

**AUSTRALIAN BUREAU OF STATISTICS Canberra** 

CATALOGUE NO. 6220.0

NOON 14 OCTOBER 1980

#### PERSONS NOT IN THE LABOUR FORCE, MARCH 1980 (including discouraged jobseekers)

INQUIRIES

If you want to know more about these statistics ring Mr Eric Hubbard on Canberra (062) 526507 or our State Office, or write to Information Services, ABS, P.O. Box 10, Belconnen, A.C.T. 2616

For copies of this publication contact Information Services, Canberra (062) 526627 or State offices.

#### MAIN FEATURES

Note: Survey estimates are subject to sampling vaariability, as explained in paragraph 12 below.

In March 1980 an estimated 2,831,200 persons aged 15 to 64 years were not in the labour force (i.e. were neither employed nor unemployed). Of these:

- . 2,151,300 did not want a full-time or part-time job.
- . 597,400 would, or might, have liked a job. Of these:

76,000 were discouraged jobseekers, i.e. they wanted a job but had not actively looked for work because they believed that there were no suitable jobs in their locality, that employers considered them too young or too old, or that they lacked the necessary schooling, experience, etc.

21,300 had actively looked for work in the four weeks before the interview week but could not have started work in the survey week.

the remaining 500,100 persons had not actively looked for work, for the following reasons:

personal reasons	215,000
family reasons	203,700
had a job to go to	17,800
no jobs in suitable hours	13,600
other reasons	50,000

#### **EXPLANATORY NOTES**

#### Introduction

In March 1980, a survey, based on the monthly population survey, was conducted throughout Australia in order to obtain information about persons aged 15 to 64 years who were not in the labour force; in particular whether they wanted a job and, if they did, why they were not looking for work.

2. Results of similar surveys conducted in November 1975, May 1977, March and September 1979 were published in previous issues.

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, institutions, 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 on 10 March 1980.

#### Scope

4. The survey included all persons aged fifteen years and over 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, and
- (d) members of non-Australian defence forces (and their dependants) stationed in Australia.

#### Definitions

5. The labour force category to which a person is assigned depends on his *actual activity* (i.e. whether working, looking for work, etc.) during a specified week known as *the survey week*, which is the week immediately preceding that in which the interview takes place. Definitions of the principal labour force categories appearing in this publication are given in *The Labour Force, Australia* (6203.0).

6. *Persons who wanted a job* are those who were not employed at the time of the survey, and:

- (a) in the four weeks before the interview week had not looked for work but in the survey answered 'yes' or 'maybe' to the question 'Even though you have not been looking for work would you like a full-time or part-time job now?', or
- (b) although claiming to have looked for work in the four weeks before the interview week, had

not taken active steps (as defined below) to find employment.

Active steps to find work include checking or registering with the Commonwealth Employment Service or other employment agencies, writing, telephoning or applying in person to an employer, answering a newspaper advertisement for a job, advertising or tendering for work, contacting friends or relatives and looking on factory or employment service notice boards.

7. Among the reasons for not looking for work *personal considerations* include own ill health, physical disability or pregnancy; studying or returning to studies; and no necessity to work; *family considerations* include such matters as ill health of another person; inability to find child care; children thought to be too young; a preference for looking after children and disapproval by the person's spouse.

8. Discouraged jobseekers are persons who wanted a job but were not actively looking for work because they believed they would not be able to find a job for any of the following reasons : they were considered by employers to be too young or too old; they had language or racial difficulties; they lacked the necessary training, skills or experience; or there were no jobs in their locality or line of work. This definition has been revised since the March 1979 survey. See paragraphs 10 and 11 for the effect of the change.

9. Persons included in the survey who wanted a job but were not actively looking for work were asked to give reasons why they were not doing so. Reasons were ranked in the order of priority shown in Table 2; where more than one reason was given, only the higher or highest ranked has been included in the estimates in Tables 2 to 4. Table 5 shows all responses.

#### Discontinuities in the series

10. Estimates for September 1979 and March 1980 are not strictly comparable with those obtained from previous surveys because the definition of *persons who* wanted a job has been widened to include those persons referred to in paragraph 6 (b), i.e. persons who, although claiming to have looked for work in the four weeks before the interview week, had not taken active steps (as defined above) to find employment. Estimates of the numbers of such persons are:

	Males	Females	Persons
November 1975	*	9,400	11,900
May 1977	5,600	14,800	20,400
March 1979	13,300	33,000	46,300
September 1979	9,100	33,400	42,500
March 1980	12,900	39,400	52,300

11. Some of these persons are now classified as *discouraged jobseekers*, the additional numbers being 8,000 persons (7,200 females) in September 1979 and 9,700 persons (8,000 females) in March 1980. Corresponding estimates for earlier periods are not available.

#### Reliability of the estimates

12. 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. More information on this topic is given in the Technical note, page 9.

#### **Related** publications

13. Other ABS publications which may be of interest include:

The Labour Force, Australia (6203.0)

Labour Force Experience, Australia (6206.0)

Persons not in the Labour Force, Australia (6220.0)

Persons Looking for Work, Australia (6222.0)

Labour Mobility, Australia (6209.0)

14. 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 12 above)
  .. not applicable
- n.e.c. not elsewhere classified

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

R. J. CAMERON Australian Statistician

	Number ('000)			Per cent of total			
	Males	Females	Persons	Males	Females	Persons	
Civilian population aged 15 years and over	5,328.0	5,462.2	10,790.2	100.0	100.0	100.0	
Employed Unemployed	3,971.1 211.5	2,272.1 200.9	6,243.2 412.4	74.6 4.0	41.6 3.7	57.9 3.8	
Not in the labour force	1,145.4	2,989.2	4,134.6	21.5	54.7	38.3	
Aged 65 years and over Aged 15 to 64 years	521.4 624.0	782.0 2,207.2	1,303.4 2,831.2	9.8 11.7	14.3 40.4	12.1 26.2	
Inmate of an institution, permanently unable to work, boarding school student Had actively looked for work but was unable to start	49.7	32.8	82.5	0.9	0.6	0.8	
a job in the survey week for reasons other than own temporary illness or injury Had not actively looked for work	8.8 565.5	12.6 2,161.9	21.3 2,727.4	0.2 10.6	0.2 39.6	0.2 25.3	
Did not want a job Did not know whether wanted a job Wanted a job	446.8 8.6 110.1	1,674.0 21.9 <b>466.0</b>	2,120.9 30.4 <b>576.1</b>	8.4 0.2 <b>2.1</b>	30.7 0.4 <b>8.5</b>	19.7 0.3 <b>5.3</b>	
Had taken only non-active steps to find a job (a) Had taken no steps at all to find a job	12.9 97.2	39.4 426.6	52.3 523.8	0.2 1.8	0.7 7.8	0.5 4.9	
Would have liked a job Might have liked a job	85.7 11.4	373.1 53.5	458.9 64.9	1.6 0.2	6.8 1.0	4.3 0.6	
Discouraged (b) Had other reasons for not actively	9.9	66.1	76.0	0.2	1.2	0.7	
looking for work (b)	100.2	399.9	500.1	1.9	7.3	4.6	

#### TABLE 1. CIVILIAN POPULATION AGED 15 YEARS AND OVER : EMPLOYMENT STATUS, MARCH 1980

(a) See Explanatory notes, paragraph 6. (b) See Table 2.

#### TABLE 2. PERSONS AGED 15 TO 64 YEARS WHO WERE NOT IN THE LABOUR FORCE AND WHO WANTED A JOB : AGE AND REASON (a) FOR NOT ACTIVELY LOOKING FOR WORK, MARCH 1980 ('000)

		Age group (years)							
Reason (a) for not looking for work	15-19	20-24	25-34	35-44	45-54	55-59	60-64	Total	
			MALES					8	
Personal considerations Discouraged	39.1	8.0 5.4 —	6.1	5.5 *	8.0 *	5.6 *	5.8 *	78.0 9.9	
Total (b)(c)	47.0	13.5	11.4	8.6	12.0	8.5	9.2	110.1	
FEMALES									
Had a job to go to Personal considerations Family considerations Discouraged (b) Considered too young or too old No jobs in locality or line of work No jobs in suitable hours Other reasons (c) Total	$ \begin{array}{r} * \\ 41.9 \\ 6.4 \\ \hline & 7 \\ \hline & 5 \\ \hline & 6 \\ 56.8 \\ \end{array} $	* 14.7 27.7 1 * .2 * .8 50.2	23.1 100.0 13.3 * 10.4 4.6 11.7 <i>156.0</i>	19.3 43.1 17.1 * 11.8 4.9 9.2 96.1	* 22.6 16.8 17.8 6.6 8.8 * 8.3 69.0	9.1 5.1 7.5 6. * * 25.4	* 6.3 * 9 	9.2 137.0 201.4 66.1 17.2 39.6 12.6 39.7 466.0	
			PERSONS						
Had a job to go to Personal considerations Family considerations Discouraged (b) Considered too young or to old No jobs in locality or line of work No jobs in suitable hours Other reasons (c)	6.7 7.5 4.9 *	.3 22.6 27.8 * * * 6.2	4.8 29.2 100.4 14.5 * 11.5 4.9 13.7		5.9 <u>30.6</u> 17.6 18.8 6.7 9.7 * 10.0	* 14.7 5.3 8.6 4.8 * *	* 12.1 5.3 * *	17.8 215.0 203.7 76.0 19.9 45.1 13.6 50.0	
Total	103.7	63.7	167.3	104.7	81.0	33.8	21.8	576.1	

(a) Highest ranked reason only. See Explanatory notes, paragraph 9. (b) Includes reasons not shown separately. (c) Includes persons who gave no reason.

# TABLE 3. PERSONS AGED 15 TO 64 YEARS WHO WERE NOT IN THE LABOUR FORCE AND WHO WANTED A JOB : BIRTHPLACE AND REASON (a) FOR NOT ACTIVELY LOOKING FOR WORK, MARCH 1980

C	n	n	n)	
C	υ	υ	U)	

			Born overseas					
					Birth	place		
		P	eriod of arriv	al	Main English			
Reason (a) for not actively looking for work	Born in Australia	Before 1961	1961- 1970	1971- 1980	countries (d)	Other countries	Total	Total
			MALES					
Personal considerations Discouraged	58.4 7.7	5.0 *	8.0 *	6.6 *	9.2 *	10.4 *	19.6 *	78.0 9.9
Total (b)(c)	83.7	7.5	9.5	9.4	11.5	14.9	26.4	110.1
5			FEMALES					
Had a job to go to	6.6	*	*	*	*	*	*	9.2
Personal considerations	106.7	9.1	13.0	8.1	13.6	16.6	30.2	137.0
Family considerations	151.1	15.3	19.7	15.3	20.6	29.7	50.3	201.4
Discouraged	43.5	7.6	9.1	6.0	10.1	12.6	22.7	66.1
Considered too young or too old	10.5	5.	.3 ———	*	*	*	6.6	17.2
No jobs in locality or line of work	27.2	*	5.4	*	6.1	6.2	12.4	39.6
No jobs in suitable hours	9.0	*	*	*	*	*	*	12.6
Other reasons (c)	28.6	5.2	*	*	6.2	4.9	11.1	39.7
Total	345.5	40.5	47.0	33.0	53.5	66.9	120.5	466.0
			PERSONS					
Had a job to go to	14.1	*	*	*	*	*	*	17.8
Personal considerations	165.1	14.2	21.0	14.7	22.8	27.0	49.8	215.0
Family considerations	152.8	15.8	19.8	15.3	20.6	30.3	50.9	203.7
Discouraged	51.2	8.7	9.6	6.6	10.8	14.1	24.9	76.0
Considered too young or too old	12.4	6.	.0 0.	*	*	*	7.6	19.9
No jobs in locality or line of work	31.7	*	5.9	*	6.6	6.8	13.4	45.1
No jobs in suitable hours	10.0	*	*	*	*	*	*	13.6
Other reasons	31.3	4.5	*	*	5.6	6.0	11.6	42.8
No reason given	4.7	*	*	*	*	*	*	7.1
Total	429.2	48.0	56.4	42.4	65.1	81.8	146.9	576.1

For footnotes (a) to (c) see Table 2. (d) Comprises the United Kingdom, Ireland, Canada, the United States of America, South Africa and New Zealand.

		and the second	(000)					
Reason (a) for not actively looking for work	N.S.W.	Vic.	Qld	<i>S.A</i> .	<i>W.A</i> .	Tas.	A.C.T.	Australia (d)
			MALES	а 16. г.с.			, ,	
Personal considerations	24.4	22.1	12.4	8.7	6.2	1.7		78.0
Discouraged	*	*	*	*	*	*	*	9.9
Total (b)(c)	33.4	31.9	19.4	10.7	9.0	2.8	*	110.1
		2	FEMALES					
Had a job to go to	*	*	*	*	*	*	*	9.2
Personal considerations	43.2	40.7	22.4	11.3	12.5	3.7	2.2	137.0
Family considerations	71.5	50.8	31.4	17.5	20.6	6.7	*	201.4
Discouraged	18.7	19.7	12.9	6.5	6.1	1.9	*	66.1
Considered too young or too old	4.5	5.6	*	*	*	*	*	17.2
No jobs in locality or line of work	9.8	12.1	8.6	3.7	3.9	*	*	39.6
No jobs in suitable hours	6.1	*	*	*	*	*	*	12.6
Other reasons (c)	10.1	11.6	8.5	3.6	3.2	*	*	39.7
Total	152.4	127.6	78.9	40.8	43.6	13.5	5.6	466.0
			PERSONS					
Had a job to go to	4.5	*	5.7	*	*	*	*	17.8
Personal considerations	67.6	62.8	34.8	20.0	18.8	5.4	4.0	215.0
Family considerations	72.2	51.0	32.0	17.8	20.9	6.9	*	203.7
Discouraged	22.3	23.3	14.0	7.2	6.8	2.1	*	76.0
Considered too young or too old	5.7	6.5	*	*	*	*	*	19.9
No jobs in locality or line of work	12.2	13.9	9.4	3.9	4.1	*	*	45.1
No jobs in suitable hours	6.3	*	*	*	*	*	*	13.6
Other reasons (c)	12.9	14.9	10.8	3.9	4.3	*	*	50.0
Total	185.8	159.5	98.3	51.6	52.6	16.3	7.4	576.1

#### TABLE 4. PERSONS AGED 15 TO 64 YEARS WHO WERE NOT IN THE LABOUR FORCE AND WHO WANTED A JOB : REASON (a) FOR NOT ACTIVELY LOOKING FOR WORK, MARCH 1980

For footnotes (a) to (c) see Table 2. (d) Includes Northern Territory.

D ( ) 1									1
Reason for not actively looking for work (a)	N.S.W.	Vic.	Qld	<i>S.A</i> .	W.A.	Tas.	<i>N.T</i> .	A.C.T.	Australia
			MALES						
Personal considerations	24.7	22.5	12.5	8.7	6.3	1.7	*	*	78.9
Total (b)(c)	37.9	38.9	21.7	12.9	10.5	3.2	*	2.2	128.3
3.			FEMALE	S					
Had a job to go to	*	*	*	*	*	*	*	*	9.2
Personal considerations	43.2	40.7	22.4	11.3	12.5	3.7	*	2.2	137.0
Family considerations	75.3	54.6	33.9	18.7	21.9	7.3	*	2:1	214.7
Considered too young or too old	6.5	6.7	*	2.6	*	*	*	*	21.8
Language or racial difficulties: lacks	0.0								
necessary skills training or									
avperiance	64	*	*	*	*	*	*	*	18.5
No jobs in locality or line of work	16.8	18.8	11.3	5.6	5.8	2.6	*	*	61.2
No jobs in suitable hours	18.0	15.4	5.5	3.5	3.1	1.7	*	*	47.4
At Jobs III suitable hours	18.4	18.4	14.3	7.3	5.6	*	*	*	67.3
Other reasons (c)	10.4	10.1	1110						
Total	187.3	159.8	96.2	51.9	54.3	17.8	3.4	6.4	577.1
			PERSON	IS					
Had a job to go to	4.5	*	5.7	*	*	*	*	*	17.8
Personal considerations	67.8	63.3	34.9	20.0	18.8	5.4	*	4.0	215.8
Fersional considerations	76.4	54.8	34.7	19.0	22.2	7.5	*	2.2	217.7
Considered too young or too old	8.3	8.0	3.8	3.2	*	*	*	*	26.6
Language or racial difficulties: lacks	010								
necessary skills training or									
averagion co	70	6.0	*	*	3.1	*	*	*	22.7
No jobs in locality or line of work	19.7	22.5	12.5	6.4	6.6	2.8	*	*	70.8
No jobs in suitable bours	19.7	177	5.7	3.7	3.4	1.8	*	*	52.0
Other reasons (c)	22.4	23.0	17.5	8.3	7.0	*	*	*	81.8
Other reasons (c)	22.1	23.0	21.0	5.0					
Total	225.2	198.7	118.0	64.8	64.7	20.9	4.6	8.5	705.4

#### TABLE 5. REASONS FOR NOT ACTIVELY LOOKING FOR WORK : ALL RESPONSES (a) OF PERSONS AGED 15 TO 64 YEARS WHO WERE NOT IN THE LABOUR FORCE AND WHO WANTED A JOB, MARCH 1980 ('000 responses)

(a) Includes all responses for those who gave more than one reason for not looking for work. (b) and (c) See footnotes to Table 2.

	N.S.W.	Vic.	Qld	<i>S.A</i> .	W.A.	Tas.	A.C.T.	Australia (b)
		MALES						
Had a job in the last 12 months	10.6	13.3	5.6	2.6	3.5	*	*	37.7
Had looked for work since that job	*	*	*	*	*	*	*	10.3
Had not looked for work since that job	7.1	10.3	4.4	*	*	*	*	27.4
Did not have a job in the last 12 months	21.2	16.5	10.9	7.4	5.0	1.5	*	63.8
Had looked for work in the last 12 months	7.2	8.1	*	3.5	*	*	*	25.0
Had not looked for work in the last 12 months	13.9	8.3	7.7	3.9	3.0	*	*	38.8
Had looked for work	10.8	11.1	4.4	4.0	3.1	*	*	35.4
Had not looked for work	21.0	18.6	12.1	5.9	5.4	*	*	66.1
Total	31.8	29.7	16.5	10.0	8.5	2.5	*	101.5
		FEMAL	ES					
Had a job in the last 12 months	23.0	25.8	12.8	6.7	9.3	2.8	*	82.4
Had looked for work since that job	5.9	8.1	4.1	*	2.8	*	*	24.9
Had not looked for work since that job	17.1	17.7	8.8	4.2	6.5	2.0	*	57.5
Did not have a job in the last 12 months	126.5	100.5	63.3	33.1	33.6	10.5	4.6	374.
Had looked for work in the last 12 months	32.5	25.9	14.7	7.9	8.3	2.8	*	94.
Had not looked for work in the last 12 months	94.0	74.5	48.6	25.2	25.2	7.7	2.9	279.
Had looked for work	38.4	34.0	18.8	10.4	11.2	3.7	2.0	119.
Had not looked for work	111.1	92.3	57.4	29.4	31.7	9.6	3.4	337.
Total	149.6	126.3	76.1	39.8	42.9	13.3	5.4	456.
· · · · · · · · · · · · · · · · · · ·		PERSO	NS		1811 1912			
Had a job in the last 12 months	33.6	39.1	18.5	9.2	12.9	3.8	*	120.
Had looked for work since that job	9.4	11.1	5.3	3.0	4.0	*	*	35.
Had not looked for work since that job	24.2	28.0	13.2	6.2	8.9	2.5	*	84.
Did not have a job in the last 12 months	147.7	117.0	74.2	40.5	38.5	12.0	5.7	438
Had looked for work in the last 12 months	39.8	34.1	17.9	11.4	10.3	3.4	2.1	119
Had not looked for work in the last 12 months	107.9	82.9	56.2	29.1	28.3	8.6	3.6	318.
Had looked for work	49.2	45.1	23.2	14.4	14.3	4.7	2.4	155
Had not looked for work	132.1	110.9	69.4	35.3	37.1	11.1	4.8	403.
Total	181.3	156.0	92.6	49.7	51.4	15.8	7.2	558

#### TABLE 6. PERSONS AGED 15 TO 64 YEARS WHO WERE NOT IN THE LABOUR FORCE AND WHO WANTED A JOB (a) : WHETHER HAD LOOKED FOR WORK AND WHETHER HAD A JOB IN THE LAST TWELVE MONTHS, MARCH 1980 ('000)

(a) Excluding those who had a job to go to. (b) Includes the Northern Territory.

	Fem	ales	Perso	ns	
	Married	Total	Married	Total	
		STATES		1	
New South Wales	15.6	18.7	17.2	22.3	
Victoria	16.0	19.7	17.4	23.3	
Queensland	10.4	12.9	10.7	14.0	
South Australia	4.8	6.5	5.1	7.2	
Western Australia	5.1	6.1	5.4	6.8	
Tasmania	1.5	1.9	1.5	2.1	
Australia (a)	53.8	66.1	57.5	76.0	
		STATE CAPITAL CITI	ES		
Svdnev	7.4	8.5	8.1	10.0	
Melhourne	10.5	13.5	11.4	15.8	
Brisbane	3.9	5.1	4.1	5.3	
Adelaide	3.1	4.1	3.2	4.4	
Perth	3.4	3.9	3.6	4.2	1 27
Total (b)	28.6	35.4	30.6	40.2	

## TABLE 7. PERSONS AGED 15 TO 64 YEARS WHO WERE DISCOURAGED JOBSEEKERS : MARITALSTATUS, STATES AND STATE CAPITAL CITIES, MARCH 1980

(a) Includes the Northern Territory and the Australian Capital Territory. (b) Includes Hobart.

### TABLE 8. PERSONS AGED 15 TO 64 YEARS WHO WERE DISCOURAGED JOBSEEKERS : WHETHER HAD LOOKED FOR WORK AND WHETHER HAD A JOB IN THE LAST TWELVE MONTHS, MARCH 1980

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	Females		Pers	ons	
	Married	Total	Married	Total	
Had a job in the last 12 months	8.2	10.0	9.7	13.7	
Had looked for work since that job Had not looked for work since that job	*	4.8	*	6.8	
	4.8	5.2	5.5	6.9	
Did not have a job in the last 12 months	45.6	56.1	47.8	62.3	
Had looked for work in the last 12 months	19.2	23.5	20.8	27.2	
Had not looked for work in the last 12 months	26.4	32.7	27.1	35.1	
Had looked for work	22.6	28.3	24.9	34.0	
Had not looked for work	31.2	37.9	32.6	42.0	
Total	53.8	66.1	57.5	76.0	

#### **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 2 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 of the likely difference is the relative standard error which is obtained by expressing the standard error as a percentage of the estimate.

Space does not allow for the separate indication 3 of the standard errors of all estimates in this publication. A table of standard errors for general application is given below. These figures will not give precise measure of the standard error of a particular estimate since they are averages based on calculations for a limited number of past 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 persons aged 15 to 64 years who were not in the labour force and who wanted a job is 576,100 (Table 1). From the table below it will be seen that the estimate has a standard error of about 7,500 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 568,600 to 583,600 and about nineteen chances in twenty that it will fall within the range 561,100 to 591,100.

4. The reliability of an estimated percentage or rate, computed by using sample data for both numerator and denominator, depends upon both the size of the numerator and the size of the denominator. For small percentages the relative standard error of the percentage is approximated by the relative standard error of the numerator, which may be obtained from the table below. 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 published. Although figures for these small components can in some cases be derived by subtraction, they should not be regarded as reliable.

6. Published figures may also be used to estimate the difference between two survey estimates (numbers, rates or percentages). Such a figure is itself an estimate and is therefore subject to sampling error. The sampling error of the difference between two survey estimates depends on the standard errors of the original estimates and on the relationship (correlation) between the two original estimates. An approximate standard error (SE) of the difference between two estimates (x - y) may be calculated by the following formula:

SE 
$$(x - y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

While this formula will only be exact for differences between separate and uncorrelated characteristics or sub-populations it is expected to provide a good approximation for all differences likely to be of interest in this publication.

An example of the use of the above formula is as follows: The difference between the estimates of the number of males and females in Australia aged 20-24 who wanted a job (Table 2) is 36,700 (50,200-13,500). The standard error of this estimate may be calculated as follows: from the standard error table, the standard errors of the two original estimates can be approximated as 2,900 and 1,600 respectively. Therefore the standard error of the difference (36,700) is:

 $\sqrt{(2,900)^2 + (1,600)^2}$ , or 3,300 (rounded to the nearest 100). Thus there are about two chances in three that the difference that would have been obtained if all dwellings had been included in the survey is within the range 33,400 to 40,000 and about nineteen chances in twenty it is between 30,100 and 43,300.

7. 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 (a)

		1							Aus	Australia	
Size of estimate	N.S.W.	Vic.	Qld	S.A. – nun	W.A. aber –	Tas.	N.T.	A.C.T.		Relative standard error (per cent)	
 1,500	1					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	ggilonation	0.0000000000	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	

(a) Estimates below the level indicated have not been published. See paragraph 5.