

Reference No. 11.6

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## RETAIL SALES OF GOODS : AUSTRALIA MONTH OF DECEMBER 1972 (PROVISIONAL)

A provisional estimate of the total value of retail sales in Australia (excluding motor vehicles, parts, petrol, etc.) for the month of December 1972 is shown in the table overleaf. Figures for some earlier months are also shown for purposes of comparison.

2. The provisional monthly estimates of retail sales are obtained from a sub-sample of establishments used to provide quarterly estimates of the value of retail sales. *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.*

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 \$500 million and the standard error of this estimate is 1 per cent, i.e. \$5 million, then there are 2 chances in 3 that a comparable complete collection would give a figure within the range of \$495 million to \$505 million and 19 chances in 20 that the figure would be within the range of \$490 million to \$510 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 November and December 1972 is shown by the original series in the table overleaf as an increase of \$229.0 million. The standard error of this movement is about 0.3 per cent of the December 1972 estimate, i.e. approximately \$3.6 million. Therefore, there are 2 chances in 3 that the movement in the value of retail sales between November and December 1972 was between \$225.4 million and \$232.6 million, and 19 chances in 20 that it was between \$221.8 million and \$236.2 million. Expressed in another way, the estimates show a *proportionate* movement in the value of retail sales between November and December of 24.0 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 23.7 per cent and 24.3 per cent and 19 chances in 20 that it was between 23.4 per cent and 24.6 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 preliminary and final quarterly estimates as they become available.

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. However, as the series has been compiled only since April 1961 these adjustments are based necessarily on limited data and could be subject to revision when data for further years become available. 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 1972* (Reference No. 1.10) of 6 July 1972.

7. All figures in this bulletin are on a basis comparable with the 1961-62 Retail Census. Further information relating to the basis on which the statistics of retail sales of goods are compiled is contained in the quarterly bulletin *Retail Sales of Goods* (Reference No. 11.4) September quarter 1972 of 5 January 1973.

**TOTAL VALUE OF RETAIL SALES OF GOODS**  
**(EXCLUDING MOTOR VEHICLES, PARTS, PETROL, ETC.)**  
**MONTHLY ESTIMATES : AUSTRALIA (a) (b)**  
 (All figures are on a basis comparable with the 1961-62 Retail Census)  
 (\$ million)

<i>Month</i>	<i>1968-69</i>	<i>1969-70</i>	<i>1970-71</i>	<i>1971-72</i>	<i>1972-73</i>
ORIGINAL					
July	623.1	671.8	727.8	792.8	821.3
August	645.0	675.8	711.5	775.7	859.4
September	603.4	671.4	722.6	792.8	866.4
October	663.1	726.6	788.0	829.5	(c)900.0
November	695.3	716.9	777.7	860.8	(c)956.0
December	867.2	960.6	1,028.1	1,097.6	(c)1,185.0
January	652.6	703.3	735.0	759.3	
February	597.3	654.2	689.2	777.4	
March	647.5	686.0	765.4	826.6	
April	646.2	710.8	775.2	793.8	
May	710.8	753.9	804.2	879.4	
June	645.1	700.4	765.2	832.6	
<b>Total for year</b>	<b>7,996.6</b>	<b>8,631.7</b>	<b>9,289.9</b>	<b>10,018.3</b>	
SEASONALLY ADJUSTED (d)					
July	646.8	695.3	743.2	811.9	873.1
August	652.3	700.4	748.1	815.8	881.7
September	640.2	700.1	753.4	822.8	893.1
October	654.5	705.5	765.7	824.3	(c)906.4
November	660.6	705.1	764.5	830.5	(c)916.5
December	666.1	722.1	769.5	809.6	(c)896.7
January	673.9	727.7	770.7	815.8	
February	666.8	730.8	778.3	839.3	
March	684.9	730.3	791.2	841.9	
April	677.6	735.5	798.1	846.6	
May	683.2	741.8	802.0	858.8	
June	696.3	741.3	808.4	863.9	

(a) Excludes Northern Territory and Australian Capital Territory. (b) Figures from April 1971 are subject to revision when more precise information is available relating to trading by new businesses. (c) Provisional estimate (see paragraphs 2 to 5 page 1). (d) See paragraph 6 page 1.

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**NOTE.** Inquiries concerning these statistics may be made in Canberra by telephoning 49 0211 extension 293 or, in each State capital, by telephoning the office of the Bureau of Census and Statistics.