## RETAIL SALES OF GOODS : AUSTRALIA AUGUST 1975 (Provisional)

## MAIN FEATURES

- The provisional estimate of the value of retail sales (excl. motor vehicles, parts, petrol, etc.) for August 1975 is $\$ 1,424.0 \mathrm{~m}$.
- Seasonally adjusted, the August 1975 estimate is 12.4\% greater than August 1974.
- Seasonally adjusted, the August 1975 estimate is 0.5\% greater than July 1975.


## EXPLANATORY NOTES

## Introduction

The table overleaf gives a provisional estimate of the total value of retail sales in Australia (excluding motor vehicles, parts, petrol, etc.) for the month of August 1975. Figures for a number of earlier months are also shown for purposes of comparison. All figures in this bulletin are on a basis comparable with the 1968-69 Census of Retail Establishments.

## The monthly sub-sample

2. The provisional monthly estimates of retail sales are obtained from a sub-sample of those establishments included in the quarterly sample of retail establishments. The monthly sub-sample is comparatively small since it is designed to provide prompt estimates of the total value of retail sales (excluding motor vehicles, parts, petrol, etc.) without placing an undue burden on either the resources of the Bureau or upon retail establishments.

## Reliability of estimates

3. As the provisional monthly estimates are derived from returns received from a sample of retail establishments they may differ somewhat from the results which would have been obtained from a comparable complete collection. A measure of the likely difference is given by the standard error of the estimate. There are about 2 chances in 3 that a sample estimate will differ from results which would be obtained from a comparable complete collection by less than 1 standard error and 19 chances in 20 that the difference would be less than 2 standard errors. If, for example a sample gives an estimate of $\$ 1,000$ million and the standard error of this estimate is 1 per cent, i.e. $\$ 10$ million, then there are 2 chances in 3 that a comparable complete collection would give a figure within the range of $\$ 990$ million to $\$ 1,010$ million and 19 chances in 20 that the figure would be within the range of $\$ 980$ million to $\$ 1,020$ million.
4. The standard error of the provisional estimates of the total value of monthly retail sales (excluding motor vehicles, parts, petrol, etc.) is about 1.0 per cent. The standard error of the month-to-month movement of the provisional estimates of the value of retail sales is generally about 0.3 per cent of the current monthly estimate. For example, the movement in the value of retail sales between the months of July 1975 and August 1975 is shown by the original series in the table overleaf as an increase of $\$ 12.0$ million. The standard error of this movement is about 0.3 per cent of the August 1975 estimate, i.e. approximately $\$ 4.3$ million. Therefore there are 2 chances in 3 that the movement in the value of retail sales between July 1975 and August 1975 was between $\$ 7.7$ million and $\$ 16.3$ million, and 19 chances in 20 that it was between $\$ 3.4$ million and $\$ 20.6$ million. Expressed in another way the estimates show a proportionate movement in the value of retail sales between July 1975 and August 1975 of 0.8 per cent and this has a standard error of about 0.3 percentage points, i.e. there are 2 chances in 3 that the proportionate movement was between 0.5 per cent and 1.1 per cent and 19 chances in 20 that it was between 0.2 per cent and 1.4 per cent.
5. The provisional monthly estimates may also differ from those which would be obtained from a sample as large as that used to provide quarterly estimates. Hence, the sum of the provisional estimates for the three months comprising a quarter may differ from the estimate obtained for that quarter from the full quarterly sample. The standard error of this difference is approximately 0.8 per cent of the quarterly estimate. The monthly estimates are subsequently adjusted in accordance with the quarterly estimates as they become available.

## Seasonal adjustment

6. Seasonally adjusted statistics are also shown in the table overleaf. In the seasonal adjustment, account has been taken of both normal seasonal factors and "trading-day" effects (arising from the varying numbers of Sundays, Mondays, Tuesdays, etc. in the month). While the normal seasonal factors should change only gradually from year to year the trading-day adjustment for any month will vary from year to year in accordance with the combination of days which occur in the month. Adjustment has also been made for the effects of movement in the date of Easter and Australia Day. It should be noted that the seasonally adjusted figures reflect the sampling errors to which the original figures are subject. Details of the methods used in seasonally adjusting this and other series are given in Seasonally Adjusted Indicators 1975 (Reference No. 1.10) and the
appendix to Retail Sales of Goods (Reference No. 11.4)
December quarter 1974 of 30 May 1975.

## Further information

7. For further information relating to the basis of
compilation of retail sales statistics see the quarterly bulletin Retail Sales of Goods (Reference No. 11.4) December quarter 1974 of 30 May 1975 .

TOTAL VALUE OF RETAIL SALES OF GOODS (EXCLUDING MOTOR VEHICLES, PARTS, PETROL, ETC.) MONTHLY ESTIMATES : AUSTRALIA (a)(b) (\$ million)


| Month | 1971-72 | 1972-73 | 1973-74 | 1974.75 | 1975-76 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ORIGINAL |  |  |  |  |  |
| July | 852.4 | 883.1 | 1,017.8 | 1,248.0 | (c) 1,412.0 |
| August | 834.1 | 924.1 | 1,100.7 | 1,297.1 | (c) 1,424.0 |
| September | 852.5 | 931.6 | 1,055.6 | 1,239.3 |  |
| October | 891.9 | 967.8 | 1,161.7 | 1,346.7 |  |
| November | 925.5 | 1,028.0 | 1,231.1 | 1,388.2 |  |
| December | 1,180.2 | 1,274.3 | 1,462.3 | 1,674.7 |  |
| January | 816.4 | 937.6 | 1,135.5 | 1,302.0 |  |
| February | 836.0 | 892.5 | 1,072.5 | 1,218.5 |  |
| March | 888.9 | 989.2 | 1,157.4 | 1,300.0 |  |
| April | 853.6 | 972.3 | 1,192.9 | (c) 1,386.0 |  |
| May | 945.7 | 1,075.3 | 1,306.6 | (c) 1,479.0 |  |
| June | 895.2 | 1,029.0 | 1,186.9 | (c) $1,344.0$ |  |
| Total for year | 10,772.4 | 11,904.8 | 14,081.0 | (c) $16,223.5$ |  |
| SEASONALLY ADJUSTED (d) |  |  |  |  |  |
| July | 871.0 | 936.4 | 1,078.6 | 1,294.9 | (c) 1,458.7 |
| August | 873.2 | 942.5 | 1,105.1 | 1,304.7 | (c)1,466.2 |
| September | 880.3 | 954.4 | 1,117.7 | 1,309.5 |  |
| October | 879.5 | 966.6 | 1,135.9 | 1,311.0 |  |
| November | 883.9 | 975.8 | 1,154.8 | 1,310.2 |  |
| December | 888.3 | 985.5 | 1,146.9 | 1,313.8 |  |
| January | 879.7 | 990.0 | 1,194.3 | 1,349.5 |  |
| February | 905.7 | 1,001.8 | 1,205.0 | 1,369.7 |  |
| March | 911.1 | 1,013.9 | 1,216.0 | 1,396.0 |  |
| April | 907.7 | 1,034.8 | 1,245.1 | (c) 1,433.6 |  |
| May | 923.0 | 1,045.4 | 1,252.2 | (c) 1,421.2 |  |
| June | 924.9 | 1,068.8 | 1,275.0 | (c) 1,440.9 |  |

(a) Excludes Northern Territory and Australian Capital Territory. (b) Figures from April 1973 are subject to revision when more precise information is available relating to trading by new businesses. (c) Provisional estimate (see paragraph 5, page 1). (d) See paragraph 6 , page 1 .

Notes on sampling aspects and on seasonal adjustment are shown overleaf.

## J. G. MILLER <br> Acting Commonwealth Statistician

## Australian Bureau of Statistics

Canberra, A.C.T. 2600
NOTE. Inquiries concerning these statistics may be made in Canberra by telephoning Mr J. Brzozowski on 527911 extension 6251 or, in each State capital, by telephoning the office of the Australian Bureau of Statistics.

