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# WEEKLY EARNINGS OF EMPLOYEES (DISTRIBUTION), AUSTRALIA, AUGUST 1980 (PRELIMINARY)

INQUIRIES

If you want to know more about these statistics ring Mr Graham Angus on Canberra (062) 526572 or State Offices, or write to Information Services, ABS, P.O. Box 10, Belconnen, A.C.T. 2616

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## MAIN FEATURES

In August 1980 the estimated percentages of full-time employees aged 20 years and over earning less than various weekly amounts were as follows:

						Males (\$)	Females (\$)
25	per	cent	earned	less	than	195	162
50	,,	99	"	99	"	234	195
75	99	99	99	99	99	304	234
90	"	99	**	99	"	392	291

Average weekly earnings of full-time employees were:

	Males	<b>Females</b>
	(\$)	(\$)
Aged 20 years and over	261	208
Aged 15 to 19 years	134	122

## **EXPLANATORY NOTES**

#### Introduction

In August 1980 a sample household survey, based on the monthly population survey, was conducted throughout Australia in order to obtain information about the weekly earnings 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. Further estimates 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 11 August 1980.

# 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 gross weekly wages and salaries (i.e. before taxation and other deductions have been made). For persons paid other than weekly, earnings were converted to a weekly equivalent.
- 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 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. The 1978, 1979 and 1980 survey estimates are 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 available on request:

Weekly Earnings of Employees (Distribution), Australia 1979 (6310.0)

Average Weekly Earnings, Australia (Preliminary) (6301.0) – issued quarterly

Average Weekly Earnings, Australia (6302.0) – issued quarterly

Earnings and Hours of Employees, Distribution and Composition, Australia (Preliminary) May 1980 (6305.0)

Earnings and Hours of Employees, Distribution and Composition, Australia, May 1979 (6306.0)

Earnings and Hours of Employees, Australia, October 1980 (Preliminary) (6303.0)

Earnings and Hours of Employees, Australia, October 1979 (6304.0)

Income Distribution Australia, 1978-79, Individuals (Preliminary) (6501.0)

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. All current publications produced by the ABS are listed in *Catalogue of Publications* (1101.0) which is available free of charge 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.

R. J. CAMERON
Australian Statistician

TABLE 1. ALL EMPLOYEES : WEEKLY EARNINGS IN ALL JOBS AND FULL-TIME OR PART-TIME STATUS, STATES AND TERRITORIES, AUGUST 1980

	N.S. W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia
		MAL	E FULL-TIM	ME EMPLO	YEES				
			I X		- '000 -				
Weekly earnings (\$) — Under 80	14.0	11.3	7.9	5.0	4.6	*	) (	1	45.0
80 and under 100	18.0	16.5	10.9	5.8	5.9	2.3		2.0	59.8
100 " " 110	15.8	13.2	9.5	4.1	3.4	2.0			48.3
110 " " 120	15.9	10.9	7.3	4.0	4.2	1.9	2.1	J	45.0
120	12.5	16.1	8.9	5.5	3.8	2.3	1 1	1	49.8
130	20.2	14.3	8.1	3.8	4.5	1.8	1 1	2.2	53.2
170	21.6	20.6	9.3	7.2	5.0	1.6		[	66.1
130	34.5	24.7	16.4	10.8	9.0	3.0	1 1	ال	100.1
100	38.0	38.3	19.7	11.7	9.5	3.8	J 1	2.8	122.0
170	35.8	35.2	18.8	11.5	9.4	3.6	1	)	116.7
100	53.2	47.1	26.2	15.7	13.8	3.9	2.1	2.3	162.5
200	50.1	44.1	26.1	14.6	12.1	4.0	, ,, ,		153.9
200 210	94.2	73.0	36.8	23.3	21.3	7.4	2.0	2.4	260.4
210 " " 220 220 " " 230	58.9	44.6	23.4	16.8	12.2	5.4	1 22		162.8
220 230	58.0	40.0	24.1	13.5	13.5	4.7	2.2	2.2	157.1
230 " " 240 240 " " 250	52.6 54.9	31.2 38.3	17.3	9.8	9.4	3.5	1	2.3	127.0
250 " " 260	54.4	37.8	17.3 15.3	10.8	9.8	4.7	2.7	2.4	139.0
230 200	34.4	31.0	13.3	12.5	13.5	4.7	) (	2.6	142.6
260 " " 280	64.9	45.0	20.7	14.0	15.6	4.9	2.2	3.3	170.7
280 " " 300	51.9	39.8	19.9	14.4	13.0	4.9	*	2.5	147.1
300 " " 320	56.5	44.0	21.9	11.8	13.0	4.1	2.5	2.9	156.7
320 " " 340	40.6	25.3	13.0	9.7	8.9	1.8	3.6	2.6	103.8
340 " " 360	32.5	19.8	13.2	7.6	7.4	2.8	3.0	2.8	87.8
360 " " 380	25.0	14.8	8.7	4.4	6.5	*	2.5	2.0	65.3
380 " " 400	21.7	16.8	6.7	4.5	4.3	1.8	]	2.8	59.3
400 " " 450	22.2	165					2.2		
400	32.3	16.5	11.1	5.7	11.1	2.5	)	3.5	84.2
430 300	20.5	15.1	6.1	3.8	4.6	2.1	1	3.0	53.1
300	15.1	8.2	4.7	**	4.0	) [	1	١	37.6
550 " " 600	10.8	5.6	*	*	*	*	3.1		23.4
600 and over	21.4	14.7	8.1	3.4	4.5	*		2.7	56.2
								٠,	
Total	1,095.6	822.6	440.0	268.0	260.1	89.5	27.8	52.7	3,056.3
					– dollars –				
Median earnings	231	220	216	217	228	221	297	271	225
Mean earnings	255	245	241	237	253	239	308	300	249
Standard error of mean	1.80	2.00	2.30	2.40	2.50	3.30	9.80	7.10	0.90
		MALE	PART-TIM	E EMPLOY	EES (a)	IVI			
					- °000 -				
Weekly earnings (\$) -						2			
Under 20	7.3	9.0	*	2.5	2.7				26.2
20 and under 40	9.8	7.2	4.4	*	*		1		26.5
40 " " 60	6.2	5.4			[		1	2.0	₹ 17.3
60 " " 80	*	5.6	3.7	4.2	3.1 {	1.9	* 1		10.6
80 " " 100	6.0	) "."	( J		-			J	11.8
100 " " 200	12.1	8.3	5.3	2.6	2.7	9		*	32.2
200 and over	8.2	6.9	*	*	3.2	*	*	*	23.9
Total	53.8	42.3	18.9	13.0	13.9	2.3	*	3.1	148.5
* V 101	33.0	1213	10.7	13.0				3.1	140.3
					– dollars –				
Median earnings	78	58	59	57	86	102	*	60	68
Mean earnings	108	102	109	84	121	116	*	101	106
Standard error of mean	3.50	3.80	4.90	3.90	5.20	10.00		9.60	1.80

For footnote see next page,

TABLE 1. ALL EMPLOYEES : WEEKLY EARNINGS IN ALL JOBS AND FULL-TIME OR PART-TIME STATUS, STATES AND TERRITORIES, AUGUST 1980  $-\ continued$ 

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N. T.	A.C.T.	Australia
		FEMA	LE FULL-T	IME EMPLO	OYEES				
					- '000 -			2	
Weekly earnings (\$) —									
Under 80	8.3	7.5	5.0	2.9	*	1.7	)		28.4
80 and under 100	18.9	14.1	14.7	4.8	4.6	1.8		2.0	₹ 60.0
						2 6	-	] [ 2.0	
100 " " 110	16.0	9.8	6.4	3.3	3.0	2.1	2.6	1	39.7
110 " " 120	17.0	11.5	5.5	3.5	5.0	, (		]	44.6
120 " " 130	16.2	16.5	7.3	5.5	4.4	1.9		1	53.0
130 " " 140	22.1	17.2	7.1	3.1	5.8	*		2.7	₹ 57.7
140 " " 150	23.0	19.3	7.6	5.3	4.7	1.5	J	l J	63.1
150 " " 160	30.2	34.6	11.3	7.3	6.8	1.8	7	2.5	93.4
160 " " 170	35.8	24.4	12.2	8.8	6.7	2.4	1	2.3	92.2
170 " " 180	33.1	23.7	13.4	8.0	7.2	2.1	2.6	2.1	90.4
180 " " 190	27.7	21.9	12.1	7.7	7.5	2.1		1 3	S 80.9
190 " " 200	31.8	22.6	11.3	9.5	5.7	2.3	)	2.8	85.4
200 " " 210	33.3	27.5	11.1	9.1	6.3	2.5	วั	2.4	93.2
210 " " 220	22.7	22.6	6.9	5.8	4.6	1.8		2.1	67.1
220 " " 230	18.4	17.7	6.2	2.8	4.2	) 1			52.0
230 " " 240	14.2	12.0	4.8	3.3	3.2	1.6	3.7	} 2.2	39.3
240 " " 250	12.8	9.4	*	*	2.9	í i	7	11	32.8
250 " " 260	12.8	10.4	4.3	3.5	3.6	} 2.1 {		2.1	37.1
	12.0		,,,,	0.0					
260 " " 280	17.3	15.3	4.4	3.9	4.1	] 22		[]	ſ 48.4
280 " " 300	14.6	7.6	4.6	3.2	*	2.3		3.6	34.6
300 " " 320	9.9	7.3	*	*	2.6	3	2.0	]	27.4
220	,,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			2.0	1.8	1	)	
320 and over	28.2	16.5	8.6	4.6	4.6			3.4	67.7
Total	464.2	369.1	170.6	110.2	102.5	32.9	10.9	27.9	1,288.4
IO(ai	40412	307.1	2,010		– dollars				
					- donais				
Median earnings	184	183	. 176	183	181	180	203	208	183
Mean earnings	196	192	188	190	192	183	211	221	. 193
Standard error of mean	2.20	2.40	2.80	3.00	3.00	4.20	11.00	7.00	1.10
		FEMAL	E PART-TIN	ME EMPLO	YEES (a)				
					- '000 -				
Weekly earnings (\$) —							2	( )	,
Under 20	15.3	17.7	8.7	4.4	7.1	*		2.9	55.9
20 and under 40	22.6	22.0	14.0	9.2	9.1	2.2		ر ا	81.2
40 " " 60	22.8	17.8	10.7	6.5	7.7	2.6			69.2
60 " " 80	24.6	18.4	12.9	7.3	8.6	2.7		2.6	76.0
80 " " 100	25.9	24.0	12.0	8.0	10.1	2.2	2.0	<b>i</b> J	83.1
200									
100 " " 110	18.2	14.8	7.0	5.1	5.1	2.1			52.2
110 " " 120	13.1	9.9	5.2	3.3	2.9	J 41	l	2.3	36.0
120 " " 130	13.4	8.3	4.4	4.2	2.9	10			35.4
130 " " 140	7.3	7.9	*	2.8	2.5	} 1.9	lí		25.3
						2	*	2.7	{
140 " " 160	14.3	11.6	4.7	3.8	3.5	1.6			40.4
160 " " 180	11.2	8.4	3.8	*	*	) 1.0			28.4
		160	7.1	2.5	4.6	*	*	*	55.2
180 and over	20.4	16.2	7.1	3.5	4.6		•		
Total	209.1	177.0	93.6	60.0	65.5	17.2	4.0	11.8	638.3
					– dollars	_			
	0.5	00	01	0.7	00	01	126	105	89
	95	90	81	87	80	81			
Median earnings			00	00	QQ	an	140	107	96
Median earnings Mean earnings Standard error of mean	101 1.60	96 1.70	90 1.80	90 1.90	88 1.70	90 2.80	140 12.00	107 5.20	96 0.80

<sup>(</sup>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 1980

- \$ -

		Ψ				
	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.
		MALES	AL MANUFACTURE DE LONG TO LONG TO LANGE TO LANGE			*
Full-time						
Capital city — mean earnings	263	250	245	241	253	244
<ul> <li>standard error</li> </ul>	2.30	2.40	3.30	2.80	2.90	5.30
Other areas — mean earnings	241	229	236	226	254	235
<ul> <li>standard error</li> </ul>	2.90	3.80	3.20	4.60	4.70	4.20
Part-time (a)						
Capital city – mean earnings	111	106	105	81	121	*
- standard error	4.30	4.40	6.60	4.20	5.80	
Other areas – mean earnings	101	87	113	97	122	*
<ul> <li>standard error</li> </ul>	5.30	6.70	7.40	8.80	11.30	
		FEMALES				
Full-time						
Capital city — mean earnings	198	195	193	193	195	186
- standard error	2.60	2.70	3.80	3.40	3.50	5.90
Other areas - mean earnings	190	181	180	180	178	179
- standard error	4.00	5.00	4.10	3.50	5.90	5.70
Part-time (a)						
Capital city - mean earnings	108	100	93	92	90	94
<ul> <li>standard error</li> </ul>	2.20	2.10	2.30	2.30	2.00	4.30
Other areas – mean earnings	87	84	86	84	81	86
<ul> <li>standard error</li> </ul>	2.40	2.90	2.10	3.60	3.30	3.70

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, AUGUST 1980

			Males		Females					
	Weekly ea	rnings in se	cond job			Weekly earnings in second job			Mean	
	\$30 and Under \$30 over		Total	weekly earnings in second job	Standard error	\$30 and Under \$30 over		Total	weekly earnings in second job	Standard error
	'000	'000	'000	\$	\$	'000	'000	'000	\$	\$
Weekly earnings in main job (\$) – Under 140	4.6	6.6	11.0	46	2.80	7.4	9.2	16.6	42	2.10
140 and under 160 160 " " 180 180 " " 200 200 " " 220 220 " " 240	} * {	} 4.5  * 5.4 5.2	5.8 4.9 6.9 5.5	63 59 65 76	5.40 { 5.40 5.00 6.60	*	7.3	10.4	58	3.70
240 and over	5.3	16.7	22.0	61	2.70	]				
Total	13.6	42.6	56.2	60	1.60	10.5	16.4	27.0	48	1.90
				– do	llars –					
Median earnings in main job Mean earnings in	206	222	219			99	122	115		
main job	204	227	222		• •	115	133	126	• •	
Standard error of mean	11.00	7.20	6.10			7.20	6.70	5.00		

TABLE 4. FULL-TIME EMPLOYEES: WEEKLY EARNINGS IN ALL JOBS AND AGE, AUGUST 1980

	************	Age group (years)								
	15 – 19	20 – 24	25 – 34	<i>35 – 44</i>	45 – 54	55 – 59	60 and over	Total 20 and over	TOTAL	
				MALES			***************************************			
				-	- '000 -					
Weekly earnings (\$) – Under 100	71.6	6.0	8.6	7.0	*	4.5	)	33.2	104.8	
100 and under 110 110 " " 120 120 " " 130 130 " " 140 140 " " 150 150 " " 160 160 " " 170 170 " " 180 180 " " 190 190 " " 200 200 " " 210 210 " " 220 220 " " 230 230 " " 240 240 " " 250 250 " " 260 260 " " 280 280 " " 300 300 " " 320 320 " " 340	29.6 28.5 22.3 19.5 19.4 17.4 10.8 10.8 9.4 8.2 7.5 6.6	* 6.8 8.5 11.5 16.8 28.8 29.1 27.7 35.1 33.6 43.7 27.4 25.3 17.8 21.3 22.9 19.0 13.6 12.7 6.3	8.4 6.7 7.0 18.3 27.6 28.8 38.5 38.9 79.4 46.7 46.2 42.9 43.0 50.7	7.0 4.7 6.1 5.2 11.9 17.3 19.9 27.2 26.0 51.0 34.9 30.9 28.4 33.5 30.0	5.1  8.2  9.9  14.7  18.7  16.6  26.9  25.5  50.2  31.4  32.0  22.1  23.8  24.5  31.9  26.2  28.6  19.3	* { 5.0 { 5.1 5.7 10.4 8.2 16.0 14.3 18.4 12.9 12.5 8.9 11.2 8.4 11.2 9.0 10.3 7.1	6.9  6.0  8.0  4.7  9.3  7.3  10.2  6.0  7.2  5.0  *  6.0  4.6  4.8	18.8 16.5 27.5 33.7 46.7 82.7 111.2 105.9 153.1 145.7 252.8 159.3 154.1 125.1 137.2 141.8 169.3 145.6 155.2 102.8	48.3 45.0 49.8 53.2 66.1 100.1 122.0 116.7 162.5 153.9 260.4 162.8 157.1 127.0 139.0 142.6 170.7 147.1 156.7 103.8	
340 " " 360 360 " " 380 380 " " 400 400 " " 450 450 " " 500	} * <	6.1 6.6 { } 6.7 {	27.3 22.6 18.4 25.8 15.4	27.2 20.1 18.9 29.9 17.8	16.1 12.2 13.4 15.3 12.0	8.2 8.2 { 8.4 *	4.9	87.7 64.8 59.1 84.2 52.5	87.8 65.3 59.3 84.2 53.1	
500 and over		4.6	27.8	38.1	31.3	10.5	ر *	116.7	117.1	
Total	273.3	442.3	854.4	634.6	519.9	222.6	109.1	2,783.0	3,056.3	
					– dollars –					
Median earnings Mean earnings Standard error of mean	123 134 1.70	203 215 2.10	245 266 1.90	255 282 2.30	238 271 2.40	225 257 3.50	213 238 4.70	234 261 1.00	225 249 0.90	
				FEMALES						
					- '000 -					
Weekly earnings (\$) – Under 100	62.8	7.5	*	5.0	4.5	]		25.7	88.4	
100 and under 110 110 " " 120 120 " " 130 130 " " 140 140 " " 150 150 " " 160 160 " " 170 170 " " 180 180 " " 190 190 " " 200 200 " " 210 210 " " 220 220 " " 230 230 " 240 240 " " 250	25.8 29.2 26.1 21.9 14.6 10.8 7.7 6.1 } 4.6	* 7.2 9.4 16.1 19.5 27.3 27.3 29.2 26.7 33.0 25.9 19.7 10.4 10.9 8.2	} 6.0 } 9.1 9.5 17.5 21.7 20.8 19.8 21.7 31.3 21.0 20.5 13.5 10.8	4.5  6.4  7.7  8.4  18.1  14.8  17.1  14.8  12.4  17.3  13.1  9.8  9.7  6.2	5.7 {     *     5.1     7.6     15.2     13.4     12.6     13.0     12.0     12.8     8.3     8.5 }	6.7 6.6 { 5.8 6.2 { 6.9 { 5.1 { 8	5.3	13.9 15.4 26.9 35.9 48.5 82.6 84.5 84.2 78.2 83.4 91.8 66.2 51.8 39.3 32.7	39.7 44.6 53.0 57.7 63.1 93.4 92.2 90.4 80.9 85.4 93.2 67.1 52.0 39.3 32.8	
250 and over	J	32.1	89.9	49.5	28.9	8.3	*	211.9	215.1	
Total	215.7	313.8	317.2	214.9	161.2	46.9	18.8	1,072.7	1,288.4	
Median earnings Mean earnings Standard error of mean	117 122 1.70	184 190 2.20	209 223 2.60	198 217 3.00	- dollars - 190 203 3.30	184 204 6.00	179 189 8.90	195 208 1.30	183 193 1.10	

## 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

- 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. The standard error can also be expressed as a percentage of the estimate, and this is known as the relative standard error.
- 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 since they are averages based on calculations for a limited number of labour force surveys over a wide range of labour force characteristics. However, they will provide an indication of the magnitude of the standard error. An example of the calculation and use of standard errors is as follows:

The estimated number of male full-time employees in the weekly earnings range \$150-160 in Australia

- is 100,100 (Table 1). From the table below it will be seen that the estimate has a standard error of about 3,900 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 96,200 to 104,000 and about nineteen chances in twenty that the value will fall within the range 92,300 to 107,900.
- 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 the tables in this publication estimates less than the lowest levels shown in the table below have not been included. Although figures for these small components 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	Mari	17'-	011	G 4	7.1	m	N/T	4.0.5	Aus	tralia
(persons)	N. S. W.	Vic.	Qld	S.A.	W.A. – number –	Tas.	N.T.	A.C.T.		Per cent of estimate
1,500						300	quantitati			
2,000				pribances.	-	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

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