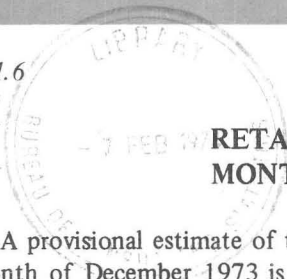


Reference No. 11.6

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658-8705
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**RETAIL SALES OF GOODS : AUSTRALIA
MONTH OF DECEMBER 1973 (Provisional)**

A provisional estimate of the total value of retail sales in Australia (excluding motor vehicles, parts, petrol, etc.) for the month of December 1973 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. A new sample based on the 1968-69 Census of Retail Establishments was introduced commencing with the month of April 1973 and all figures in this bulletin are on a basis comparable with the 1968-69 Census.

4. 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.

5. 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 1973 is shown by the original series in the table overleaf as an increase of \$219.0 million. The standard error of this movement is about 0.3 per cent of the December 1973 estimate, i.e. approximately \$4.2 million. Therefore there are 2 chances in 3 that the movement in the value of retail sales between November and December 1973 was between \$214.8 and \$223.2 million, and 19 chances in 20 that it was between \$210.6 million and \$227.4 million. Expressed in another way the estimates show a *proportionate* movement in the value of retail sales between November and December 1973 of 18.7 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 18.4 per cent and 19.0 per cent and 19 chances in 20 that it was between 18.1 per cent and 19.3 per cent.

6. 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.

7. 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. Revised seasonally adjusted statistics are shown in this issue, following a re-analysis to take account of a change in the December seasonal pattern from December 1971. Details of the methods used in seasonally adjusting this and other series are given in *Seasonally Adjusted Indicators 1973* (Reference No. 1.10) of 3 August 1973 and the appendix to *Retail Sales of Goods* (Reference No. 11.4) September quarter 1973 of 14 January 1974.

8. 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 1973 of 14 January 1974.

**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 1968-69 Retail Census)
(\$ million)**

<i>Month</i>	1969-70	1970-71	1971-72	1972-73	1973-74
ORIGINAL					
July	698.3	754.6	820.4	849.9	973.5
August	702.3	737.6	802.7	889.3	1,052.8
September	697.5	748.9	820.4	896.5	1,009.7
October	754.6	816.5	858.3	931.4	(c)1,105.0
November	744.4	805.7	890.7	989.3	(c)1,173.0
December	996.4	1,064.7	1,135.8	1,226.4	(c)1,392.0
January	730.1	761.3	785.7	900.0	
February	679.1	713.8	804.5	856.7	
March	711.9	792.5	855.5	949.5	
April	737.4	802.5	821.5	931.3	
May	781.9	832.4	910.1	1,030.0	
June	726.5	791.9	861.5	985.6	
Total for year	8,960.4	9,622.4	10,367.1	11,435.9	
SEASONALLY ADJUSTED (d)					
July	720.9	768.4	838.7	902.7	1,034.6
August	725.5	772.4	840.7	908.5	1,060.1
September	725.4	778.3	847.4	919.3	1,070.8
October	733.7	795.2	846.6	930.8	(c)1,081.4
November	731.5	790.7	849.5	936.9	(c)1,097.1
December	748.7	796.7	854.3	947.4	(e)
January	756.3	800.0	846.7	950.8	
February	759.2	806.9	870.1	959.0	
March	759.2	821.3	873.5	968.1	
April	763.7	827.0	877.2	996.2	
May	769.2	829.2	887.7	1,000.2	
June	768.6	835.7	891.3	1,025.1	

(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 paragraph 6, page 1). (d) Revised to take account of a changed December seasonal pattern from December 1971. See paragraph 7, page 1. (e) On the basis of the revised method of seasonal adjustment (see paragraph 7) the seasonally adjusted figure for December 1973 was calculated to be \$1,090.1 million. The decrease over November 1973 may be due in part to the occurrence of an extra public holiday in December in some States. This extra holiday is not taken into account in the seasonal adjustment procedure. In addition, the reduction since December 1971 in December sales relative to other months may still be continuing. In this case seasonal analysis would tend to understate the adjusted figure for December 1973.

J. P. O'NEILL
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NOTE. Inquiries concerning these statistics may be made in Canberra by telephoning Mr J. McLucas on 49 0211 extension 282 or, in each State capital, by telephoning the office of the Australian Bureau of Statistics.