

SECTION IV.—RETAIL PRICES, HOUSE RENT, AND COST OF LIVING.

1. **General.**—The main investigations carried out as to retail prices and cost of living are of a threefold nature and consist of:—

- (i.) Quarterly variations in the Cost of Living in thirty towns.
- (ii.) Annual variations in the Cost of Living in 100 towns.
- (iii.) Householders' Budget Inquiries.

It is principally with the first of these that this Section deals. In Report No. 2, issued in April, 1913, the results of comprehensive investigations into the subjects of Prices, Price-Indexes, and Cost of Living for past years were published, and an account was given of the methods used in the collection of the data and the computation of the results. A discussion of the theory upon which the calculation of the index-numbers is based was furnished in Appendixes to Report No. 1, issued in December, 1912.

For the computations of the index-numbers the "aggregate expenditure" method is adopted, i.e., the average price for each commodity included, is multiplied by its respective "mass unit." The "mass-unit" represents the relative extent to which each commodity is used or consumed, and is regarded as constant over the period under review. By taking the aggregate expenditure for any one year as base, the index-number for the relative aggregate expenditure for any other year is readily calculated. Certain aspects of this method, not dealt with in previous Reports, are discussed in a later part of this Report.

In order to illustrate clearly the method adopted it will be well to take a simple numerical example. Suppose that in 1901 the average price of butter was 1s. 3d. per lb., of bread was 3d. per 2lb. loaf, of mutton was 3d. per lb., and of milk was 4d. per quart; and suppose that in 1911 the prices of these four commodities were 1s. 6d. for butter, 4d. for bread, 5d. for mutton, and 5d. for milk. Now, the total quantities of each of these commodities consumed in Australia per annum are approximately 90 million lb. of butter, 470 million 2lb. loaves of bread, 330 million lb. of mutton, and 300 million quarts of milk. Therefore, the actual expenditure of the people of Australia on these commodities in 1901 and 1911 respectively would be as follows:—

Computation of Index-Numbers: Illustrative Example of Aggregate Expenditure Method.

Particulars.	Unit.	Quantities Consumed. (0,000,000 omitted).	Prices.		Total Expenditures.	
			1901.	1911.	1901.	1911.
Butter	lb.	90	d.	d.	d.	d.
			15	18	(0,000,000 omitted) 135	(0,000,000 omitted) 162
Bread	2lb. loaf	470	3	4	141	188
Mutton	lb.	330	3	5	99	165
Milk	quart.	300	4	5	120	150
					495	665

The relative aggregate expenditure was 495 in 1901, and rose to 665 in 1911; in other words, the index-number in 1901, taking the expenditure in 1911 as the base (= 1000) was $\frac{495}{665} \times 1000 = 744$, and the index-number in 1911, taking the expenditure in 1901 as the base (= 1000) was $\frac{665}{495} \times 1000 = 1343$, which might, of course, have been obtained directly by taking the reciprocal of the result previously obtained. If now, instead of only four commodities, a representative group of fifty or more were treated in this way for a series of years, the numbers thus obtained would furnish a satisfactory index of the variations in price from year to year.

2. Changes in Cost of Living, Standard of Living, and Expenditure on Living.—Considerable confusion appears to exist as to what is meant by change in the "Cost of Living." This confusion arises from the fact that a change may occur either in the *standard of living* or the *purchasing power of money*, or both; both affect the *expenditure* on living which expenditure itself depends on three things, viz.:—

1. The *particular series of commodities* consumed.
2. The *relative quantities* of the commodities consumed, and
3. The *price* of the commodities

To remove any confusion as to the significance of the results given in this Section, it is necessary that the conception of what is meant by "cost of living" should be clearly understood, and it is evident that a change in any *one* of these may produce a change in the *expenditure* on living, whereas a change in the *cost* of living can be produced and measured only if there is a change in the last, viz., the price of the commodities, while numbers 1 and 2, viz., the particular series and relative quantities remain constant. For otherwise there would be confusion between the change in the *cost* and change in the *standard* of living.

Turning now to the third of these, which is not subject to individual control, it may be said that *price* measures or expresses the value-relation between the unit of money, viz., the sovereign, and any commodity in question. As time goes on the purchasing power of the sovereign varies of course with each commodity, though not in an identical way with each, inasmuch as their prices do not vary identically. Hence in measuring this value-relation we get a different result, according to the particular commodity used to measure it, and it is for this reason that recourse must be had to a suitable *group of commodities*. Particulars of the group selected in the investigations are given in the following paragraph (3). The purchasing power of money becomes definitely measurable only when a specific and appropriate *composite unit* is taken. Such composite unit must represent actual usage, and since such usage varies, not only with different classes of the community, but with each individual, it is necessary to assume the existence of what Quételet calls an "average man." This definite usage or consumption indicates the "standard of living," and has been called a "régimen." It is determined from other investigations based mainly on

two sources, viz., (a) statistics of imports, exports, and production, and (b) householder's budget inquiries shewing actual cost of living. When this usage or average consumption is ascertained, the change in the purchasing power of money may be measured in the most practical way.

This usage is, of course, not the usage of either a particular class of the community or of a particular individual, for it would then be a variable quantity, but it is the average consumption of what has been termed the "average man." Unless the requirements of the "average man" are thus made a basis, there could, in the nature of the case, be no common standard for comparisons of the purchasing power of money, and the whole inquiry would resolve itself into a meticulous and unprofitable analysis of minutiae. In fact, the inquiry might be pushed not only as far as distinguishing between class and class, but even as between individuals.

Results which are quite unequivocally expressive of the changes in the purchasing power of money can be ascertained only on the basis of an unchangeable composite unit (i.e., a constant standard of living). Change in the expenditure on living may be due to a change in the quantity, quality, or number of commodities actually used. If the composite unit be changed, the result for the purpose of measuring the change in the purchasing power of money (i.e., cost of living) is confusing, since it reflects not only variation in the value of money, but also variation in the regimen itself, that is, in the standard of living.

To put the matter in another way:—Even if the average usage or "composite unit" could be satisfactorily ascertained for comparatively short periods, its application to the prices in order to obtain an aggregate expenditure would be inappropriate, since the results would not indicate solely variations in the purchasing power of money (i.e., cost of living), but would include also variations in *expenditure* on living due to changes in the standard of living, that is in the commodities used, or their relative proportions, or both. It is probable that for many persons the "aggregate expenditure" is a practically constant sum, though the distribution of expenditure, i.e., the "composite unit" is varied according to changes in prices, and therefore in investigating variations in the cost of living on the basis of a variable "composite unit," any results obtained would have no definite significance.

It is evident that the character of the composite unit can only be satisfactorily determined by a careful review throughout some considerable period, and when this unit is determined, it is the only practical basis on which to make comparisons between changes in the purchasing power of money, until a sufficiently lengthy period has passed for revision to be made necessary. The average consumption of commodities taken over a sufficient period changes slowly, and this change can be dealt with by a method which gives estimates of the purchasing value of gold which are *virtually*, though not strictly continuous. See Labour and Industrial Report No. 1, December, 1912, Appendix pp xlv. to lv.

3. **Commodities and Requirements Included.**—The 47 items of expenditure included are divided into four groups, viz., (i.) groceries and bread, (ii.) dairy produce, (iii.) meat, and (iv.) house-rent. These items cover about 60 per cent. of the total expenditure of a normal family. There are very cogent reasons for the restriction of the inquiries to the items mentioned. If the comparisons made are to be satisfactory, no confusion must arise between changes in standard of living and changes arising from a variation of the purchasing power of money. In order to avoid such confusion the items selected are such as are sensibly identical and identifiable in the various localities. The most important group of expenditure which is not included is clothing, the cost of which amounts to about 13 per cent. of the total expenditure. Owing to influences of individual taste, fashion, and the enormous variety of production, articles included in this group are practically not comparable and identifiable. As regards fuel and light, the cost of which amounts to about 4 per cent. of total expenditure, while these commodities are comparable and identifiable, the usage or relative consumption in the towns included in the inquiries varies to such an extent that their inclusion on an assumed constant regimen would tend to produce a fictitious result in so far as relative cost of living is concerned.

While it is true that insurance premiums and contributions to benefit societies have probably not increased, it must be borne in mind that the purchasing power of money benefits to be derived is reduced in accordance with the general depreciation in the purchasing power of money, and in order to obtain benefits of the same nett value as before, the premiums and contributions would have to be increased *pro rata*.

It will be seen, therefore, that notwithstanding the exclusion of various items of expenditure, the results obtained based on the four groups referred to, can be vitiated only in an abnormal state of affairs, and then only to a very slight extent. It is to be remembered also that prices of commodities which cannot be included because they do not lend themselves to exact specification, tend, *on the whole*, to move in the same direction as those included, and approximately to the same extent. Thus, as a matter of fact, a more reliable result is obtained than would be the case if the investigation endeavoured to cover the whole of the items of expenditure. In short, this method of measuring the variations in the purchasing power of money, though *theoretically* subject to obvious limitations, is *practically* the best general measure.

The following tabular statement gives particulars of the commodities and items included, the units of measurement for which prices are collected, and the mass-units shewing the relative extent to which each item is used or consumed.

Retail Prices.—Table shewing Commodities, etc., included in Investigation, Units of Measurement, and "Mass-Units."

Commodity.	Unit.	"Mass Unit."	Commodity.	Unit.	"Mass Unit."
GROUP I.—GROCERIES (INCLUDING BREAD).			GROUP III.—MEAT.		
1. Bread	2 lb. loaf	468	26. Beef, sirloin	lb	67
2. Flour, ordinary .. .	25 lb. bags	11	27. " rib	"	82
3. Tea	lb.	30	28. " flank	"	12
4. Coffee	"	2	29. " shin	"	14
5. Sugar	"	400	30. " steak, rump	"	24
6. Rice	"	50	31. " shoulder	"	53
7. Sago	"	8	32. " buttock	"	53
8. Jam	"	73	33. " corned round	"	30
9. Oatmeal	"	35	34. " brisket, with bone	"	11
10. Raisins	"	14	35. " without bone	"	32
11. Currants	"	14	36. Mutton, leg	"	92
12. Starch	"	1	37. " shoulder	"	62
13. Blue	doz. sqs.	1	38. " loin	"	30
14. Candles	lb.	16	39. " neck	"	40
15. Soap	"	64	40. " chops, loin	"	62
16. Potatoes	14 lbs.	64	41. " leg	"	15
17. Onions	lb.	68	42. " neck	"	31
18. Kerosene	gallon	17	43. Pork, leg	"	9½
GROUP II.—DAIRY PRODUCTS.			44. " loin	"	8½
19. Milk	quart	300	45. " belly	"	10½
20. Butter	lb.	9½	46. " chops	"	8½
21. Cheese	"	15	GROUP IV.—HOUSE RENT.		
22. Eggs	dozen	18	47. House Rent	per week	46½
23. Bacon, middles .. .	lb	16			
24. " shoulder	"	16			
25. Ham	"	8			

It may here be pointed out that both in the collection of the data and computation of the results great care was exercised, and that there is reason to believe that the cost of living figures are based upon more extensive data than any which have been obtained in similar investigations in other parts of the world.

In order to give some idea of the thorough manner in which the work has been performed, it may be mentioned that with regard to the 46 commodities and house rent included in the cost of living inquiry, nearly 10,500 prices and quotations were received and tabulated for the 30 towns dealt with each month. This amounts to 126,000 per annum. The complete scheme in regard to cost of living provides for the collection and analysis of over 140,000 separate prices and quotations each year, but owing to the difficulty in getting in all the returns regularly it was necessary to provide for a larger number of returns than was actually required.

When it is understood that the cost of living inquiry goes back for the capital towns as far as 1901, and the wholesale price inquiry (80 commodities) as far as 1871, some idea may be gathered as to the magnitude of the work involved. All the returns received are carefully examined, and in cases where the accuracy of any price or quotation is open to doubt, special inquiries are made from the person furnishing the quotation. Each return as received is compared with the previous return from the same dealer and with all other returns received for the same period. It is believed, therefore, that a high

degree of accuracy is obtained in the investigations, and it is evident that personal impressions or results, not based upon an equally systematic and equally extensive inquiry, cannot be allowed weight.

4. **Other Investigations as to Cost of Living.**—While this report is concerned principally with variations in the cost of living on the lines indicated in the preceding paragraphs, it will not be out of place to refer briefly to other cognate investigations which have been carried out. These consist, as already indicated, of (i.) Annual Variations in Cost of Living in 100 Towns, and (ii.) Householders' Budget Inquiries.

(i.) *Cost of Living in 100 Towns, 1913.*—The investigation into cost of living in 100 towns was carried out for the month of November, 1913, and will be repeated annually. The results of the November, 1913 investigation were published in Labour Bulletin No. 5, pp. 26 to 33. Prior to 1912 investigations were made concerning the cost of living in the capital towns only, but during 1912 and 1913 these investigations were extended to 30 towns. To test the accuracy with which the results obtained from these inquiries reflect the conditions obtaining throughout the States and Commonwealth, comparisons have been made with the results for the month of November, 1913. Thus in the following table the first line shows the results obtained from the special inquiry, covering in all 100 towns. The second line shows the results obtained from the investigations for the month of November, 1913, for the five towns in each State from which regular monthly returns are received, and the last line gives the results obtained from the November returns from the capital towns only.

Relative Cost of Living:—Comparisons between Results obtained from Special Investigation and from Ordinary Periodic Returns, November, 1913.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	W'ld. Aver
FOOD AND GROCERIES.							
All Towns*	1,029	919	980	1,000	1,239	1,024	1,000
Five Towns in each State	1,035	921	964	1,003	1,234	1,034	1,000
Capital Town only	1,038	930	955	1,013	1,177	1,056	1,000
RENT, 5-ROOMED HOUSES.							
All Towns*	1,156	935	727	1,075	1,012	794	1,000
Five Towns in each State	1,153	932	709	1,053	995	783	1,000
Capital Town only	1,131	942	703	1,041	945	787	1,000
FOOD, GROCERIES AND RENT.							
All Towns*	1,077	925	884	1,028	1,152	937	1,000
Five Towns in each State	1,081	926	865	1,022	1,141	936	1,000
Capital Town only	1,076	935	852	1,024	1,083	946	1,000

* For list of towns included see table on pages 27 to 29, Labour Bulletin, No. 5.

An examination of the above table reveals the fact that there is but little variation in the results obtained from the different sources indicated. It should be noted that the capital towns are included in the other two investigations, and that the five towns are included in the investigation for all towns. In all the States, with the exception of Western Australia, the results obtained approximate closely to each other, and in Western Australia the difference between the three results amounts to only about 6 per cent.

This approximation between the various results indicates that the index-numbers published for the capital towns only, for the years prior to 1912 and for the 30 towns for 1912 and 1913, probably reflect, with a substantial degree of accuracy, the variations in the cost of living, not only in each State separately, but also throughout the Commonwealth as a whole.

(ii.) *Householders' Budget Inquiries.*—The first of these was held in 1910-11, and covered a period of twelve months. The results of that investigation were published in December, 1911.* A second was held during 1913 for the month of November only. The results of this second investigation are given in a special report, entitled "Labour Report, No. 4, Expenditure on Living in the Commonwealth, November, 1913."

5. Cost of Living, General Results of Investigation in each Metropolitan Town, 1901 to 1913.—Index-numbers, computed separately for each group of commodities (and for house-rent) included in the investigation, as well as the weighted average for all groups together, are shewn for the capital town of each State in the tables given hereinafter. A departure has been made from the method of fixing the base index-number adopted in previous Reports and Bulletins. Hitherto each capital town has been treated separately, the average expenditure in 1911 for each such town (and for all the towns combined) being taken as a separate base (= 1000) for each town. The index-numbers given for each town separately were, of course, comparable in the horizontal lines only, the cost in 1911 being made equal in each case to 1000, though it is obvious that the cost was not, in fact, the same in each town. Owing to confusion having arisen in the minds of some persons as to the interpretation of these index-numbers, it has been decided to furnish results in future which are comparable throughout. In the following tables the weighted aggregate expenditure for the whole of the capital towns in 1911 is accordingly taken as base (= 1000), the figures for that year (as well as other years) for the individual towns shewing the relative cost of living as between the respective towns. The result is that the index-numbers given herein are comparable in all respects, that is to say, they shew not only the variations from year to year in each town, but they also furnish comparisons as to the relative cost in the different towns, either in any given year or as between one year and another and one town and another.

* See Report on an "Inquiry into the Cost of Living in Australia, 1910-11," by G. H. Knibbs C.M.G., etc., December, 1911. Owing to the small number of budgets returned, the deductions and tabulations based thereon are necessarily restricted.

Retail Prices in Metropolitan Towns, 1901 to 1913.

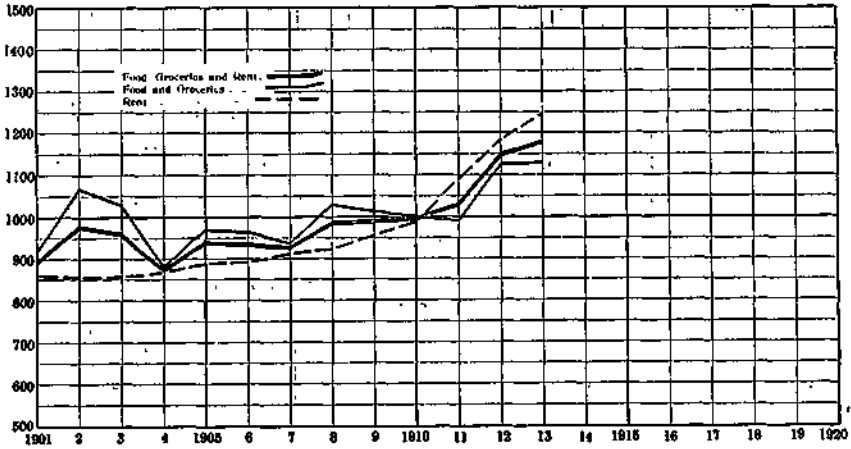
TOWN.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
GROUP I.—GROCERIES.													
Sydney	876	940	982	870	1,022	996	904	1,009	1,015	1,028	1,018	1,151	1,106
Melbourne .. .	897	883	895	824	812	902	817	823	895	939	924	1,061	953
Brisbane .. .	1,011	1,005	942	893	884	998	999	1,045	1,039	1,054	1,087	1,195	1,110
Adelaide .. .	949	953	916	889	870	956	903	944	991	972	958	1,138	1,039
Perth .. .	1,008	1,092	1,113	1,057	1,105	1,080	1,018	1,038	1,033	1,095	1,276	1,186	1,073
Hobart .. .	935	941	960	883	946	988	888	960	1,018	1,011	1,003	1,169	1,061
Weighted Average*	912	936	949	870	979	964	885	975	974	997	1,000	1,124	1,043
GROUP II.—DAIRY PRODUCE.													
Sydney	831	1,085	1,013	804	896	911	932	1,093	1,038	976	971	1,098	1,095
Melbourne .. .	989	1,047	969	907	937	940	967	1,064	999	970	959	1,077	1,019
Brisbane .. .	833	941	925	774	818	823	837	953	906	978	983	1,055	708
Adelaide .. .	975	1,025	937	865	900	906	928	1,068	1,028	1,017	1,103	1,293	1,167
Perth .. .	1,290	1,328	1,336	1,218	1,228	1,216	1,120	1,289	1,251	1,238	1,241	1,320	1,262
Hobart .. .	931	957	953	864	927	926	955	1,015	1,017	982	994	1,102	1,109
Weighted Average*	945	1,068	1,002	871	927	934	955	1,082	1,023	998	1,000	1,115	1,080
GROUP III.—MEAT.													
Sydney	1,025	1,266	1,125	966	966	966	994	1,000	982	977	959	1,107	1,213
Melbourne .. .	1,077	1,207	1,114	1,086	1,037	1,023	1,067	1,043	998	978	929	1,123	1,149
Brisbane .. .	1,026	1,112	1,130	1,018	995	1,038	1,024	1,062	967	936	935	991	965
Adelaide .. .	1,221	1,154	1,140	1,107	1,123	1,109	1,059	1,060	1,081	1,032	1,037	1,130	1,206
Perth .. .	1,378	1,529	1,518	1,466	1,554	1,530	1,511	1,482	1,479	1,535	1,577	1,643	1,607
Hobart .. .	1,225	1,336	1,322	1,275	1,282	1,278	1,279	1,262	1,303	1,276	1,221	1,321	1,400
Weighted Average*	1,101	1,251	1,181	1,072	1,058	1,053	1,074	1,069	1,040	1,024	1,000	1,144	1,198
GROUPS I., II., AND III. COMBINED.—GROCERIES AND FOOD.													
Sydney	917	1,067	1,029	877	972	964	936	1,030	1,012	1,000	989	1,124	1,131
Melbourne .. .	965	1,015	974	916	952	945	925	995	949	960	935	1,082	1,024
Brisbane .. .	965	1,015	987	892	945	959	947	1,023	983	1,000	1,018	1,102	1,042
Adelaide .. .	1,028	1,026	961	940	999	982	951	1,010	1,025	1,001	1,020	1,154	1,119
Perth .. .	1,184	1,274	1,283	1,210	1,258	1,237	1,197	1,226	1,212	1,251	1,346	1,345	1,267
Hobart .. .	1,011	1,050	1,054	981	1,030	1,047	1,010	1,055	1,093	1,073	1,058	1,190	1,164
Weighted Average*	972	1,056	1,019	924	986	980	955	1,031	1,006	1,005	1,000	1,129	1,095
GROUP IV.—HOUSE RENT.													
Sydney	858	854	856	866	887	801	911	922	955	988	1,090	1,183	1,246
Melbourne .. .	733	744	747	764	771	782	804	828	842	916	970	1,016	1,089
Brisbane .. .	488	492	507	508	519	524	575	616	662	700	767	804	863
Adelaide .. .	629	629	629	629	702	761	812	872	940	1,018	1,112	1,160	1,125
Perth .. .	801	798	802	798	730	716	684	678	667	696	810	880	928
Hobart .. .	667	669	673	674	681	686	708	727	749	776	805	829	887
Weighted Average*	751	753	756	766	782	793	816	839	867	919	1,000	1,068	1,118
ALL GROUPS COMBINED.—GROCERIES, FOOD, AND HOUSE RENT.													
Sydney	893	979	958	872	937	934	926	986	989	995	1,081	1,148	1,178
Melbourne .. .	870	903	881	854	878	878	875	926	905	942	950	1,055	1,051
Brisbane .. .	769	800	790	734	770	780	794	856	851	877	915	979	969
Adelaide .. .	864	863	837	812	873	891	864	953	990	1,008	1,058	1,167	1,121
Perth .. .	1,027	1,077	1,085	1,041	1,045	1,023	986	1,001	988	1,023	1,126	1,154	1,128
Hobart .. .	869	893	897	855	886	899	886	920	952	951	954	1,042	1,050
Weighted Average*	880	929	910	858	901	902	897	951	948	970	1,000	1,101	1,104

Note.—As to basis of index-numbers, see remarks above.
 * For all capital towns. It is, of course, obvious that the index-numbers given in the separate parts of the table cannot be compared with each other in order to shew the relative cost of (say) house-rent, groceries, and food, since the weighted average cost for the six towns taken together in 1911 is in each case made equal to 1000, although the cost is of course not the same.

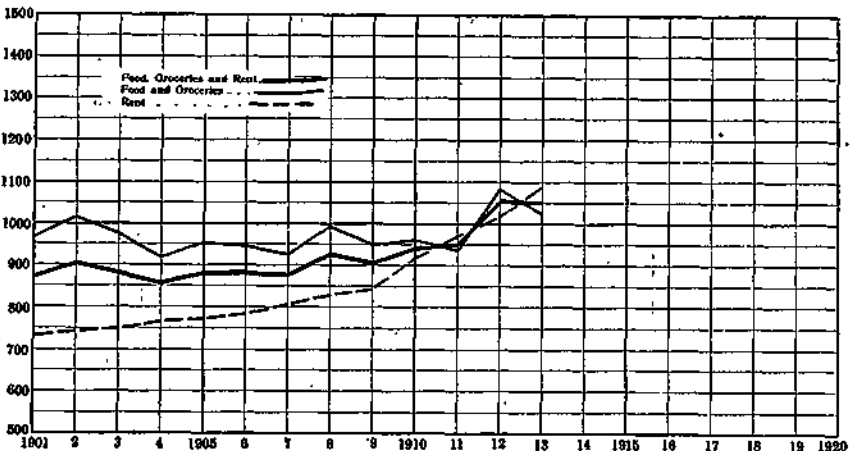
† The index-numbers for the last three groups (groceries and food, house rent, and groceries, food, and house rent combined) are shewn for each capital town, together with the weighted average for all six towns combined in the graphs on pages 24, 25, and 26. The following

RETAIL PRICES, HOUSE RENT, AND COST OF LIVING.

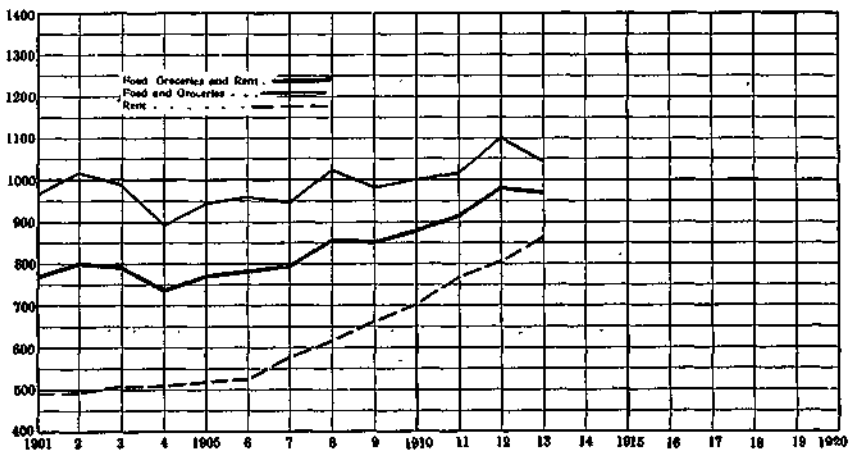
GRAPHS SHEWING COST OF LIVING, METROPOLITAN TOWNS, 1901 to 1913.
SYDNEY.



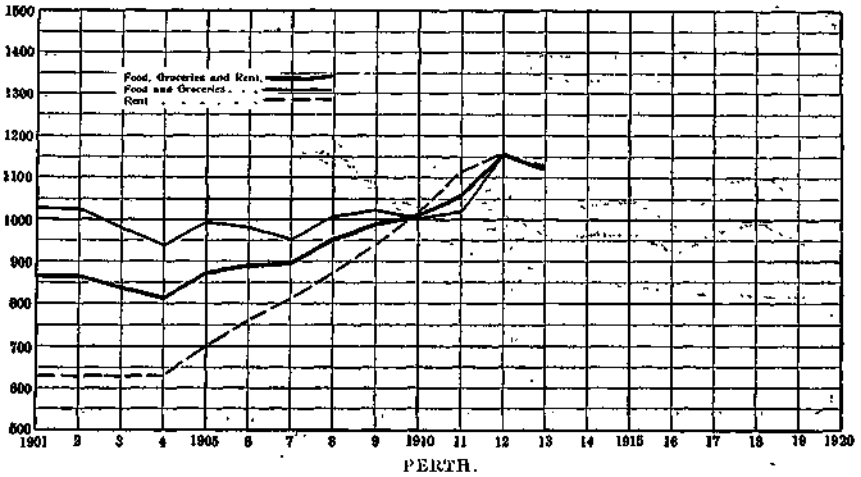
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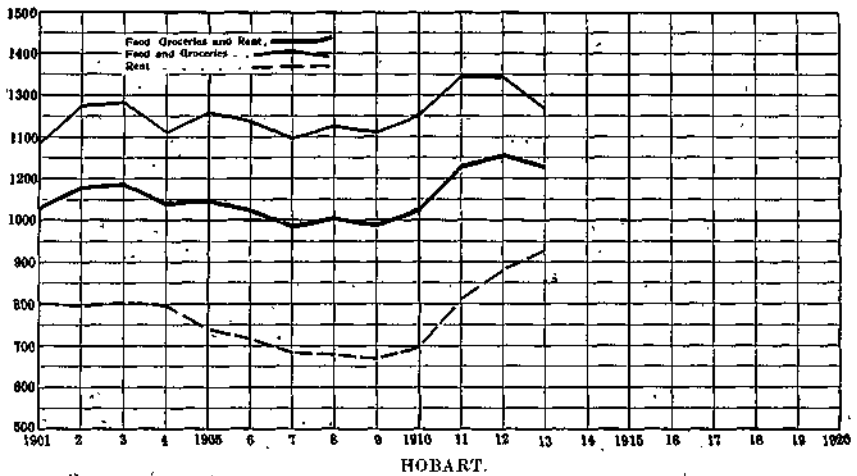
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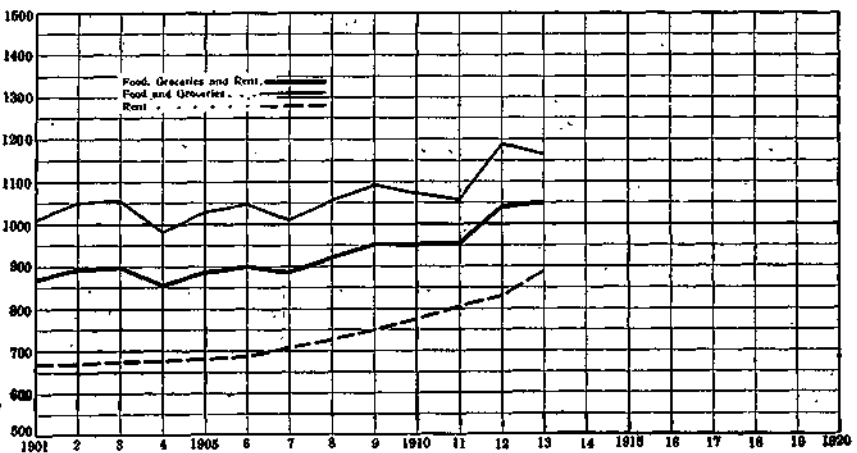
GRAPHS SHEWING COST OF LIVING, METROPOLITAN TOWNS, 1901 to 1913.
ADELAIDE



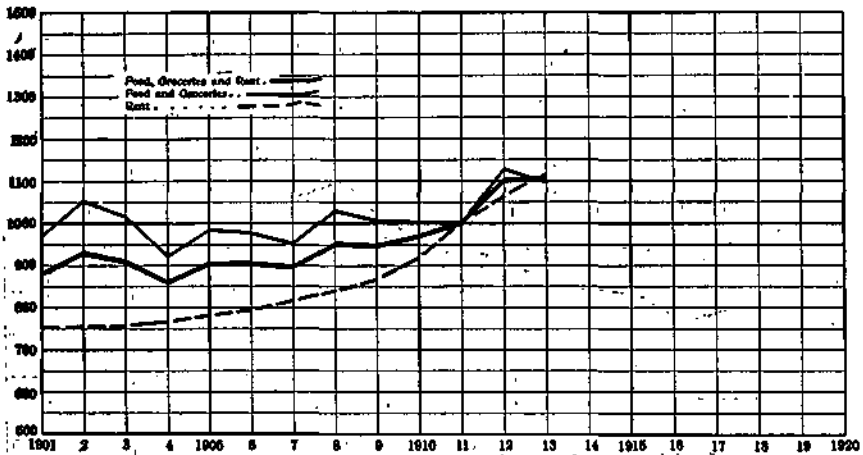
PERTH.



HOBART.



COST OF LIVING.—WEIGHTED AVERAGE SIX CAPITAL TOWNS, 1901 to 1913.



paragraphs briefly indicate the general nature of the variations in each group.

(i.) *Groceries* (18 commodities).—It may be seen that in each of the towns, prices were lower in 1913 than in 1912, but that they were still considerably higher than in 1901, and that prices for this group were lowest in 1904. The average increase for all the towns taken together in the cost of commodities included in this group in 1913, compared with 1901, was 14.4 per cent., and compared with 1904, 19.9 per cent.

(ii.) *Dairy Produce* (7 commodities).—Prices of commodities included in this group were lower in 1913 than in 1912 in each of the capital towns except Hobart. The weighted average cost for all towns was greater in 1913, compared with 1901 by 14.3 per cent., and compared with 1904 (when they reached their lowest point) by 24.0 per cent.

(iii.) *Meat* (21 joints or cuts of butchers' meat).—The index-numbers for this group were higher in 1913 than in 1912 in Sydney, Melbourne, Adelaide, and Hobart, but lower in Brisbane and Perth. It may be seen that the level of prices in Perth has, throughout the period under review, been higher than in any other capital town, and was in 1913 nearly 40 per cent. higher than in Melbourne, and 33 per cent. higher than in Sydney. Since 1909, prices have been lower in Brisbane than in any other capital town. The average increase for all the towns in the cost of the items included in this group in 1913 was 8.8 per cent., compared with 1901, and 13.2 per cent., compared with 1905.

(iv.) *Groceries and Food* (Groups I., II., and III. combined).—The index-numbers for this group show the aggregate effect on the cost of living, of movements in prices of commodities apart from variations in house rent. It may be seen that with the exception of Sydney, index-numbers reached their maximum in 1912, and that they were lower in 1904 than in any other year in all the towns except Perth, where the lowest point during the period under review was reached in 1901. During the whole of the period under review prices have

been on a higher level, in Perth than in any other capital town. Taking the weighted average result for all towns, prices were 12.9 per cent. higher in 1913 than in 1901, and 18.7 per cent. higher than in 1904.

(v.) *House Rent*.—It may be seen that except in Adelaide, where rents remained stationary from 1901 to 1904, and declined in 1913, and in Perth, where they decreased from 1903 to 1907, and again in 1908-9, there has been a uniform increase in each of the metropolitan towns during the whole of the period under review. The weighted average index-number for the six capital towns was no less than 48.9 per cent. higher in 1913 than in 1901. The greatest increase has taken place in Adelaide, where in spite of a fairly substantial decrease in 1913, the index-number for that year is 78.9 per cent. above that for 1901. The increases in the remaining towns during the same period were as follows:—Brisbane, 76.8 per cent.; Melbourne 48.6 per cent.; Sydney, 45.2 per cent.; Hobart, 33.0 per cent.; and Perth, 15.9 per cent.

(vi.) *Cost of Living (food, groceries, and house rent combined)*.—It may be seen that the weighted average index-number for 1913 shews little variation from that of 1912. It is still, however, considerably higher than for any year prior to 1912. Reference to the graphs on page 26 will shew that the cost-of-living index-number was lower in 1904 than in any other year during the period covered by the investigations. The index-numbers rose in 1905 and 1906, and fell in 1907. There was a substantial rise in 1908, followed by a slight decline in 1909. There were further rises in 1910 and 1911, and again in 1912, when the increase was very considerable (10.1 per cent.). It may be seen that the graphs for each capital town (except to some extent that for Perth) follow fairly closely the trend of the graph for the weighted average of all towns. The cost-of-living index-number for 1913 was highest in Sydney, and lowest in Brisbane. The index-numbers for Melbourne and Hobart are practically the same, while there is less than 1 per cent. difference between those for Adelaide and Perth. With regard to the two latter towns, it may be pointed out, that whereas prices of food and groceries are on a considerably higher level in Perth than in Adelaide, cost of housing accommodation is considerably lower in the former town. The index-number for Sydney is 6.7 per cent., for Adelaide 1.5 per cent., and for Perth 2.2 per cent. above the weighted average, while for Melbourne the index-number is 4.8 per cent., for Brisbane 12.2 per cent., and for Hobart 4.9 per cent. below the weighted average for the six capital towns taken together.

6. *Cost of Living in Various Towns, 1912 and 1913*.—Commencing with the year 1912, particulars have been collected as to the variation in prices and cost of living in thirty of the more important towns throughout the Commonwealth. In order to make the index-numbers comparable in all respects, the weighted average expenditure for all towns for the whole of the year 1912 has been taken as base, and made equal to 1000. The index-numbers given in the horizontal lines of the subjoined table shew the variations in cost of living for the periods indicated, while those in the vertical columns shew the variations in cost of living as between the different towns. Thus it may be seen that, taking the average for the whole year 1913 (last column), cost of

living was greatest in Kalgoorlie, and least in Beaconsfield. Or taking the first horizontal line, it will be seen that the cost-of-living index-number for Sydney rose from 1063 in the year 1912, to 1091 in 1913, and that it was highest (1120) in the third quarter of 1912, and lowest (989) in the first quarter of the same year.

Cost-of-Living Index-Numbers (Groceries, Food and House Rent), for each of Thirty Towns, 1912 and 1913, with weighted Average for all Towns in 1912 as base (= 1000).

Particulars.	1912.					1913.				
	1st Q'ter. (Jan. to Mar.)	2nd Q'ter. (April to June.)	3rd Q'ter. (July to Sept.)	4th Q'ter. (Oct. to Dec.)	Whole Year.	1st Q'ter. (Jan. to Mar.)	2nd Q'ter. (April to June.)	3rd Q'ter. (July to Sept.)	4th Q'ter. (Oct. to Dec.)	Whole Year.
NEW SOUTH WALES—										
Sydney	989	1,040	1,120	1,105	1,083	1,084	1,104	1,089	1,087	1,091
Newcastle	834	854	923	926	884	907	927	914	904	913
Broken Hill	946	971	1,021	1,055	1,000	1,012	1,046	1,023	1,029	1,027
Goulburn	916	936	968	1,040	965	1,006	1,037	994	989	1,006
Bathurst	793	827	888	893	850	865	885	883	885	880
*Weighted Average ..	971	1,017	1,094	1,084	1,042	1,063	1,083	1,068	1,065	1,070
VICTORIA—										
Melbourne	914	964	1,023	1,005	977	971	980	975	965	973
Ballarat	801	834	869	882	846	813	812	793	783	801
Bendigo	790	854	891	896	857	855	851	823	803	833
Geelong	867	908	955	959	922	919	911	891	877	899
Warrnambool	824	860	888	891	865	870	877	861	851	865
*Weighted Average ..	895	944	999	986	956	949	956	947	937	947
QUEENSLAND—										
Brisbane	902	903	911	911	907	885	905	894	903	897
Toowoomba	924	915	893	894	904	862	861	855	853	865
Rockhampton	898	889	884	895	891	865	875	863	876	870
Charters Towers	939	934	926	935	933	896	897	876	875	886
Warwick	922	921	979	894	929	878	895	849	814	859
*Weighted Average ..	908	906	909	909	908	880	897	884	891	888
SOUTH AUSTRALIA—										
Adelaide	1,043	1,072	1,096	1,077	1,071	1,049	1,061	1,034	1,011	1,038
Kadina, Moonta, Wal- aroo	829	840	866	873	849	840	868	844	837	845
Port Pirie	910	931	934	942	930	918	939	938	930	931
Mt. Gambier	776	798	827	837	810	800	823	822	804	814
Petersburg	920	925	955	963	938	926	950	965	949	948
*Weighted Average ..	1,015	1,042	1,065	1,050	1,042	1,022	1,035	1,011	990	1,014
WESTERN AUSTRALIA—										
Perth	1,033	1,066	1,087	1,058	1,068	1,043	1,060	1,035	1,030	1,044
Kalgoorlie and Boulder	1,234	1,271	1,228	1,200	1,235	1,189	1,178	1,179	1,156	1,176
Mid. Junct. & Guildford	989	1,061	1,063	1,046	1,040	1,017	1,038	1,018	1,004	1,019
Bunbury	1,001	1,043	1,037	1,006	1,022	999	1,010	1,006	996	1,002
Geraldton	1,114	1,172	1,190	1,171	1,162	1,159	1,179	1,167	1,158	1,166
*Weighted Average ..	1,074	1,131	1,116	1,090	1,103	1,073	1,085	1,066	1,064	1,072
TASMANIA—										
Hobart	905	935	993	1,025	965	975	985	974	964	975
Launceston	869	918	947	962	925	892	908	907	888	899
Zeehan	840	867	896	923	861	862	877	866	832	859
Beaconsfield	795	748	783	828	766	745	758	751	724	745
Queenstown	864	907	942	946	915	910	937	913	903	916
*Weighted Average ..	880	917	962	987	937	930	944	935	920	932
†W'ed Aver. for C'with	947	988	1,037	1,027	1,000	998	1,012	998	992	1,000

* Average for 5 towns.

† Average for 30 towns.

‡ Basis of table.

The weighted average index-number for the whole of the thirty towns is the same for 1913 as for 1912. The index-numbers for the individual quarters, however, are widely different. Thus it may be seen that cost of living in 1912 was considerably higher for the last two quarters than for the first two quarters of the year, whereas in 1913 the opposite was the case. Again taking the weighted result for the thirty towns it will be seen that the changes were as follows:—

First quarter of 1913 compared with corresponding quarter of 1912, 5.4 per cent. *increase*.

Second quarter of 1913 compared with corresponding quarter of 1912, 2.4 per cent. *increase*.

Third quarter of 1913 compared with corresponding quarter of 1912, 3.8 per cent. *decrease*.

Fourth quarter of 1913 compared with corresponding quarter of 1912, 3.5 per cent. *decrease*.

The weighted average index-numbers for the five towns in each State show that cost of living in 1913 was greater than in 1912 in New South Wales (2.7 per cent.), but was less in the other States. The decline was greatest in Western Australia (2.8 per cent.), followed in the order named by South Australia (2.6 per cent.), Queensland (2.2 per cent.), Victoria (0.9 per cent.), and Tasmania (0.5 per cent.). As regards individual towns, however, the *increase* in cost of living in 1913, compared with 1912, was greatest in Goulburn, while the town shewing the greatest *decrease* was Warwick (7.6 per cent). The aggregate effect of the increases and decreases is that the weighted average index-number for all thirty towns is exactly the same in 1913 as in 1912. The fortuitous identity of the two results is, of course, remarkable.

The population weights used in the computation of the weighted average cost-of-living index-numbers for the States and Commonwealth in the table on page 28 are as follows:—

Population Weights used in Computation of Index-Numbers shewing Cost of Living in different Towns, with weighted average for all Towns as Base (= 1000).

Town.	Weight.	Town.	Weight.	Town.	Weight.	Town.	Weight.	Town.	Weight.	Town.	Weight.
Sydney	633	Melbourne	500	Brisbane	140	Adelaide	100	Perth, etc.	105	Hobart	42
Newcastle	62	Ballarat	53	T'woomba	20	Kadina, etc.	12	Kalg'lieetc	31	Launceston	25
Broken Hill	31	Bendigo	44	R'k'linton	21	Pt. Pirie	11	Mid J'nca.	7	Q'ntown	5
Goulburn	13	Geelong	34	Chtra Twrs	17	Mt. Gamb'r	7	Bunbury	4	Zeehan	4
Bathurst	9	W'nambo'l	9	Warwick	6	Petersburg	3	Geraldton	4	Beaconsfield	3

7. **Relative Cost of Living in Different Towns, 1913.**—The figures given in the table on page 31 shew the relative cost of living in the thirty towns, for which particulars are regularly collected. The index-numbers are comparable in all respects. The expenditure on groceries and food, as well as the average house rent paid by the people of the thirty towns considered as a whole has been taken as base (= 1000). The first column gives the relative expenditure on food and groceries. The second, third, fourth, and fifth columns give similar information with regard to houses of four, five, and six rooms, and for all houses respectively. The weighted average for all houses is obtained separately for each of the thirty towns by "weighting" the rent paid for each class of house by the number of houses in each respective class in each town. If houses of only one particular size are included, different results may be obtained. This is evident when it is remembered that the distribution of houses, according to number of rooms, is substantially different in some of the towns; that is to say, there are a greater number of large, and therefore of relatively more expensive houses, in some towns than in others, and *vice versa*, and consequently the weighted average rents in the former class of towns refer to a larger size of house than in the latter class. Separate results are accordingly given for the several classes of houses specified in the table.

The figures in the last four columns furnish results for expenditure on groceries and food, combined with expenditure on rent, for each of the three classes of houses indicated, and also for the weighted average for all houses.

(i.) *Groceries and Food.*—As regards groceries and food, it may be seen that the weighted average of the five towns is above the weighted average for all towns, in New South Wales, South Australia, Western Australia, and Tasmania, and below in Victoria and Queensland. The most expensive towns are in Western Australia, Kalgoorlie being 45.3 per cent., and Geraldton 25.3 per cent., above the weighted average for all towns. In the other States, Broken Hill is the most expensive town, followed in the order named by Queenstown, Zeehan, Charters Towers, Beaconsfield, Hobart, and Port Pirie.

(ii.) *House Rents.*—It will be seen, that taking the average rent for all houses (fourth column) Sydney is the most expensive town, followed in the order named by Adelaide, Melbourne, Geraldton, and Goulburn. Rents were lowest in Beaconsfield and Zeehan.

(iii.) *Cost of Living.*—The last column shews the relative cost of living, according to average prices of commodities and housing accommodation in each town during 1913. It may be seen that Kalgoorlie and Geraldton, in Western Australia, were the most expensive towns, the former being 17.6 per cent., and the latter 16.6 per cent. above the weighted average for all towns. The next towns in order of relative cost of living were Sydney, Perth, Adelaide, and Broken Hill.

Cost of living was least in Beaconsfield, followed in the order named by Ballarat, Mt. Gambier, Bendigo, Moonta, Warwick, and Zeehan.

Cost of Living, 1913.—Index-numbers, shewing Relative Cost in each of Thirty Towns (including 4, 5, and 6 roomed Houses, and all Houses), compared with Weighted Average Expenditure on Groceries, Food and Rent for all Towns.

TOWN.	Groceries and Food.	HOUSE RENT.				GROCERIES, FOOD AND RENT, INCLUDING HOUSES HAVING—			
		Four roomed Houses only.	Five roomed Houses only.	Six roomed Houses only.	All Houses Weighted Average.	Four Rooms.	Five Rooms.	Six Rooms.	All Houses Weighted Average.
NEW SOUTH WALES—									
Sydney	617	348	450	529	474	965	1,067	1,146	1,091
Newcastle	615	227	312	377	298	842	927	992	913
Broken Hill	738	275	330	416	295	1,006	1,063	1,149	1,028
Goulburn	628	201	327	429	379	829	955	1,057	1,007
Bathurst	575	213	281	366	305	793	856	941	880
Weighted Average	621	330	430	509	449	953	1,051	1,130	1,070
VICTORIA—									
Melbourne	558	300	373	466	415	853	931	1,024	973
Ballarat	561	133	191	261	240	694	752	822	801
Bendigo	577	175	228	298	256	752	805	875	833
Geelong	572	201	281	376	323	773	853	948	900
Warrnambool	569	213	271	328	296	782	840	897	855
Weighted Average	560	275	345	435	387	835	905	995	947
QUEENSLAND—									
Brisbane	569	209	276	360	323	773	845	929	897
Toowoomba	570	180	236	274	286	750	806	844	856
Rockhampton	582	193	233	305	288	775	815	887	870
Charters Towers	661	174	238	281	225	835	899	942	886
Warwick	585	151	233	297	274	736	818	882	859
Weighted Average	578	199	264	338	310	779	842	916	868
SOUTH AUSTRALIA—									
Adelaide	610	337	435	523	429	947	1,045	1,133	1,039
Noonta, etc.	622	158	212	273	225	780	834	895	845
Port Pirie	633	263	305	361	299	806	933	994	932
Mt. Gambier	557	184	230	304	253	741	787	861	815
Petersburg	604	284	357	403	344	888	961	1,007	943
Weighted Average	610	318	409	493	405	923	1,019	1,103	1,015
WESTERN AUSTRALIA									
Perth	691	292	374	449	354	983	1,065	1,140	1,045
Kalgoorlie, etc.	877	302	360	470	299	1,179	1,237	1,347	1,176
Mid. Junction	710	239	333	415	310	949	1,042	1,125	1,020
Bunbury	737	260	330	391	265	997	1,067	1,128	1,002
Geraldton	756	409	503	571	410	1,165	1,259	1,327	1,166
Weighted Average	733	294	371	454	340	1,027	1,104	1,187	1,073
TASMANIA.									
Hobart	635	264	312	365	340	809	947	1,000	975
Launceston	585	221	295	362	314	808	880	947	899
Zeehan	691	163	235	301	168	854	926	992	859
Beaconsfield	644	86	110	123	101	790	754	772	745
Queenstown	704	208	247	334	212	912	961	1,038	816
Weighted Average	627	235	291	350	306	862	918	977	893
Commonwealth									
Weighted Average	603	292	374	456	397	895	977	1,059	1,000

Some few words as to the proper interpretation of the above table may not be out of place. The total cost of living in each town for food and groceries, as well as the average rental paid, is multiplied by a number representing the population of the town, and a weighted average expenditure for all towns is thus computed. Taking this average expenditure as the base (= 1000), the relative expenditure in each town for (a) food and groceries, (b) house rents, and (c) food, groceries, and house rent combined, is shewn. Thus in each horizontal line the sum of the index-number for food and groceries and that for rent of houses of each specified size is equal to the index-number for food, groceries, and house rent combined, taking the corresponding house-rent group. Thus the table is comparable in all respects, and in addition shews the proportionate cost of food and groceries and of rent. For example, taking the last line in the table, it may be seen that taking the weighted average expenditure for all the towns on food, groceries, and average rents to be £1000, the expenditure on food and groceries alone is £603 (1st column), and the average rental £397 (5th column), the sum of the two latter amounts being £1000. Again, if it be desired to ascertain the relative expenditure for food and groceries and rent of four-roomed houses it will be found the figures are £603 and £292, which, together amount to £895 (6th column). In addition to shewing the relative cost of food and groceries and house rent (for different classes of houses) in each town individually, the table also furnishes comparisons as to the relative cost of these items as between the several towns. Thus taking food and groceries only (1st column) it may be seen that commodities which would cost £617 in Sydney can be purchased for £558 in Melbourne, or £610 in Adelaide. Again, taking the combined expenditure on food, groceries, and house rent for houses of five rooms (7th column), it will be seen that an expenditure of £931 in Melbourne is equivalent to an expenditure of £1067 in Sydney, £1045 in Adelaide, £1237 in Kalgoorlie, or £1259 in Geraldton.

The index-numbers are reversible, and may be used for comparisons as to cost of living as between any of the towns included. Thus if it be ascertained that the average rental of five-roomed houses in Melbourne is, say, 15s. 3d. weekly, and the average rental of the same class of house in Sydney is required, all that is necessary is to multiply the rental in Melbourne by the index-number for five-roomed houses in Sydney and divide by the index-number for Melbourne (3rd column), $15s. 3d. \times \frac{459}{179} = 18s. 6d.$, which will be found to be the average rental of five-roomed houses in Sydney (see Appendix II.).

8. Variation in Purchasing Power of Money, 1901 to 1914 (3rd quarter).— The tables in paragraph 5 give the relative cost of living in the six capital towns from 1901 to 1913 in the form of index-numbers. In the following tables similar information is given as regards variations in cost of living (groceries, food, and house-rent), the base being taken as 20s. for the weighted average in the six capital towns in 1911. The figures therefore shew the sums which would have to be paid in each town and in each year in order to purchase such relative

quantities (indicated by the mass units) of the several commodities, and to pay such sums for house-rent as would in the aggregate cost £1, according to the weighted average prices and rents in the six capital towns in 1911.

Purchasing-Power of Money.—Amounts necessary on the Average in each Year from 1901 to 1914 (3rd quarter) to purchase in each Capital Town what would have cost on the Average \$1 in 1911 in the Australian Capitals regarded as a whole.

Year.	Sydney.	Melb'rne.	Brisbane.	Adelaide.	Perth.	Hobart.	Weighted Average of 6 Capital Towns	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	
1901	17 10	17 5	15 5	17 3	20 6	17 5	17 7	
1902	19 7	18 1	16 0	17 3	21 7	17 10	18 7	
1903	19 2	17 7	15 9	16 9	21 8	17 11	18 2	
1904	17 5	17 1	14 8	16 3	20 10	17 1	17 2	
1905	18 9	17 7	15 5	17 6	20 11	17 9	18 0	
1906	18 8	17 7	15 7	17 10	20 5	18 0	18 0	
1907	18 6	17 6	15 11	17 11	19 9	17 9	17 11	
1908	19 9	18 6	17 1	19 1	20 0	18 5	19 0	
1909	19 9	18 1	17 0	19 10	19 9	19 0	19 0	
1910	19 11	18 10	17 6	20 2	20 6	19 0	19 5	
1911	20 7	19 0	18 4	21 2	22 6	19 1	20 0*	
1912	22 11	21 1	19 7	23 2	23 1	20 10	22 0	
1913	23 7	21 0	19 5	22 5	22 6	21 1	22 1	
1912	1st Quarter	21 4	19 9	19 6	22 6	22 4	19 7	20 9
	2nd "	22 5	20 10	19 6	23 2	23 8	20 2	21 9
	3rd "	24 1	22 1	19 8	23 8	23 6	21 5	22 11
	4th "	23 10	21 8	19 8	23 3	22 10	22 2	22 7
1913	1st "	23 5	21 0	19 1	22 8	22 6	21 1	22 0
	2nd "	23 10	21 2	19 7	22 11	22 11	21 3	22 4
	3rd "	23 6	21 1	19 4	22 4	22 4	21 1	22 1
1914	4th "	23 6	20 10	19 6	21 10	22 5	20 10	21 11
	1st Quarter	24 0	21 4	19 7	22 4	22 3	21 1	22 4
	2nd "	24 3	22 7	19 9	23 6	22 10	22 0	23 1
3rd "	24 2	22 5	20 1	23 2	23 3	21 10	23 0	

* Basis of Table.

(i) *Groceries and Food only.*—The following table has been computed in the same manner as that indicated above, but relates to groceries and food (46 items) only. The average expenditure for the six capital towns in 1911 has again been taken as the basis of the table (= 20s.), and the figures are, of course, comparable throughout.

Purchasing-Power of Money.—Groceries and Food only.—Amount necessary on the Average in each Year from 1901 to 1914 (3rd Quarter) to purchase in each Capital Town what would have cost on the Average £1 in 1911 in the Australian Capitals regarded as a whole.

Year.	Sydney.	Melb'ne.	Brisbane.	Adelaide.	Perth.	Hobart.	Weighted Average of 6 Capital Towns.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1901 ...	18 4	19 4	19 4	20 7	23 8	20 3	19 4
1902 ...	21 4	20 4	20 4	20 6	25 6	21 0	21 1
1903 ...	20 7	19 6	19 9	19 8	25 8	21 1	20 4
1904 ...	17 6	18 4	17 10	18 10	24 3	19 8	18 5
1905 ...	19 5	19 1	18 11	19 10	25 2	20 7	19 8
1906 ...	19 3	18 11	19 2	19 8	24 9	20 11	19 7
1907 ...	18 9	18 6	18 11	19 0	23 11	20 2	19 1
1908 ...	20 7	19 11	20 6	20 2	24 6	21 1	20 7
1909 ...	20 3	19 0	19 8	20 6	24 3	21 10	20 1
1910 ...	20 0	19 2	20 0	20 0	25 0	21 6	20 1
1911 ...	19 9	18 8	20 4	20 5	26 11	21 2	20 0*
1912 ...	22 6	21 8	22 0	23 1	26 11	23 10	22 6
1913 ...	22 8	20 6	20 10	22 5	25 4	23 3	21 11
1913 (1st quarter)	20 9	19 9	21 11	22 0	26 0	21 10	21 0
1912 (2nd ")	21 10	21 5	21 11	22 11	28 2	22 11	22 3
1912 (3rd ")	23 11	23 2	22 1	23 10	27 4	24 8	23 9
1912 (4th ")	23 6	22 3	22 3	23 6	26 1	25 9	23 2
1913 (1st ")	22 9	20 9	20 9	22 5	25 6	23 2	22 0
1913 (2nd ")	23 2	20 10	21 2	22 11	26 0	23 9	22 4
1913 (3rd ")	22 7	20 5	20 10	22 4	25 0	23 5	21 10
1913 (4th ")	22 1	20 0	20 8	21 10	24 11	22 9	21 5
1914 (1st ")	23 0	20 7	20 11	22 11	24 11	23 3	22 1
1914 (2nd ")	23 3	22 4	21 2	25 0	25 11	24 7	23 2
1914 (3rd ")	23 1	22 0	21 8	24 7	26 9	24 3	23 0

* Basis of Table.

(ii) *House Rent only.*—The following table gives similar particulars for house rent only, the average for the six towns in 1911 being again taken as the basis of the table (= 20s.) :—

Purchasing-Power of Money.—House Rent.—Amount payable on the Average in each Year from 1901 to 1914 (3rd Quarter) for House Rent in each Capital Town, compared with a Rent of £1 in 1911 in the Australian Capitals regarded as a whole.

Year.	Sydney.	Melb'ne.	Brisbane.	Adelaide.	Perth.	Hobart.	Weighted Average of 6 Capital Towns.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1901 ...	17 3	14 8	9 9	12 7	16 0	13 4	15 1
1902 ...	17 8	14 11	9 10	12 7	15 11	13 5	15 2
1903 ...	17 4	14 11	10 1	12 7	16 0	13 6	15 3
1904 ...	17 5	15 3	10 2	12 7	16 0	13 6	15 4
1905 ...	17 10	15 5	10 5	14 0	14 9	13 7	15 8
1906 ...	17 11	15 8	10 6	15 3	14 4	13 9	15 11
1907 ...	18 4	16 1	11 6	16 3	13 8	14 2	16 4
1908 ...	18 7	16 7	12 4	17 5	13 7	14 7	16 10
1909 ...	19 2	16 10	13 3	18 10	13 4	15 0	17 5
1910 ...	19 10	18 4	14 0	20 4	13 11	15 6	18 5
1911 ...	21 10	19 5	15 4	22 3	16 3	16 1	20 0*
1912 ...	23 8	20 4	16 1	23 2	17 7	16 7	21 3
1913 ...	24 11	21 10	17 3	22 6	18 7	17 10	22 4
1913 (1st quarter)	22 4	19 8	16 0	23 3	17 0	16 3	20 6
1912 (2nd ")	23 4	20 0	16 1	23 5	17 2	16 4	21 1
1912 (3rd ")	24 7	20 7	16 2	23 5	18 0	16 10	21 10
1912 (4th ")	24 4	20 11	16 0	22 11	18 3	16 11	21 7
1913 (1st ")	24 5	21 4	16 10	22 11	18 3	18 0	22 0
1913 (2nd ")	24 10	21 9	17 2	22 11	18 6	17 9	22 4
1913 (3rd ")	24 11	22 0	17 3	22 3	18 7	17 8	22 5
1913 (4th ")	25 6	22 1	17 10	21 10	18 11	18 0	22 8
1914 (1st ")	25 6	22 5	17 8	21 6	18 5	18 1	22 8
1914 (2nd ")	25 9	22 10	17 10	21 5	18 5	18 3	23 0
1914 (3rd ")	25 8	22 11	17 10	21 1	18 4	18 5	22 11

* Basis of Table.

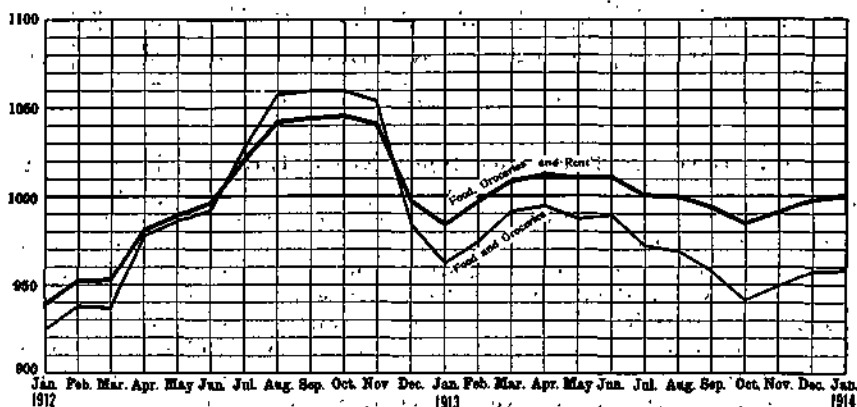
9. **Monthly and Seasonal Fluctuations in Cost of Living, 1912 and 1913.**—Special investigations have been made in regard to monthly and seasonal fluctuations in price during 1912 and 1913. The weighted average results for all the thirty towns are shewn in the following tables, index-numbers for each month being computed with the average prices for the whole year 1912 as base (= 1000). The seasonal fluctuations are practically confined to prices of food and groceries, the quarterly returns of house rents shewing generally an upward tendency during both years. Index-numbers for groceries and food alone, and also combined with house rent, are shewn in the table. It will be seen that the inclusion of house rent (which has, broadly speaking, uniformly increased, and not fluctuated) naturally has a steadying effect on the range of the total fluctuations in cost of living.

Monthly Fluctuations in Prices of Groceries and Food and Cost of Living, Weighted Average Results for Thirty Towns, 1912 and 1913.

Particulars.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Whole Year.	Jan., 1914.
1912.														
Groceries and Food	925	938	937	978	986	992	1,028	1,058	1,060	1,060	1,054	984	1,000	—
Groceries, Food, and House Rent	939	952	953	981	989	996	1,021	1,042	1,044	1,045	1,040	997	1,000	—
1913.														
Groceries, and Food	962	974	991	994	987	989	972	969	956	941	949	957	970	958
Groceries, Food and House Rent	984	997	1,009	1,012	1,010	1,011	1,001	1,000	994	985	991	998	1,000	1,000

The significance of these figures may be more readily appreciated by reference to the following graph:—

SEASONAL FLUCTUATIONS IN COST OF LIVING, 1912 AND 1913.



10. **Increase in Cost of Living 1913, and Previous Years.**—The following table has been prepared in order to shew for each capital town (i) the total increase (or decrease) in cost of living in 1913, compared with each preceding year since 1901, and (ii.) amount of the percentage increase (or decrease) due to variations (a) in prices of food

and groceries, and (b) in house rent. The sum of the percentages for any year and town shewn in the last two parts of the table must, of course, equal the corresponding total percentage in the first part of the table. Thus the total percentage of increase in cost of living in Sydney for 1913, compared with 1904 is 35.11 per cent., of which 17.19 per cent. is due to increased cost of food and groceries, and 17.92 per cent. to increase in house rents. In any case where there has been a decrease (i.e., where cost of living was less in 1913 than in preceding years) the fact is indicated by a negative sign.

Percentage of Increase or Decrease in Cost of Living in 1913, compared with Previous Years 1901 to 1912.

LOCALITY.	PERCENTAGE OF TOTAL INCREASE IN 1913 COMPARED WITH—											
	1901.	1902.*	1903.*	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.*	1912.*
Sydney ..	31.99	20.32	23.04	35.11	25.75	26.18	27.29	19.56	19.10	18.45	14.32	2.63
Melbourne ..	20.83	16.30	19.32	23.06	19.73	19.70	20.02	13.42	16.10	11.56	10.65	— 0.87
Brisbane ..	25.89	21.03	22.66	31.90	25.86	24.12	21.98	13.14	13.85	10.46	5.88	— 1.10
Adelaide ..	29.80	29.94	34.04	38.08	28.48	25.85	25.44	17.69	13.28	11.29	6.95	— 3.03
Perth ..	9.86	4.71	3.94	8.34	7.93	10.27	14.37	12.72	14.15	10.25	0.19	— 2.23
Hobart ..	20.82	17.57	17.04	22.83	18.53	18.89	18.55	14.12	10.36	10.44	10.12	— 0.83
Average ..	25.61	18.83	21.34	28.72	22.56	22.46	23.14	16.22	16.54	13.97	10.42	0.34

PERCENTAGE DUE TO COST OF FOOD AND GROCERIES.

Sydney ..	14.14	3.89	6.31	17.19	10.02	10.55	12.44	6.05	7.08	7.78	8.11	— 0.36
Melbourne ..	3.98	0.57	3.36	7.40	4.81	5.30	6.63	1.83	4.87	4.00	5.48	— 3.25
Brisbane ..	5.90	1.90	4.13	12.03	7.49	6.28	7.09	1.30	4.13	2.82	1.58	— 3.56
Adelaide ..	6.18	6.30	9.66	12.97	8.48	9.04	11.02	6.75	5.57	6.91	5.52	— 1.80
Perth ..	4.75	— 0.36	— 0.86	3.20	0.50	1.71	4.17	2.44	3.28	0.90	— 4.12	— 3.95
Hobart ..	10.40	7.52	7.23	12.59	8.93	7.67	10.24	6.96	4.38	5.62	6.55	— 1.48
Average ..	8.42	2.67	5.00	11.83	7.29	7.62	9.31	4.13	5.64	5.54	5.56	— 1.70

PERCENTAGE DUE TO INCREASE IN HOUSE RENTS.

Sydney ..	17.85	16.43	16.73	17.92	15.73	15.61	14.85	13.51	12.11	10.67	6.21	2.27
Melbourne ..	16.85	15.73	15.96	15.66	14.92	14.40	13.89	11.58	11.23	7.56	5.17	2.88
Brisbane ..	19.99	19.04	18.53	19.87	18.37	17.84	14.89	11.84	9.72	7.64	4.30	2.46
Adelaide ..	23.62	23.64	24.38	25.11	19.95	16.81	14.42	10.94	7.71	4.38	0.53	— 1.23
Perth ..	5.11	5.07	4.80	5.14	7.43	8.55	10.20	10.28	10.87	9.35	4.31	1.72
Hobart ..	10.41	10.05	9.82	10.24	9.60	9.22	8.31	7.10	5.98	4.82	3.57	2.31
Average ..	17.19	16.16	16.34	16.89	15.36	14.84	13.83	12.09	10.90	8.43	4.86	2.04

* The negative sign indicates a decrease.

11. **Tables of Prices and House Rents, 1913.**—While the summarised results of price-movements are published quarterly the actual data from which such results are obtained are published only annually. In Appendixes to Report No. 1, particulars were given of prices and house rents in the metropolitan towns in each year from 1901 to 1911, and in Appendixes to Report No. 2, particulars were given of average prices and house rents in 1912 for each of the thirty towns from which returns are collected. In Appendix I. hereof particulars are given of average prices in 1913 for each of the thirty towns, and in Appendix II. similar information is given in regard to house rents.

Owing to the fact that five house agents erroneously excluded kitchens as rooms in classifying house rents according to number of rooms, certain amendments are necessary in the table published in Appendix III. in Report No. 2. The corrected figures are given in Appendix II. hereof.