



## WEEKLY EARNINGS OF EMPLOYEES (DISTRIBUTION), AUSTRALIA, AUGUST 1981 (PRELIMINARY)

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### MAIN FEATURES

In August 1981 the estimated average weekly earnings of full-time male employees aged 20 years and over was \$289, an increase of 10.7% over August 1980. For full-time female employees aged 20 years and over the figure was \$232, an increase of 11.5%. Comparable figures for males and females aged 15-19 years were \$149 (11.2% increase) and \$140 (14.8% increase) respectively.

The table below shows percentages of full-time employees aged 20 years and over earning less than various weekly amounts in August 1980 and August 1981, and the percentage change over that time:

	Males			Females		
	1980 (\$)	1981 Change (\$)	1981 Change (%)	1980 (\$)	1981 Change (\$)	1981 Change (%)
25 per cent earned less than	195	213	9.2	162	183	13.0
50 per cent earned less than	234	260	11.1	195	215	10.3
75 per cent earned less than	304	339	11.5	234	261	11.5
90 per cent earned less than	392	448	14.3	291	326	12.0

### EXPLANATORY NOTES

#### Introduction

In August 1981 a sample household survey, based on the monthly population survey, was conducted throughout Australia in order to obtain information about the weekly earnings and frequency of pay of wage and salary earners. For the sake of brevity, wage and salary earners are referred to in the tables as 'employees'.

2. This publication contains a summary of results of the survey of weekly earnings. Final estimates of weekly earnings and frequency of pay will be published in *Weekly Earnings of Employees (Distribution), Australia* (6310.0). Although the survey obtained separate particulars of earnings from main and other jobs, this publication contains only details of earnings from *all* jobs (except in Table 3).

#### The population survey

3. The survey was based on a multi-stage area sample of private dwellings (about 30,000 houses, flats etc.) and non-private dwellings (hotels, motels, etc.) and covered about two-thirds of one per cent of the population of Australia. The information was obtained from the occupants of selected dwellings by carefully chosen and specially trained interviewers, the interviews being conducted during the two weeks beginning 10 August 1981.

#### Scope

4. The estimates relate to all persons aged 15 years and over who were employed as wage and salary earners in their main job, except:

- (a) members of the permanent defence forces,
- (b) certain diplomatic personnel of overseas governments, customarily excluded from census and estimated populations,
- (c) overseas visitors holidaying in Australia,
- (d) members of non-Australian defence forces (and their dependants) stationed in Australia,
- (e) patients in hospitals and sanatoria or inmates of gaols, reformatories, etc. and
- (f) persons on workers' compensation.

#### Interpretation of results

5. Since the estimates are based on a sample, they are subject to sampling variability. (See Technical note, page 7.) In addition, they are subject to errors of response and reporting. In many cases the answer to the question on earnings was based on the knowledge of one person (generally the housewife). Respondents were asked to indicate the amount of earnings in terms of ranges. (An indication of the earnings ranges used can be obtained from Table 1.) It is considered that there may be some understatement in the estimates because of imperfect recall of minor or irregular sources of earnings. Other errors may be due to genuine misunderstanding.

#### Definitions

6. *Weekly earnings* refers to the amount of 'last total pay' prior to the interview (i.e. before taxation and other deductions have been made). For persons paid other than weekly, earnings were converted to a weekly equivalent. No adjustment has been made for any back payment of wage rises or pre-payment of leave, etc.

7. *Median weekly earnings* is the amount which divides the distribution of individuals into two equal groups, one having earnings above and the other below that amount. Medians were calculated from grouped data, the class intervals in some cases being finer than those published in the tables. Linear interpolation was used within the class interval in which the median fell.

8. *Mean weekly earnings* is the amount obtained by dividing the total earnings of a group by the number of units in that group.

9. The *main job* was defined as the job at which most hours were worked during the survey week (i.e. the week before the interview week). The *second job* was defined to include all remaining jobs, in which some hours were worked during the survey week.

10. *Full-time employees* are those who usually work 35 hours a week or more (in all jobs) and others who, although usually part-time employees, worked 35 hours or more during the survey week. It should be noted that some full-time employees may have worked or been paid for less than a full week. *Part-time employees* are those who usually work less than 35 hours a week and who did so during the survey week. When recording hours of work, fractions of an hour were disregarded.

11. For the purposes of the survey persons were classified as having a second job if, during the survey week, they:

- (a) worked in a second job; and
- (b) were employed as a wage or salary earner in both of their jobs.

Service in the reserve defence forces was not regarded as a second job. Persons who by the nature of their employment worked for more than one employer, e.g. domestics, odd-job men, baby-sitters, etc., were not counted as multiple jobholders unless they also held another job of a different kind; nor were those who worked for more than one employer solely by reasons of changing jobs during the survey week.

#### Comparability of estimates with those for previous years

12. Similar surveys of weekly earnings have been conducted annually since August 1975. However, care must be taken in making comparison from one survey period to another as the 1975 survey data related to earnings from *all jobs* and *hours worked*, whereas subsequent survey publications contain tables on earnings from the *main job* as well as *all jobs* and statistics of *hours paid for* as well as *hours worked*.

13. Since 1978 survey estimates have been based on revised population benchmarks, derived from the 1976 Population Census, adjusted for underenumeration. Estimates of numbers of employees in these surveys are therefore not compatible with those from earlier surveys. Because of resource constraints it is not feasible to

calculate estimates on the revised basis for earlier years. However, it is considered that the estimates of mean and median earnings would have been only slightly affected by the change.

#### Reliability of the estimates

14. Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they may differ from the figures that would have been produced if the information had been obtained from occupants of all dwellings. An indication of the likely differences is given in the Technical note, page 7. See also paragraph 6 of the Technical note regarding non-sampling errors.

#### Related publications

15. Users may also wish to refer to the following publications which are currently available on request. It should be noted however that changes are being made to the frequency and format of some of the surveys. For details of the new arrangements refer to *Information Paper, Review of ABS Employment Statistics*. (6239.0).

*Weekly Earnings of Employees (Distribution), Australia, August 1980* (6310.0)

*Average Weekly Earnings, Australia, (Preliminary) — (6301.0), and final publication — (6302.0) — issued quarterly*

*Earnings and Hours of Employees, Distribution and Composition, Australia (Preliminary) — (6305.0), and final publication (6306.0) — sample survey conducted annually in May*

*Earnings and Hours of Employees, Australia (Preliminary) — (6303.0), and final publication — (6304.0) — sample survey conducted annually in October*

*Income Distribution, 1973-74 — Part 1, (6502.0), Part 2 (6503.0) and Part 3 (6504.0)*

*Income Distribution, Australia, 1978-79 : Individuals (Preliminary) (6501.0), and final publication (6502.0)*

*Wage Rates Indexes, Australia, (Preliminary) (6311.0) — issued monthly*

*Wage Rates, Australia (6312.0) — issued monthly*

*The Labour Force, Australia (6203.0) — issued monthly.*

16. Current publications produced by the ABS are listed in the *Catalogue of Publications, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Publications Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Publications Advice are available from any ABS office.

#### Symbols and other usages

- \* subject to sampling variability too high for most practical uses. See paragraph 5 page 7.
- .. not applicable

17. Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

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Australian Statistician

TABLE 1. ALL EMPLOYEES : WEEKLY EARNINGS IN ALL JOBS AND FULL-TIME OR PART-TIME STATUS, STATES AND TERRITORIES, AUGUST 1981

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia
MALE FULL-TIME EMPLOYEES									
— '000—									
Weekly earnings (\$) —									
Under 100	21.0	16.6	13.0	8.5	8.7	2.2	*	*	70.6
100 and under 110	14.3	12.0	7.6	4.9	4.9	} 2.2 {	} 2.3 {	} 4.0 {	45.5
110 " 120	13.7	9.4	5.6	4.7	2.6				37.7
120 " 130	16.0	12.7	7.2	4.3	4.5	} 2.9 {	} 2.3 {	} 4.0 {	46.8
130 " 140	14.1	10.1	7.0	4.8	4.8				42.9
140 " 150	16.5	12.4	7.7	3.0	3.4	2.1	} 2.3 {	} 4.0 {	45.6
150 " 160	18.8	17.1	10.7	7.1	5.3	2.4			62.7
160 " 170	23.7	17.2	8.8	7.2	3.9	2.3	} 4.2 {	} 4.0 {	64.4
170 " 180	23.5	22.4	12.9	7.7	6.3	3.2			76.4
180 " 190	28.3	25.6	18.1	9.6	7.4	2.5	} 4.2 {	} 4.0 {	92.2
190 " 200	39.0	33.4	19.2	11.3	9.4	3.6			118.5
200 " 210	74.7	60.9	33.1	22.7	15.0	5.1	} 2.5 {	} 4.6 {	216.3
210 " 220	52.7	40.6	24.2	15.4	12.6	4.8			154.3
220 " 230	59.0	44.6	26.3	15.3	13.0	4.8	} 2.4 {	} 5.1 {	166.0
230 " 240	49.1	46.3	19.0	13.1	10.8	3.2			143.2
240 " 250	54.3	44.2	18.2	12.7	12.9	4.4	} 2.4 {	} 5.1 {	149.1
250 " 260	68.0	43.6	25.8	13.0	13.7	5.5			172.8
260 " 280	82.1	56.9	25.3	16.1	15.3	5.8	} 2.8 {	} 2.8 {	205.9
280 " 300	70.5	54.1	29.1	15.2	16.0	5.5			195.1
300 " 320	75.6	51.8	26.7	14.4	16.7	4.8	} 2.9 {	} 2.3 {	194.8
320 " 340	45.9	39.7	20.1	9.5	11.7	3.6			134.2
340 " 360	45.7	30.5	15.6	8.6	11.1	3.1	} 3.0 {	} 2.6 {	118.8
360 " 380	34.4	24.0	12.1	7.9	7.5	2.1			*
380 " 400	27.8	23.3	11.4	6.0	9.3	2.1	*	2.2	83.4
400 " 450	48.9	34.6	19.1	9.5	13.7	4.4	2.8	3.7	136.7
450 " 500	34.6	20.8	13.8	4.9	7.3	2.1	*	4.2	89.1
500 " 550	23.7	13.9	9.2	3.5	6.1	} 2.2 {	} 2.6 {	} 4.2 {	61.6
550 " 600	16.1	8.7	3.8	3.1	4.0				39.4
600 and over	35.7	20.3	14.8	5.4	9.9	1.8	3.1	3.1	94.2
<b>Total</b>	<b>1,127.4</b>	<b>847.7</b>	<b>465.2</b>	<b>269.4</b>	<b>267.6</b>	<b>88.5</b>	<b>31.4</b>	<b>52.3</b>	<b>3,149.6</b>
— dollars —									
Median earnings	257	250	247	236	256	247	318	308	252
Mean earnings	282	272	271	259	283	266	342	334	277
Standard error of mean	2.00	2.20	2.50	2.60	2.70	3.70	10.10	7.70	1.00
MALE PART-TIME EMPLOYEES(a)									
— '000 —									
Weekly earnings (\$) —									
Under 20	9.5	6.4	3.6	} 4.6 {	2.9	} 2.8 {	* 3.0 {	26.4	
20 and under 40	9.6	11.7	3.8		2.6			31.2	
40 " 60	} 6.1 {	5.1	} 3.6 {	} 3.9 {	} 3.8 {	} 2.8 {	* 3.0 {	13.9	
60 " 80		4.9						3.6	3.9
80 " 100	6.2	} 4.9 {	} 3.6 {	} 3.9 {	} 3.8 {	} 2.8 {	* 3.0 {	12.3	
100 " 200	15.6							10.5	4.3
200 and over	14.3	6.4	*	*	} 4.2 {	*	*	*	29.2
<b>Total</b>	<b>61.2</b>	<b>45.0</b>	<b>18.7</b>	<b>12.6</b>		<b>13.5</b>	<b>3.1</b>	<b>*</b>	<b>3.5</b>
— dollars —									
Median earnings	98	57	66	67	55	52	*	55	78
Mean earnings	129	99	107	93	104	88	*	110	112
Standard error of mean	7.70	6.90	9.70	8.70	8.90	12.90	*	19.50	3.60

For footnote see end of table.

TABLE 1. ALL EMPLOYEES : WEEKLY EARNINGS IN ALL JOBS AND FULL-TIME OR PART-TIME STATUS, STATES AND TERRITORIES, AUGUST 1981—continued

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia
FEMALE FULL-TIME EMPLOYEES									
— '000 —									
Weekly earnings (\$) —									
Under 100	13.0	13.0	11.0	4.1	5.5	1.5			48.5
100 and under 110	9.0	9.4	7.5	} 3.8	5.1	1.9	} 2.3	} 4.0	30.9
110 " 120	9.0	9.0	3.9		4.0	3.2			2.1
120 " 130	14.8	11.5	7.1	3.2	3.1	} 1.9	} 2.5	} 6.4	42.9
130 " 140	14.4	11.0	5.7	3.8	3.9				1.6
140 " 150	15.0	13.1	7.1	4.9	5.2	1.9	} 2.5	} 7.4	45.6
150 " 160	25.0	17.7	7.5	5.2	4.9	1.6			63.1
160 " 170	17.6	19.2	8.8	6.6	5.0	1.9	} 2.5	} 7.4	58.7
170 " 180	29.2	26.4	9.3	7.2	6.2	*			78.6
180 " 190	26.0	22.8	8.9	5.7	7.6	1.8	} 2.5	} 6.4	73.7
190 " 200	32.3	21.2	11.5	10.6	8.4	3.3			82.6
200 " 210	42.8	30.0	17.5	7.2	6.4	1.8	} 2.5	} 7.4	115.2
210 " 220	28.0	29.8	11.5	5.8	5.5	2.0			87.6
220 " 230	22.8	24.2	8.0	5.3	4.3	1.8	} 2.1	} 4.5	71.0
230 " 240	20.8	16.4	6.9	4.9	4.4				57.9
240 " 250	23.5	15.8	5.9	3.7	3.4		} 4.4	} 2.9	57.9
250 " 260	20.9	17.0	7.4	5.4	4.7				30.2
260 " 280	24.8	21.8	7.4	3.6	3.9		} 4.4	} 2.9	67.4
280 " 300	21.2	17.4	5.1	2.6	3.6				54.0
300 " 320	13.7	14.1	5.5	*	2.7		} 4.4	} 2.9	43.0
320 " 340	10.1	9.0	3.9						30.2
340 and over	33.3	22.4	13.2	7.8	6.4	2.3	*	5.0	91.6
<b>Total</b>	<b>467.2</b>	<b>392.1</b>	<b>180.8</b>	<b>107.7</b>	<b>103.4</b>	<b>33.4</b>	<b>11.5</b>	<b>27.3</b>	<b>1,323.4</b>
— dollars —									
Median earnings	207	207	201	205	202	203	232	239	206
Mean earnings	220	216	211	216	214	211	253	263	218
Standard error of mean	2.40	2.60	3.10	3.50	3.30	4.70	12.40	8.40	1.20
FEMALE PART-TIME EMPLOYEES(a)									
— '000 —									
Weekly earnings (\$) —									
Under 20	12.5	10.6	8.3	4.1	7.4	*			44.9
20 and under 40	27.4	21.9	14.1	8.4	7.6	1.9	} 2.4	} 2.6	82.9
40 " 60	17.1	17.2	10.9	6.2	6.5	2.4			61.9
60 " 80	22.7	16.2	9.9	6.5	7.1	2.0	} 2.4	} 3.0	65.6
80 " 100	26.5	17.9	8.8	7.9	9.5	1.6			74.2
100 " 110	18.7	11.2	7.3	2.5	3.6	1.5	} 2.4	} 2.3	46.2
110 " 120	13.1	9.7	4.0	4.2	3.7				36.9
120 " 130	15.3	9.2	5.8	4.7	4.3	} 3.2	} 2.3	} 3.0	40.8
130 " 140	7.9	6.5	2.6	*	2.9				
140 " 160	20.6	12.7	8.8	5.3	5.2	} 1.9	} 2.5	} 3.0	55.8
160 " 180	12.3	8.4	4.1	3.0	3.2				
180 " 200	9.6	6.0	4.7	*	*	} 2.1	} 2.0	} 2.0	25.3
200 and over	27.2	14.6	9.4	5.4	5.7				
<b>Total</b>	<b>230.9</b>	<b>162.2</b>	<b>98.8</b>	<b>62.2</b>	<b>68.0</b>	<b>17.9</b>	<b>4.9</b>	<b>12.9</b>	<b>657.6</b>
— dollars —									
Median earnings	105	97	94	85	91	98	122	108	100
Mean earnings	114	105	104	102	100	102	136	122	108
Standard error of mean	2.50	2.70	2.90	3.00	2.70	4.30	14.40	7.90	1.20

(a) Since part-time employees are defined as those who usually work less than 35 hours and who did so in the survey week, these figures may include some school teachers, academic staff in universities, air crew, etc.

**TABLE 2. MEAN WEEKLY EARNINGS IN ALL JOBS : FULL-TIME AND PART-TIME EMPLOYEES,  
STATE CAPITAL CITIES AND OTHER AREAS, AUGUST 1981**

— \$ —

	<i>N.S.W.</i>	<i>Vic</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>
MALES						
<i>Full-time</i>						
Capital city — mean earnings	289	278	271	263	281	263
standard error	2.50	2.60	3.50	3.00	3.20	5.70
Other areas — mean earnings	268	256	272	245	286	268
standard error	3.20	4.10	3.50	5.00	5.10	4.70
<i>Part-time(a)</i>						
Capital city — mean earnings	141	105	118	84	103	100
standard error	10.00	8.80	15.00	8.90	9.90	20.20
Other areas — mean earnings	99	85	96	122	105	76
standard error	11.00	10.90	12.50	23.90	20.40	16.10
FEMALES						
<i>Full-time</i>						
Capital city — mean earnings	225	218	217	220	214	216
standard error	2.80	2.90	4.30	3.90	3.70	6.70
Other areas — mean earnings	205	207	203	199	216	205
standard error	4.50	5.60	4.40	7.40	7.50	6.60
<i>Part-time(a)</i>						
Capital city — mean earnings	121	109	105	107	102	100
standard error	3.20	3.30	4.00	3.60	3.10	6.80
Other areas — mean earnings	99	92	103	85	96	103
standard error	3.70	4.80	4.10	5.20	5.40	5.60

For footnote see Table 1.

**TABLE 3. EMPLOYEES WHO WORKED IN A SECOND JOB : WEEKLY EARNINGS IN MAIN JOB  
AND WEEKLY EARNINGS IN SECOND JOB, AUSTRALIA, AUGUST 1981**

	<i>Males</i>					<i>Females</i>				
	<i>Weekly earnings in second job</i>			<i>Mean weekly earnings in second job</i>	<i>Standard error</i>	<i>Weekly earnings in second job</i>			<i>Mean weekly earnings in second job</i>	<i>Standard error</i>
	<i>Under \$30</i>	<i>\$30 and over</i>	<i>Total</i>			<i>Under \$30</i>	<i>\$30 and over</i>	<i>Total</i>		
	'000	'000	'000	\$	\$	'000	'000	'000	\$	\$
<i>Weekly earnings in main job (\$) —</i>										
Under 140	4.5	6.5	11.0	55	3.40	6.6	9.5	16.1	47	2.40
140 and under 200	*	*	6.0	56	4.70	*	5.4	7.1	58	4.40
200 .. 220	} 5.4 {	} 7.9 {	5.0	62	5.70	*	} 7.0 {	} 4.8 {	63	5.80
220 .. 240			*	*	*					
240 and over		16.4	20.6	63	2.80	*		4.5	85	8.20
<b>Total</b>	<b>11.5</b>	<b>35.1</b>	<b>46.6</b>	<b>60</b>	<b>1.80</b>	<b>10.6</b>	<b>21.9</b>	<b>32.5</b>	<b>57</b>	<b>2.00</b>

— dollars —

Median earnings in main job	194	235	230	..	..	79	158	141	..	..
Mean earnings in main job	196	241	230	..	..	118	170	153	..	..
Standard error of mean	11.70	8.30	6.80	..	..	7.40	7.40	5.50	..	..

TABLE 4. FULL-TIME EMPLOYEES : WEEKLY EARNINGS IN ALL JOBS AND AGE, AUSTRALIA, AUGUST 1981

	Age group (years)							Total 20 and over	Total
	15-19	20-24	25-34	35-44	45-54	55-59	60 and over		
MALES									
— '000 —									
Weekly earnings (\$)—									
Under 110	73.2	10.4	11.0	9.9	7.5			43.0	116.1
110 and under 120	26.1	*			*			11.6	37.7
120 " 130	26.5	6.6	} 6.5	5.9	*			20.3	46.8
130 " 140	23.1	7.5						19.8	42.9
140 " 150	20.9	7.0		} 6.3	5.2			24.7	45.6
150 " 160	18.0	15.8	12.0	6.9	6.4			44.8	62.7
160 " 170	16.8	15.8	10.2	7.9	8.8			47.6	64.4
170 " 180	11.6	19.0	16.5	10.2	10.7			64.8	76.4
180 " 190	12.1	23.4	20.5	12.8	12.3			80.1	92.2
190 " 200	10.4	27.4	30.0	17.2	18.8			108.1	118.5
200 " 210	13.0	47.5	48.8	40.3	37.8			203.3	216.3
210 " 220	6.3	32.8	42.4	24.5	28.1			148.1	154.3
220 " 230	5.1	33.8	45.7	32.2	28.2			160.9	166.0
230 " 240		25.6	42.0	26.8	28.2			140.9	143.2
240 " 250	} 4.8	23.1	43.5	32.8	29.0			146.7	149.1
250 " 260		24.6	56.6	37.1	30.5			170.0	172.8
260 " 280	} 4.7	29.8	73.5	42.2	34.9			204.1	205.9
280 " 300		26.9	68.1	45.3	36.2			193.4	195.1
300 " 320		20.4	73.3	48.7	33.3			193.4	194.8
320 " 340	} 4.8	14.8	48.2	33.2	23.0			133.0	134.2
340 " 360		9.7	41.2	33.7	20.0			118.3	118.8
360 " 380	*	6.2	29.8	27.8	17.4			90.4	91.1
380 " 400	*	5.6	28.3	27.5	13.7			83.1	83.4
400 " 450		5.2	46.1	46.9	28.0			136.2	136.7
450 " 500		5.0	22.0	32.7	19.2			87.9	89.1
500 " 550		*	17.8	22.2	14.0			61.6	61.6
550 and over	*	6.5	34.9	39.1	30.7			132.6	133.6
<b>Total</b>	<b>281.1</b>	<b>456.1</b>	<b>882.8</b>	<b>670.2</b>	<b>526.2</b>	<b>217.0</b>	<b>116.2</b>	<b>2,868.5</b>	<b>3,149.6</b>
— dollars —									
Median earnings	136	223	271	290	264	257	242	260	252
Mean earnings	149	239	293	314	298	295	270	289	277
Standard error of mean	1.80	2.30	2.00	2.50	2.70	4.10	5.10	1.10	1.00
FEMALES									
— '000 —									
Weekly earnings (\$)—									
Under 110	53.7	5.6	6.9	6.0	4.9			25.8	79.5
110 and under 120	19.8	*			*			9.0	28.9
120 " 130	28.2	5.4	} 5.7	5.3	*			14.6	42.9
130 " 140	19.6	9.5						18.7	38.3
140 " 150	20.9	8.7	} 11.3	6.4	4.8			24.7	45.6
150 " 160	17.2	18.5	10.5	9.6	5.7			45.9	63.1
160 " 170	12.0	15.0	11.1	10.8	7.2			46.7	58.7
170 " 180	8.5	23.4	15.4	16.4	10.2			70.2	78.6
180 " 190	6.5	24.4	13.3	13.8	12.2			67.2	73.7
190 " 200	*	30.4	16.2	13.8	12.3			78.6	82.6
200 " 210	5.5	38.4	28.1	21.1	16.6			109.7	115.2
210 " 220		27.2	26.1	15.3	10.3			84.6	87.6
220 " 230	} 5.4	20.7	19.8	10.6	10.7			68.5	71.0
230 " 240		18.2	17.4	10.5	7.2			56.9	57.9
240 " 250		12.6	15.8	12.6	12.7			56.7	57.9
250 " 260		14.3	22.1	9.7	6.4			54.8	55.9
260 " 280	} 7.2	15.6	26.9	13.2	7.0			66.6	67.4
280 " 300		13.1	21.1	10.5	5.2			53.3	54.0
300 and over		19.5	68.4	42.6	23.9			162.5	164.9
<b>Total</b>	<b>208.4</b>	<b>323.4</b>	<b>335.9</b>	<b>228.2</b>	<b>160.8</b>	<b>50.9</b>	<b>15.9</b>	<b>1,115.0</b>	<b>1,323.4</b>
— dollars —									
Median earnings	131	205	232	217	213	218	210	215	206
Mean earnings	140	213	247	240	231	231	216	232	218
Standard error of mean	2.00	2.40	2.70	3.20	3.70	6.60	11.00	1.40	1.20

## TECHNICAL NOTE

### Estimation procedure

The estimates are derived from the population survey by use of a complex ratio estimation procedure, which ensures that the survey estimates conform to an independently estimated distribution of the population by age and sex, rather than to the age and sex distribution within the sample itself.

### Reliability of the estimates

2. Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings they are subject to sampling variability; that is, they may differ from the figures that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the *standard error*, which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included, and about nineteen chances in twenty that the difference will be less than two standard errors. Another measure is the *relative standard error*, which expresses the standard error as a percentage of the estimate.

3. Space does not allow for the separate indication of the standard errors of all estimates in this publication. A table of standard errors for general application to estimates of numbers of persons is given below. These figures will not give a precise measure of the standard error of a particular estimate, but they will provide an indication of its magnitude. An example of the calculation and use of standard errors is as follows:

The estimated number of female part-time employees in Queensland is 98,800 (Table 1). From the table below it will be seen that the estimate has a standard error of about 2,800 and therefore there

are about two chances in three that the value that would have been produced if all dwellings had been included in the survey will fall within the range 101,600 to 96,000 and about nineteen chances in twenty that the value will fall within the range 104,400 to 93,200.

4. Approximate standard errors of estimates of means in this publication are included in the tables in which the estimates are given. Standard errors of estimates of medians are approximately the same as the standard errors of corresponding means.

5. As the standard errors in the table below show *the smaller the estimate the higher is the relative standard error*. Very small estimates are thus subject to such high standard errors (relative to the size of the estimate) as to detract seriously from their value for most reasonable uses. In this publication estimates below the levels shown in the table below, and means and medians based on such estimates, have not been included. Although figures for numbers of employees can in some cases be derived by subtraction they should not be regarded as reliable.

6. The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections in reporting by interviewers and respondents. Inaccuracies of this kind are referred to as the *non-sampling error*, and they may occur in any enumeration, whether it be a full count or only a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers and efficient operating procedures.

### STANDARD ERRORS OF ESTIMATES

Size of estimate (persons)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia	
									— number —	Per cent of estimate
1,500						300				
2,000						340	470	440		
2,500				510	510	380	510	480		
3,000				550	560	410	550	510		
3,500			740	590	590	430	590	540		
4,000			780	620	630	460	620	560		
4,500	1,000	1,000	820	650	660	480	650	590	970	21.6
5,000	1,100	1,100	860	680	690	500	680	610	1,000	20.0
6,000	1,200	1,200	930	730	750	530	740	650	1,100	18.0
10,000	1,500	1,400	1,200	900	920	640	910	750	1,400	14.0
20,000	2,000	1,900	1,500	1,200	1,200	810	1,200	910	2,000	10.0
50,000	3,000	2,700	2,200	1,600	1,700	1,100	1,700	1,100	2,900	5.8
100,000	3,900	3,500	2,800	2,100	2,100	1,300		1,300	3,900	3.9
200,000	5,000	4,400	3,600	2,600	2,600	1,500			5,100	2.6
300,000	5,800	5,000	4,100	2,900	2,900				6,000	2.0
500,000	6,900	5,800	4,800	3,300	3,300				7,200	1.4
1,000,000	8,500	7,000	5,900						9,100	0.9
2,000,000	10,000	8,400							11,000	0.6
5,000,000									15,000	0.3

