

SECTION V.—WHOLESALE PRICES.

1. **General.**—The results of an investigation into wholesale prices in Melbourne from 1871 to 1912 were given in some detail in Reports Nos. 1 and 2. In this Section results are now included for the year 1913.

The data upon which the investigation is based were obtained mainly from reports of Melbourne market prices, published in the ordinary press, and in special trade reviews. In any case of doubt as to the reliability of the figures, the records thus obtained were verified by reference to well-known and important business firms, dealing in the articles in question. Every care was taken to ensure that the prices quoted for each article refer to a uniform quality, and, in cases where more than one source of information was utilised for obtaining prices of single commodities, special precautions were taken to ensure substantial continuity of quality or grade. In most cases, monthly prices were obtained (but where daily or weekly quotations were available, these were adopted), and arithmetic averages for the several years were computed. In regard, however, to a few commodities, such as coal, tea, cotton and wool, since monthly prices were not available for back years, yearly averages, based in each case upon expert opinion, were secured.

It was at first intended to obtain records, on the lines indicated, for a uniform list of commodities for the capital town of each State. Owing, however, to the large amount of work involved, and to the difficulty experienced in obtaining regularly the prices of anything like a uniform representative list of commodities from the papers and journals published in some of these towns, this idea has for the present been abandoned.

2. **Commodities Included and Methods Adopted.**—Retail prices have the advantage that a comparatively small list of commodities suffices to represent a large proportion of the average expenditure. They are, however, subject to the difficulty that their variations depend largely upon local conditions, and it is, therefore, ordinarily necessary to collect the data over a wide area. Wholesale prices, on the other hand, are fixed usually at one or two centres, but a much larger list of commodities must be covered.

The index-numbers up to the year 1911 are based on the prices of eighty commodities, but since that year the number has been increased to ninety-two.* The methods followed for the computation of the wholesale price index-numbers are the same as those adopted in regard to retail prices. The commodities included, the units of measurement for which the prices are taken, and the mass-units, indicating the relative extent to which each commodity, in the units of measurement specified, is used or consumed, are shewn in the following statement.

* In the computation of the index-numbers for years prior to 1911, the aggregate expenditure on 80 commodities in 1911 is taken as base (=1000), while for later years the aggregate expenditure on 92 commodities in 1911 is taken.

Melbourne Wholesale Prices, Commodities included, Units of Measurement, and "Mass-Units."

| Commodity. | Brand. | Unit. | Mass Unit. | Commodity. | Brand. | Unit. | Mass Unit. |
|----------------|--------------------|----------|------------|-------------------|------------------|---------------|------------|
| GROUP I. | | | | GROUP V. | | | |
| Iron— | | | | Currants | | lb. | 1,400 |
| Fig | M'x'd Nos | ton | 64 | Raisins | Sultanas | doz. 1 lb. | 1,400 |
| Rod and Bar | Stafford | " | 34 | Herrings | 1-lb. tins | tins | 50 |
| Angle and T | " | " | 34 | Salmon | | doz. halves | 50 |
| Plate | " | " | 3 | Sardines | Halves | lb. | 100 |
| Hoop | " | " | 4 | Coffee | Plantation | lb. | 200 |
| Galvanized | 26 gauge | cwt. | 5 | Cocoa | Taylor's | ton | 100 |
| Tinned Plates | I.C. Coke | ton | 60 | Sugar | No. 1A | lb. | 22 |
| Fencing Wire | No. 8 | " | 1 | Macaroni | | ton | 200 |
| Zinc, Sheet | | " | 3 | Sago | | lb. | 2 |
| Lead, Sheet | | " | 4 | Rice | Patna | " | 7 |
| " Pipes | | lb. | 2,000 | Salt | Liverpool | " | 2 |
| Copper Sheet | | " | 12 | Salt | Rock | " | 1 |
| Quicksilver | | ton | 600 | Mustard | Coleman's | doz. 1 lb. | 6 |
| Coal | Newcastle on Wharf | " | 600 | Starch | Coleman's | tins | 100 |
| | | Total | 2,702½ | Blue | White | lb. | 50 |
| GROUP II. | | | | Matches | Keen's | gross | 90 |
| | | | | | Wooden | " | 90 |
| Branbags | | doz. | 110 | Candles | Safety | lb. | 1,800 |
| Cornsacks | | each | 250 | Tobacco | Gouda | " | 1,300 |
| Woolpacks | | " | 200 | Tea | Two Seas in | " | 3,000 |
| Leather, Waxed | | lb. | 600 | Kerosene | Pocket Pcs. | gallon | 1,700 |
| Kip | | " | 600 | | | Total | 11,378½ |
| Waxed Split | | " | 600 | GROUP VI. | | | |
| Medium Crop | | " | 600 | Beef | Average quality. | 100 lbs. | 390 |
| Cotton | Raw | " | 24,000 | Mutton | " | lb. | 33,000 |
| Wood | Greasy | " | 12,200 | Veal | " | " | 2,000 |
| Twine | Reaper and Binder | " | 150 | Lamb | " | each | 200 |
| | Mutton | ton | 1½ | Fork | " | lb. | 3,700 |
| Tallow | Prime | " | 1½ | | | Total | 39,290 |
| | | Total | 38,711½ | GROUP VII. | | | |
| GROUP III. | | | | Timber:— | Flooring | 100 ft. lin. | 30 |
| Wheat | | bushel | 500 | | 6 x 1½ | " | 30 |
| Flour | | ton | 48 | | 6 x 1½ | " | 30 |
| Bran | | " | 14 | | 6 x 1½ | " | 30 |
| Pollard | | " | 14 | | 6 x 1½ | " | 30 |
| Oats | Feed | bushel | 1,200 | | 6 x 1½ | " | 200 |
| Ons | Colonial | ton | 13 | Weather-boards | Oregon | 1000 ft. sup. | 20 |
| Oatmeal | Malting | bushel | 150 | Shelving | Portland | " | 10 |
| Barley | Feed | " | 100 | Cement | White Lead | cask | 30 |
| Maize | | " | 1,000 | Slates | Welsh | ton | 3 |
| Hay | Best M'ng'r | ton | 155 | | 20 x 10 | " | 3 |
| Chaff | Good oats | " | 135 | | | Total | 381½ |
| Straw. | Victorian | " | 25 | GROUP VIII. | | | |
| Peas | | bushel | 55 | Cream of Tartar | In Kegs | lb. | 400 |
| Potatoes | | ton | 40 | Carbonate of Soda | Refined | ton | ½ |
| Malt | | ton | 40 | Sulphur | | " | 2½ |
| Onions | Victorian | bushel | 140 | Sulphur | | " | ½ |
| | | ton | 3 | Caustic Soda | | cwt. | 7 |
| | | Total | 3,560½ | Alum | Lump | lb. | ½ |
| GROUP IV. | | | | Cyanide | | " | 570 |
| Ham | | lb. | 800 | Potassium | | " | ½ |
| Bacon | | " | 3,200 | | | Total | 978½ |
| Cheese | | " | 1,500 | | | | |
| Butter | Best Fresh | " | 9,500 | | | | |
| Lard | In Bladders | " | 200 | | | | |
| Eggs | Ordinary | doz. | 1,800 | | | | |
| Honey | | lb. | 600 | | | | |
| Beeswax | | doz. lb. | 40 | | | | |
| Condensed Milk | Bacchus Marsh | " | 160 | | | | |
| | | Total | 17,800 | | | | |

3. **Index-Numbers and Graphs.** — Index-numbers have been computed for each group of commodities, as well as for all groups together. The index-numbers for the several groups, and for all groups together, are shewn in the following table. In regard to Group VI., it should be observed that reliable and uniform records as to prices of meat could not be obtained further back than 1890 (except for the years 1884 and 1885). Index-numbers were accordingly worked out for the full period since 1871 for the seven groups, *excluding* meat, and also for the period since 1890, for the eight groups, *including* meat. The figures shewn in the last column of the subjoined table for years prior to 1890 (except for 1884 and 1885) have, accordingly, been adjusted (on the basis of the results for succeeding years), so as to include meat.

The index-numbers have in each case been computed with the prices in the year 1911 as base; that is to say, they shew the amount which would have had to be expended in each of the years specified in order to purchase what would have cost £1000 in 1911 distributed in purchasing the relative quantities (indicated by the mass-units) of the several commodities included in each group, and in all groups respectively. Thus, in the last column it may be seen that the cost of the relative quantities of the various commodities was 1229 in 1871, and 974 in 1901, as compared with 1000 in 1911, and 1170 in 1912. In other words, prices were lower in 1911 than in either 1871 or 1912, and the purchasing power of money in 1911 was, accordingly, greater. Again, prices were higher in 1911 than in 1901, and the purchasing power of money in the former year was therefore less.

Melbourne Wholesale Prices, Index-Numbers, 1861 to 1912, Computed to Year 1911 as Base.

| YEAR. | I. Metals and Coal. | II. Jute, Leather, &c. | III. Agricultural Produce, &c. | IV. Dairy Produce | V. Groceries. | VI. Meat. | VII. Building Materials | VIII. Chemicals. | IX. Commodities together |
|-------|---------------------|------------------------|--------------------------------|-------------------|---------------|-----------|-------------------------|------------------|--------------------------|
| 1861 | 1,438 | 1,381 | 1,533 | 1,008 | 1,963 | — | 1,070 | 2,030 | 1,538 |
| 1871 | 1,096 | 1,257 | 1,236 | 864 | 1,586 | — | 1,044 | 1,409 | 1,329 |
| 1881 | 1,178 | 1,115 | 1,012 | 935 | 1,421 | — | 1,091 | 1,587 | 1,121 |
| 1891 | 895 | 847 | 1,024 | 995 | 1,032 | 888 | 780 | 1,194 | 945 |
| 1901 | 1,061 | 774 | 928 | 1,029 | 1,048 | 1,345 | 841 | 917 | 974 |
| 1902 | 1,007 | 756 | 1,192 | 1,215 | 945 | 1,447 | 837 | 881 | 1,051 |
| 1903 | 923 | 834 | 1,209 | 1,059 | 936 | 1,443 | 875 | 921 | 1,049 |
| 1904 | 821 | 885 | 754 | 876 | 916 | 1,427 | 845 | 875 | 890 |
| 1905 | 772 | 850 | 894 | 980 | 942 | 1,209 | 801 | 859 | 910 |
| 1906 | 882 | 978 | 916 | 972 | 923 | 1,110 | 896 | 864 | 948 |
| 1907 | 1,037 | 1,017 | 973 | 1,020 | 948 | 1,294 | 968 | 961 | 1,021 |
| 1908 | 1,033 | 901 | 1,312 | 1,198 | 968 | 1,335 | 935 | 891 | 1,115 |
| 1909 | 1,014 | 907 | 1,000 | 1,119 | 978 | 1,088 | 911 | 815 | 993 |
| 1910 | 1,004 | 1,052 | 969 | 1,100 | 999 | 1,008 | 996 | 898 | 1,007 |
| 1911 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| 1912 | 1,021 | 991 | 1,370 | 1,206 | 1,052 | 1,357 | 1,057 | 978 | 1,170 |
| 1913 | 1,046 | 1,070 | 1,097 | 1,054 | 1,024 | 1,252 | 1,128 | 995 | 1,083 |

NOTE.—The figures given in this table are comparable in the vertical columns, but are not directly comparable horizontally. The index-numbers are reversible.

The general index-number for the year 1913 shews a decrease of 7.9 per cent., compared with that for 1912. With regard to the various group index-numbers, four groups, viz., III. (Agricultural, etc.), IV. (Dairy Produce), V. (Groceries), and VI. (Meat) shew decreases of 20.0, 12.6, 2.7, and 7.8 per cent. respectively, while the remaining four groups shew increases, for Group I. (Metals, etc.), 2.4

per cent., Group II. (Jute, Leather, etc.), 3 per cent., Group VII. (Building Materials), 6.7 per cent. and Group VIII. (Chemicals) 1.7 per cent.

The index-numbers for the full period since 1871 (and for 1861 and 1866) are given in Report No. 1, page 48. On page 43 herein after a graph is given showing the index-numbers since 1901 for all groups taken together.

4. **Seasonal Fluctuations in Wholesale Prices, 1913.**—In order to shew the seasonal fluctuations in wholesale prices, index-numbers have been computed for each quarter of the year 1913. These are shewn in the following table, the first line giving the index-numbers computed with the year 1911 as base, the second line with the average prices for the year 1913 as base. In the last line corresponding figures for cost of living (retail prices and house rents) have been included for comparative purposes.

Melbourne Wholesale Prices—Quarterly Index-Numbers, 1913.

| Particulars. | Jan to March. | April to June. | July to Sept. | Oct to Dec. | Whole Year. |
|--|---------------|----------------|---------------|-------------|-------------|
| Index-Numbers with 1911 as base (= 1,000) | 1,112 | 1,095 | 1,072 | 1,072 | 1,088 |
| Index-Numbers with average for 1913 as base (= 1,000) | 1,022 | 1,006 | 985 | 985 | 1,000 |
| Cost of Living (Retail Price and House Rent), Index-Numbers, with average for 1913 as base (= 1,000) | 998 | 1,012 | 998 | 992 | 1,000 |

The first line of this table shews that, whereas prices in the first three months of the year 1913 were 11.2 per cent. higher than the average for the whole year 1911, by the third quarter they had declined, so that they were then only 7.2 per cent. higher than the average for 1911.

During the fourth quarter there was no change in the price level. In the second line comparative figures are given for each quarter, taking the average for the year 1913 as base, while in the last line similar figures are given for retail prices and house rent. From the first to the second quarter the wholesale price index-number decreased slightly, while the cost-of-living index-number increased about 1 per cent. From the second to the third quarter both index-numbers decreased, the wholesale more than the retail, while from the third to the fourth quarters the wholesale price index-number remained stationary, and the cost-of-living index-number fell about 1 per cent.

It may be seen that the range of fluctuation in wholesale prices (from 985 to 1022) is greater than that in the cost-of-living index-numbers (from 992 to 1012). It was pointed out in Report No. 2 that this phenomenon is observed not only in regard to seasonal fluctuations, but also in movements from year to year, both in Australia and other countries.

5. **Table of Prices, 1913.**—In Appendix III. particulars are given as to the average price of each commodity in the years 1912 and 1913. Corresponding information for previous years, as far back as 1871, was given in Appendix VI. to Report No. 1.