 124 | ... |
| | | Weaving | 96 | 98 | 102 | 111 | 92 | 76 | 94 | 109 | 127 | 131 | ... |
| United States : | | Spinning and weaving ² | 102 | 95 | 100 | 98 | 105 | 75 | 85 | 66 | 90 | 70 | 124 |
| Chile : | | Spinning ³ | . | . | (73) | (101) | (124) | (154) | (228) | (354) | (315) | (329) | (369) |
| <i>Asia :</i> | | | | | | | | | | | | | |
| Japan | { | Spinning ⁴ | 75 | 72 | 106 | 115 | 132 | 139 | 189 | 205 | 237 | 221 | 226 |
| | | Weaving | 81 | 104 | 98 | 113 | 105 | 99 | 99 | 105 | 82 | 68 | 77 |
| <i>Europe :</i> | | | | | | | | | | | | | |
| Belgium : | | Spinning ⁵ | 76 | 84 | 114 | 115 | 111 | 85 | 80 | 66 | 81 | 44 | 75 |
| Bulgaria ⁶ | { | Spinning | . | . | . | . | (100) | (214) | (138) | (136) | (124) | (140) | (104) |
| | | Weaving | . | . | . | . | (100) | (95) | (95) | (134) | (147) | (134) | (139) |
| Czechoslovakia : | | Spinning ⁷ | 79 | 89 | 107 | 107 | 119 | 103 | 101 | 83 | 84 | 90 | 82 |
| Denmark | { | Spinning | 86 | 92 | 101 | 108 | 113 | 112 | 138 | 168 | 176 | 164 | 160 |
| | | Weaving | 100 | 85 | 95 | 107 | 114 | 110 | 97 | 105 | 143 | 154 | 151 |
| Estonia : | | Weaving | 79 | 101 | 103 | 125 | 92 | 123 | 138 | 162 | 168 | 170 | ... |
| Finland | { | Spinning | 97 | 99 | 105 | 108 | 90 | 69 | 72 | 96 | 131 | 167 | ... |
| | | Weaving | 103 | 109 | 109 | 99 | 80 | 81 | 76 | 95 | 127 | 163 | ... |
| France : | | Spinning and weaving ⁸ | 96 | 103 | 97 | 105 | 100 | 94 | 83 | 73 | 90 | 72 | 75 |
| Germany ⁹ | { | Spinning | . | . | (111) | (96) | (93) | (99) | (97) | (88) | (99) | (97) | ... |
| | | Weaving | . | . | (111) | (102) | (87) | (87) | (83) | (67) | (71) | (89) | ... |
| Greece : | | Weaving | 72 | 92 | 92 | 132 | 112 | 125 | 122 | 122 | 171 | c)188 | ... |
| Hungary ⁶ | { | Spinning | . | . | . | . | (100) | (125) | (126) | (134) | (177) | (249) | (232) |
| | | Weaving | . | . | . | . | (100) | (104) | (90) | (92) | (125) | (160) | (144) |
| Irish Free State : | | Weaving ⁹ | . | (86) | . | . | (114) | . | (91) | (116) | (151) | (154) | ... |
| Italy : | | Weaving ¹⁰ | . | . | (102) | (98) | (90) | (83) | (76) | (83) | (84) | d)(88) | ... |
| Latvia ⁶ | { | Spinning | . | . | . | (100) | (64) | (90) | (81) | (157) | (211) | ... | |
| | | Weaving | . | . | . | (100) | (86) | (96) | (116) | (160) | (176) | ... | |
| Netherlands | { | Spinning | 78 | 86 | 109 | 113 | 114 | 121 | 109 | 105 | 114 | 102 | 90 |
| | | Weaving | 88 | 88 | 101 | 109 | 113 | 110 | 109 | 117 | 139 | ... | ... |
| Norway ⁹ | { | Spinning | . | . | (99) | (98) | (103) | (105) | (96) | (125) | (126) | (141) | ... |
| | | Weaving | . | . | (100) | (95) | (105) | (115) | (99) | (136) | (140) | (159) | ... |
| Poland ⁹ | { | Spinning | . | . | (108) | (99) | (93) | (72) | (79) | (67) | (74) | (82) | ... |
| | | Weaving | . | . | (113) | (104) | (83) | (63) | (58) | (45) | (51) | (63) | ... |
| Roumania | { | Spinning | 83 | 117 | 136 | 93 | 70 | 62 | 42 | 81 | 98 | 111 | ... |
| | | Weaving | 87 | 122 | 115 | 94 | 83 | 77 | 59 | 86 | 102 | 97 | ... |
| Spain : | | Spinning | 89 | 102 | 94 | 112 | 104 | 116 | 132 | 140 | 117 | 112 | 119 |
| Sweden | { | Spinning | 96 | 99 | 97 | 105 | 103 | 102 | 87 | 96 | 108 | 125 | ... |
| | | Weaving | 97 | 97 | 98 | 103 | 105 | 108 | 92 | 102 | 106 | 133 | ... |
| United Kingdom ¹¹ | | | 98 | 109 | 100 | 98 | 95 | 85 | 82 | 84 | 89 | 87 | 90 |
| U.S.S.R. : | | Weaving | 69 | 89 | 112 | 104 | 126 | 141 | 144 | 113 | 102 | 91 | 99 |
| <i>Oceania :</i> | | | | | | | | | | | | | |
| Australia a) | { | Spinning ¹² | 68 | 86 | 115 | 114 | 116 | 120 | 98 | 149 | 195 | 190 | 186 |
| | | Weaving | 67 | 80 | 114 | 130 | 109 | 104 | 113 | 164 | 202 | 218 | 192 |
| New Zealand b) | { | Spinning | 100 | 84 | 103 | 113 | 99 | 55 | 116 | 176 | 172 | 165 | ... |
| | | Weaving | 91 | 100 | 120 | 106 | 82 | 69 | 79 | 94 | 98 | 103 | ... |

V. † Unless otherwise stated, the indices for spinning refer to woollen-yarn production, and those for weaving to woollen-cloth production.

a)-b) Twelve months ending a) 30.VI. — b) 31.III of following year. — c) First half-year. — d) First eight months.

¹ Canada: general index: based on raw wool and woollen yarn imports.

² United States: index based on wool consumption, machinery, carpet-loom and rug-loom activity.

³ Chile, Germany, Norway, Poland: base 1927-1929.

⁴ Japan (spinning): 1925-1929, all factories in Japan proper; 1930-1931, 12, and since 1932, 10 largest companies.

⁵ Belgium: index of wool conditioned at Verviers and Dison.

⁶ Bulgaria, Hungary, Latvia: base 1929.

⁷ Czechoslovakia: index of wool imports.

⁸ France: index based on wool conditioned at Roubaix, Tourcoing and Mazamet, and on loom activity.

⁹ Irish Free State: base 1926 and 1929.

¹⁰ Italy: base 1928-1929; index of loom activity.

¹¹ United Kingdom: index based on wool and worsted retained.

¹² Australia (spinning): index based on scoured wool used by mills.

Appendix II. Table 3 (continued).

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.
Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|-------------------------------------------------|--------|------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| VI. Natural Silk Industry. | | | | | | | | | | | |
| <i>America:</i> | | | | | | | | | | | |
| Canada ¹ | 51 | 73 | 105 | 122 | 149 | 179 | 223 | 286 | 332 | 422 | ... |
| United States { Deliveries and | 93 | 92 | 99 | 104 | 112 | 104 | 104 | 92 | b) 91 | ... | ... |
| { loom activity. . . | 91 | 92 | 100 | 104 | 113 | 106 | 108 | 100 | 86 | 84 | 91 |
| { Deliveries | | | | | | | | | | | |
| <i>Asia:</i> | | | | | | | | | | | |
| Japan { Spinning | 70 | 82 | 107 | 98 | 141 | 125 | 142 | 147 | 146 | 113 | ... |
| { Weaving ² | . | . | . | . | . | (100) | (102) | (108) | (120) | (130) | (123) |
| <i>Europe:</i> | | | | | | | | | | | |
| France: Spinning ³ | 101 | 106 | 88 | 112 | 92 | 75 | 61 | 35 | 42 | 45 | 50 |
| Germany: Weaving ⁴ | . | . | (114) | (95) | (91) | (87) | (77) | (66) | (80) | (105) | ... |
| Greece: Weaving | 64 | 89 | 95 | 114 | 139 | 196 | 240 | 296 | 288 | b)342 | ... |
| Hungary ⁵ { Spinning | . | . | (93) | (100) | (106) | (128) | (154) | (158) | (146) | ... | ... |
| { Weaving | . | . | (86) | (116) | (99) | (136) | (90) | (43) | (17) | c)(11) | ... |
| Italy ⁶ { Spinning | . | . | . | (100) | (94) | (97) | (83) | (46) | (51) | (48) | d)(51) |
| { Weaving | . | . | . | (100) | (105) | (94) | (89) | (68) | (79) | (81) | d)(81) |
| Poland: Weaving ⁶ | . | . | . | (92) | (108) | (102) | (116) | (71) | (100) | (139) | ... |
| Portugal: Spinning ² | . | . | . | . | (1) | (100) | (181) | (148) | (265) | (407) | ... |
| Roumania ⁴ | . | . | (83) | (92) | (125) | (158) | (183) | (191) | (274) | (274) | ... |
| Switzerland: Spinning ⁷ | 95 | 81 | 114 | 121 | 88 | 52 | 41 | 28 | 24 | 31 | 37 |
| United Kingdom ⁸ { Board of Trade | a)(78) | . | (92) | (114) | (116) | (114) | (119) | (126) | (136) | (175) | (188) |
| { London and/asm. | 92 | 97 | 90 | 104 | 117 | 103 | 110 | 141 | 167 | 206 | 212 |
| { Cambridge (quar. | 86 | 77 | 92 | 119 | 127 | 112 | 122 | 163 | 191 | 217 | 251 |
| VII. Leather and Boot and Shoe Industry. | | | | | | | | | | | |
| <i>Africa:</i> | | | | | | | | | | | |
| Union of S. { Leather (sole and upper) | 86 | 96 | 108 | 102 | 107 | 112 | . | . | 103 | 129 | ... |
| Africa a) { Boots, shoes and slippers | 96 | 97 | 104 | 102 | 110 | 115 | . | . | 159 | 215 | ... |
| <i>America:</i> | | | | | | | | | | | |
| Canada: Boots and shoes | 100 | 100 | 102 | 100 | 99 | 86 | 89 | 88 | 94 | 92 | 106 |
| United States { Leather and prod., total | 96 | 98 | 102 | 101 | 103 | 91 | 89 | 84 | 96 | 99 | 108 |
| { Boots and shoes | 95 | 96 | 101 | 102 | 107 | 89 | 93 | 92 | 103 | 105 | 113 |
| Chile: Boots and shoes ¹ | . | . | (91) | (94) | (111) | (105) | (57) | (63) | (58) | (70) | (69) |
| <i>Asia:</i> | | | | | | | | | | | |
| Japan: Leather | 71 | 88 | 122 | 121 | 98 | 107 | 91 | 96 | 122 | 171 | ... |

VI. a) 1924. — b) First half-year. — c) First nine months. — d) First eight months.
¹ Canada: production of silk and silk manufactures.
² Japan (weaving), Portugal: base 1930.
³ France: index based on silk conditioned at Lyons.
⁴ Germany, Hungary, Roumania: base 1927-1929.
⁵ Italy: base 1928.
⁶ Poland: base 1928-1929; production of tissues of silk, half-silk, artificial silk and half-artificial silk.
⁷ Switzerland: index based on silk conditioned at Zurich and Basle.
⁸ United Kingdom: Board of Trade index: base 1924, 1927-1929; deliveries of natural silk for home consumption. — London and Cambridge Economic Service: annual index: based on silk consumed; quarterly index: based on silk consumed and artificial silk produced.

VII. a) Twelve months ending 30.VI.
¹ Chile: base 1927-1929.

Appendix II. Table 3 (continued).

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.
Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|---------------------------------------------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|---------|
| VIII. Rubber Industry. | | | | | | | | | | | |
| <i>America:</i> | | | | | | | | | | | |
| Canada : Tyres and tubes | 84 | 82 | 103 | 116 | 116 | 87 | 65 | 43 | 51 | 67 | 61 |
| United States : Tyres and tubes . . . | 92 | 92 | 95 | 114 | 107 | 79 | 76 | 62 | 70 | 73 | 80 |
| <i>Asia:</i> | | | | | | | | | | | |
| Japan : Rubber footwear | 54 | 70 | 79 | 121 | 175 | 219 | 149 | 159 | 189 | 205 | ... |
| <i>Europe:</i> | | | | | | | | | | | |
| Bulgaria : Rubber footwear ¹ | . | . | . | . | (100) | (171) | (424) | (634) | (601) | (443) | (373) |
| Czechoslovakia : Rubber goods ² . . . | 61 | 64 | 99 | 113 | 163 | 160 | 254 | 319 | 343 | 359 | 368 |
| Denmark ³ { | 122 | 109 | 90 | 77 | 102 | 112 | 90 | 82 | 115 | 129 | 133 |
| | | | | | | | | | | | |
| Denmark ³ { | 100 | 89 | 77 | 102 | 132 | 127 | 91 | 95 | 178 | 233 | 328 |
| | | | | | | | | | | | |
| | 109 | 97 | 83 | 91 | 120 | 120 | 91 | 87 | 152 | 190 | 247 |
| | | | | 91 | 120 | 120 | 91 | 87 | 152 | 190 | 247 |
| Estonia : Rubber goods ⁴ | . | . | . | (96) | (104) | (248) | (241) | (483) | (738) | (903) | (1,083) |
| Finland : Rubber footwear | 87 | 89 | 75 | 96 | 152 | 154 | 110 | 107 | 74 | 106 | ... |
| France : Rubber industry. ⁵ | 81 | 97 | 88 | 95 | 139 | 145 | 145 | 107 | 145 | 144 | 127 |
| Germany : Rubber industry | 106 | 57 | 111 | 105 | 121 | 109 | 53 | 45 | ... | ... | ... |
| Italy : Rubber industry ⁶ | 90 | 80 | 92 | 102 | 135 | 152 | 82 | 125 | 158 | 175 | 186 |
| Latvia : Rubber footwear ¹ | . | . | . | . | (100) | (70) | (47) | (57) | (64) | (63) | ... |
| Netherlands : Bicycle tyres and tubes | 92 | 83 | 97 | 104 | 125 | 142 | 141 | 134 | 163 | 160 | ... |
| Poland ⁷ { | . | . | (40) | (111) | (149) | (142) | (111) | (100) | (98) | (136) | (100) |
| | | | | | | | | | | | |
| Poland ⁷ { | . | . | . | . | (100) | (95) | (82) | (74) | (99) | (175) | ... |
| | | | | | | | | | | | |
| Sweden : Rubber goods ⁸ | 87 | 82 | 95 | 114 | 122 | 100 | 122 | 128 | 135 | 161 | ... |
| United Kingdom ⁹ { | 74 | 72 | 100 | 99 | 155 | 159 | 163 | 169 | 161 | 223 | 194 |
| | | | | | | | | | | | |
| U.S.S.R. ¹⁰ { | . | . | (83) | (100) | (116) | (113) | (172) | (173) | (166) | (173) | (203) |
| | | | | | | | | | | | |
| U.S.S.R. ¹⁰ { | . | . | . | (85) | (115) | (157) | (214) | (288) | (301) | ... | ... |
| | | | | | | | | | | | |
| IX. Timber Industry. | | | | | | | | | | | |
| <i>America:</i> | | | | | | | | | | | |
| Canada (Exports) ¹ | 111 | 108 | 104 | 88 | 89 | 77 | 48 | 35 | 49 | 69 | 68 |
| United States ² | 107 | 104 | 97 | 96 | 96 | 68 | 43 | 26 | 34 | 34 | . |
| <i>Asia:</i> | | | | | | | | | | | |
| Japan ³ | 92 | 97 | 99 | 106 | 106 | 100 | 104 | 107 | 120 | 140 | ... |
| Netherlands Indies ² | 77 | 76 | 96 | 113 | 138 | 101 | 94 | 63 | 69 | 73 | ... |

VIII. a) 1924.

¹ Bulgaria, Latvia : base 1929.

² Czechoslovakia : index consumption of rubber and gutta-percha.

³ Denmark : index of values of production.

⁴ Estonia : base 1928-1929.

⁵ France : index of consumption of crude rubber.

⁶ Italy : index of net imports of crude rubber.

⁷ Poland : rubber footwear : base 1927-1929 ; other rubber goods : base 1929.

⁸ Sweden : index of values of production at 1913 prices.

⁹ United Kingdom : Board of Trade : base 1924, 1927-1929 ; index of crude rubber available for manufacture. — London and Cambridge Economic Service : index of quantities of rubber, gutta-percha and balata retained.

¹⁰ U.S.S.R. : rubber shoes : base 1927-1929 — other rubber goods : index of values of production at 1926-1927 prices : base 1928-1929.

IX. ¹ Canada : index of exports of sawn and planed timber.

² United States, Netherlands Indies : index based on lumber cut.

³ Japan : index of production of sawn timber.

Appendix II. Table 3 (continued).

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.
Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|----------------------------------------------------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| IX. Timber Industry (continued). | | | | | | | | | | | |
| <i>Europe :</i> | | | | | | | | | | | |
| Austria (Exports) ¹ | 90 | 81 | 101 | 126 | 102 | 83 | 56 | 41 | 47 | 54 | 59 |
| Czechoslovakia ² | 98 | 83 | 94 | 120 | 106 | 90 | 71 | 53 | 51 | 55 | 57 |
| Denmark : Activity ³ | . | . | (94) | (98) | (109) | (120) | (125) | (96) | (114) | (144) | (141) |
| Estonia ^{2,3} | . | . | (95) | (108) | (97) | (95) | (81) | (60) | (72) | (119) | (104) |
| Finland ^{4,5} | . | (93) | (111) | (105) | (91) | (73) | (60) | (62) | (73) | (99) | (91) |
| Irish Free State ^{5,6} | . | (97) | . | . | (103) | . | (111) | ... | ... | ... | ... |
| Latvia ⁷ | . | . | . | . | . | (100) | (48) | (33) | (63) | (72) | ... |
| Norway ² | 111 | 89 | 89 | 105 | 106 | 105 | 80 | 87 | 83 | 92 | *98 |
| Poland { Activity ⁸ | 95 | 88 | 103 | 109 | 105 | 88 | 64 | 50 | 57 | 68 | 73 |
| { Sawn timber ⁴ | . | (95) | (105) | (106) | (94) | (91) | (72) | (64) | (76) | (94) | ... |
| Roumania ⁹ | 110 | 119 | 94 | 91 | 86 | 73 | 53 | 49 | 53 | 60 | ... |
| Sweden ¹⁰ | 88 | 94 | 101 | 108 | 110 | 104 | 97 | 87 | 87 | 110 | ... |
| Turkey ⁵ | 128 | 115 | 83 | 83 | 92 | 94 | 95 | 89 | 117 | 118 | ... |
| Yugoslavia (Exports) ¹ | 82 | 88 | 98 | 118 | 114 | 95 | 63 | 42 | 53 | 61 | 61 |
| U.S.S.R. ⁵ | 71 | 86 | 102 | 109 | 132 | 174 | 190 | 194 | 181 | 202 | 224 |
| <i>Oceania :</i> | | | | | | | | | | | |
| Australia : Sawn timber a) ⁵ | 102 | 119 | 103 | 95 | 82 | 78 | 46 | 38 | 48 | 60 | 82 |
| New Zealand b) ¹¹ { Sawn timber | 119 | 103 | 91 | 91 | 95 | 77 | 52 | 56 | 67 | 82 | ... |
| { Planed flooring, etc. (120) (100) (86) (97) (103) (89) (56) (52) (54) (62) ... | | | | | | | | | | | |
| X. Paper and Printing Industry. | | | | | | | | | | | |
| <i>America :</i> | | | | | | | | | | | |
| ✓ Canada { Paper | 74 | 90 | 98 | 113 | 125 | 115 | 102 | 88 | 93 | 119 | ... |
| { Paper-boards | 80 | 86 | 89 | 107 | 138 | 129 | 112 | 116 | 128 | 155 | ... |
| { Wood-pulp | 82 | 95 | 97 | 107 | 119 | 107 | 94 | 79 | 88 | 108 | ... |
| { Newsprint | 72 | 89 | 98 | 113 | 129 | 118 | 103 | 90 | 95 | 123 | 130 |
| ✓ United States { Paper and printing | 93 | 99 | 97 | 103 | 108 | 98 | 92 | 79 | 82 | . | . |
| { Wood-pulp, paper and paper-boards | 95 | 99 | 96 | 103 | 107 | 95 | 87 | 74 | 79 | . | . |
| { Printing ¹ | 87 | 98 | 100 | 104 | 111 | 104 | 100 | 85 | 81 | 94 | 100 |
| Chile ² { Paper | . | . | (88) | (95) | (120) | (142) | (114) | (210) | (244) | (246) | (281) |
| { Paper-boards | . | . | (36) | (137) | (142) | (173) | (67) | (109) | (141) | (123) | (130) |

IX. *Provisional figure. — a) Twelve months ending 30.VI. — b) Twelve months ending 31.III of following year.

- ¹ Austria, Yugoslavia : index of exports of sawn and planed timber.
- ² Czechoslovakia, Denmark, Estonia, Norway : activity in the woodworking industry.
- ³ Denmark, Estonia : base 1927-1929.
- ⁴ Finland, Poland (sawn timber) : base 1926-1929.
- ⁵ Finland, Irish Free State, Turkey, U.S.S.R., Australia : index of production of sawn timber.
- ⁶ Irish Free State : base 1926 and 1929.
- ⁷ Latvia : index of production of planks : base 1930.
- ⁸ Poland : index based on number of hours worked.
- ⁹ Roumania : index of production of planks.
- ¹⁰ Sweden : index of total production of woodworking industry.
- ¹¹ New Zealand : sawn timber : index based on surface area ; planed flooring, including skirting, and, since 1928, also moulding, etc. : base 1928-1929.

X. ¹ United States (printing) : newsprint consumption.
² Chile : base 1927-1929.

Appendix II, Table 3 (continued).

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.
Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|---------------------------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| X. Paper and Printing Industry (continued). | | | | | | | | | | | |
| <i>Asia:</i> | | | | | | | | | | | |
| ✓ India: Paper | 82 | 93 | 98 | 110 | 117 | 115 | 117 | 115 | 124 | 123 | 136 |
| ✓ Japan { Paper | 80 | 89 | 98 | 112 | 121 | 117 | 114 | 112 | 123 | 136 | 147 |
| { Paper-boards | 87 | 90 | 89 | 106 | 128 | 118 | 115 | 110 | 140 | 156 | ... |
| <i>Europe:</i> | | | | | | | | | | | |
| Austria { Paper | 90 | 93 | 100 | 109 | 108 | 99 | 99 | 95 | 95 | 94 | 93 |
| { Paper-boards | 92 | 99 | 104 | 103 | 101 | 109 | 55 | 42 | 53 | 60 | 91 |
| Belgium: Paper and paper-boards | 88 | 93 | 98 | 108 | 113 | 99 | 104 | 86 | 90 | 88 | 96 |
| Czechoslovakia { Paper | 81 | 93 | 105 | 106 | 115 | 111 | 107 | 93 | 85 | 93 | 100 |
| { Printing ¹ | . | . | . | (94) | (106) | (103) | (100) | (97) | (96) | (101) | (121) |
| Denmark { Paper | 90 | 101 | 104 | 103 | 101 | 106 | 103 | 107 | 111 | 114 | 117 |
| { Paper-boards | 81 | 88 | 97 | 117 | 118 | 127 | 114 | 129 | 208 | 431 | 576 |
| Estonia ² { Paper industry | . | . | (84) | (104) | (107) | (115) | (121) | (101) | (109) | (118) | (120) |
| { Paper | . | . | (100) | (104) | (96) | (100) | (67) | (40) | (42) | (50) | (51) |
| Finland: Wood-pulp and newsprint ³ | . | (84) | (94) | (108) | (115) | (132) | (135) | (150) | (168) | (190) | (208) |
| France: Paper ⁴ | 92 | 100 | 92 | 97 | 118 | 145 | 120 | 114 | 141 | 159 | 140 |
| ✓ Germany { Paper | 88 | 86 | 105 | 110 | 111 | 104 | 97 | 86 | 92 | 101 | 108 |
| { Paper-boards | 92 | 82 | 108 | 110 | 108 | 102 | 88 | 83 | 83 | 96 | 108 |
| { Printing | 92 | 82 | 105 | 114 | 108 | 107 | 92 | 88 | 90 | 109 | ... |
| Greece: Paper and paper-boards | 50 | 45 | 83 | 145 | 176 | 182 | 190 | 186 | 209 | 294 | 240 |
| Hungary ² { Paper | . | . | (45) | (74) | (181) | (266) | (283) | (237) | (241) | (304) | (364) |
| { Paper-boards | . | . | (91) | (92) | (117) | (152) | (138) | (138) | (134) | (153) | (166) |
| Italy: Paper and paper-boards | 117 | 100 | 88 | 95 | 101 | 100 | 96 | 97 | 107 | 125 | b) 144 |
| Latvia: Paper ⁵ | . | . | . | . | (100) | (90) | (61) | (61) | (77) | (70) | ... |
| Netherlands: Paper | 83 | 89 | 97 | 110 | 120 | 123 | 124 | 118 | 122 | 124 | ... |
| Norway { Paper and paper-boards | 95 | 85 | 101 | 105 | 114 | 106 | a) 63 | 103 | 97 | 96 | 107 |
| { Printing | 102 | 95 | 98 | 101 | 105 | 109 | 90 | 109 | 108 | 110 | *115 |
| Poland { Paper | 88 | 86 | 98 | 114 | 113 | 110 | 97 | 92 | 90 | 101 | 106 |
| { Printing | 93 | 84 | 98 | 111 | 115 | 112 | 98 | 82 | 82 | 88 | 93 |
| Portugal: Paper ⁶ | . | . | . | . | (100) | (120) | (104) | (131) | (145) | (147) | (153) |
| Roumania: Paper and paper-boards | 84 | 95 | 104 | 110 | 108 | 110 | 102 | 99 | 112 | 143 | 148 |
| Sweden { Paper | 91 | 97 | 99 | 96 | 116 | 105 | 117 | 115 | 120 | 130 | ... |
| { Paper-boards | 86 | 93 | 96 | 105 | 120 | 117 | 88 | 91 | 99 | 116 | ... |
| { Printing ⁶ | 87 | 94 | 100 | 105 | 114 | 118 | 127 | 127 | 127 | 136 | ... |
| ✓ United Kingdom: Paper ⁷ | 88 | 94 | 105 | 94 | 119 | 109 | 102 | 119 | 124 | 142 | 143 |
| U.S.S.R.: Paper | 71 | 87 | 101 | 114 | 126 | 161 | 158 | 150 | 158 | 180 | 203 |
| <i>Oceania:</i> | | | | | | | | | | | |
| New Zealand: Printing c) ⁸ | 87 | 95 | 103 | 102 | 112 | 109 | 94 | 87 | 90 | 99 | ... |

X. * Provisional index. — a) Labour dispute. — b) First eight months. — c) Twelve months ending 31.III of following year.

¹ Czechoslovakia (printing): base 1928-1929.

² Estonia, Hungary: base 1927-1929.

³ Finland: base 1926-1929.

⁴ France: index based on apparent consumption of wood pulp.

⁵ Latvia, Portugal: base 1929.

⁶ Sweden (printing): index based on value of output at 1913 prices.

⁷ United Kingdom: index of estimated production of paper from esparto and pulp.

⁸ New Zealand: index based on consumption of paper for newspaper and for job printing.

Appendix II. Table 3 (continued).

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.
- Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | |
|------------------------------------------------|------------------------------------------------------|------------------------------------------|------|-------|-------|-------|-------|-------|-------|-------|---------|----------|
| XI. Engineering Industry. | | | | | | | | | | | | |
| <i>America :</i> | | | | | | | | | | | | |
| United States | { Demand for machine tools | 78 | 84 | 71 | 122 | 145 | 66 | 38 | 18 | 25 | 43 | 81 |
| | | { Demand for foundry equipment | 86 | 92 | 81 | 113 | 128 | 68 | 34 | 13 | 24 | 39 |
| <i>Asia :</i> | | | | | | | | | | | | |
| Japan ¹ | ✓ | . | . | . | . | (100) | (94) | (107) | (138) | (180) | (212) | |
| <i>Europe :</i> | | | | | | | | | | | | |
| Denmark | : Value of machine production | 97 | 99 | 80 | 104 | 120 | 125 | 92 | 74 | 88 | 113 | 135 |
| Estonia ² | | . | . | (97) | (102) | (102) | (103) | (96) | (77) | (74) | (87) | (109) |
| Finland | : Metalwork and machinery ³ | . | (85) | (87) | (112) | (116) | (90) | (76) | (76) | (83) | (109) | (125) |
| France | : Mechanical industry ⁴ | 88 | 101 | 87 | 105 | 120 | 120 | 104 | 74 | 82 | 75 | 73 |
| Germany | { Despatch of machines | 86 | 74 | 97 | 121 | 122 | 101 | 72 | 46 | 51 | 77 | 99 |
| | { Orders received for machines | 90 | 74 | 112 | 110 | 114 | 82 | 61 | 36 | 43 | 77 | 117 |
| Greece | | 95 | 87 | 103 | 111 | 104 | 98 | 96 | 80 | 75 | 153 | 462 |
| Hungary | : Net value of production ⁵ | . | . | (84) | (101) | (116) | (99) | (68) | (53) | (45) | (58) | ... |
| Italy | : Engineering ⁶ | . | . | (100) | (104) | (95) | (83) | (71) | (72) | (75) | b) (95) | |
| Netherlands | { Value of products | 78 | 85 | 93 | 112 | 131 | 125 | 89 | 48 | 53 | 53 | ... |
| | { Workers employed ⁶ | 88 | 87 | 92 | 109 | 124 | 118 | 88 | 62 | 70 | 68 | ... |
| Poland | : Metals and engineering ⁷ | 83 | 76 | 98 | 122 | 122 | 92 | 68 | 54 | 55 | 67 | 78 |
| Sweden | : Engineering ⁸ | 76 | 90 | 94 | 114 | 126 | 131 | 126 | 109 | 107 | 148 | ... |
| United Kingdom ⁹ | { Board of Trade | a) (89) | . | (103) | (101) | (108) | (104) | (85) | (79) | (85) | (100) | (111) |
| | { London and Cambridge Economic Service | 87 | 89 | 102 | 122 | 101 | 120 | 49 | 11 | 21 | 16 | 62 |
| U.S.S.R. ¹⁰ | { Machine production | 48 | 69 | 90 | 120 | 173 | 259 | 448 | 562 | 657 | 819 | ... |
| | { Prod. of agricult. machinery | 35 | 68 | 86 | 125 | 186 | 354 | 535 | 624 | ... | ... | ... |
| <i>Oceania :</i> | | | | | | | | | | | | |
| New Zealand | : Engineering ^c ¹¹ | 73 | 83 | 102 | 123 | 119 | 88 | 54 | 38 | 48 | 64 | ... |
| XII. Electrical Manufacturing Industry. | | | | | | | | | | | | |
| <i>America :</i> | | | | | | | | | | | | |
| United States | : Value of production ¹ ✓ | 88 | 97 | 90 | 98 | 127 | 97 | 69 | 34 | 39 | 52 | 64 |
| <i>Europe :</i> | | | | | | | | | | | | |
| Denmark | : Value of production | 83 | 87 | 91 | 106 | 133 | 154 | 120 | 102 | 124 | 151 | 196 |
| Germany | { Prod. of electrical bulbs. ✓ | 88 | 86 | 106 | 112 | 107 | 96 | 72 | 70 | 77 | ... | ... |
| | { Prod. of wireless equipment | 25 | 28 | 68 | 186 | 193 | 256 | 240 | 221 | 337 | 429 | ... |
| Italy | { Machines ² | . | . | . | (100) | (114) | (112) | (98) | (83) | (83) | (92) | b) (114) |
| | { Bulbs | 69 | 80 | 95 | 107 | 150 | 169 | 149 | 136 | 173 | 177 | a) 218 |
| Netherlands | { Value of products | 75 | 75 | 100 | 104 | 147 | 144 | 94 | 69 | 62 | 68 | ... |
| | { Workers employed ³ | 82 | 86 | 95 | 111 | 126 | 119 | 103 | 76 | 77 | 88 | ... |
| Poland | : Workers employed ⁴ | . | . | (69) | (108) | (124) | (96) | (74) | (67) | (77) | (116) | (158) |
| Sweden | : Value of production | 75 | 91 | 100 | 117 | 118 | 126 | 113 | 92 | 92 | 112 | ... |
| United Kingdom | : Activity ⁵ ✓ | 82 | 95 | 123 | 91 | 110 | 111 | 79 | 61 | 66 | 86 | 116 |
| U.S.S.R. | : Electro-technical machinery ⁶ | 51 | 70 | 83 | 116 | 180 | 357 | 589 | 679 | ... | ... | ... |

XI. a) 1924. — b) First eight months. — c) Twelve months ending 31.III of following year.

¹ Japan : base 1930. — ² Estonia, Hungary : base 1927-1929. — ³ Finland : base 1926-1929. — ⁴ France : index based on consumption of steel by mechanical industry. — ⁵ Italy : base 1928. — ⁶ Netherlands : workers employed on 15.IX. — ⁷ Poland : index based on hours worked. — ⁸ Sweden : index of values of production of shipbuilding, vehicles, machines, instruments and watches at 1913 prices. — ⁹ United Kingdom : Board of Trade : base 1924, 1927-1929 ; production in engineering, including shipbuilding. London and Cambridge Economic Service : production of railway locomotives, wheels and axles. — ¹⁰ U.S.S.R. : indices of values of production at 1926/27 prices. — ¹¹ New Zealand : consumption of iron and steel by engineering mills.

XII. a) First six months. — b) First eight months.

¹ United States : index of values of new orders of electrical goods ; figures relate to about 58% of industry. — ² Italy (machines) : base 1928. — ³ Netherlands : workers employed on 15. IX. — ⁴ Poland : base 1927-1929 ; monthly average of workers employed. — ⁵ United Kingdom : activity in the electrical manufacturing industry. — ⁶ U.S.S.R. : index of values of output of electro-technical machinery at 1926/27 prices.

Appendix II. Table 3 (continued).

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.
Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|----------------------------------------------------------------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| XIII. Building Industry. | | | | | | | | | | | |
| <i>Africa:</i> | | | | | | | | | | | |
| Union of S. Africa a) ¹ | | | | | | | | | | | |
| { Total plans passed | 78 | 95 | 102 | 104 | 122 | 116 | 118 | 98 | 83 | 127 | *147 |
| { New dwelling-houses completed | 79 | 96 | 101 | 108 | 116 | 108 | 102 | 80 | 67 | 96 | *113 |
| <i>America:</i> | | | | | | | | | | | |
| Canada | | | | | | | | | | | |
| { General index ² | 69 | 83 | 99 | 112 | 137 | 108 | 76 | 36 | 24 | 30 | 41 |
| { Building permits | 68 | 84 | 101 | 120 | 128 | 93 | 64 | 25 | 14 | 17 | 31 [#] |
| { Total buildings (excl. public works and utilities) | 105 | 100 | 96 | 110 | 89 | 57 | 41 | 17 | 16 | 17 | 28 ^I |
| United States ³ | | | | | | | | | | | |
| { Residential buildings | 111 | 103 | 98 | 112 | 77 | 45 | 38 | 15 | 14 | 13 | 27 [~] |
| { Factory and commercial buildings | 96 | 96 | 89 | 106 | 113 | 61 | 30 | 14 | 18 | 19 | 24 |
| Argentina (Buenos Aires): Buildings completed ⁴ | 99 | 78 | 87 | 105 | 131 | 117 | 78 | 55 | 53 | 69 | 65 |
| Chile: Buildings completed ⁵ | . | . | . | . | (100) | (79) | (35) | (44) | (58) | (103) | (111) |
| Colombia: (Bogotá): Buildings completed ⁴ | 40 | 64 | 92 | 148 | 156 | 93 | 57 | 52 | 180 | 188 | 196 |
| <i>Asia:</i> | | | | | | | | | | | |
| China (6 towns): Permits ⁶ ⁷ | . | . | . | . | (100) | (100) | (121) | (86) | (112) | (105) | (79) |
| Japan ⁸ | | | | | | | | | | | |
| { Dwellings completed (i) | 66 | 77 | 74 | 126 | 158 | 124 | 124 | 122 | 72 | . | . |
| { Dwellings completed (ii) | . | . | . | . | . | . | . | (100) | (86) | (82) | (89) |
| { Commercial and ind. build. completed (i) | 44 | 61 | 73 | 171 | 151 | 80 | 75 | 66 | 47 | . | . |
| { Commercial and ind. build. completed (ii) | . | . | . | . | . | . | . | (100) | (74) | (87) | (76) |
| <i>Europe:</i> | | | | | | | | | | | |
| Belgium ⁹ : Permits | . | . | (80) | (116) | (104) | (77) | (89) | (108) | (92) | (59) | (110) |
| Czechoslovakia: Buildings completed ¹⁰ | . | (84) | (100) | (119) | (98) | (64) | (73) | (86) | (61) | (49) | (35) |
| Denmark ¹¹ | | | | | | | | | | | |
| { Apartments completed | b) 89 | b) 98 | b) 101 | b) 98 | 113 | 136 | 159 | 128 | 157 | 226 | 222 |
| { Apartments under construction ⁵ | . | . | . | (77) | (100) | (130) | (130) | (86) | (151) | (166) | (124) |
| Finland: Dwelling-rooms completed ¹² | 67 | 83 | 110 | 135 | 106 | 28 | 26 | 37 | 16 | 19 | 39 |
| France: Permits ¹³ | 81 | 115 | 81 | 98 | 124 | 139 | 127 | 101 | 92 | 83 | 69 |
| Germany ¹⁴ | | | | | | | | | | | |
| (i) { Permits { Dwellings | 55 | 76 | 110 | 113 | 146 | 113 | 52 | 36 | 42 | 58 | 83 |
| (i) { Permits { Other buildings ⁵ | . | . | . | . | (100) | (74) | (38) | (20) | (22) | (47) | (79) |
| (ii) { Buildings { Dwellings | 52 | 77 | 107 | 125 | 139 | 158 | 117 | 52 | 70 | 110 | 93 |
| (ii) { Buildings { Other buildings ⁵ | . | . | . | . | (100) | (112) | (60) | (31) | (20) | (31) | (58) |
| (ii) { Dwellings completed: total | . | . | . | . | . | . | . | . | . | . | . |
| (ii) { Germany | 69 | 79 | 110 | 119 | 122 | 119 | 91 | 57 | 73 | 115 | 95 |

XIII. * Provisional figures. — a)-b) Twelve months ending a) 30.VI; b) 31.X.

¹ Union of South Africa: urban areas.

² Canada (general index): based on value of contracts adjusted for changes in costs and on building permits.

³ United States: contracts awarded relating to floor space of new buildings in thirty-seven States.

⁴ Argentina, Colombia: ground area of new buildings.

⁵ Chile, China, Denmark (apartments under construction), Germany (other buildings): base 1929.

⁶ Chile: area of new buildings in nine municipalities.

⁷ China: area covered by building permits issued in six principal towns.

⁸ Japan: (i) ground area of new buildings completed in Tokio; about 95% of the dwellings and 73% of the business buildings are wooden; (ii) base 1932; new area expanded in 1932.

⁹ Belgium: base 1927-1929; index based on building permits in 114 towns and localities.

¹⁰ Czechoslovakia: base 1928-1929; number of permits delivered for the utilisation of new buildings in thirty-eight towns.

¹¹ Denmark: apartments completed in the capital and eighty-five provincial towns (since 1930, adjusted to include suburbs). Apartments under construction in the same towns on 1.I of following year.

¹² Finland: actual number of dwelling-rooms (including kitchen) completed in thirty-eight localities.

¹³ France: actual number of building permits (when possible, number of floors) issued in the principal towns.

¹⁴ Germany: (i) building permits and buildings completed in ninety-six towns; dwellings: number; other buildings: cubic area; (ii) number of dwellings completed.

Appendix II. Table 3 (concluded).

INDICES OF ACTIVITY IN INDIVIDUAL INDUSTRIES.
Average 1925-1929 = 100.

| Country | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|---------------------------------------------------------------------|------------------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| XIII. Building Industry (continued). | | | | | | | | | | | |
| <i>Europe (continued):</i> | | | | | | | | | | | |
| Greece | 84 | 93 | 93 | 113 | 118 | 121 | 122 | 123 | 124 | 160 | 160 |
| Hungary: Dwelling-rooms completed ¹ | . | . | . | (100) | (145) | (100) | (94) | (74) | (60) | (61) | (63) |
| Italy: Permits ² | . | . | . | . | (127) | (77) | (66) | (77) | (129) | (152) | |
| Latvia: Dwelling-rooms completed ^{3 4} | . | . | . | . | (100) | (128) | (106) | (83) | (79) | (87) | ... |
| Netherlands: Dwellings completed ^{5 6} | . | (101) | (104) | (98) | (98) | (106) | (104) | (85) | (92) | (109) | (93) |
| Norway ⁷ : Dwellings completed | 106 | 82 | 76 | 101 | 134 | 141 | 146 | 208 | 142 | 195 | 223 |
| Poland ⁸ | General index | 84 | 71 | 85 | 131 | 128 | 86 | 50 | 27 | 23 | 31 |
| | Buildings completed | 77 | 88 | 106 | 103 | 127 | 162 | 96 | 128 | 154 | 179 |
| Roumania: Dwelling permits ⁹ | 66 | 88 | 99 | 103 | 144 | 179 | 135 | 190 | 234 | 280 | 298 |
| Spain ¹⁰ : Permits | Dwellings | 136 | 85 | 83 | 88 | 107 | 141 | 141 | 85 | 74 | 83 |
| | Comm. and indust. buildings | 111 | 93 | 91 | 97 | 108 | 88 | 87 | 72 | 76 | 79 |
| Sweden | Dwellings completed | 87 | 94 | 100 | 109 | 110 | 148 | 150 | 136 | 99 | 127 |
| | Rooms (incl. kitchens) completed | 93 | 98 | 98 | 104 | 107 | 138 | 140 | 128 | 103 | 129 |
| | Non-speculative buildings | 111 | 96 | 109 | 109 | 76 | 108 | 123 | 155 | 67 | 76 |
| | Dwelling permits ¹¹ | . | (84) | (90) | (93) | (117) | (126) | (104) | (93) | (65) | (130) |
| Switzerland ¹² | Dwellings built | . | (85) | (93) | (107) | (115) | (129) | (154) | (155) | (120) | (132) |
| | Comm. & indust. bldgs. permits | . | (83) | (104) | (104) | (109) | (94) | (87) | (74) | (66) | (56) |
| | Comm. & indust. bldgs. built | . | (95) | (96) | (101) | (107) | (100) | (100) | (73) | (66) | (64) |
| United Kingdom ¹³ | Board of Trade: Dwelling-houses | b)(93) | . | (99) | (99) | (109) | (116) | (100) | (116) | (154) | (172) |
| | London and Cambridge Economic Service a) | b)(81) | . | (97) | (108) | (114) | (110) | (89) | (77) | (85) | (103) |
| 83 | 104 | 128 | 84 | 101 | 86 | 101 | 101 | 121 | 160 | 170 | |
| <i>Oceania:</i> | | | | | | | | | | | |
| Australia: Permits ¹⁴ : Dwelling-houses and other bldgs. | . | . | . | . | . | . | (100) | (136) | (201) | (326) | (479) |
| New Zealand: Permits: Dwelling-houses and other bldgs. ⁵ | . | (118) | (103) | (88) | (90) | (62) | (29) | (24) | (33) | (38) | (55) |
| Zealand | Buildings completed a) | 96 | 92 | 82 | 115 | 116 | 77 | 32 | 29 | 43 | 75 |
| | Dwelling-houses | 63 | 89 | 92 | 124 | 132 | 77 | 46 | 36 | 31 | 54 |
| Business premises | . | . | . | . | . | . | . | . | . | . | ... |

XIII. a) Twelve months ending 31.III of following year. — b) 1924.

¹ Hungary: base 1930; net increase of number of dwelling-rooms.

² Italy: base 1928; building permits in the principal towns.

³ Latvia, Roumania: base 1929.

⁴ Latvia: number of dwelling-rooms completed in about sixty localities.

⁵ Netherlands, Switzerland, New Zealand (permits): base 1928-1929.

⁶ Netherlands: number of dwellings completed on new ground (i.e., excluding rebuilding).

⁷ Norway: net increase of number of dwellings in towns of over 2,000 inhabitants.

⁸ Poland: general index: based on total number of hours worked, indices of buildings completed: towns of over 25,000 inhabitants; since 1931, over 20,000 inhabitants.

⁹ Roumania: floor area of dwelling permits in thirty-six localities.

¹⁰ Spain: building permits in Barcelona.

¹¹ Sweden: dwelling permits: base 1927-1929; index based on number of rooms (including kitchens) in towns of over 10,000 inhabitants.

¹² Switzerland: figures relate to 351 localities.

¹³ United Kingdom: Board of Trade: base 1924, 1927-1929; estimated cost of plans approved by 146 local authorities; other buildings: include additions and alterations to existing buildings. — London and Cambridge Economic Service: estimated number of houses completed in England and Wales.

¹⁴ Australia: base 1931; value of building permits in capital cities and suburbs.

Appendix II : Sources of National Indices.

- Union of South Africa.* Tables 2 and 3 (VII, XIII) : Office of Census and Statistics, Pretoria.
- Canada.* Tables 2 and 3 (I-X, XIII) : Dominion Bureau of Statistics, Ottawa.
- United States.* Tables 2 and 3 (I-X) : Federal Reserve Board, New York. — Table 3 (XI, XII) : U.S. Department of Commerce, Washington. — Table 3 (XIII) : F. W. Dodge Corporation, New York.
- Argentina.* Table 3 (XIII) : *Revista d'Economia Argentina*, Buenos Aires.
- Chile.* Tables 2 and 3 (I, III, V, VII, X, XIII) : Dirección general de Estadística, Santiago.
- Colombia.* Table 3 (XIII) : *Revista del Banco de la República*, Bogotá.
- China.* Table 3 (III) : Nankai Institute of Economics, Tientsin. — Table 3 (XIII) : Directorate of Statistics, Nanking.
- India.* Table 3 (III) : *Cotton*, Manchester. — Table 3 (IV) : Foreign trade statistics, Table 3 (X) : Department of Commercial Intelligence and Statistics, Calcutta and Delhi.
- Japan.* Tables 2 and 3 (II, IV-VIII, X, XI) : Ministry of Commerce and Industry, Tokio. — Table 3 (III) : Japanese Cotton Spinners' Association, Tokio. — Table 3 (IX) : Ministry of Agriculture and Forestry, Tokio. — Table 3 (XIII) : Municipal Bureau of Statistics, Tokio.
- Netherlands Indies.* Table 3 (IX) : Centraal Kantoor voor de Statistiek, Batavia.
- Austria.* Tables 2 and 3 (III) : Österreichisches Institut für Konjunkturforschung, Vienna. — Table 3 (IX) : International Timber Committee, Vienna. — Table 3 (X) : Bundesamt für Statistik, Vienna.
- Belgium.* Tables 2 and 3 (II, III, VII, X) : Institut des sciences économiques, Louvain. — Table 3 (III, V, XIII) : Banque nationale de Belgique, Brussels. — Table 3 (IV) : Foreign trade statistics.
- Bulgaria.* Table 3 (III, V, VII, VIII) : General Directorate of Statistics, Sofia.
- Czechoslovakia.* Tables 2 and 3 (I, II, IV, V, VII, IX, X) : *Obzor Národohospodářský*, Prague. — Table 3 (III, VIII, XIII) : Státní úřad statistický (State Statistical Bureau), Prague.
- Denmark.* Tables 2 and 3 (I-V, VII-XIII) : Statistiske Departement, Copenhagen.
- Estonia.* Tables 2 and 3 (I-V, VII-XI) : Konjunktuurinstituut (Institute for Economic Research), Tallinn.
- Finland.* Tables 2 and 3 (II, VII, IX, XI) : Nordiska Föreningsbanken-Pohjoismaiden Yhdyspankki, Helsinki. — Table 3 (I, III-V, VIII, X, XIII) : Tilastollinen Päätoimisto (Central Statistical Office), Helsinki.
- France.* Tables 2 and 3 (I-III, V-VIII, X, XI, XIII) : Statistique générale de la France, Paris.
- Germany.* Tables 2 and 3 (I-VIII, X-XIII) : Institut für Konjunkturforschung, Berlin.
- Greece.* Tables 2 and 3 (I-III, V-VII, X, XI, XIII) : Superior Economic Council, Athens.
- Hungary.* Tables 2 and 3 (II-VI, X, XI) : Ungarisches Institut für Wirtschaftsforschung, Budapest. — Table 3 (XIII) : Central Statistical Office, Budapest.
- Irish Free State.* Table 3 (III-V, VII, IX) : Department of Industry and Commerce, Dublin.
- Italy.* Tables 2 and 3 (II-VI, XI, XII : machines, XIII) : Ministero delle Corporazioni, Direzione generale dell'industria, Rome. — Table 3 (VIII) : Foreign trade statistics. — Table 3 (I, X, XII : bulbs) : Istituto centrale di Statistica, Rome.
- Latvia.* Table 3 (III-V, VII-X, XIII) : Valsts statistikā pārvalde (State Statistical Bureau), Riga.
- Netherlands.* Tables 2 and 3 (I-III, V : spinning, VII, VIII, X-XIII) : Centraal Bureau voor de Statistiek, The Hague. — Table 3 (V : weaving) : Handels-Hoogeschool, Tilburg.
- Norway.* Tables 2 and 3 (I-V, VII, IX, X, XIII) : Statistiske Centralbyrå, Oslo.
- Poland.* Tables 2 and 3 (II, VII : leather, IX : activity, X, XI, XIII : general index) : Instytut badania konjunktur gospodarczych i cen (Institute for Economic Research), Warsaw. — Table 3 (III-VI, VII : boots and shoes, VIII, IX : timber, XII, XIII : buildings completed) : Główny urząd statystyczny (Central Statistical Office), Warsaw.
- Portugal.* Table 3 (III, VI, VII, X) : Direcção geral de Estadística, Lisbon.
- Roumania.* Tables 2 and 3 (II-VII, IX, X, XIII) : Institutul românesc de conjunctura, Bucharest.
- Spain.* Table 2 : Banco de España, Madrid. — Table 3 (III, V, XIII) : Institut d'investigations économiques, Barcelona.
- Sweden.* Table 2 (annual index), Table 3 (I-V, VII-XII) : Kommerskollegium (Board of Trade), Stockholm. — Table 2 (monthly index) : Sveriges Industriförbund, Stockholm. — Table 3 (XIII) : Socialstyrelsen, Stockholm.
- Switzerland.* Table 3 (VI) : Banque nationale suisse, Zurich. — Table 3 (VII) : *Neue Zürcher Zeitung*, Zurich. — Table 3 (XIII) : Office fédéral de l'industrie, des arts et métiers et du travail, Berne.
- Turkey.* Table 3 (I, IX) : İstatistik G.D. (Central Statistical Office), Ankara.
- United Kingdom.* Tables 2 and 3 (II, III, VI, VIII, XI, XIII) : Board of Trade and London and Cambridge Economic Service, London (parallel indices). — Table 3 (VII) : Board of Trade. — Table 3 (I, IV, V, X) : London and Cambridge. — Table 3 (XII) : British Electrical and Allied Manufacturers' Association (BEAMA), London.
- Yugoslavia.* Table 3 (IX) : International Timber Committee, Vienna.
- U.S.S.R.* Tables 2 and 3 (II-V, VII-XII) : Central Administration of Economic and Social Statistics of the State Planning Commission ("Gosplan"), Moscow.
- Australia.* Table 3 (I, V, VII, IX, XIII) : Commonwealth Bureau of Census and Statistics, Canberra.
- New Zealand.* Tables 2 and 3 (V, VII, IX-XI, XIII) : Census and Statistics Office, Wellington.