

# AUSTRALIAN BUREAU OF STATISTICS CANBERRA

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# THE LABOUR FORCE AUGUST 1976 (PRELIMINARY)

#### MAIN FEATURES

. In August 1976, the number of employed civilians (including self-employed) was 5,747,600, a decrease of 93,000 since May 1976. Males decreased by 60,700 while females decreased by 32,300. On the basis of other information it is believed that the survey figures have significantly overstated the extent of this decline. In addition the August figures have been affected by industrial disputes.

The estimated number of unemployed persons (including those looking for part-time work) was 264,100 or 4.4 per cent of the civilian labour force (4.9 per cent seasonally adjusted), an increase of 16,500 since May 1976.

Average duration of unemployment was 17.7 weeks.

#### **EXPLANATORY NOTES**

#### Introduction

This statement contains preliminary estimates of the civilian labour force for August 1976 and estimates for the previous five quarters. The estimates are derived from the results of the population surveys conducted in February, May, August and November each year throughout Australia. The quarterly bulletin *The Labour Force* (Reference No. 6.20), which gives information in greater detail, will be published shortly.

2. Preliminary unemployment estimates are published several weeks in advance of this statement in *Unemployment, Preliminary Estimates* (Reference No. 6.35).

#### The population survey

3. The survey is based on a multi-stage area sample of private dwellings (about 30,000 houses, flats, etc.) and non-private dwellings (hotels, motels, etc.), and covers about two-thirds of one per cent of the population of Australia. The information is obtained each quarter from the occupants of selected dwellings by carefully chosen and specially trained interviewers. Interviews are carried out during a period of four weeks, so that in each of the months to which the survey relates, there are four survey weeks, chosen so as to fall within the limits of the calendar month or with minimum encroachment into the adjacent months.

#### Scope

4. The estimates relate to all persons aged fifteen years and over except members of the permanent armed forces and certain diplomatic personnel customarily excluded from census and estimated populations.

#### Classification of the labour force

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 *survey week*, which is the week immediately preceding that in which the interview takes place. Definitions of the principal categories appearing in this statement are given in the quarterly bulletins.

### Estimation procedure

6. Estimates are obtained by using a complex ratio estimation procedure which ensures that survey estimates conform to independent population estimates by State, area, age and sex. These population estimates are based on very preliminary information and are subject to revision.

# Reliability of the estimates

- 7. Since the estimates are based on a sample, they may differ from the figures that would have been obtained from a complete census using the same questionnaires and procedures. 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, and not the whole population, was enumerated. The smaller the estimate the higher is the relative standard error : for example, the relative standard error of an estimate for Australia of 2,000,000 is approximately 0.5 per cent (10,000) while that of an estimate of 20,000 is approximately 8 per cent (1,600). 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 from a comparable enumeration, and about nineteen chances in twenty that the difference will be less than two standard errors.
- 8. Limitations of space preclude publication of the standard errors of all estimates in this statement. More information on this topic, together with a table of estimated standard errors for States, Territories and Australia, is given in the quarterly bulletin *The Labour Force* (Reference No. 6.20).

## Seasonal adjustment

- 9. In the May 1976 and previous issues of this statement and other labour force publications, mention has been made of the problems in seasonally adjusting numbers unemployed due to the change in the proportional relationship of the amplitude of the seasonal variations to the level of the quarterly series.
- 10. An estimate of the effect of the change in the relationship between the amplitude of the seasonal variations and the level of the quarterly series has now been made. Prior adjustment factors derived from this estimate have been used in the X-11 program to obtain improved seasonal adjustment factors. The estimate of the new relationship is necessarily based only on experience since late 1974. Although the problems in satisfactorily seasonally adjusting the quarterly series are less than would be the case with a monthly series, it would be claiming too much to suggest that the problems encountered previously have now been wholly overcome. However, the revised figures will provide a seasonal adjustment than that provided previously.
- 11. The seasonal adjustment factors have been revised for both the "persons aged 15-19 years looking for their first job" and the "remainder" series. This statement therefore includes revised seasonally adjusted estimates for total unemployed and total excluding persons aged 15-19 years looking for their first job.
- 12. As from the May 1976 issue of this statement the unemployment estimates derived from the population survey have been based on a revised definition. See *The Labour Force*, May 1976 (Reference No. 6.20), pages 3 and 4, paragraphs 9 to 16 for details. Estimates of unemployment on the revised basis have a different seasonal pattern from those on the old basis. Because only five quarterly figures on the revised basis were available at the time the seasonal adjustment factors were calculated it has been necessary to make special estimates for the seasonally adjusted series.
- NOTE. Any discrepancies between totals and sums of components in tables are due to rounding.

						Unemp	loyed (b)							
						Par.		persons a	xcluding aged 15-19	Total labour force (b)				
	Employed (b)(c)			Total		Per cent of labour force (d)		years looking for first job		Number		Per cent	Not	Civilian
Month	Agri- culture ('000)	Other industries ('000)	Total ('000)	Original ('000)	Seasonally adj. (e)(f) ('000)	Original	Seasonally adj. (f)	Original ('000)	Seasonally adj. (e)(f) ('000)	Original ('000)	Seasonally adj. (e) ('000)	of popula- tion (g)	in labour force (b) ('000)	population aged 15 and over (a) ('000)
							MALES							
1975 - May Aug. Nov. (h) 1976 - Feb. (i) May Aug. †	297.6 294.8 294.3 294.8 284.2 282.4	3,474.3 3,453.4 3,475.0 3,509.4 3,543.9 3,485.0	3,771.9 3,748.2 3,769.3 3,804.2 3,828.1 3,767.4	131.8 126.4 139.0 159.5 132.4 146.2	140.3 142.2 141.0 138.0 142.2 166.3	3.4 3.3 3.6 4.0 3.3 3.7	3.6 3.6 3.6 3.5 3.6 4.2	122.8 118.0 126.8 142.0 123.0 133.7	126.2 127.8 130.1 125.2 127.5 145.1	3,903.6 3,874.5 3,908.3 3,963.6 3,960.5 3,913.6	3,901.3 3,897.9 3,925.0 3,929.0 3,958.6 3,937.5	81.2 80.5 80.7 81.4 81.0 80.0	903.3 939.4 935.1 908.5 930.1 978.6	4,807.0 4,814.0 4,843.3 4,872.1 4,890.6 4,892.2
			*			MARI	RIED WOMEN							
1975 – May Aug. Nov. (h) 1976 – Feb. (i) May Aug. †	52.1 54.8 62.7 60.1 57.1 62.4	1,185.5 1,191.7 1,241.9 1,226.9 1,230.7 1,216.2	1,237.6 1,246.5 1,304.6 1,287.0 1,287.8 1,278.6	62.3 53.7 65.2 68.7 50.9 51.9	n.a. n.a. n.a. n.a. n.a.	4.8 4.1 4.8 5.1 3.8 3.9	n.a. n.a. n.a. n.a. n.a.	62.3 53.3 64.9 67.9 50.7 51.6	n.a. n.a. n.a. n.a. n.a.	1,299.9 1,300.2 1,369.8 1,355.7 1,338.8 1,330.5	1,305.3 1,315.8 1,345.1 1,358.7 1,344.4 1,346.6	40.1 40.2 42.3 41.5 41.0 40.7	1,939.7 1,933.5 1,868.3 1,912.3 1,924.4 1,942.3	3,239,6 3,233.7 3,238.1 3,268.0 3,263.2 3,272.8
						ALI	LFEMALES							
1975 - May Aug. Nov. (h) 1976 - Feb. (i) May Aug. †	62.4 67.3 74.8 71.7 67.8 72.2	1,876.3 1,872.7 1,955.1 1,934.8 1,944.7 1,908.0	1,938.7 1,939.9 2,029.8 2,006.5 2,012.5 1,980.2	120.7 117.4 135.5 145.0 115.1 118.0	127.1 131.7 136.8 126.4 122.2 132.1	5.9 5.7 6.3 6.7 5.4 5.6	6.1 6.3 6.4 5.9 5.7 6.2	106.9 101.5 116.2 122.3 100.4 104.2	109.9 110.6 119.6 107.4 103.8 114.0	2,059.4 2,057.3 2,165.3 2,151.5 2,127.6 2,098.2	2,073.7 2,082.2 2,142.9 2,135.5 2,142.3 2,124.3	42.0 41.9 43.8 43.3 42.7 42.0	2,845.8 2,849.1 2,776.6 2,814.8 2,851.2 2,897.9	4,905.3 4,906.4 4,942.0 4,966.3 4,978.8 4,996.1
						P	ERSONS					85		
1975 - May Aug. Nov. (h) 1976 - Feb. (i) May Aug. †	360.0 362.1 369.1 366.5 352.0 354.6	5,350.6 5,326.0 5,430.0 5,444.2 5,488.6 5,393.0	5,710.6 5,688.1 5,799.1 5,810.6 5,840.6 5,747.6	252.5 243.8 274.5 304.5 247.6 264.1	266.5 274.1 279.2 263.2 263.8 297.3	4.2 4.1 4.5 5.0 4.1 4.4	4.5 4.6 4.6 4.3 4.3 4.9	229.7 219.5 243.1 264.3 223.4 237.9	235.4 238.7 250.6 232.0 231.1 259.2	5,963.0 5,931.8 6,073.6 6,115.1 6,088.1 6,011.8	5,981.1 5,970.5 6,066.3 6,070.3 6,107.0 6,051.7	61.4 61.0 62.1 62.2 61.7 60.8	3,749.2 3,788.6 3,711.8 3,723.3 3,781.3 3,876.5	9,712.3 9,720.4 9,785.3 9,838.4 9,869.4 9,888.3

<sup>(</sup>a) For scope of estimates see page 1, paragraph 4. (b) For definition see the May 1976 issue of The Labour Force (Reference No. 6.20), pages 2 to 4, paragraphs 6 to 16. (c) Employed includes employers and self-employed in addition to wage and salary earners. For monthly statistics of wage and salary earners see Employment and Unemployment (Reference No. 6.4). (d) The number of unemployed in each group as a percentage of the labour force in the same group. (e) For details of the methods used in seasonally adjusting these series see Seasonally Adjusted Indicators, 1976 (Reference No. 1.10). (f) Revised following re-analysis of the series. See paragraphs 9 to 12. (g) The labour force (original) in each group as a percentage of the civilian population aged 15 years and over in the same group (labour force participation rate). (h) The sample size was reduced for the November 1975 survey. Consequently the standard errors for estimates from that survey are larger than usual. For details see the November 1975 issue of The Labour Force (Reference No. 6.20). (i) Affected by the deferral of the interviewing period by one week. It is estimated that had interviewing taken place in the normal period, the original and seasonally adjusted figures for total unemployed persons and persons in the labour force would have been higher by some 5,000 to 10,000, and the number of persons not in the labour force would have been correspondingly decreased.

n.a. Not available.

<sup>†</sup> Affected by industrial dispute.

TABLE 2. - EMPLOYED PERSONS (a), AUGUST 1976 †

	Males	Married women	Other females (b)	All females	Persons
		NUMBER EMPLOY	ED ('000)		
Full-time workers (c) Part-time workers (c)	3,600.8 166.6	747.7 530.8	572.1 129.6	1,319.8 660.4	4,920.6 827.0
Total	3,767.4	1,278.6	701.7	1,980.2	5,747.6
	A	VERAGE HOURS W	ORKED (d)		
Agriculture	53.3 39.2	29.9	36.3	30.8	48.7
Manufacturing Construction	38.5	32.8 20.8	36.5 37.7	33.8 22.9	37.8 37.4
Wholesale and retail trade	41.3	29.2	31.9	30.2	36.8
Community services (e)	37.5	27.5	33.9	29.9	32.7
All industries	40.1	28.8	33.4	30.4	36.8
Full-time workers (c)	41.3	37.7	37.7	37.7	40.3
Part-time workers (c)	15.1	16.2	14.4	15.8	15.7

<sup>(</sup>a) See footnote (b) to Table 1. (b) Never married, widowed and divorced. (c) For definition, see the May 1976 issue of The Labour Force (Reference No. 6.20), page 4, paragraph 15. (d) Averages have been calculated using actual hours worked during survey week, not hours paid for. All employed persons, including those who did not work during survey week, have been included in the calculations. When recording hours worked, fractions of an hour are disregarded. This procedure results in a slight lowering of the average hours figures. The figures may be affected by public holidays, leave, absenteeism; temporary absence from work due to sickness, accidents and industrial disputes; and work stoppages due to bad weather, plant breakdown, etc. (e) Comprises health, education, libraries, etc., welfare and religious institutions; and other community services. In May and August each year estimates of average hours are low because hours worked by school teachers are affected by school holidays.

TABLE 3. - UNEMPLOYED PERSONS (a), AUGUST 1976

	Males	Married Other All s women females (b) females			Persons		
	1	NUMBER UNEMPLO	YED ('000)				
Looking for full-time work (c) Looking for part-time work (d)	138.0 8.1	27.4 24.5	57.5 8.6	84.9 33.1	222.9 41.2		
Aged 15-19 years — Looking for first job Other Total aged 15-19 years	12.5 30.3 42.7	*	13.5 29.5 43.0	13.8 32.0 45.9	26.3 62.3 88.6		
Aged 20 years and over	103.4	49.0	23.1	72.1	175.5		
Unemployed for (e) — Under 2 weeks 2 weeks and under 4 weeks 4 weeks and under 8 weeks 8 weeks and under 13 weeks 13 weeks and under 26 weeks 26 weeks and over	13.1 21.0 26.1 24.8 22.0 39.3	6.6 10.3 7.9 9.2 7.8 10.0	5.2 10.3 11.4 10.9 10.9 17.4	11.9 20.5 19.3 20.2 18.7 27.4	24.9 41.5 45.4 44.9 40.7 66.7		
All unemployed persons	146.2	51.9	66.1	118.0	264.1	narryment d. o	
	AVERAGE D	URATION OF UNE	IPLOYMENT (f) (week	s)			
Aged 15-19 years Aged 20 years and over	19.6 17.7	19.1 15.9	17.9 17.9	18.0 16.5	18.8 17.2		
All unemployed persons	18.2	16.1	17.9	17.1	17.7		
	UNE	EMPLOYMENT RATI	ES (g) (per cent)				
Looking for full-time work (c) Looking for part-time work (d)	3.7 4.7	3.5 4.4	9.1 6.2	6.0 4.8	4.3 4.7		
Aged 15-19 years Aged 20 years and over	11.8 2.9	3.7	14.5 4.9	14.4	13.0 3.3		
All unemployed persons	3.7	3.9	8.6	5.6	4,4		

<sup>(</sup>a) See footnote (b) to Table 1. (b) Never married, widowed and divorced. (c) Includes persons laid off for the whole week from full-time jobs. (d) Includes persons laid off for the whole week from part-time jobs. (e) Period from the time the person began looking for work, or was laid off, to the end of survey week. (f) Periods of unemployment are recorded only in complete weeks; the averages shown are affected accordingly. (g) The number of unemployed in each group as a percentage of the labour force in the same group.

<sup>†</sup> Affected by industrial dispute.

<sup>\*</sup> Less than or based on a figure less than 4,000. See the May 1976 issue of The Labour Force (Reference No. 6.20) page 26, paragraph 7.

TABLE 4. – CIVILIAN POPULATION 15 YEARS OF AGE AND OVER (a), BY EMPLOYMENT STATUS STATES AND TERRITORIES, AUGUST 1976

	Ei	Employed (b)(c)			Unemployed (b)		Total labour force (b)		Civilian
State or Territory	Other Agri- indus- culture tries ('000) ('000)		Total ('000)	Number ('000)	Per cent of labour force (d)	Number ('000)	Per cent of popula- tion (g)	Not in labour force (b) ('000)	population aged 15 and over (a) ('000)
				MALES					
New South Wales †	82.5	1,251.1	1,333.6	60.8	4.4	1,394.4	79.5	359.4	1,753.8
Victoria †	62.5	958.6	1,021.1	32.3	3.1	1,053.4	80.2	260.9	1,314.3
Queensland	60.8	483.6	544.4	24.1	4.2	568.5	79.1	150.5	719.0
South Australia	32.1	320.8	352.9	9.9	2.7	362.7	80.4	88.5	451.2
Western Australia	34.3	293.2	327.5	10.9	3.2	338.4	81.7	75.6	414.0
Tasmania	8.8	100.9	109.6	4.7	4.1	114.3	79.0	30.5	144.8
Northern Territory	*	23.9	25.1	*	*	25.9	82.1	5.6	31.5
Australian Capital Territory	*	52.9	53.2	2.7	4.9	55.9	87.9	7.7	63.6
Australia	282.4	3,485.0	3,767.4	146.2	3.7	3,913.6	80.0	978.6	4,892.2
			F	FEMALES					
New South Wales †	21.9	674.1	696.0	44.0	6.0	740.0	41.2	1,056.0	1,796.0
Victoria †	15.6	545.4	561.0	29.3	5.0	590.3	43.4	771.2	1,361.5
Queensland	14.5	244.2	258.7	17.9	6.5	276.6	37.9	453.1	729.7
South Australia	8.7	184.5	193.2	9.3	4.6	202.5	43.6	261.5	464.0
Western Australia	8.8	164.5	173.3	10.7	5.8	184.0	45.6	219.6	403.6
Tasmania	2.7	50.1	52.8	3.5	6.2	56.3	38.1	91.6	147.9
Northern Territory	*	12.5	12.6	*	*	13.3	50.0	13.3	26.6
Australian Capital Territory	*	32.7	32.7	2.5	7.1	35.2	52.7	31.6	66.8
Australia	72.2	1,908.0	1,980.2	118.0	5.6	2,098.2	42.0	2,897.9	4,996.1
			]	PERSONS					
New South Wales †	104.3	1,925.3	2,029.6	104.8	4.9	2,134.5	60.1	1,415.3	3,549.8
Victoria †	78.1	1,504.0	1,582.1	61.6	3.7	1,643.7	61.4	1,032.1	2,675.8
Queensland	75.3	727.8	803.1	42.0	5.0	845.1	58.3	603.6	1,448.7
South Australia	40.8	505.3	546.0	19.2	3.4	565.2	61.8	350.0	915.2
Western Australia	43.2	457.7	500.8	21.6	4.1	522.4	63.9	295.2	817.6
Tasmania	11.4	151.0	162.4	8.2	4.8	170.6	58.3	122.1	292.
Northern Territory	*	36.4	37.7	1.5	3.8	39.2	67.4	18.9	58.
Australian Capital Territory	*	85.6	85.9	5.2	5.7	91.1	69.9	39.3	130.4
Australia	354.6	5,393.0	5,747.6	264.1	4.4	6,011.8	60.8	3,876.5	9,888.

For footnotes see Table 1.

NOTE. Standard errors of State estimates are available from the office of the Australian Bureau of Statistics in each State capital. See also page 1, paragraph 8.

R. W. COLE Australian Statistician

Australian Bureau of Statistics Belconnen, A.C.T. 2616

<sup>\*</sup> Subject to sampling variability too high for most practical uses.

<sup>†</sup> Affected by industrial dispute.