COMMCNWEALTH BUREAU OF CENSUS AND STATISTICS
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RETAIL SALES OF GOODS : AUSTRALIA
MONTH OF NOVEMBER 1970 (PROVIS IONAL)
A provisionel estimate of the total value of retail sales in Australia (excluding motor vehicles, parts, petrol, etc.) for the month of November 1970 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 lexcluding motor vehicles, parts, petrol, etc.) without placing an undue burden on efther 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 fron 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 $\$ 500 \mathrm{milli}$ ion 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 $\$ 495 \mathrm{million}$ to $\$ 505 \mathrm{million}$ and 19 chances in 20 that the figure would be within the range of $\$ 490 \mathrm{million}$ to $\$ 510 \mathrm{million}$.
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-tomonth movement of the provisional estimates of the value of retall 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 October 1970 and November 1970 is shown by the original series in the table overleaf as decrease of $\$ 10.0 \mathrm{mlllon}$. The stardard error of this movement is about 0.3 per cent of the November 1970 estimate, i.e. approximately $\$ 2.3$ million. Therefore, there are 2 chances in 3 that the movement in the value of retail sales between October and November 1970 was between $\$ 7.7$ million and $\$ 12.3$ million and 19 chances in 20 that it was between $\$ 5.4$ milion and $\$ 14.6 \mathrm{millin}$. Expressed in another way, the estimates show a proportionate movement in the value of retail sales from October to November 1970 of 1.3 per cent and this has a standard error of about 0.3 percentage points, $1, e_{,}$, thene are 2 chances in 3 that the proportionate movement was between 1.0 per cent and 1.6 per cent and 19 chances in 20 that it was between 0.7 per cent and 1.9 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 quarteriy 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 evallable.
6. Seasonally adjusted statistios are also shown in the table overleaf. In the seasonal adjustment, account has been taken of both normel seasonal factors and "trading-day" effects larising from the vafying numbers of Sundays, Mondays, Tuesdays, ete. 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 that month. Adjustment has also been made for the effects of movement in the date of Easter. However, as the series has been compiled only since April 1951 the Easter adjustment is based necessarily on limited data and could be subject to revision when data for further years become avallable. Details of the methods used in seasonally adjusting these and other series are given in "Seasonally Adjusted Indicators 1970" (Reference No. 1.10) of 29 June 1970. It should be noted that the seasonally adjusted figures reflect the sampling errors to which the original figures are subject.
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)

TOTAL VALUE OF RETAIL SALES OF GOODS
(EXCIUDING YCIOR VEHICLES, PARTS, PETROL, ITC.)
MONPHLY ESTMATES : AUSTRALIA (a) (b)
(All figures are on a basis comparable with the 1961-62 Retail Census) (\% million)

| Month | 1966 67 | 1967-68 | 1968-69 | 1969-70 | 1970-71 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Original |  |  |  |  |  |
| July | 542.9 | 577.7 | 620.0 | 665.8 | 714.6 |
| August | 556.7 | 601.0 | 641.8 | 669.8 | 698.5 |
| September | 564.6 | 608.1 | 600.4 | 665.6 | 709.5 |
| October | 569.1 | 613.0 | 658.3 | 717.3 | (c) 766.0 |
| November | 603.1 | 655.2 | $690 \cdot 3$ | 707.8 | (c) 756.0 |
| December | 789.5 | 823.5 | 861.0 | 948.2 |  |
| Januery | 547.9 | 593.8 | 646.4 | 692.5 |  |
| February | 534.0 | 583.3 | 591.6 | 644.3 |  |
| March | 578.3 | 603.9 | 641.4 | 675.5 |  |
| April | 562.8 | 602.7 | 639.4 | 699.3 |  |
| Hay | 612.8 | 664.3 | 703.3 | 741.7 |  |
| June | 580.9 | 591.1 | 638.4 | 689.1 |  |
| Total for year | 7,042.6 | 7.517 .6 | 7,932.3 | 8,516.9 |  |
| Seasonally adjusted (d) |  |  |  |  |  |
| July | 564.9 | 611.9 | 643.1 | 686.1 | 726.0 |
| August | 570.8 | 612.5 | 646.3 | 691.2 | 732.8 |
| September | 573.5 | 621.2 | 636.6 | 691.8 | (735.1 |
| October | 578.0 | 622.7 | 650.5 | 698.8 | (c) 747.5 |
| November | 579.6 | 626.5 | 654.7 | 695.2 | (c) 743.7 |
| December | 584.6 | 623.7 | 661.9 | 713.3 |  |
| January | 590.1 | 625.4 | 666.5 | 714.9 |  |
| February | 596.4 | 625.9 | 661.3 | 720.5 |  |
| March | 594.6 | 632.3 | 682.5 | 723.9 |  |
| April | 597.5 | 632.1 | 668.4 | 723.0 |  |
| May | 601.3 | 638.5 | 6.77 .0 | 731.3 |  |
| June | 603.7 | 639.8 | 692.6 | 732.8 |  |

(a) Excludes Northern Territory and Australian Capital Territory. (b) Figures from April 1969 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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## 31. DECEMBER 1970

NOTE. Inquiries concerning these statistics may be made in Canberra by telephoning 490211 extension 293 or, in each state capital, by telephoning the office of the Bureau of Census and Statistics.

