



## RETAIL SALES OF GOODS (EXCLUDING MOTOR VEHICLES, PARTS, PETROL, ETC.), MAY 1982

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### MAIN FEATURES

**NOTE:** *This publication contains retail sales estimates compiled from a new survey of retail establishments. The basis of the new survey and its relationship with the former survey are described in the Explanatory notes. For various reasons, including those discussed below under Reliability and Seasonal adjustment, care should be taken not to overemphasise the significance of changes in estimates of retail sales between single months.*

The estimated value of retail sales (excluding motor vehicles, parts, petrol etc.) for May 1982 is \$3,236.5m, 2.5 per cent greater than for April 1982.

Seasonally adjusted, the May 1982 estimate is \$3,207.3m which is 0.9 per cent lower than for April 1982.

### EXPLANATORY NOTES

#### Introduction

This publication introduces a new series of monthly estimates of the value of retail sales based on the 1979-80 retail census results. April 1982 was the last month for which estimates were made as part of the old series (based on 1973-74 retail census results). The scope of the new series differs from that of the previous series (see paragraphs 3-7 below). Statistics for the new series are available from April 1982. Comparisons between the old and the new series are assisted by the publication of original and seasonally adjusted Australian estimates for April 1982 on both bases. The new series has been seasonally adjusted using factors derived from the old series, on the presumption that the seasonal and other forms of calendar variation in the two series are expected to be similar.

2. In addition to total estimates for Australia the new series provides statistics of the value of retail sales classified by broad industry for each State and Australia. It will not be possible to publish seasonally adjusted figures classified by State and industry until estimates on this basis are available for at least four years.

#### Scope and coverage

3. The comparability of the value of sales derived from the new survey with estimates for earlier periods is affected by the differences in scope between the new and previous surveys.

4. In the new series, all establishments included in the Australian Standard Industrial Classification, 1978 Edition (ASIC) subdivision 48 except motor establishments (ASIC classes 4861-4868), bread and milk vendors (4878-4879), footwear repairers (4846) and electrical appliance repairers n.e.c. (4857) are included in the scope of the survey. The following establishments are also included: cafes and restaurants (9231), hotels, etc. (mainly drinking places) (9232), licensed clubs (9241-9243) and hairdressers (9351-9352).

5. The previous survey included licensed hotels and motels predominantly engaged in providing accommodation. These businesses are excluded from the new survey and it is not possible to reliably estimate the contribution of these businesses to the results of the previous survey.

6. The scope of the new survey includes establishments in all States and the Australian Capital Territory but excludes those in the Northern Territory. The former survey excluded establishments in both the Australian Capital Territory and Northern Territory.

7. The survey is based on a random sample of retail and selected service establishments within the scope of the survey as defined above. From the data reported by the sampled establishments aggregates comprising all retail sales in Australia (excluding Northern Territory) are estimated.

#### Retail industry statistics

8. Details of the value of retail sales are available for 15 retail industries. Retail industries consist of individual ASIC classes or combinations of ASIC classes. The ASIC classes which make up each retail industry are as follows:

| <i>Retail industry</i>                   | <i>ASIC Class(es)</i>                          |
|--|--|
| Grocers, Confectioners,<br>Tobacconists  | 4881   |
| Butchers                                 | 4882   |
| General stores                           | 4815   |
| Other food stores                        | 4883,4885,4886                                 |
| Hotels, Liquor stores,<br>Licensed clubs | 9232,4884,9241,<br>9242,9243                   |
| Clothiers                                | 4843,4844,4847                                 |
| Department stores                        | 4814   |
| Footwear stores                          | 4845   |
| Hardware stores                          | 4853,4854                                      |
| Electrical stores                        | 4855,4856                                      |
| Furniture stores                         | 4849   |
| Floor coverings stores                   | 4848   |
| Chemists                                 | 4891   |
| Newsagents                               | 4894   |
| Other                                    | 4892,4893,4895<br>4896,4897,9231,<br>9351,9352 |

### Reliability of estimates

9. Since the estimates are based on information obtained from a sample survey of retail establishments, the estimates of levels and movements are subject to sampling variability; that is, they may differ from the figures that would have been produced if all units had been included in the survey. 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 of units was included. 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 if all units had been included, and about nineteen chances in twenty that the difference will be less than two standard errors.

10. Standard errors of estimates for the latest month and of estimates of movement since the previous month are shown in the tables. Examples of the use of these two sets of standard errors are given below:

- (a) The estimate of \$3,236.5 million for the total value of Retail Sales of Goods in May 1982 has a standard error of about \$21.8 million. Therefore there are two chances in three that the figure which would have been obtained if all establishments had been included in the survey would be within the range \$3,214.7 million to \$3,258.3 million and nineteen chances in twenty that the figure would be within \$3,192.9 million to \$3,280.1 million.
- (b) The estimate of movement of 2.5 per cent in the total value of Retail Sales of Goods between April and May 1982 has a standard error of about 0.2 per cent. Therefore there are two chances in three that the movement which would have been obtained if all establishments had been included in the survey would be within the range 2.3 per cent to 2.7 per cent and nineteen chances in twenty that the movement would be within 2.1 per cent to 2.9 per cent.

11. The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents and errors made in collection and processing of data. Inaccuracies of this kind are referred to as the non-sampling error and they may occur in any collection, whether it be a full count or only a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of forms, editing of data and efficient operating procedures.

### Seasonal adjustment

12. Seasonally adjusted statistics are shown in Table 1. In the seasonal adjustment of the estimates, 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 holidays. It should be noted that the technique of seasonal adjustment does not remove from the series the effect of random influences (e.g. abnormal weather, industrial disputes) and that the seasonally adjusted figures still reflect the sampling and non-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, Australia* (1308.0).

### Related publications

13. Other statistics compiled from the retail surveys are published quarterly in *Retail Sales of Goods, Australia* (8503.0).

14. Current publications produced by the ABS are listed in the *Catalogue of Publications, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Publications Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Publications Advice are available from any ABS office.

### Symbols and other usages

n.p. Not available for publication but included in totals

.. not applicable

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TABLE 1. TOTAL VALUE OF RETAIL SALES OF GOODS (EXCLUDING MOTOR VEHICLES, PARTS, PETROL, ETC). MONTHLY ESTIMATES, AUSTRALIA

| Month                   | Original |         |                               |     | Seasonally adjusted |         |                               |      |
|-------------------------|----------|---------|-------------------------------|-----|---------------------|---------|-------------------------------|------|
|                         | \$m      |         | % change from preceding month |     | \$m                 |         | % change from preceding month |      |
|                         | (a)      | (b)     | (a)                           | (b) | (a)                 | (b)     | (a)                           | (b)  |
| 1981—                   |          |         |                               |     |                     |         |                               |      |
| March                   | 2,704.5  |         | 8.5                           |     | 2,855.6             |         | 1.3                           |      |
| April                   | 2,727.6  |         | 0.9                           |     | 2,824.3             |         | -1.1                          |      |
| May                     | 2,935.9  |         | 7.6                           |     | 2,871.2             |         | 1.7                           |      |
| June                    | 2,752.7  |         | -6.2                          |     | 2,889.7             |         | 0.6                           |      |
| July                    | 2,880.2  |         | 4.6                           |     | 2,922.4             |         | 1.1                           |      |
| August                  | 2,852.3  |         | -1.0                          |     | 2,990.0             |         | 2.3                           |      |
| September               | 2,937.1  |         | 3.0                           |     | 3,041.3             |         | 1.7                           |      |
| October                 | 3,056.5  |         | 4.1                           |     | 3,010.7             |         | -1.0                          |      |
| November                | 3,053.4  |         | -0.1                          |     | 3,026.1             |         | 0.5                           |      |
| December                | 4,222.4  |         | 38.3                          |     | 3,120.0             |         | 3.1                           |      |
| 1982—                   |          |         |                               |     |                     |         |                               |      |
| January                 | 2,922.0  |         | -30.8                         |     | 3,146.0             |         | 0.8                           |      |
| February                | 2,741.0  |         | -6.2                          |     | 3,134.0             |         | -0.4                          |      |
| March                   | 3,084.0  |         | 12.5                          |     | 3,163.0             |         | 0.9                           |      |
| April                   | 3,124.0  | 3,159.1 | 1.3                           |     | 3,199.0             | 3,234.8 | 1.1                           |      |
| May                     |          | 3,236.5 |                               | 2.5 |                     | 3,207.3 |                               | -0.9 |
| Standard error(c) of—   |          |         |                               |     |                     |         |                               |      |
| May 1982                |          | 21.8    |                               |     |                     |         |                               |      |
| April-May 1982 movement |          | 6.3     |                               | 0.2 |                     |         |                               |      |

(a) Series based on 1973-74 Retail Census; excludes Northern Territory and Australian Capital Territory. (b) Series based on 1979-80 Retail Census; excludes Northern Territory, but includes Australian Capital Territory. (c) See paragraphs 9 and 10.

TABLE 2. TOTAL VALUE OF RETAIL SALES OF GOODS (EXCLUDING MOTOR VEHICLES, PARTS, PETROL, ETC.)  
MONTHLY ESTIMATES BY INDUSTRY, AUSTRALIA(a), STATES AND AUSTRALIAN CAPITAL TERRITORY  
(\$ million)

| Month           | Grocers,<br>confect-<br>ioners,<br>tobacco-<br>onists | Butchers | General<br>stores | Other<br>food<br>stores | Hotels | Clothiers | Dept.<br>stores | Foot-<br>wear<br>stores | Hard-<br>ware<br>stores | Electrical<br>goods<br>stores | Furniture<br>stores | Floor<br>covering<br>stores | Chemists | News-<br>agents | Other | Total   |
|-----------------|---|----------|-------------------|-------------------------|--------|-----------|-----------------|-------------------------|-------------------------|-------------------------------|---------------------|-----------------------------|----------|-----------------|-------|---------|
|                 |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| AUSTRALIA(a)    |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| 1982—           |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| April           | 965.4   | 130.0    | 38.1              | 203.0                   | 378.0  | 256.1     | 392.6           | 53.5                    | 77.6                    | 176.6                         | 86.4                | 37.0                        | 121.5    | 107.2           | 136.2 | 3,159.1 |
| May             | 933.7   | 132.4    | 37.4              | 205.5                   | 374.1  | 282.7     | 425.7           | 62.8                    | 78.2                    | 201.1                         | 89.4                | 39.0                        | 124.4    | 108.9           | 141.1 | 3,236.5 |
| Standard Error— | 9.0   | 4.9      | 0.4               | 7.7                     | 8.9    | 7.2       | 0.0             | 1.4                     | 2.5                     | 7.4                           | 3.7                 | 2.4                         | 3.2      | 4.6             | 4.9   | 21.8    |
| Level(b)        | 3.1   | 1.2      | 0.0               | 2.9                     | 2.7    | 1.2       | 0.0             | 1.0                     | 1.3                     | 1.9                           | 1.4                 | 0.5                         | 0.4      | 1.1             | 0.8   | 6.3     |
| Movement(c)     |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| NEW SOUTH WALES |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| 1982—           |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| April           | 309.8   | 50.5     | 10.8              | 87.6                    | 144.4  | 98.8      | 148.9           | 17.5                    | 25.3                    | 58.2                          | 32.1                | 11.8                        | 50.0     | 44.5            | 52.2  | 1,142.2 |
| May             | 296.8   | 52.6     | 12.4              | 88.9                    | 148.0  | 112.2     | 171.3           | 20.1                    | 26.4                    | 65.7                          | 31.3                | 10.9                        | 53.1     | 44.7            | 53.2  | 1,187.8 |
| Standard Error— | 6.1   | 4.2      | 0.3               | 6.6                     | 6.0    | 5.3       | 0.0             | 1.1                     | 1.8                     | 6.4                           | 3.1                 | 1.1                         | 2.6      | 3.3             | 9.6   | 16.5    |
| Level(b)        | 1.4   | 2.7      | 0.1               | 2.3                     | 2.5    | 3.1       | 0.0             | 0.4                     | 1.1                     | 1.2                           | 1.5                 | 1.3                         | 1.5      | 1.1             | 3.1   | 7.9     |
| Movement(c)     |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| VICTORIA        |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| 1982—           |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| April           | 271.9   | 34.3     | 9.1               | 51.3                    | 84.8   | 81.2      | 90.5            | 16.3                    | 30.5                    | 50.3                          | 22.4                | 10.4                        | 28.3     | 27.3            | 40.8  | 849.4   |
| May             | 268.0   | 33.5     | 8.7               | 52.1                    | 83.7   | 85.9      | 91.5            | 16.6                    | 30.3                    | 57.7                          | 23.0                | 12.3                        | 27.5     | 28.1            | 42.1  | 861.2   |
| Standard Error— | 4.4   | 1.7      | 0.0               | 3.0                     | 5.0    | 3.7       | 0.0             | 0.7                     | 1.4                     | 3.1                           | 1.5                 | 1.9                         | 1.2      | 2.8             | 9.4   | 10.6    |
| Level(b)        | 2.9   | 2.6      | 0.0               | 1.5                     | 2.5    | 2.2       | 0.0             | 0.2                     | 0.9                     | 3.2                           | 0.9                 | 0.7                         | 0.8      | 1.0             | 2.2   | 7.9     |
| Movement(c)     |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| QUEENSLAND      |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| 1982—           |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |
| April           | 154.1   | 20.6     | 7.5               | 32.4                    | 75.5   | 30.2      | 57.9            | 7.4                     | 10.9                    | 31.4                          | 14.7                | 6.3                         | 18.3     | 15.3            | 20.8  | 503.3   |
| May             | 147.0   | 21.4     | 5.8               | 33.0                    | 72.8   | 33.1      | 58.8            | 12.6                    | 10.5                    | 33.5                          | 15.4                | 6.4                         | 18.2     | 15.2            | 22.8  | 506.7   |
| Standard Error— | 3.3   | 1.4      | 0.1               | 2.0                     | 3.7    | 2.4       | 0.0             | 0.3                     | 0.7                     | 1.4                           | 1.1                 | 1.0                         | 1.1      | 1.3             | 11.0  | 7.6     |
| Level(b)        | 1.8   | 0.6      | 0.0               | 0.9                     | 1.2    | 1.1       | 0.0             | 0.2                     | 1.0                     | 0.9                           | 0.6                 | 0.5                         | 0.6      | 0.6             | 1.3   | 3.7     |
| Movement(c)     |   |          |                   |                         |        |           |                 |                         |                         |                               |                     |                             |          |                 |       |         |

For footnotes see end of table.

TABLE 2. TOTAL VALUE OF RETAIL SALES OF GOODS (EXCLUDING MOTOR VEHICLES, PARTS, PETROL, ETC.)  
MONTHLY ESTIMATES BY INDUSTRY, AUSTRALIA(a), STATES AND AUSTRALIAN CAPITAL TERRITORY—continued  
(\$ million)

| Month                        | Grocers,<br>confectioners,<br>tobacconists | Butchers | General<br>stores | Other<br>food<br>stores | Hotels | Clothing | Dept.<br>stores | Foot-<br>wear<br>stores | Hard-<br>ware<br>stores | Electrical<br>goods<br>stores | Furniture<br>stores | Floor<br>covering<br>stores | Chemists | News-<br>agents | Other | Total |
|------------------------------|--|----------|-------------------|-------------------------|--------|----------|-----------------|-------------------------|-------------------------|-------------------------------|---------------------|-----------------------------|----------|-----------------|-------|-------|
| SOUTH AUSTRALIA              |  |          |                   |                         |        |          |                 |                         |                         |                               |                     |                             |          |                 |       |       |
| 1982—                        |  |          |                   |                         |        |          |                 |                         |                         |                               |                     |                             |          |                 |       |       |
| April                        | 90.4                                       | 11.2     | 5.3               | 12.0                    | 27.0   | 15.7     | 42.9            | 4.4                     | 4.6                     | 13.1                          | 6.2                 | 3.0                         | 10.0     | 6.6             | 7.9   | 260.2 |
| May                          | 85.8                                       | 11.0     | 5.2               | 11.9                    | 24.2   | 17.9     | 45.7            | 4.6                     | 4.9                     | 15.9                          | 7.2                 | 3.4                         | 10.3     | 6.1             | 8.2   | 262.2 |
| Standard Error—<br>Level(b)  | 3.2  | 0.7      | 0.1               | 1.5                     | 1.4    | 1.6      | 0.0             | 0.3                     | 0.5                     | 0.5                           | 0.6                 | 0.2                         | 0.6      | 0.2             | 8.9   | 4.4   |
| Movement(c)                  | 0.5  | 0.4      | 0.1               | 0.4                     | 0.7    | 1.2      | 0.0             | 0.1                     | 0.4                     | 0.5                           | 0.4                 | 0.3                         | 0.2      | 0.2             | 0.3   | 1.8   |
| WESTERN AUSTRALIA            |  |          |                   |                         |        |          |                 |                         |                         |                               |                     |                             |          |                 |       |       |
| 1982—                        |  |          |                   |                         |        |          |                 |                         |                         |                               |                     |                             |          |                 |       |       |
| April                        | 97.2                                       | 8.9      | 3.9               | 13.9                    | 33.3   | 18.1     | 33.1            | 5.0                     | 3.5                     | 15.3                          | 6.3                 | 4.1                         | 9.7      | 8.3             | 8.9   | 269.6 |
| May                          | 95.2                                       | 9.3      | 3.8               | 13.6                    | 31.8   | 20.8     | 39.4            | 6.0                     | 3.2                     | 19.9                          | 7.3                 | 4.3                         | 10.1     | 9.5             | 9.5   | 283.5 |
| Standard Error—<br>Level(b)  | 1.5  | 0.7      | 0.3               | 0.9                     | 1.7    | 0.6      | 0.0             | 0.3                     | 0.5                     | 1.6                           | 0.4                 | 0.4                         | 0.7      | 1.1             | 7.1   | 3.5   |
| Movement(c)                  | 0.7  | 0.4      | 0.1               | 0.7                     | 0.9    | 0.6      | 0.0             | 0.1                     | 0.5                     | 0.7                           | 0.3                 | 0.2                         | 0.4      | 0.8             | 0.3   | 2.4   |
| TASMANIA                     |  |          |                   |                         |        |          |                 |                         |                         |                               |                     |                             |          |                 |       |       |
| 1982—                        |  |          |                   |                         |        |          |                 |                         |                         |                               |                     |                             |          |                 |       |       |
| April                        | 27.5                                       | 3.0      | n.p.              | 2.9                     | 9.5    | 7.7      | 9.8             | 2.0                     | 1.4                     | 4.4                           | 2.6                 | 1.0                         | 3.1      | 2.9             | n.p.  | 81.9  |
| May                          | 27.1                                       | 3.0      | n.p.              | 3.1                     | 9.3    | 8.2      | 9.1             | 1.8                     | 1.3                     | 4.0                           | 3.0                 | 1.0                         | 3.0      | 2.9             | n.p.  | 81.1  |
| Standard Error—<br>Level(b)  | 0.6  | 0.2      | ..                | 0.3                     | 0.4    | 0.3      | 0.0             | 0.1                     | 0.1                     | 0.3                           | 0.1                 | 0.0                         | 0.1      | 0.2             | ..    | 1.1   |
| Movement(c)                  | 0.3  | 0.1      | ..                | 0.2                     | 0.5    | 0.2      | 0.0             | 0.1                     | 0.2                     | 0.3                           | 0.1                 | 0.0                         | 0.1      | 0.1             | ..    | 0.8   |
| AUSTRALIAN CAPITAL TERRITORY |  |          |                   |                         |        |          |                 |                         |                         |                               |                     |                             |          |                 |       |       |
| 1982—                        |  |          |                   |                         |        |          |                 |                         |                         |                               |                     |                             |          |                 |       |       |
| April                        | 14.5                                       | 1.5      | n.p.              | 2.9                     | 3.6    | 4.4      | 9.5             | 1.0                     | 1.3                     | 3.9                           | 2.0                 | 0.4                         | 2.1      | 2.3             | n.p.  | 52.4  |
| May                          | 13.6                                       | 1.6      | n.p.              | 2.8                     | 4.3    | 4.6      | 10.0            | 1.0                     | 1.6                     | 4.5                           | 2.3                 | 0.6                         | 2.1      | 2.4             | n.p.  | 54.0  |
| Standard Error—<br>Level(b)  | 0.5  | 0.2      | ..                | 0.3                     | 0.4    | 0.2      | 0.0             | 0.1                     | 0.2                     | 0.3                           | 0.5                 | 0.1                         | 0.1      | 0.1             | ..    | 1.0   |
| Movement(c)                  | 0.3  | 0.1      | ..                | 0.3                     | 0.6    | 0.1      | 0.0             | 0.1                     | 0.1                     | 0.2                           | 0.1                 | 0.0                         | 0.0      | 0.1             | ..    | 0.6   |

(a) Excludes Northern Territory. (b) The standard error of the estimate for the current month—see paragraphs 9 and 10 of Explanatory notes. (c) The standard error of the movement between the current and previous months—see paragraphs 9 and 10 of Explanatory notes.