

5 JULY 1990

CORRIGENDUM

1988/89 HOUSEHOLD EXPENDITURE SURVEY, AUSTRALIA,
SUMMARY OF RESULTS
CATALOGUE NO. 6530.0 (Issued on 4 June 1990)

PHONE INQUIRIES	<ul style="list-style-type: none">• <i>about these statistics</i> —contact Allan Etheredge on Canberra (06) 252 7031 or any ABS State office• <i>about other statistics and ABS services</i> —contact Information Services on Canberra (06) 252 5402, 252 6007, 252 6627 or any ABS State office
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An error has been detected in Table 1 of the above publication. Income deciles were incorrectly calculated and this affected other figures in the table. Other tables in the publication are not affected. Examples provided in the text of Appendix D to assist in the calculation of relative standard errors are also affected.

The corrected figures for the above are included in the attached replacement pages.

Figures from Table 1 are used on page 2 in the SUMMARY OF FINDINGS. The figures in error are in paragraph 2, headed "Factors affecting household expenditure". Replace the value \$207.53 in line 5 with \$207.51 and replace the value \$932.61 in line 7 with \$929.81.

IAN CASTLES
Australian Statistician

TABLE 1: HOUSEHOLD EXPENDITURE AND CHARACTERISTICS BY HOUSEHOLD INCOME DECILE GROUP(a), AUSTRALIA,
JULY 1988 — JUNE 1989

	Gross income decile										All house- holds
	Lowest 10%	Second decile	Third decile	Fourth decile	Fifth decile	Sixth decile	Seventh decile	Eighth decile	Ninth decile	Highest 10%	
AVERAGE WEEKLY HOUSEHOLD EXPENDITURE (\$)(b)											
Upper boundary of income decile group (\$)	149	230	324	431	540	656	790	955	1,204
Broad expenditure group(c)											
Commodity or service											
Current housing costs (selected dwelling)	34.82	39.63	42.89	62.09	69.71	78.65	85.39	96.16	103.50	104.47	71.80
Fuel and power	7.99	9.50	10.70	11.71	12.24	13.48	14.48	14.77	15.47	18.31	12.87
Food and non-alcoholic beverages	46.10	57.91	68.43	80.01	90.07	97.44	110.46	118.67	129.10	159.26	95.83
Alcoholic beverages	5.77	7.87	9.79	12.16	15.36	14.42	19.53	23.00	26.53	34.37	16.90
Tobacco	3.53	5.07	6.27	7.36	7.34	7.67	7.98	8.09	7.77	7.83	6.89
Clothing and footwear	11.28	13.23	17.27	20.03	25.34	27.98	35.51	41.80	49.10	65.33	30.73
Household furnishings and equipment	13.00	19.72	22.09	28.56	29.77	32.48	39.70	44.55	71.35	71.96	37.37
Household services and operation	12.97	16.43	16.79	19.56	21.76	24.14	26.53	29.01	33.80	39.91	24.11
Medical care and health expenses	9.76	10.79	13.68	18.29	19.39	23.82	24.28	26.86	30.59	39.16	21.68
Transport	22.49	36.57	44.64	56.87	69.99	79.08	86.39	101.27	118.83	144.24	76.13
Recreation	23.49	26.13	32.40	33.36	56.72	48.76	62.44	77.10	96.20	136.31	59.37
Personal care	4.57	5.80	6.46	7.81	7.74	9.40	11.71	12.34	15.39	18.21	9.95
Miscellaneous commodities and services	11.73	12.79	15.79	26.36	29.81	40.47	49.05	49.78	64.03	90.46	39.08
Total commodity and service expenditure	207.51	261.43	307.21	384.16	455.23	497.78	573.44	643.39	761.66	929.81	502.71
Selected other payments											
Income tax	16.75	10.43	23.03	58.45	88.97	118.73	141.71	181.37	227.56	400.73	127.02
Mortgage payment-principal (selected dwelling)	0.83	1.11	1.44	4.17	6.41	8.83	10.71	10.78	11.66	14.11	7.01
Other capital housing costs	12.99	3.30	12.00	22.39	5.32	20.31	2.86	19.45	42.13	58.01	19.91
Superannuation and life insurance	1.46	1.07	2.94	8.00	12.58	17.33	20.26	27.55	30.63	46.47	16.86
HOUSEHOLD CHARACTERISTICS											
Average weekly household income (\$)(d)	92.29	194.54	271.22	378.36	484.30	595.41	720.18	869.62	1,063.66	1,680.50	636.05
Proportion (%) of total income being:											
Wages and salaries	4.8	6.8	16.8	60.4	73.7	77.2	79.8	85.0	85.5	74.7	72.3
Own business	-16.6	2.2	5.6	9.5	7.7	9.5	10.1	7.3	6.6	14.4	9.2
Government pensions and benefits	101.1	75.2	58.5	16.8	9.1	7.3	4.1	2.8	2.2	0.9	10.1
Other	10.6	15.8	19.1	13.3	9.5	6.0	6.0	4.9	5.7	10.0	8.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average age of reference person	61	58	55	45	43	42	41	41	41	44	47
Average number of persons in the household:											
Under 18 years	0.19	0.41	0.58	0.84	1.00	1.12	1.13	1.02	1.02	0.92	0.82
18 to 64 years	0.65	0.84	1.12	1.54	1.71	1.85	2.04	2.18	2.30	2.64	1.69
65 years and over	0.53	0.68	0.67	0.24	0.14	0.12	0.08	0.08	0.09	0.08	0.27
Total	1.37	1.93	2.37	2.62	2.84	3.09	3.25	3.27	3.40	3.65	2.78
Proportion (%) of households with nature of housing occupancy being:											
Owned outright	59.0	56.7	56.9	40.3	35.5	37.7	35.5	30.8	33.7	41.8	42.8
Being bought	6.7	10.0	13.5	24.1	31.1	39.9	42.8	46.1	45.4	39.2	29.9
Renting — government	11.3	14.8	10.8	5.8	7.3	3.1	2.6	2.8	2.8	1.9	6.3
Renting — private	17.3	15.2	15.8	26.1	22.7	18.0	17.6	18.6	16.6	15.6	18.4
Occupied rent free	5.7	3.3	3.0	3.6	3.4	1.4	1.5	1.6	1.5	1.5	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average number of employed persons in household	0.2	0.2	0.4	1.0	1.2	1.4	1.7	1.9	2.2	2.5	1.3
Proportion (%) of households with family composition of the household being:											
Married couple:											
only	8.4	40.3	42.2	23.2	16.8	15.7	21.5	21.7	25.9	15.9	23.2
with dependent children only	7.0	6.5	18.3	27.7	37.0	42.6	40.7	39.2	34.0	30.4	28.4
other(e)	0.4	1.1	2.4	7.6	8.4	10.6	16.3	21.4	24.0	39.1	13.1
Single parent one family household only	1.7	17.9	10.4	8.7	7.3	5.4	3.2	2.0	0.9	0.5	5.8
Single person household	80.1	30.9	14.7	25.4	21.0	14.8	7.7	5.3	2.0	1.9	20.3
Other(f)	2.3	3.4	12.0	7.3	9.6	10.9	10.7	10.4	13.2	12.2	9.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Estimated number of households('000) being in (g):											
Metropolitan areas	314.2	314.4	312.0	332.1	309.4	341.3	346.7	377.5	404.0	418.7	3,470.3
Other urban areas	176.8	182.1	170.6	147.7	172.4	152.2	154.9	134.2	111.9	89.4	1,492.1
Rural areas	47.2	43.3	60.1	62.3	62.1	48.3	37.2	32.9	29.3	35.3	458.0
Number of households in sample	704	711	732	730	725	714	765	800	766	758	7,405
Estimated total number in population ('000):											
Households	538.2	539.8	542.7	542.0	543.9	541.9	538.9	544.6	545.1	543.4	5,420.4
Persons(h)	739.4	1,040.4	1,286.8	1,419.6	1,547.0	1,673.4	1,749.8	1,779.9	1,854.7	1,981.9	15,072.9

(a) The decile groups in this table are 10% groupings of the estimated population when households are ranked in ascending order according to each household's total gross weekly income. (b) The average obtained when the total estimated expenditure for a particular broad expenditure group is divided by the estimated number of households within the scope of the survey in the relevant decile group. (c) Details of the component expenditure items which comprise broad expenditure groups are given in Appendix B of the 1988-89 HES Information Paper (6527.0). (d) Household income is the sum of the gross weekly income of all household members. (e) Includes married couple family households where a combination of dependent and non-dependent children are present. (f) Includes married couple and single parent families living in multiple family households. (g) See Glossary. (h) See paragraph 8 in Appendix A.

- presentation difficulties would have been encountered because of the large number of estimates involved
- computer production of all standard errors would have been very costly; and
- the standard errors themselves are subject to sampling errors, and 'smoothing' or averaging them in the appropriate fashion improves their accuracy

Tables in this publication are, for the most part, in a standard form. Each column in a table corresponds to a category (e.g. *NSW, single person household*) and each row corresponds to an item (e.g. *average weekly household expenditure on current housing costs (selected dwelling), average age of reference person*). Entries in the tables are estimates of the value of the items for each category. The relative standard errors of estimates at the Australia level are presented in Table B. The relative standard errors of estimates at lower levels can be obtained from the Australian figure and the factor line of the graph indicated in Table B.

To calculate the relative standard error of the estimate of item I for category C, use the formula

$$RSE = F \times R \% \quad \text{where}$$

- R is the relative standard error of the estimate of item I for Australia and is given in Table B; and
- F is a factor based on the number of sampled households in category C. It is obtained from the factor line graph using the line specified for that item in Table B.

The procedure for calculating relative standard errors is outlined below.

- In the table containing the estimate look up the number of sampled households in the category.
- Using Table B, look up the Australian relative standard error R for that item, and beside it the letter of the factor line corresponding to that item.
- Read the factor F from the graph using the factor line from step (ii) and the number of sampled households from step (i).
- The relative standard error is $F \times R \%$.

An example of the calculation of a relative standard error is given below. Table 1 shows that the estimate of *average age of reference person* for the fourth decile group is 45. The relative standard error is calculated as follows:

- From Table 1 we see that the number of sampled households is 730.
- From Table B we find that the Australian relative standard error R is 0.7% and the factor line required is C.
- Looking up line C on the graph with number of sampled households (730) shows factor F is 2.2.
- The relative standard error is thus
 $2.2 \times 0.7\% = 1.54\%$.

An example of the use of relative standard errors is as follows. The estimate of *average age of reference person* for the fourth decile group is 45 with a relative standard error of 1.54% (see above). The standard error of this estimate is therefore $45 \times 0.0154 = 0.69$. Thus, there are about 2 chances in 3 (or approximately with 67% confidence) that the true figure lies in the range 44.31 to 45.69 and about 19 chances in 20 (or approximately with 95% confidence) that the figure is in the range 43.62 to 46.38.

Only income within a fixed range falls into an income decile group. Hence the item *average weekly household income* is much less variable when categorised by income decile group than otherwise. Because of this, three rows of Table B have been provided to calculate relative standard errors for estimates of *average weekly household income*. The relative standard error is $F \times R\%$. Here, the figure R from the row 'not categorised by income decile group' (under the heading 'Household Characteristics' in Table B) is the relative standard error for Australia. The R's from the next two rows are simply the appropriate figures for the calculation of relative standard errors for estimates categorised by income decile group.

Table 1 is categorised by income decile group. In this table the decile groups are defined by decile upper boundaries. These estimates are given in Table C along with their relative standard errors. For example, the estimate of the third income decile upper boundary is \$324.00 and its relative standard error is 1.8%.

TABLE C: 1988-89 HOUSEHOLD EXPENDITURE SURVEY
ESTIMATES OF INCOME DECILES AND THEIR RELATIVE STANDARD ERRORS(%)

	Decile of Average Weekly Household Income								
	1	2	3	4	5	6	7	8	9
Decile upper boundary(\$)	149	230	324	431	540	656	790	955	1,204
Relative standard error(%)	1.8	1.4	1.8	1.4	1.2	1.1	1.0	0.9	1.2