## CHAPTER II.-WHOLESALE PRICES AND PRICE INDEXES. § 1. Melbourne Wholesale Price Index.

1. General.-The data on which this chapter is based relate almost entirely to wholesale prices in Melbourne.

The index of Melbourne wholesale prices was first computed in 1912, and has been continued on the same lines since that your. The items included in the (old) Melbourne wholesale price index comprise chielly basic materials which in the form of raw material, food, or as a source of fower, enter into production for home consumption. The purpose of the index, therefore, is to measuro the changes in the prices of these particular materials rather than the changes in prices generally. As Australia does not, to any extent, manufacture from imported raw materials commodities for export, the local consumption appears to give the most appropriate weightiag. Any lack of uniformity in the variations of the index-numbers for these wholesale prices and for retail prices would indicate broadly changes in the relation of manufacturing and distributing charges to the cost of basic materials.

The scope of this wholesale price index can best be understood by an examination of the list of commodities included which is given on page 44. This list is, to a large extent, comparable with that used in the compilation of the Economist and Statist index-numbers for Great Britain, bat differs largely from that used for the wholesale price index-numbers of the United States (Bureau of Labour) or Canada (Department of Labour).
2. The Grouping of the Commodities.-The commodities are divided into eight groups, as set out on page 44. The descriptions of the groups are given in the following tables with the proportional cost of each group for the year 1947. These proportious cannot be used to combine "group" index-aumbers owing to the possible wide differences in the proportions compared with those for the base period. In this connexion, see paragraph following table on page 16 .

Groaps of Commodities.

| Group. | Deseriptiod. | Percentagn of Aggrogat Cott (1947). |
| :---: | :---: | :---: |
| I. | "Metala and Coal" | 14 |
| - II, | "Wool, Cotton ", also jute, leather, 践c. | 19 |
| 11. | "Agricultural Produce " .. .. | 24 |
| 1 V . | "Jairy Produce" .. .. | 7 |
| V. | "Grocories" ${ }^{\text {" }}$ | 14 |
| VI. | "Meat" . . | 12 |
| VII. | "Building Matorials" (mostly timbar) | 9 |
| VIII. | "Chemicals" (excluding fertilizers) - | 1 |
| - |  | 100 |

It will be noticed that the group " Chemicals" is practically negligible.
The index relates chiefly to basic materials, but a certain proportion of Australian manufacturing costs enters into all groups. The amount is small in Meat (VI.), Agricultural Produce (III.), and Wool, Cotton (II.), and greater in others, but the difference is not sufficient to justify any inference as to different changes of the price level for manufactured goods and farm products. The number and weight of manufactured commodities included are too small to warrant deductions of this nature from any possible grouping.

Many of the commodities included are affected by the tarifi. Wool, Cotton (II.), Agricultural Produce (III.), and Meat (VI.), are little affected, and Dairy Produce (IV.) not greatly, but in the other groups the tarift is a dominating influence.

Melbourne Wholesale Price Inder : Commodities included, Dnits of Measorement, and "Mass Units".


Gnote III.
(Agricultural Produce).

| Wheat Flour | . |  | bus. | 500 48 |
| :---: | :---: | :---: | :---: | :---: |
| Bran .. | . |  |  | 4 |
| Pollard | . |  |  | 14 |
| Oats .. | . | Mfllitig. | bus. | t.300 |
| Oatmeal |  | Colonias | ton | 11 |
| Darloy | ** | Eaplish | bua. | 150 100 |
| Matze. | + | Cape . | * | 100 1,000 |
| Hoy | + | Beat Mingr. | ton | 135 |
| Chaft | $\ldots$ | Prime ${ }^{\text {+ }}$ | * | 135 |
| Stra\% | . | Victorian | "* | 25 |
| Peas ${ }^{\text {Pr }}$ | $\cdots$ | .. | bus. | 55 |
| Potatote | . |  | ton | 40 |
| Malt .. | $\cdots$ | Victorien | bus. | 140 |
| Ontone | $\cdots$ | .. | toll | 3. |

GLovp IY.
(Dajry Produce).

| Bammen $\quad \because$ | * | Ib. | 800 3,200 |
| :---: | :---: | :---: | :---: |
| Cheest |  |  | 1,500 |
| Butter | Best Fresh | $\cdots$ | 9,500 |
| Lard | Bulk . |  | 200 |
| Reg ${ }^{\text {P }}$ | Ordinary | doz. | 1,800 |
| Honey |  | 1 b . | 600 |
| Beeswax mut |  |  | 40 |
| Condensed Milk | Bacchus Marsh | don. 14-oz tIns. | 160 |


3. Index-Numbers.-(i) 186 I to 1947 (IgrI base)-Index-numbers for each group of commodibies, as well as for all groups combined, are shown in the following table:-

Mitbourne Wholesale Price Index-Numbers, 1861 to $194 \%$.
(Base of each Group: Year 1911 $=1,000$.).


Norn-Tho tgurea given in thit table are eompareble in ths verticat sotumas, but are not areotly comperablo horleontely.
(ii) 1915 to 1947 (July, 1914, base)-The variations in the index-numbers of the separate commodity groups for the years ro15 to 1947, are shown in the following table, taking Juty, 19r4, as base ( $=\mathrm{I}, 000$ ) for each group :-

Melbourne Wholesale Price Index-Numbers.
(Base of each Group : July, $1914=1,000$.)

|  | Perlo |  | 1. <br> Metals and Cosi. | 11. <br> Wool, Cotton. Lestler, $\boldsymbol{4 c}$. | $\begin{gathered} \text { III. } \\ \text { AgTi- } \\ \text { cultural } \\ \text { Produce, } \\ \text { \&o. } \end{gathered}$ | IV. <br> Dairy <br> Pro- <br> duce. | $\mathbf{V} .$ <br> Groceties. | $\begin{gathered} \text { YI. } \\ \text { Meat. } \end{gathered}$ | V1I. <br> Bulkdins <br> Materiala |  | $\underset{\text { Groaps }}{\text { All }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| July. | 1914 |  | 1,000 | 1,000 | 1,000 | 1,000 | 1.000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Year | 1915 | $\cdots$ | 1,166 | 934 | 2,024 | 1,272 | 1,098 | 1,502 | 1,164 | 1,490 | 1.406 |
| -' | 1916 | ** | 1,539 | 1,307 | 1,130 | 1,735 | 1,266 | 1,551 | 1,361 | 1,716 | 1.316 |
| . | 1917 | ** | 1.919 | 1,841 | 1,084 | t.181 | 1.302 | 1,480 | t,722 | 2,141 | 1,456 |
| * | 19 s | -* | 2,197 | 1.3*4 | t.351 | 5,210 | 1,378 | 1,469 | 2,448 | 3,085 | 5,695 |
| * | 1919 | * | 1,930 | 2,169 | 1,858 | 1,373 | I,469 | 1,448 | 1,601 | 1,827 | 1,801 |
| " | 1920 | . | 2,003 | 2,430 | 2,288. | 1,840 | 1,860 | 2,022 | 2,944 | 2,764 | 2,178 |
| ., | 1925 | . | 1.974 | 1,250 | 2,653 | 1,663 | 1.016 | 1,391 | 2,495 | 2,246 | 1,668 |
| . | 1922 | $\ldots$ | 1.763 | t,543 | 1,523 | 1,970 | 1.811 | 1,102 | 1,830 | 1,917 | 1,54: |
| , | 1923 | + | 1.658 | 1.972 | I, 664 | 1,527 | 1.693 | 1.590 | 1,848 | 1,685 | 3,704 |
| " | 1924 | $+$ | 1.667 | 2.220 | 1,541 | 1,376 | 1.668 | 1,371 | 1,656 | 1,761 | 1,639 |
| " | 1935 |  | 1,682 | 1,806 | 1.681 | 1.360 | 1,670 | 1,364 | 1,562 | 1,746 | 1.617 |
| * | 5926 | * | 1,760 | 1,453 | 1,873 | 1.483 | 1.677 | 1.19t | 1,519 | t,771 | 1.606 |
| - | 1927 | . | 1,782 | t. 515 | 1,709 | 1.516 | 1.671 | 1.302 | 1,482 | 1,820 | 1.393 |
| . | 1931 | . | 1.737 | 1,635 | т,665 | 1,456 | 1.654 | 1,142 | 1.582 | 1,676 | t.5\%t |
| - | 1939 | . | 1.737 | 5,428 | 1.677 | 1,540 | 1,635 | 3,385 | 1,601 | 1.895 | 4,98t |
| - | 1930 | . | 1,595 | 1,035 | 1,389 | 1,353 | 1,614 | 1,249 | 1,712 | 1,933 | 1,399 |
| $\cdots$ | 1931 | $\cdots$ | 1,659 | 954 | 1.049 | $\pm .163$ | 1,738 | 930 | r,849 | x, 117 | 2.253 |
| - | 1932 | ., | 1,577 | 918 | 1,152 | I. 083 | T,712 | 831 | 1,865 | 1.074 | 1,237 |
| * | 1933 | $\cdots$ | 1,556 | 1,026 | 1,100 | 994 | 1,66x | 917 | 1.888 | 2,054 | 1,233 |
| $\therefore$ | 1934 | $\cdots$ | 1,508 | 1,158 |  | 1,059 | 1,6\%2 | 950 | 1,839 | 1.968 | 1.299 |
| " | 1935 | . | 1,456 | 1,116 | 7,258 | 1,100 | 1,677 | 931 | t.792 | t,946 | 1,288 |
| - | 1936 | . | t,422 | 1,222 | 1,385 | 1,123 | 1,678 | 1.038 | 1.798 | 1,948 | 1,353 |
| " | , 1937 | . | 1,609 | T,29 | 1,502 | 1,206 | 1,696 | 1,0.35 | 2,219 | 1.937 | 1,439 |
| .. | 1938 | . | 1,586 | . 963 | 1,674 | t.287 | 1,693 | t,154 | 2,043 | 2,005 | 1,457 |
| " | 1939 | . | 1,597 | 1,01: | 1,704 | 1,295 | 1,699 | 1,054 | 2.026 | 2,024 | 1,480 |
| - | 1940 | . | [,684 | 4,250 | t,467 | 1,103 | 1,728 | 1,16t | 2.638 | 2,2!2 | 1,502 |
| " | 1941 | . | 1,780 | 1,287 | 1,611 | 1,292 | 1,825 | 1,124 | 2,864 | 2,465 | 1.574 |
| - | 1942 | .. | t,949 | 1,384 | 1,778 | 1,384 | 1,878 | 1,426 | 3,115 | 2,377 | 1,733 |
| - | 1943 | . | 2,064 | \%.786 | 1,839 | 1.427 | 1.879 | 1.459 | 3,436 | 2,382 | 1,856 |
|  | 1941 | . | 2,069 | 1,806 | 1,0:0 | 1,430 | 1,888 | 1.523 | 3,439 | 2,382 | 1,893, |
|  | 1945 | * | 2,062 | 1,799 | 2,118 | 1,435 | 1,907 | 1,579 | 3,445 | 2,465 | 1,953 |
|  | 1946 |  | 2,055 | 1,893 | 1,826 | 1,432 | 1,915 | 1,597 | - 3,444 | 2,549 | 1,896 |
| " | 1947 | $\cdots$ | 2,175 | 2,470 | 1,890 | r,466 | 2,106 | 1.695 | 3.469 | 2.773 | 2,069 |

## § 2.-Basic Materials and Foodstuffs.

1. General.-As mentioned above, the Melbourne Wholesale Price Index was first computed in 1912. Neither the component items nor the weighting have been varied. Consequently the index is a measure of changes in wholesale price levels based on usages which have altered substantially since the period on which the weighting was determined. As such it is useful as an indication of long-term trends over the past 86 yeara which it covers, on the assumption that the relative importance of component items remained constant. But it no longer serves as a measure of price variations from month to month or from year to year of commodities weighted in accordance with present day consumption. Reference to the description of the index in $\S$ I above will indicate that animal foddera preponderate in the "Agricultural Produce" group, while "Building Materials" include little besides imported timber. In other groups, some principal items have increased in consumption while others have decreased. It was resolved, therefore, at the Conference of Statisticians at Brisbane in 1930 that the time had come to revise and extend the items included in order to bring the index into live with changed conditions. An investigation to that end was commenced, and in the course of the past few years, many
inew price-series have been collected on a mouthly basis back to January, 1928. Some of these have been incorporated in a new index of the prices of basic materials and foodstuffs, index-numbers of which are currently published in the Mondhly Review of Business Statistics. Others are being incorporated in a number of " special-purpose" indexes, which it is hoped to publish in the future. Their construction has been delayed in order to make use, for weighting purposes, of the larger amount of information which is now becoming available as the result of the collection of more extensive statistics of factory production. The price guotations have in the main been obtzined directly from manufacturers and merchants, and, with a few important exceptions, from Melbourne sources. - Apart from home-produced building materials, coal and one or two minor commodities, however, the price movements may be taken as representative of fluctuations in wholesale prices of basic materials in most Australian markets. The weighting system adopted is based on average annual consumption during the years 1928-29 to 1934-35 inclusive. In the meantime, however, the original index has been cortinued on existing lines, as set ont in § x of this chapter.
2. Index-Numbers.-Index-numbers for each group of commodities and for all groups combined for this new index of wholesale prices of basic materials and foodstuffs are given in the following table:-

Wholesale Price Index-Numbers-magic Materials and Foodstuffs, 1928 to December, 1947.
(Base of each (Iroup : Year $1928=1,000$.)



BXPLANATION,-The index-tumbers in the graph above are for the Six Capital Cittes as a whole, with the exception of thoge for Whotegale Prices up to the fourth guarter of 1927 , which are for Meftoourne. They are all calculated to the common base rasi $=1,000$, the scale tor which appears on the left of the graph. The wholesile prices graph sho tis the trend of prices according to the "old" Melbourne lidex up to the fourth quafter of r9z7, but therenfter, this index having becn "spliced" with the Basic Saterjals and Foodstuffs Jndex, the curve line moves in accordouce with the varations of the latter. The price quotations for this index are, th the main, obtanped from 3leflourne
 rgix-t914 the "C" Series index-numbers are taken back from the true base (November, $191_{4}=1,000$ ) by means of the "A" Series Index (Food and Rent of All Houses),


## § 3．International Comparisons：Wholesale Price Index－Numbers．

The following table gives index－numbers of wholesale prices for the period 1937 to December， 1947 for Australia and other countries，the average prices in each country for the year 1937 being taken as base（ $=100$ ）．The figares which have been taken cliefly from the Monthly Bulletin of Statistics published by the Statistical Office of the United Nations are official except where indicated otherwise and show merely the fluctuations in prices in each country．They are obviously not comparable horizontally．

## Wholesale Price Index－Numbers：Principal Countries．

（Base ： $1937=100$. ）

| Perlod． |  |  |  | UNITED Kingdom． |  | $\begin{aligned} & \text { A4 } \\ & x_{0}^{4} \\ & 0.0 \end{aligned}$ | 閏 |  |  |  |  | $\begin{aligned} & \text { 昏 } \\ & \text { 㤩 } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\left\|\begin{array}{c} \text { Board } \\ \text { of } \\ \text { Trade. } \end{array}\right\|$ | Econo－ mist |  |  |  |  |  |  |  |  |
| 1937 | ， | ＊＊ | 100 | 100 | 100 | 100 | 100 | ． | 100 | 100 | 100 | 100 | 100 |
| 1938 | ＋＊ | ． | 100 | 93 | 87 | 93 | 90 | $\cdots$ | 101 | 103 | 94 | 95 | 99 |
| 1939 | ． | $\cdots$ | 100 | 94 | 90 | 89 | 95 | 105 | 105 | 101 | 96 | 93 | 173 |
| 1940 | ，． | ＊＊ | 110 | 126 | 117 | 98 | 113 | 132 | 117 | 112 | 110 | 102 | 137 |
| 194 ： | $\cdots$ | ＋ | 217 | 540 | 128 | 106 | 122 | 1.8 | 128 | 133 | 129 | 119 | 147 |
| 1942 | － | ， | 132 | 147 | 135 | 113 | 149 | 170 | 139 | 138 | 167 | 162 | 150 |
| 1943 | ． | ＋ | 138 | 150 | 136 | 518 | 215 | 189 | 148 | 150 | 180 | 179 | 152 |
| 1944 | $\cdots$ | ． | 139 | 153 | 142 | 121 | 227 | 198 | 152 | 155 | 188 | 184 | 153 |
| 1945 | ． | ＊ | 140 | 156 | 145 | 122 | 231 | 198 | 195 | 158 | 193 | 196 | 170 |
| 1946 | $\cdots$ | $\cdots$ | 1.40 | 361 | 15.4 | 128 | 252 | 198 | 156 | 161 | 208 | 227 | 297 |
| 19.47 |  | $\cdots$ | 148 | 177 | 178 | $1 \$ 3$ | 2976 | 719 | 162 | 169 | 222 | 292 | 312 |
| 1947－March Qti |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | ． | 142 | 168 | 170 | 139 | 292 | 206 | 156 | 165 | 117 | 267 | 309 |
| Jıne＊， |  | ． | 146 | 174 | 178 | 149 | 291 | 216 | 158 | 167 | 220 | 282 | 30.4 |
| Sec． | ．${ }^{\text {，}}$ | ． | 148 | 179 | 178 | 155 | 300 | 224 | 161 | 171 | 225 | 306 | 311 |
|  |  |  | 155 | 185 | 185 | 168 | 306 | 231 | 174 | 174 | 227 | $3!3$ | $3: 6$ |



[^0]
[^0]:    （a）Base Octotier $1938=100$
    100．（c）Base ： $5958=100$
    （d）Base：series．Base：

