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SPECIAL MEMORANDUM No. 44

Description and Sources of IMPORTANT INDEX-NUMBERS

BY

K. C. SMITH

JUNE 1936

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Brief Description and Sources of IMPORTANT INDEX-NUMBERS

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<td>*(12) Reuters</td>
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<td>*(13) Statist</td>
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<td>Index-numbers</td>
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SECTION III—SOURCES OF INDEX-NUMBERS FOR VARIOUS COUNTRIES.

* Index-numbers marked with an asterisk are quoted regularly in London and Cambridge Economic Service Bulletin or Supplements.
Brief Description and Sources of
IMPORTANT INDEX-NUMBERS
relating to the United Kingdom and certain other countries, with
special reference to those quoted in the Bulletins and Supplements

SECTION I.—UNITED KINGDOM.

INDEX NUMBERS OF SECURITIES.

1. Actuaries' Index Numbers.
   Calculated by the Institute of Actuaries
   and circulated to subscribers. Selected figures
   are quoted in Economist.
   Monthly and weekly index numbers for
   ordinary stocks and shares, monthly only for
   fixed interest securities and bonds.
   Quotations used—middle market prices
   in London Official Lists, on Tuesday for weekly
   index numbers, on last Tuesday in month
   for monthly index numbers. Allowance is
   made for accrued dividends.
   Total index is the geometric mean of price
   ratios of 319 securities, expressed as a per­
   centage of December, 1928, with subsidiary
   indexes for 33 separate groups. Includes
   Ordinary, Preference and Debentures in three
   final totals, and shows three subdivisions of
   industry.
   Index numbers of Yields also given. Divi­
   dends used in calculating yields are the total
   dividends paid during the period of twelve
   months preceding the date of calculation.
   For full description see Journal of the Institute of Actuaries,
   vol. LXI, part 2, no. 302, p. 379; and for
   index of yield see vol. LXII, part 2, no. 304,
   p. 321.

2. Bankers' Magazine Index Numbers.
   Published monthly in the Bankers' Magazine.
   Figures relate to about 20th of each month.
   Available from January, 1922, onwards.

<table>
<thead>
<tr>
<th>Year</th>
<th>(a)</th>
<th>(b)</th>
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<td>110.5</td>
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<td>1924</td>
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<td>149.0</td>
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<tr>
<td>1928</td>
<td>111.6</td>
<td>139.8</td>
</tr>
</tbody>
</table>

   3. Financial News Index.
   Daily index of (a) industrial ordinary
   shares (30), and (b) fixed interest stocks
   (20).
   Based upon daily quotations for leading
   British companies and for British Govern­
   ment, Municipal and Public Bonds, and railway
   and industrial debentures and preference stocks.
   First published in January, 1930, based
   on 1928 average as 100%. Industrial index
   shown as % of July 1st, 1935, since July,
   1933.
   Industrial index is geometric mean of
   changes in its 30 components.
   For list of shares included see Financial
   News for July 16th, 1935.

Index numbers are expressed as a percentage of December, 1921.
They are deduced from the changes in the
total market values of a group of about 390
securities (classified under 34 headings).
There are subsidiary percentages for totals
of (a) Fixed Interest Securities and (b) Others, separately.
For full description see Bankers' Magazine,
February, 1922, p. 231.
4. Financial Times Index.

Published in the Financial Times each Monday.

Every week the most active shares are selected, and the average percentage change during the week is calculated from their prices. The upward bias in the result (due to the choice of most active shares) is estimated from comparisons of prices at longer intervals and adjustments made. The index is calculated from the selected links, on the chain basis, and shown as a percentage of October 13th, 1926.

Monthly average index numbers are calculated as well as the weekly index, beginning from October, 1927. An operators' index and an investment index are given. Separate series are shown for:—

Government Securities
Home Rails
Oils
Rubber
Mines
London Industrials.

For notes on the series see Financial Times for January 10th and September 19th, 1927.

5. Investors' Chronicle Index.


* Series marked with asterisk are quoted regularly in Economic Service.
INDEX NUMBERS OF SECURITIES (continued).

to December, 1930. In Special Memorandum No. 37 will be found monthly and annual series from 1867 to 1914.

Current index of industrials is the weighted arithmetic mean of percentage changes in about 90 shares as compared with 1924. Weights (a) within each group according to the total market value of the particular shares in 1924; (b) group weights according to the relative importance of the net output of the group of industries in 1924. A sensitive index, the unweighted geometric mean of the percentage changes in the above shares from month to month, is also given.

The index-numbers of price and yield of fixed interest securities are the unweighted arithmetic means of the percentage changes of four fixed interest securities (or their reciprocals) since 1924.

<table>
<thead>
<tr>
<th>ANNUAL AVERAGES</th>
<th>% OF 1924</th>
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</thead>
<tbody>
<tr>
<td>(a) Industrials</td>
<td>(b)</td>
</tr>
<tr>
<td>1925 98.3</td>
<td>98.4</td>
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<tr>
<td>1926 98.1</td>
<td>105.7</td>
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<td>1927 99.2</td>
<td>112.3</td>
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<tr>
<td>1928 99.4</td>
<td>112.2</td>
</tr>
</tbody>
</table>

INDEX NUMBERS OF SECURITIES

8. INDEX OF PROFITS.


Based upon company reports summarised quarterly in the Economist.

The index is expressed as a percentage of year 1924.

There is:

(a) General Profits Index, and

(b) Sub-index for Ordinary Capital.

<table>
<thead>
<tr>
<th>ANNUAL INDEX</th>
<th>% OF 1924</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) General Profits</td>
<td>(b) On Ordinary Capital</td>
</tr>
<tr>
<td>1925 98.1</td>
<td>94.8</td>
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<td>1926 104.1</td>
<td>99.9</td>
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<tr>
<td>1927 106.5</td>
<td>111.4</td>
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<td>1928 106.2</td>
<td>110.5</td>
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<tr>
<td>1929 106.8</td>
<td>114.3</td>
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</table>

MONEY.

9. SHORT MONEY INDEX.

Published in the monthly Bulletins and Supplements of the London and Cambridge Economic Service.

Data are averages for the week ending 15th of month (in Bulletins on 23rd) and last week of month (in Supplements on 7th).

Index is the average of —

Bank Rate,

Bankers' Deposit Rate,

Day-to-day Rate,

Three-months' Bill Rate,

expressed as a percentage of the corresponding average for 1924.

Current series from 1924 onwards; corresponding series from January, 1919, to December, 1930, expressed as a percentage of 1913, was previously published.

INDEX NUMBERS OF PRICES. WHOLESALE.

9. BOARD OF TRADE INDEX.

Published in the Board of Trade Journal on about 8th of each month.

Data relate to average prices for the preceding month.

Summary of monthly figures from 1929 onwards in the Abstracts of Labour Statistics.

Current index is the geometric mean of the changes in prices of 200 commodities (formerly 150). 1929 is now taken as base year (formerly 1924 or 1913).1

Weighting is effected by including in each group a number of items proportionate to the relative importance of the group, as indicated by the 1930 Census of Production.

In L. & C. Economic Service Tables, the Board of Trade Index is still shown as a percentage of the year 1924.

1 Very Provisional. 2 Provisional.
INDEX NUMBERS OF PRICES

BOARD OF TRADE INDEX—(continued).

Each month subsidiary figures are given for eleven groups as follows:

1. Cereals
2. Meat, Fish and Eggs
3. Other Food and Tobacco etc.
4. Coal
5. Iron and Steel
6. Non-ferrous metals
7. Cotton
8. Wool
9. Other Textiles
10. Chemicals and Oils
11. Miscellaneous

and the following reclassification of the second group is also given:

- Industrial Products, ex. fuel
- Basic Materials
- Intermediate Products
- Manufactured Articles


YEARLY AVERAGES. % OF 1913.

<table>
<thead>
<tr>
<th>Year</th>
<th>Old Index</th>
<th>New Index</th>
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<tr>
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<td>159.3</td>
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<td>127.2</td>
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<td>1930</td>
<td>106.8</td>
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<tr>
<td>1935</td>
<td>94.3</td>
<td>94.3</td>
</tr>
</tbody>
</table>

11. Financial Times Index.

(a) Weekly index published each Monday.
(b) Monthly index published on 1st of month.

The index-numbers are based upon 75 commodities.

The weekly index (a) is expressed as a percentage of September, 1931, and in addition to figures for about the last 15 weeks, averages for the past 15 months and for 1913 and 1925 to 1935 are also shown.

The monthly index (b) is shown as a percentage of the previous year. The extent of the fluctuations in the annual figures of this series (available for 1913 and from 1920 onwards) is not identical with that of the annual averages of the weekly figures mentioned above.

Changes in the following groups of the monthly index are given:

1. Cereals
2. Meat Food
3. Other Food

A Corresponding figures for U.S.A., France, Italy, Germany are shown alongside.
12. Reuters' Index.

Daily index of wholesale prices compiled by Reuters, quoted in the Financial News, with comparable figures for preceding day, month and year.

The index is based upon prices of 21 primary commodities, including gold and silver. The index is calculated by the method of weighted geometric means, and is shown as % of September 18th, 1931. Series available from mid-1933 onwards.

Weighting is proportional to the importance of the groups of commodities which the items represent, as follows:

- Wheat (17), Rye (6), Maize (5)
- Sugar (9), Cocoa (2), Copra (2), Pepper (1)
- Gold (8), Silver (4)
- Copper (6), Tin (5), Lead (2), Spelter (1)
- Cotton (14), Jute (2), Hemp (1)
- Lime (4), Ground Nuts (3), Soya (2)
- Rubber (5), Shellac (1)

*13. Statist (Sauerbeck) Index.*

Published in the Statist on or about the 15th of month, i.e., after the issue of the Accounts of Trade for the previous month.

Data relate to prices at the end of the previous month.

Summary of monthly figures from 1888 onwards appears in the March issues of the Journal of the Royal Statistical Society, together with tables of annual movements of the individual items. Annual total index is shown from 1846.

The index is an unweighted average of percentage changes in 45 items, the averages of 1867-77 being taken as base. The numbers of items in each group were chosen roughly in proportion to relative importance.

Each month subsidiary figures are given for six groups as follows:

1. Vegetables
2. Animal Food
3. Total Foodstuffs, Sugar, Coffee, Tea
4. Minerals
5. Total Materials
6. Sundries

Also the actual quotations for the 45 items for the past twelve months are now shown.

In the London and Cambridge Economic Service tables the Statist index is proportionately transferred to percentages of 1924 average level.

*14. Times Index.*

Published in the Times on 1st of month. Data relate to end of previous month. Series available from January, 1920, onwards.

Current index is the arithmetic mean of changes in prices of about 100 commodities as a percentage of the 1913 average.

---

### Annual Index, % of 1867-77

<table>
<thead>
<tr>
<th>Year</th>
<th>1824</th>
<th>1825</th>
<th>1826</th>
<th>1827</th>
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</tbody>
</table>
INDEX NUMBERS OF PRICES (continued).

Subsidiary figures given as follows:—
1. Cereals
2. Meat and Fish
3. Other Food
4. Iron and Steel
5. Other Metals and Minerals
6. Cotton
7. Other Textiles
8. Other Materials

<table>
<thead>
<tr>
<th>TOTAL INDEX</th>
<th>END OF YEAR</th>
<th>% OF 1913</th>
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</thead>
<tbody>
<tr>
<td>1924</td>
<td>179.5</td>
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<td>179.8</td>
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<tr>
<td>1927</td>
<td>180.9</td>
<td>1928</td>
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</tbody>
</table>

15. AGRICULTURAL PRODUCE, INDEX OF PRICES.

Ministry of Agriculture’s index, published in the Agricultural Market Report on the first Friday of the month.

The monthly index numbers are percentages of the corresponding month 1911–1913. They are weighted arithmetic means of the percentage price changes for agricultural produce, the weights being proportionate to the estimated values of such produce as indicated by the (Agricultural) Census of Production, 1909.

For full data and weighting see Agricultural Statistics, 1933, Vol. LXVIII, Part II.

ANNUAL INDEX | % OF 1911-13 |
-------------|--------------|
1924         | 101          |
1925         | 129          |
1926         | 144          |
1927         | 144          |

RETAIL INDEX NUMBERS.

16-7. COST OF LIVING INDEX, and the subsidiary Retail Food Index, published by the Ministry of Labour in the Ministry of Labour Gazette on 18th of month.

Data relate to prices on 1st of month.

Summary of the monthly figures from July, 1914, onwards appears in the Abstract of Labour Statistics. Earlier data covering food, coal, clothing and rent from 1892 to 1900, and food, coal and clothing from 1900 to 1914 will also be found in that publication.

The index is published in the form of percentage increases over the July, 1914, level. In the London and Cambridge Economic Service tables this index is published in the form of a percentage of the average 1924 level (not merely the increase), and is quoted as for the end of the preceding month to correspond with other indices which relate to end of month.

The index is calculated on a weighted arithmetic mean basis, and covers expenditure on food, clothing, rent, fuel and miscellaneous goods. For full description see leaflet, The Cost of Living Index Number, Method of Compilation, H.M.S.O.

It has recently been announced, however, that a special enquiry is about to be undertaken to collect up-to-date information with regard to household expenditure, etc., so that the weighting and content of the index-number may be revised.

AVERAGES FOR YEAR | % ABOVE JULY, 1914 |
-------------------|-------------------|
|                   | (a) Cost of Living. | (b) Food. |
| 1924              | +75               | +75       |
| 1925              | +75               | +75       |
| 1926              | +72               | +72       |
| 1927              | +66               | +66       |
| 1928              | +66               | +66       |
| 1929              | +66               | +66       |

WAGES.

18. LONDON AND CAMBRIDGE ECONOMIC SERVICE INDEX.

(Professor Bowley’s Index.)

Published monthly in Bulletins of the Service.

An index of average weekly wage-rates, based on changes in 20 groups of occupations, weighted primarily according to the normal wage bill in each group in the base period. For full description see Special Memorandum No. 28 of the London and Cambridge Economic Service.

Index relates to 15th of current month and is expressed as percentage of December, 1924.

Current index available from January, 1925, to date. For an earlier series covering 1919-1928, based upon 11 groups unweighted and expressed as percentage of year 1913 (and
INDEX NUMBERS OF PRICES (continued).

Discussion thereof, see Special Memorandum No. 28.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>% ABOVE JULY, 1914</th>
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<tbody>
<tr>
<td>1924</td>
<td>4.70-75</td>
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<td>1927</td>
<td>4.70-75</td>
</tr>
</tbody>
</table>

TRADE AND OUTPUT

21. INDEX NUMBERS OF VOLUME AND AVERAGE VALUE OF EXTERNAL TRADE.

Published quarterly in the Board of Trade Journal, about three weeks after end of quarter, in considerable detail.

Imports, exports and re-exports are revalued in detail, group by group, at the average prices prevailing per unit of quantity in the base year, 1930. The series of quarterly totals so obtained, being independent of price changes, give index-numbers of volume (i.e. quantity) when expressed as percentages of the corresponding quarterly averages for the base year. The ratios of the original totals at declared values to the corresponding revalued totals give index-numbers of average price level of the goods in question as compared with the base year.

Calculations based upon 1930 prices are available from 1930 onwards; for earlier years 1924 prices were taken. Initially 1913 prices were adopted for the earlier post-war period.

For index of volume, 1924-30 (percentage of 1924) and 1924, 1930-33 (percentage of 1930); see Statistical Abstract for 1933.

For index of volume, 1910-24 (percentage of 1913); see Survey of Overseas Markets, 1925 (Balfour Report).

For index of volume, 1900-13 (percentage of 1900), see Imports and Exports at Prices of 1900. C.D. 7432. 1914.
INDEX NUMBERS OF PRODUCTION.

*22. Board of Trade Index.
Published in the Board of Trade Journal about the third week of second month of quarter.

The method of compilation is similar to that of the London and Cambridge Economic Service Index as described below (No. 23), but the index includes additional production data obtained from official or other confidential sources. Agriculture is excluded.

Current index (1934 to date) is expressed as a percentage of 1930, and weighted according to net output in that year. Index previously published (annual figure for 1927, and quarterly from 1928-1934) was based upon 1924.

For full description of new index see Board of Trade Journal, March 28th, 1935, and of old index, July 26th, 1928.

<table>
<thead>
<tr>
<th>Annual Index</th>
<th>% of 1924</th>
<th>% of 1920</th>
</tr>
</thead>
<tbody>
<tr>
<td>1927 100-1</td>
<td>1928 100-2</td>
<td>1929 100-3</td>
</tr>
</tbody>
</table>

* Original basis.  | * Revised basis.


(a) Annual index, published with details in the May Bulletins of the Service.

(b) Quarterly index, published in the Special Quarterly Bulletins in the first month of each quarter.

The annual index covers eleven groups of production, including Agriculture and Building.

The output of representative commodities in each group is expressed as a percentage of the corresponding 1924 figure for each year. These percentages are weighted by numbers proportional to the net output of the industries they represent, as indicated by the 1924 Census of Production.

The quarterly index is similar to the above, but excludes such data as are available only annually or after considerable delay.

The current series are available from 1924 to date. Formerly, series expressed as a percentage of 1913 and weighted according to the 1907 Census of Production were published, for 1913-4 and 1920-1928.

For full description see Special Memorandum No. 8—The Physical Volume of Production.

ANNUAL INDEX | % OF 1924 |
1925 101-4 | 1926 100-7 | 1927 100-8 | 1928 100-7 |
1929 100-7 | 1930 100-6 | 1931 100-5 | 1932 100-4 |
1933 100-3 | 1934 100-2 | 1935 100-1 |


Published in the Economist Monthly Trade Supplement (about 25th of month).

Index is a geometric mean of the changes in 14 series relating to employment, consumption, bank clearings, building trade, transport, etc., shown as a percentage of their 1924 average. The component series are adjusted for seasonal variation, and are weighted.


25. Index of Retail Sales.

Published in the Bank of England's Monthly Statistical Summary, and in the Board of Trade Journal towards end of month.

Based upon data received from Departmental Stores, Co-operative Societies, Multiple Shops and Independent Retailers in Great Britain only. For full description see Board of Trade Journal, March 15th, 1934, p. 395.

Index shows change in aggregate value of retail sales of (a) foodstuffs and perishables,
**RETAIL TRADE (continued).**

(b) other merchandise, (c) total, in Great Britain as a whole, and for five geographical sub-divisions.

Series available from January, 1932, onwards, expressed as a percentage of average daily sales in 1933. (See Bank of England Summary for March, 1934, and subsequent issues.)

These index-numbers are deduced from the monthly percentage changes in sales (at selling value) as compared with a year earlier. The latter are shown in detail for foodstuffs and for 12 classes of other merchandise. Corresponding percentage changes in Stocks (at cost) are also shown.

**SHIPPING FREIGHTS.**

26. Chamber of Shipping Index.

Published in Statist on second or third Saturday of month.

(a) Freight Index, the geometric mean of changes on 21 routes (formerly 27).

(b) Time Charter Rates.

The former is published as percentage of the year 1920, the latter as percentage of 1929, of 1931 and of 1929. In the London and Cambridge Bulletins, both series are quoted as percentages of their 1924 level.

Current series available from 1920 onwards.

### DECEMBER. AS % OF 1898-1913 AVERAGE.

<table>
<thead>
<tr>
<th>Year</th>
<th>1924</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>129.4</td>
<td>121.8</td>
<td>117.3</td>
<td>119.0</td>
<td>123.1</td>
<td>121.5</td>
<td>120.7</td>
<td>120.8</td>
<td>120.8</td>
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</tbody>
</table>

27. Economist Freight Index.

Published in Economist, usually on second Saturday of month.

Index of whole cargo shipping freightings, based upon 28 items classified in six regional groups; it is expressed as percentage of 1898-1913.

Each group is the arithmetic average of its components, and the total index is the arithmetic average of the six groups.

For full description, see Economist Monthly Supplement, July 21st, 1923.

### INSURED PERSONS. GREAT BRITAIN. ANNUAL AVERAGES. % OF 1923.

<table>
<thead>
<tr>
<th>Year</th>
<th>1924</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
<th>1930</th>
</tr>
</thead>
</table>


Information is published in the Ministry of Labour Gazette (18th of month), based upon unemployment insurance data for the third week of each month.

The following estimates are included:

- (1) Monthly—the total number of insured persons at work in Great Britain.
- (2) In first month of each quarter—monthly index-numbers for recent months and quarterly averages for previous years for:
  - (a) Total insured persons,
  - (b) Insured persons unemployed,
  - (c) Insured persons not recorded as unemployed,
  - (d) As (c), less those sick or involved in trade dispute.
- (3) In November issue—index-numbers of insured persons in each of 100 industries, in July of each year from 1924 to date, as percentage of 1923.
- (4) In December issue—index-numbers of employed insured persons in each industry in June of each year as percentage of June, 1923.

Also, as in §2 (a) to (d), summary of monthly figures for last two years and yearly averages from 1924-1933.

1 Prior to 1931, second month. 
2 Group (d) above.
SECTION II.—OTHER COUNTRIES.

(a) STOCK EXCHANGE SECURITIES.

*29. BELGIUM.

Monthly index numbers calculated by the Banque Nationale de Belgique and published in Bulletin de l'Information et de Documentation. Quotations relate to first Monday in the month on Brussels Bourse.

Series include:
(a) Index of 30 bonds (and for four sub-groups)
(b) Index of 120 variable dividend securities (and for 12 sub-groups).
All are shown as percentages of January 1st, 1926.

*30. CANADA.

Investors' index-numbers of common stocks, calculated by the Dominion Bureau of Statistics, Ottawa, published monthly in detail in Prices and Price Indexes (and quoted in Monthly Review of Business Statistics). Indexes are averages for the month expressed as percentages of the year 1926. Subsidiary indexes for eight groups of industrials (including 88 shares), and four groups of public utilities and banks (33 shares) are shown. There are also index-numbers of mining stocks and preferred stocks.


31. FRANCE.

Index numbers calculated by the Statistique générale de la France—published weekly in leaflet, Indices économiques hebdomadaires.

Index numbers for end of each week since July, 1927, as percentage of 1913 level. Total index for 300 French shares and subsidiary series for 15 chief groups. Also series for foreign shares and for Rentes and Bonds.

Before July, 1927, the index quoted was based on the average of the years 1901-1910.

*32. GERMANY.

Monthly index published in Wirtschaft und Statistik, second issue of each month. Index is based upon all shares officially quoted on Berlin stock exchange—industry, commerce, transport, banking, etc. Base period, 1924-1926.

Current series available from July, 1925, onwards, but incomplete in 1931-1932, as the Berlin stock exchange was closed from July, 1931, to April, 1932. Full description not available, but detailed discussion appears each year in Wirtschaft und Statistik, No. 2.

*33. HOLLAND.

Index-numbers published by the Central Bureau of Statistics in Maandschrift. Monthly index-numbers of shares with subsidiary series distinguishing industry, banking, shipping and East Indian Companies.

Base period, 1921-1925. Series available since January, 1926; were revised in October, 1928, when additional shares were included. Previous series up to December, 1925, based on 1920-1924 average. For summary of monthly figures for years 1919-1924, see Maandschrift, March, 1925, p. 366.

34. ITALY.

Weekly index-numbers of (a) shares, (b) bonds, published by the Milan Council of Corporative Economy in Indici settimanali di Borsa.

Metals and Banking, quoted in L. & C. Economic Service Supplements.
Data for the index of shares are end-of-week quotations averaged for the various bourses in the country; 34 shares are included. December, 1925, is chosen as base, and the index-numbers are averages weighted according to the paid-up capital of the companies.

The index of bonds is based upon end-of-week quotations (ex interest) for 12 important bonds on the Milan Bourse. The end of December, 1927, is taken as base, and the percentages are weighted according to the nominal value of the bonds in circulation. This index is also shown proportionately changed to percentage of December, 1925.

For summaries of above weekly index-numbers, see Rassegna di Borsa (1927-1934).

In addition to the above index-numbers, the following are also quoted monthly in Alcuni Indici della Situazione economica (Provincial Council of Corporative Economy, Rome):

- Bachi index of monthly settlement prices as percentage of 1913.
- Index of the Confederation of Industry, percentage of December, 1922.

In the Bulletins of the London and Cambridge Economic Service the index of settlement prices of 20 industrials on the Milan Bourse (Bollettino della Borsa di Milano) is quoted.

35. U.S.A.

(a) Index numbers calculated by Standard Statistics and quoted in the Survey of Current Business and its weekly supplements.

Weekly and monthly index numbers for:
- Industrials . . . (351)
- Public Utilities . . . (37)
- Ralls . . . (33)

Total . . . (421)

shown as percentages of 1926.

(b) Dow Jones Averages—quoted in the Financial News daily.

Daily averages of quotations, with allowances for bonuses, splittings, etc.

Series relate to:
- 40 Domestic bonds.
- 20 Rail shares.
- 30 Industrial shares.¹
- 20 Utility shares.

For full description, see Barron’s The Dow Jones Averages; The Barron’s Averages.

(b) WHOLESALE PRICES

36. Belgium.

Official index calculated by the Ministère du Travail, and published monthly in the Revue du Travail.

The index is calculated on a monthly chain basis, and comprises over 200 items, the number in each group being selected to correspond with the relative importance of that group, according to the 1910 Census of Industry and Commerce and other enquiries.

The unweighted geometric mean for each of 17 groups and for the total of the above items is taken. The results are shown as percentages of April, 1914.

For detailed description, see Revue du Travail, November, 1921.

37. Canada.


Base year, 1926.

For summary of above series from 1890-1934 (annual), see Prices and Price Indexes, 1913-1934, pp. 16-17; and for 1867-1913 (old index) as percentage of 1913, see p. 15.

¹ The industrial series is quoted in the Bulletins of the London and Cambridge Economic Service as a percentage of its average 1923-25 level.
WHOLESALE PRICES (continued).

*38. France.
Published monthly in the Bulletin de la Statistique générale de la France, Supplement mensuel.
Figures relate to 45 commodities at the end of each month.
The index is similar, in content and method of compilation, to the Statist (Sauerbeck) index for the United Kingdom. It is calculated as percentage of 1901-1910 average, and published also as percentages of the July, 1914, level.
This index is now also calculated weekly for current month. See Statistique générale de la France, Indices hebdomadaires.
For summary of monthly series 1901-1934, see Annuaire statistique de la Statistique générale de la France for 1934. p. 140.

*39. Germany.
Official index of the Statistisches Reichsamt, published in Wirtschaft und Statistik monthly (first issue of each month). Weekly estimates are also given (first and second issues). Data are monthly and weekly average prices.
Present series available from 1924.
Base year, 1913.
Subsidiary indices are shown for:—
Agricultural produce (in four groups).
Colonial wares.
Raw materials and semi-manufactures (in 11 groups).
Manufactured goods:—
(a) Production.
(b) Consumption.
There are also monthly indices of:—
Home produced goods.
Foreign produced goods.
Unrestricted prices.
Controlled prices.
For description, see Wirtschaft und Statistik, 1926, No. 23, p. 875, and Vierteljahrshefte zur Statistik des Deutschen Reiches, 1927, I, p. 37, and 1932, I, p. 139.

*40. Holland.
Index-numbers published by the Central Bureau of Statistics in Maandschrift.
Old index covering 48 articles, showing total and foodstuffs alone, available till December, 1935 ; base year, 1913.
New index based upon 274 articles, distinguishing foodstuffs (16, in two groups), materials (53, in seven groups) and manufactures (205); now calculated with 1926-1930 as base.
For full description of new index and summary of annual figures, 1921-1934, and monthly figures, 1928-1935, see Maandschrift, August, 1935, pp. 1217-20.

*41. Italy.
(a) Index-numbers based upon wholesale prices of a small number of sensitive commodities, calculated by Professor Ottolenghi, published in the monthly Supplements of the London and Cambridge Economic Service.
The index-numbers relate to the end of the month, and are expressed as percentages of the 1913 average. Series available in detail from January, 1920, onwards.
(b) Weekly and monthly index-numbers, calculated by the Milan Council of Corporative Economy, published in Indici settimanali dei Prezzi all' Impresa.
Index-numbers are based upon prices of 37 foodstuffs (two groups) and 88 raw materials (six groups), and shown as percentages of year 1913.
Index-numbers (b), and also the Bachi* Index (percentages of 1913), are quoted in Alcuni Indici della Situazione economica (Rome, monthly).

*42. U.S.A.
Bureau of Labor Index, compiled by the Department of Labor and published monthly in detail in the Monthly Labor Review; quoted in the Survey of Current Business.
Index is based upon prices (averages for month) of about 780 commodities representing the chief markets, being those applicable to the bulk of the steady flow of business.

The index-numbers are combined into three main groups, shown in the following table:

1 Transferred to percentage of 1913 average in Supplements of the London and Cambridge Economic Service.
The monthly indexes are percentage changes from the preceding month converted to the average of 1920 as base.

The weighting is revised every two years, and is based upon the quantities marketed in the three-year period prior to the last census of manufactures.

For summary of monthly figures from 1923-1931, see Annual Supplement to the Survey of Current Business for 1932.

43. Comparable Wholesale Price Index Numbers for Eleven Countries.

Published in the Bulletins of the London and Cambridge Economic Service in March, June, September and December.

Monthly index numbers are calculated by the same method and from similar lists of commodities for each of the eleven countries, the prices being obtained from the International Institute of Statistics (The Hague) and other sources. Series available from 1925 onwards.

The monthly index-numbers are weighted arithmetic means of the percentage price changes since 1925 of 16 foodstuffs and 19 raw materials. Subsidiary series for these two groups are shown. A quarterly calculation based upon the year 1913 is also made.

For full description, see Special Memorandum No. 34.

(c) COST OF LIVING.

44. Belgium.

Index-numbers are calculated by the Ministere du Travail, and published monthly in the Revue du Travail.

Calculations based upon results of enquiries into working-class and petit bourgeois expenditure in 1921. Five series are calculated—from budgets of four grades of workers and one bourgeois; all are expressed as percentages of year 1921, but a general index is also given as percentages of April, 1914.

For full description, see Revue du Travail for September, 1923, and Bulletin du Revitallement, February 29th, 1920.

45. Canada.


Index-numbers are averages for the month expressed as percentages of 1926. They cover food, fuel, rent, clothing and sundries.

For detailed summary of annual figures from 1913 to 1934, and monthly from 1932 to 1934, see Prices and Price Indexes, 1913-1934, p. 118.

Other index-numbers are calculated by the Department of Labour for each province and for the chief cities, as percentages of 1913 level. For summary, see p. 130 as above.

46. France.

Index of Cost of Living in Paris, compiled by the Statistique generale de la France and published in their Bulletin (Supplement mensuel).

Quarterly index-number covering all expenses of a working-class home according to the Paris Commission on the Cost of Living. Base period, first quarter of 1914.

A monthly weighted index-number of the retail prices of 13 household items (mainly foodstuffs) during each month is also published. Base—July, 1914.

Published in the Bulletin of the London and Cambridge Economic Service each month, changed to a percentage of 1924 level to correspond with U.K. Index.


Belgium, Canada, France, Germany, Holland, Italy, New Zealand, South Africa, Sweden, U.K., U.S.A.
COST OF LIVING (continued).

47. Germany.
Reichs-Index published monthly in Wirtschaft und Statistik, first issue of month. Data are monthly averages. Current series available from February, 1925, but in October, 1934, weighting was altered, new figures being calculated as from January, 1928. Base period, 1913-1914. Subsidiary series are shown for:—
(a) Food.
(b) Rent.
(c) Fuel and Light.
(d) Clothing.
(e) Miscellaneous.
An index-number excluding rent is also given.
For description of latest weighting, see Wirtschaft und Statistik, 1934, No. 19.

48. Holland.
Index of cost of living in Amsterdam, calculated by the Bureau of Statistics of the City of Amsterdam. See Maandbericht. Quarterly index relating to last month of quarter. The percentage changes in 14 groups of expenditure are weighted by estimated proportionate outlay thereon in the base period. Index-numbers have been expressed as % of October 1923-September 1924, from 1926 onwards, formerly % of March, 1920, from 1920-1926, and % of 1911-1912, from 1917-1920. Weighting changed when base date was changed.

49. Italy.
National index-number, compiled by the Statistical Office of Milan, was based on index-numbers calculated for principal cities of the chief regions of the country. The composite index for each region was weighted according to the population in 1921. Recently index-numbers have been based upon Rome and Milan only. The index is calculated on the aggregate expenditure method, and July, 1929, taken as base.

50. U.S.A.
Index-numbers compiled by the National Industrial Conference Board and quoted in the Survey of Current Business. Monthly series available from 1920 onwards. From March, 1922, prices relate to 15th of month. The groups are weighted as follows, according to a post-war estimate of the distribution of average household consumption among wage-earners:—
(a) Food . . . . . . . 33%
(b) Housing . . . . . 26%
(c) Fuel and Light . . . 17%
(d) Clothing . . . . . . 10%
(e) Miscellaneous . . . . 20%
Index-numbers are published as percentage of 1923 level. For summary of monthly figures, 1923-1931, see Annual Supplement to Survey of Current Business for 1932.

51. Belgium.
Index-numbers calculated by the Institut des Sciences économiques, University of Louvain, and published in their quarterly Bulletin. Monthly index-numbers are based upon changes in five industrial groups; the annual index covers nine, more extensive, groups. The average of 1923-1925 is taken as base.

INDEX OF PRODUCTION.
For details of annual index, see Bulletin de l’Institut des Sciences économiques, February, 1936, p. 317. This issue gives annual figures for 1931-1935. Bulletin for August, 1931, gives annual figures for:—
1920-1930, as percentages 1923-1925, and
1901-1930, as percentages 1907-1913.

\[ \text{See The Cost of Living in Foreign Countries published by the National Industrial Conference Board.} \]
\[ \text{Transferred to percentage of 1924 in London and Cambridge Economic Service Bulletins.} \]
INDEX OF PRODUCTION

52. CANADA.
The index is calculated on the aggregative method, is shown as percentages of 1926 average, and is adjusted for seasonal variation.
It is based upon 41 weighted series, the weights being proportional to net output of the industries.

53. FRANCE.
Index is the weighted arithmetic average of changes in eight group indices, weighted primarily according to the numbers employed in the various industries in 1913.
Results are shown as percentages of (a) 1913, (b) 1928.
For description and summaries (monthly from 1919, annual from 1928), see above Bulletin for October, 1924, April, 1926, and October-December, 1928.
See also Indices generaux du Mouvement economique en France, 1901-1931, for fuller detail.

54. GERMANY.
Index published in Vierteljahrshefte zur Konjunkturforschung.
Based upon monthly averages per working day, with adjustment for seasonal variation
For general description, see Wirtschaftszahlen, 1923-1931, Berlin, 1932.

55. ITALY.
Official index of industrial production published each month by the Ministero del Corpoazione, and quoted in Alcuni Indici della Situzione economica.
Index is shown as percentage of year 1928, and is available from January, 1929.

56. U.S.A.
Compiled from 57 series of data, representing about 34 industries. The monthly index-numbers have been adjusted for varying length of working month and for seasonal variations.
The total and subsidiary index-numbers are shown as percentages of 1923-1925.
In general, weights are proportional to the net output in 1923 and 1925 of the industries which the series represent.
For summary of revised figures, see Federal Reserve Bulletin, September, 1933, p. 584.
For full description, see Federal Reserve Bulletin, February, 1927, and March, 1927.
SECTION III.—SOURCES OF INDEX-NUMBERS FOR VARIOUS COUNTRIES.

In the periodicals mentioned below will be found in convenient form important index-numbers of securities, prices, production, etc., etc., available for the countries in question.

<table>
<thead>
<tr>
<th>Country</th>
<th>Publication</th>
<th>Source</th>
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<tbody>
<tr>
<td>Australia</td>
<td>Quarterly Summary of Australian Statistics</td>
<td>Commonwealth Bureau of Census and Statistics</td>
</tr>
<tr>
<td>Austria</td>
<td>Konjunkturberichte (quarterly)</td>
<td>Institut fur Konjunkturforschung</td>
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<td>Belgium</td>
<td>Bulletin d'Information et de Documentation (fortnightly)</td>
<td>Banque Nationale de Belgique</td>
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<td>France</td>
<td>Bulletin de la Statistique Générale ; Supplement mensuel</td>
<td>Statistique Générale de la France</td>
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<td>Germany</td>
<td>Wirtschaft und Statistik (fortnightly)</td>
<td>Statistisches Reichsamt</td>
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<td>Holland</td>
<td>Maandblad (monthly)</td>
<td>Central Bureau of Statistics</td>
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<td>Italy</td>
<td>Alcuni Indici della Situazione economica (monthly)</td>
<td>Consiglio Provinciale dell' Economia</td>
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<td>Corporativa di Roma</td>
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<td>Japan</td>
<td>Monthly Circular</td>
<td>Mitsubishi Economic Research Bureau</td>
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<td>Sweden</td>
<td>The Swedish Economic Review (quarterly)</td>
<td>Swedish Board of Trade</td>
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<tr>
<td>U.S.A.</td>
<td>Survey of Current Business (monthly and annual)</td>
<td>Bureau of Labor</td>
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<td>Monthly Bulletin of Statistics</td>
<td>League of Nations</td>
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<td>Monthly Crop Report and Agricultural Statistics</td>
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<td>Recueil de Statistique (monthly)</td>
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<td>Recueil de l'Institut international de Statistique (quarterly)</td>
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LIST OF SPECIAL MEMORANDA PUBLISHED

BY THE

LONDON AND CAMBRIDGE ECONOMIC SERVICE

Price: Five shillings each, unless otherwise stated.

No. 1. Stocks of Staple Commodities, by J. M. Keynes, assisted by R. B. Lewis. April, 1923.
No. 5* Relative Changes in Price and Other Index-Numbers, by A. L. Bowley. February, 1924.
No. 8* The Physical Volume of Production, by J. W. F. Rowe. October, 1924.
No. 22* Stocks of Staple Commodities, by J. M. Keynes and J. W. F. Rowe. March, 1927.
No. 29. Stocks of Staple Commodities, by J. M. Keynes and J. W. F. Rowe. August, 1929.
LIST OF SPECIAL MEMORANDA (continued).

No. 42. The Sawmill Industry in Scandinavia and Finland and the Exports of Sawn Softwood from these Countries, by Eino Saari. April, 1936.
No. 43. The Economic Position of Great Britain, by A. C. Pigou and Colin Clark. April, 1936 (2/6).
No. 44. Description and Sources of Important Index Numbers, by K. C. Smith. June, 1936 (2/6).

* Photostat copies of Numbers out of print can be obtained.