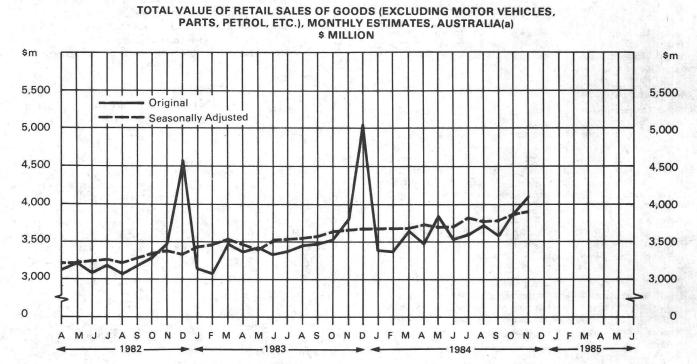


MAIN FEATURES



(a) Excluding Northern Territory.

Note: Care should be taken not to overemphasise the significance of changes in estimates of retail sales between single months. Survey estimates are subject to sampling and non-sampling variability as explained in paragraphs 9 to 12 below. Particular attention is directed to paragraphs 13 to 15 concerning interpretation of the seasonally adjusted estimates.

The estimated value of total retail sales in Australia (excluding sales of motor vehicles, parts, petrol, etc.) for November 1984 is \$4,081.4m, 5.6% higher than for October 1984. The seasonally adjusted value of retail sales for November 1984 is 1.0% up on October 1984.

For the 3 months ended November 1984 the estimated value of total retail sales is \$11,508.9m, 6.1% greater than for the preceding 3 months (i.e. the 3 months ended August 1984).

The seasonally adjusted value of total retail sales for the 3 months ended November 1984 is 2.4% higher than for the preceding 3 months and 6.6% higher than for the corresponding 3 months of the previous year.

Introduction

This publication presents a 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 previous series (based on 1973-74 retail census results). 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 this publication 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.

3. As well as the monthly estimates this publication shows, in Table 1, estimates for periods of 3 months, for Australia (total all industries), derived by summing the monthly estimates.

4. A quarterly series providing estimates for the value of retail sales for Australia and States classified by commodity groups is published in Catalogue No. 8503.0. Analysis of the quarterly commodity data may lead to revisions in the monthly industry series. For this reason the monthly figures which relate to periods subsequent to the latest quarterly release should be regarded as preliminary.

Scope and coverage

5. All establishments classified to subdivison 48 of the Australian Standard Industrial Classification, 1978 Edition (ASIC) 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. Also included are establishments classified to cafes and restaurants (9231), hotels, etc. (mainly drinking places) (9232), licensed clubs (9241-9243) and hair-dressers (9351-9352).

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

7. The survey is based on a random sample of retail and 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 were described in the May 1982 issue of this publication.

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 standard errors are given below:

- (a) The estimate of \$4,081.4 million for the total value of retail sales of goods in November 1984 has a standard error of about \$25.4 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 \$4,056.0 million to \$4,106.8 million and nineteen chances in twenty that the figure would be within \$4,030.6 million to \$4,132.2 million.
- (b) The estimated increase of \$216.4 million (5.6 per cent) in the total value of retail sales of goods between October 1984 and November 1984 has a standard error of about \$10.9 million (0.3 per cent). Therefore there are two chances in three that the increase which would have been obtained if all establishments had been included in the survey would be within the range \$205.5 million to \$227.3 million (5.3 per cent to 5.9 per cent) and nineteen chances in twenty that the increase would be within \$194.6 million to \$238.2 million (5.0 per cent to 6.2 per cent).

11. Standard errors of estimates for the latest 3-monthly period and of estimates of movement since the preceding 3-monthly period and since the corresponding 3-monthly period in the previous year are also shown in Table 1.

12. 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

13. 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 irregular 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).

14. The seasonally adjusted retail sales series is substantially influenced by the trading day adjustments that are made prior to the seasonal analysis. Following the substantial changes that have taken place in trading patterns in the retail industry over the past few years, a new set of trading day weights was introduced in the July 1984 issue of this publication. 15. The effects of changes in trading patterns are most pronounced in months where seasonal influences are greatest, such as December and January. For example, retail sales are estimated to have increased by 33.0 per cent in December 1983 and to have decreased by 32.7 per cent in January 1984. It is evident from Table 1 that a very high proportion of this month to month change is seasonal in nature, so that a small degree of uncertainty about how much of the change is seasonal (including trading day effects) makes a large difference to the residualwhich is the estimate of the trend plus irregular movement. For this and other reasons outlined in paragraph 13 particular care should be exercised in interpreting monthly movements based on the seasonally adjusted estimates.

Related publications

16. Other statistics compiled from the retail surveys are published quarterly in *Retail Sales of Goods, (Excluding Motor Vehicles, Parts, Petrol, etc.) Australia* (8503.0).

17. 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

Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

R. J. CAMERON Australian Statistician

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

Period		Original	Sea	sonally adjusted
Month—	\$ <i>m</i>	% change from preceding month	\$ <i>m</i>	% change from preceding month
1983—				
September	3,484.5	0.8	3,572.8	0.8
October	3,527.8	1.2	3,625.0	1.5
November	3,779.0	7.1	3,638.7	0.4
December	5,026.7	33.0	3,652.4	0.4
1984—				
January	3,384.5	-32.7	3,666.6	0.4
February	3,373.5	-0.3	3,663.7	-0.1
March	3,640.5	7.9	3,675.4	0.3
April	3,456.9	-5.0	3,700.5	0.7
May	3,807.4	10.1	3,688.3	-0.3
June	3,540.1	-7.0	3,703.3	0.4
July	3,600.0	1.7	3,803.7	2.7
August	3,706.9	3.0	3,768.4	-0.9
September	3,562.5	-3.9	3,784.6	0.4
October	3,865.0	8.5	3,863.9	2.1
November	4,081.4	5.6	3,901.5	1.0
Standard error(b) of—				
November 1984	25.4			
Change: November 1984 from October 1984	10.9	0.3		

Seasonally adjusted Period Original % change from % change from % change from corresponding % change from corresponding preceding preceding 3 months 3 months of 3 months of \$m 3 months ended-Sm 3 months previous vear previous year 1983-November 10,791.3 6.5 8.6 10,836.5 2.5 8.6 1984-11,784.7 10,904.8 9.1 10 982 7 7.4 6.5 6.7 February 9.2 1.3 6.3 0.7 11,064.2 -7.5 May 10,847.0 -0.5 7.1 11,275.4 1.9 August 11,550.0 2.4 November 11,508.9 6.6 6.6 6.1 Standard error(c) of-3 mths ended November 1984 74.1 Change: 3 months ended November 1984 from-76.5 0.7 3 mths ended August 1984 0.9 3 mths ended November 1983 93.3

(a) Excluding Northern Territory. (b) See paragraphs 10 and 12. (c) See paragraphs 10,11 and 12. Standard errors shown are approximations only.

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)	ion)									
Month	Grocers, confect- ioners, tohacc- onists	ocers, mfect- oners, ohace onists Butchers	General stores	al food es stores	H s lic	~	Clothiers	Dept. stores	Foot- wear stores	Hard- El ware stores	Electrical goods Fi stores	ctrical goods Furniture co stores stores	Floor coverings stores (Chemists	News- agents	Other	Total
							AUSTRALIA(a)	(LIA(a)			See						
1983— September October November December	1,16 1,13 1,18 1,37	(105.7 128.1 136.2 125.4 188.5 124.9 374.1 148.6	28.1 38.5 25.4 38.0 25.4 38.0 24.9 41.4 48.6 64.5	.5 220.1 .0 214.1 .4 217.6 .5 247.3	В	414.3 430.8 3440.4 577.0 5	327.9 318.1 348.6 508.0	361.9 364.5 430.3 734.9	59.0 57.4 56.3 73.7	85.5 93.6 110.1 211.0	209.9 212.6 246.0 346.0	90.9 87.4 95.7 111.6	35.9 38.3 40.1 41.5	143.0 146.0 151.6 193.7	122.5 119.8 126.1 162.6	141.2 145.3 161.6 232.4	3,484.5 3,527.8 3,779.0 5,026.7
1984— January Rebruary March April	1,11		15.1 33.6 19.2 33.1 25.1 36.7 19.6 37.2 28.0 42.3				279.5 271.8 337.9 \$25.6	309.1 310.3 364.8 366.9	62.0 52.7 63.7 81.7 81.7	89.8 87.6 87.6 81.4 81.4 87.9	198.8 204.7 214.2 183.9 232.5	91.3 94.6 99.9 78.2 95.4	33.4 37.0 31.5 38.5 38.5	143.0 140.5 140.5 149.1 149.2	139.3 139.3 131.9 131.9 131.6	140.8 132.6 142.7 152.2	3.384.5 3.373.5 3.640.5 3.456.9 3.807.4
June July August September November	1.15 1.15 1.21 1.23 1.23 1.23	.153.1 121 .153.7 120 .211.0 125 .232.9 126 .260.6 130	21.8 36.7 220.2 37.5 225.9 36.9 226.8 36.9 30.1 41.1			411.2 396.9 426.3 425.1 3435.7 466.0 3	323.4 331.1 330.5 380.2 380.2	377.5 415.6 332.1 425.7 478.1	68.8 64.3 63.1 66.9 68.9 68.9	74.8 76.4 88.0 97.8 110.6	215.3 221.8 221.1 191.5 241.5 241.5	89.7 94.2 94.8 94.8 102.3	36.2 41.2 45.3 46.1 49.2 49.5	142.9 144.8 153.4 152.8 152.8	125.9 131.9 136.2 131.3 146.9 154.7	140.5 142.2 154.1 147.5 163.5 182.1	3.540.1 3.600.0 3.562.5 3.865.0 4.081.4
Standard Error- Level(b) Movement(c)		9.3 5 4.3 1	5.8 1.8 0.	0.3 7.	7.4 2.9	8.0 3.5	8.8 8.8	0.0	3.8 1.4	5.6 2.4	7.5 2.2	4.3 1.8	3.9 2.2	5.3 1.7	5.8 2.3	8.1 4.4	25.4 10.9
	1					NEW	W SOUT	SOUTH WALES	S							2.4	
1984 April May June June July August September October November	8888888888 4888888888	348.8 354.8 355.2 355.2 375.2 375.2 379.0 554 49 7 49 7 54 54 54 554 554 554 554 554 554 554	55.9 55.9 55.9 55.9 55.9 55.9 55.9 55.9	11.0 91.5 12.7 94.9 10.9 90.2 91.4 90.2 92.4 90.2 92.4 90.2 92.9 90.2 92.9 90.2		555.2 56.4 48.4 661.0 15.3 75.3	.8 4 .7 1 .5 1 .5	143.4 187.6 150.7 170.0 152.9 162.3 196.0	24:2 24:2 25:0 25:0 25:0 25:0 25:0 25:0 25:0	30.2 26.5 30.7 30.7 30.7 42.8 42.8	55.7 64.2 69.3 65.4 65.0 70.0	25.8 31.7 32.2 32.2 33.6 33.6	10.6 11.3 15.1 15.3 18.3	59.5 66.1 63.0 64.9 67.3 67.3	47.8 53.4 53.4 53.1 53.1 58.4 58.4 58.4 58.4	55.9 57.0 53.4 53.7 53.7 59.4 66.6	1,220.4 1,347.8 1,244.8 1,274.5 1,274.5 1,305.9 1,373.4 1,347.7
Standard Error- Level(b) Movement(c)		6.0 4 1.5 1	4.5 0 1.6 0	0.2 4. 0.0 1.	4.6 1.5	5.8 2.2	6.9 4.2	0.0	3.5 1.0	3.6 1.1	3.8 1.4	2.8 0.8	2.9 1.6	3.7 1.3	3.9 1.8	4.5 2.7	17.9 7.3

For footnotes see end of table.

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TABLE 2. TOTAL VALUE OF RETAIL SALES OF GOODS (EXCLUDING MOTOR VEHICLES, PARTS, PETROL, ETC.)

	G 5.4	Grocers, confect- ioners,			Other	Hotels, liquor stores,			Foot-		Electrical		Floor				
Month	14		Butchers	General stores	food	licensed clubs	Clothiers	Dept. stores	wear	ware	goods F stores	Furniture co stores	coverings stores	Chemists	News- agents	Other	Total
							VIC	VICTORIA									
1984-	α.,	333.0	3.7.1	0.3	54.0	7 00	1001	70.4	2.06	5 26	517	7.20	6	3.05	1 12	20.4	1 7 10
May		346.1	32.5	C.6	59.0	93.4	122.5	92.2	22.7	28.2	70.4	28.1	11.2	33.5	38.3	43.5	1,031.2
July		340.5	29.7	8.0 9.2	54.1	88.1	105.6	81.1	18.2	21.7	56.9	23.9	0.01	31./	33.2	38.1	941.5
August Sentember		349.1 330.0	30.3	9.6	52.7	92.5	100.6 92.6	84.8	17.3	25.0	62.4	25.7	10.3	34.6	35.9	38.1	971.6
October November		358.0 377.1	28.9 30.4	10.7	59.8	97.1 104.3	106.7	92.0 98.5	21.1	28.8 32.6	55.2	31.3	12.4	34.7 37.6	38.5 42.6	44.4	1.017.5
Standard Error- Level(b)		5.8	2.9	0.1	4.0	4.0	4. S.	0.0	E.	3.4	2.1	2.6	2.0	5.8	3.4	5.3	13.2
Movement(c)		0.0	0.4	0.0	7.7	C.2	1.1	0.0	0.1	1.1	0.1	<u>.</u>	<u>.</u>	0.8	0.1	2.2	0./
= ≅kye ₽			- 14				QUEE	QUEENSLAND		2				2			
1984		182.0	18.6	6.7	34.5	76.7	40.5	52.9	8.6	10.2	33.3	11.7	4.9	18.3	18.7	20.8	538.2
June		188.9	20.3	6.9	35.3	77.8	42.4	54.3	6.5	1.7 1.7	37.6	13.9	6.5	19.2	19.3	21.9	564.2
August		199.4	23.1	9.9	40.5	85.1	8.44.8	52.8	9.8	14.7	43.3	17.9	8.9	24.6	24.1	26.3	618.6
October November		204.5	22.3	6.9	41.7	88.3	46.2	60.4	8.3 6.8	13.3	43.1	13.6	6.6	22.3	26.0	24.1	621.0 651.4
Standard Error—			2	1													
Level(b) Movement(c)		2.8	0.6	0.0	3.4	2.7	2.5 1.3	0.0	0.5	0.5	5.6 1.1	0.5	0.7	1.7 0.5	2.2 0.9	3.4 1.6	9.9 3.3
							SOUTH /	AUSTRALIA	IA					1997 - 19	5.04		
1984— April		105.2	0.6	4.3	16.2	30.1	25.9	39.6	6.5	5.1	15.9	6.5	3.7	11.8	6.6	10.3	296.8
May June		109.0	6.6 6.9	5.2	17.6	29.0	29.5	49.8	2.5	5.8	20.4	 	4.4	12.4	4.7	10.4	328.8
July August		104.6	9.7 9.1	6.6 2.6	17.0	31.0	26.0	46.4	5.0	6.2	19.3	0.6 8.8	5.2	13.3	7.3	10.3	312.1
September October		103.4	8.0 8.0	5.4	17.0	30.2	23.2	41.3	5.0	6.6	18.4	9.1	5.0 5.6	12.5	7.1	10.7	303.2
November		115.5	9.2	5.7	19.7	35.2	28.3	52.4	5.5	7.7	22.0	11.6	5.9	14.5	7.0	12.8	353.0
Standard Error- Level(b)		8.1	0.6	0.1	4.1	1.7	1.2	0.0	0.2	2.0		4.1			0.8	1.2	4.9
Movement(c)		0.3	0.2	0.2		9.0	0 4	00		0	04	04	0.0	20	D D	VU	6

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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, confect- ioners, tobacc- onists	Butchers	General stores	Other food stores	Hotels, liquor stores, licensed clubs	Clothiers	Dept. stores	Foot- wear stores	Hard- E. ware stores	Electrical goods F stores	Floor Furniture coverings stores stores		Chemists	News- agents	Other	Total
					~	WESTERN	AUSTRALIA	LIA								
1984- April May June June September October November	112.5 113.5 117.6 117.6 121.1 123.1 124.4	6.5 6.5 6.1 6.1 6.1 6.1	4.2 4.7 6.9 7.9 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	17.7 17.6 20.5 21.8 21.8 20.2 20.2	37.8 38.1 37.1 40.1 40.0 44.2 44.2	23.6 23.7 27.5 27.8 26.8 20.1	29.0 28.5 31.7 32.9 32.9 8.8	5.7 6.1 5.5 6.3 6.3 6.3	6.3 7.1 7.2 8.8 8.9 9.9	222.15 20.3 20.3 20.3 20.3 26.2 26.2	80000000000000000000000000000000000000	22222222 272222222 21222222222222222222	10.2 9.6 10.8 10.8 10.2 10.2	8.5 9.5 10.0 11.8 11.2	10.1 9.8 12.0 11.7 11.7 16.1	298.5 339.3 307.6 318.8 318.8 317.9 317.9 345.1
Standard Error— Level(b) Movement(c)	2.1 1.6	0.6 0.1	0.0	1.4 0.2	1.7 0.8	1.1 0.6	0.0 0.0	0.3	1.1 0.3	1.9 0.3	0.7 0.5	0.7 0.4	1.1	1.0 0.5	1.6 0.8	4.8 2.4
						TASN	TASMANIA									
1984- April May June June September October November	31.9 33.9 33.5 33.5 33.5 33.5 33.5 33.5 33	7		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	10.9 10.7 10.7 11.4 11.0 13.1	8.9 8.7 9.2 10.3 0.5 0.5	11.0 13.7 12.1 10.9 11.3 12.8	2200 2200 2200 2200 2200 2200 2200 220	1.18 1.18 1.18 1.18 1.18 1.18 1.18 1.18	4.0.0.0.44.0 4.0.604.0	9.000000444 8.0000444	<u></u>	246666666 840000000	86.65 66.65 66.75 77.75 77.75 77.75 77.75 77.75 77.75 77.75 77.75 77.75 77.75 77.757		91.7 103.1 98.1 97.9 97.9 95.1 105.4
Standard Error- Level(b) Movement(c)	0.6 0.1	0.4 0.1	::	0.3 0.0	0.4 0.2	0.4 0.1	0.0	0.0	0.1 0.0	0.2 0.0	0.1	0.0	0.1	0.3 0.1	::	1.4 0.5
					AUSTRALIAN	ALIAN CA	CAPITAL TE	TERRITORY	Y							
1984– April May June June September October November	17.7 17.7 18.8 18.8 19.3 19.3	0.1111111 0.011111111		4444 6.4446 6.44466 6.44466 6.44466 6.44466666666	4484888888 894888888 894888888	202224420 202224420 2022240	11:5 9.5 11:5 11:5 11:5 12:4 12:4 12:4 12:5 12:5 12:5 12:5 12:5 12:5 12:5 12:5	<u> </u>		808028649 4080280900	23.7 2.6 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7	0.6 0.5 0.5 0.5 0.5 0.9	22:0 22:0 22:0 22:0 22:0 22:0 22:0 22:0	2010101010 2010101010 2010101010		63.9 65.1 65.1 65.1 65.1 65.1 65.1 65.1 65.1
Standard Error— Level(b) Movement(c)	0.0	0.3	::	0.3 0.1	0.6	0.4	0.0	0.1 0.0	0.0	0.4 0.1	0.2	0.0	0.0	0.3	::	1.4 0.6

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