APRIL 2009

8501.0

Australian Bureau of Statistics

RETAIL TRADE

AUSTRALIA

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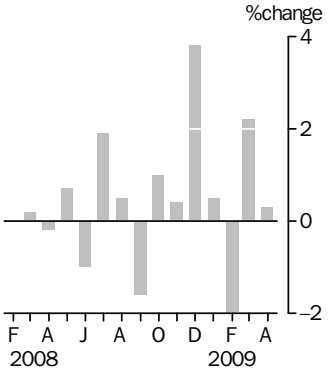
Monthly Turnover
Seasonally adjusted
% change



KEY FIGURES

	Apr 09 $m	Mar 09 to Apr 09 % change
Turnover at current prices		
Trend estimates	na	na
Seasonally adjusted estimates	19 351.4	0.3

na not available

KEY POINTS

SUSPENSION OF TREND ESTIMATES

- The retail trade trend series have been suspended as at November 2008 as it is not possible to determine the trend in retail turnover through the period affected by the Government's stimulus packages and other influences associated with global economic conditions. For further details refer to the December 2008 issue of this publication.

AUSTRALIA

- The seasonally adjusted estimate increased by 0.3% in April 2009. This follows an increase of 2.2% in March 2009 and a decrease of 2.0% in February 2009.
- In original terms, Australian turnover decreased by 0.8% in April 2009 compared with March 2009. There was no percentage change for Chains and other large retailers (which are completely enumerated), while the estimate for 'smaller' retailers decreased by 2.3%. Australian turnover increased by 7.2% in April 2009 compared with April 2008. Chains and other large retailers increased by 10.4%, while the estimate for 'smaller' retailers increased by 2.0%.

INDUSTRIES

- In seasonally adjusted terms, industries that had an increase in April 2009 were—Clothing and soft good retailing (+0.8%), Household good retailing (+3.9%) and Other retailing (+0.1%), while the Food retailing (–0.2%), Department stores (–2.8%) and Cafes, restaurants and takeaway food services (–0.5%) industries had a decrease.

STATES

- In seasonally adjusted terms, the following states had an increase in retail turnover in April 2009—New South Wales (+1.3%), Queensland (+0.8%), Tasmania (+0.5%) and the Australian Capital Territory (+0.9%). Victoria was virtually unchanged, while South Australia (–0.1%), Western Australia (–2.4%) and the Northern Territory (–4.6%) all decreased in April 2009.

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Neil Hamilton on Canberra (02) 6252 5990.

NOTES

FORTHCOMING ISSUES

ISSUE	RELEASE DATE
May 2009	1 July 2009
June 2009	3 August 2009
July 2009	9 September 2009
August 2009	30 September 2009
September 2009	4 November 2009
October 2009	3 December 2009

CHANGES IN THIS ISSUE

From this issue the completely enumerated sector total level seasonally adjusted series is estimated using forward seasonal factors based on data to the June 2008 reference month. This series is available from the Downloads tab of this publication.

TIME SERIES DATA

Data available from the Downloads tab of this issue on the ABS website include longer time series of tables in this publication, quarterly chain volume measures and the following additional current price monthly series:

- Retail turnover by state and 15 industry subgroups in trend, seasonally adjusted and original terms
- Retail turnover completely enumerated and sample sector, by six industry groups in original terms
- Retail turnover completely enumerated and sample sector, by state in original terms
- Retail turnover completely enumerated sector, total level in trend, seasonally adjusted and original terms.

SAMPLING ERRORS

Standard errors for the Australian estimates (original data) for April 2009 contained in this publication are:

Data Series	*Estimate*	*Standard error*
Level of retail turnover *($m)*	18 510.5	137.6
Change from preceding month *($m)*	–152.7	75.6
% change from preceding month *(%)*	–0.8	0.4

For more information, see Explanatory Notes, paragraphs 31–35.

Peter Harper
Acting Australian Statistician

ANALYSIS

TOTAL RETAIL

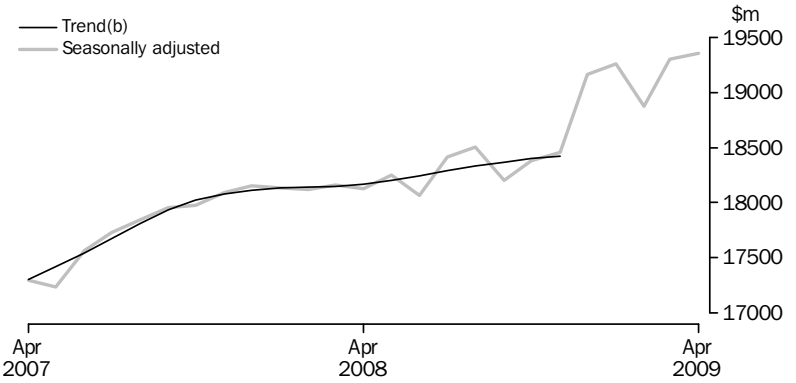
The chart below shows the trend series, to November 2008, and seasonally adjusted series, to April 2009.

As the seasonally adjusted series are currently estimated using forward seasonal factors based on data to the June 2008 reference month, the seasonal adjustment factors have not been influenced by spending associated with the stimulus package.

In current price seasonally adjusted terms, Australian turnover increased by 0.3% in April 2009, following a 2.2% increase in March, a decrease of 2.0% in February and increases for the previous four months including a 3.8% increase in December 2008. The level of turnover, in seasonally adjusted terms, remains above the level of the trend at November 2008.

All industry and state seasonally adjusted estimates for April 2009 are above the level of the respective trend estimate at November 2008.

RETAIL TURNOVER(a), Australia



(a) Estimates for July to October 2008 are derived from the one-in, two-out sampling method.
(b) Trend series suspended as at November 2008.

1 RETAIL TURNOVER, By Industry Group(a)

Month	Food retailing	Department stores	Clothing & soft good retailing	Household good retailing	Other retailing	Cafes, restaurants & takeaway food services	Total
			ORIGINAL ($ million)				
2008							
February	6 959.5	1 140.5	1 062.9	2 736.2	2 545.5	2 093.6	16 538.2
March	7 493.2	1 351.7	1 136.2	2 802.2	2 592.8	2 164.5	17 540.6
April	7 051.7	1 396.6	1 287.0	2 836.0	2 545.9	2 154.2	17 271.3
May	7 331.4	1 421.1	1 323.2	2 928.4	2 710.5	2 184.0	17 898.6
June	6 921.7	1 401.6	1 206.0	3 052.6	2 510.8	2 098.0	17 190.7
July	7 414.4	1 582.3	1 257.8	3 015.3	2 661.2	2 178.3	18 109.3
August	7 536.7	1 268.4	1 199.6	3 013.5	2 694.6	2 208.7	17 921.4
September	7 278.1	1 383.3	1 251.5	2 926.1	2 647.6	2 128.6	17 615.0
October	7 831.3	1 452.4	1 303.7	3 081.3	2 870.3	2 305.0	18 844.0
November	7 817.3	1 675.9	1 317.2	3 138.9	2 974.6	2 243.5	19 167.4
December	9 013.9	2 886.1	1 880.7	4 285.5	4 183.0	2 468.0	24 717.2
2009							
January	8 155.1	1 451.0	1 331.4	3 140.6	2 694.4	2 310.5	19 082.9
February	7 320.1	1 056.6	1 043.5	2 612.3	2 526.4	2 068.9	16 627.9
March	8 017.9	1 386.9	1 290.9	2 889.8	2 774.5	2 303.2	18 663.2
April	7 878.5	1 509.1	1 368.3	2 801.9	2 675.4	2 277.2	18 510.5
			SEASONALLY ADJUSTED ($ million)				
2008							
February	7 272.2	1 527.4	1 297.1	3 017.9	2 789.5	2 218.0	18 122.2
March	7 381.5	1 509.0	1 268.3	3 063.7	2 765.0	2 171.1	18 158.6
April	7 283.6	1 530.0	1 298.8	3 080.1	2 746.6	2 186.9	18 126.1
May	7 369.2	1 516.3	1 291.2	3 062.4	2 819.0	2 190.2	18 248.3
June	7 361.9	1 436.8	1 227.4	3 087.2	2 762.9	2 190.0	18 066.2
July	7 497.2	1 593.6	1 308.6	3 072.8	2 755.8	2 185.3	18 413.4
August	7 645.6	1 492.7	1 307.8	3 074.7	2 780.1	2 199.4	18 500.3
September	7 494.6	1 533.6	1 283.3	2 973.2	2 750.4	2 168.6	18 203.6
October	7 601.5	1 503.2	1 251.6	3 013.1	2 803.8	2 204.5	18 377.7
November	7 750.0	1 476.4	1 269.5	2 960.3	2 796.9	2 204.4	18 457.5
December	7 857.4	1 599.5	1 342.6	3 252.3	2 869.3	2 241.7	19 162.8
2009							
January	7 998.1	1 591.5	1 353.0	3 123.8	2 874.1	2 316.3	19 256.8
February	7 963.9	1 436.0	1 316.2	3 004.4	2 866.2	2 286.7	18 873.4
March	7 999.3	1 625.2	1 400.7	3 043.7	2 908.6	2 318.2	19 295.7
April	7 981.2	1 580.2	1 411.4	3 162.8	2 910.4	2 305.4	19 351.4
			TREND ($ million) (b)				
2008							
February	7 298.5	1 519.9	1 283.7	3 069.0	2 764.5	2 199.4	18 137.8
March	7 310.6	1 517.0	1 281.5	3 068.1	2 773.4	2 193.4	18 145.1
April	7 336.0	1 513.9	1 280.5	3 070.2	2 776.6	2 188.5	18 165.7
May	7 371.9	1 513.1	1 281.5	3 072.7	2 775.4	2 185.8	18 200.4
June	7 419.0	1 514.2	1 282.8	3 071.5	2 772.4	2 186.1	18 245.9
July	7 473.3	1 515.7	1 283.1	3 061.6	2 771.1	2 187.5	18 292.4
August	7 530.0	1 515.5	1 282.2	3 042.7	2 773.1	2 189.6	18 333.1
September	7 586.1	1 512.6	1 279.6	3 020.6	2 776.9	2 191.8	18 367.5
October	7 641.8	1 507.1	1 275.2	2 997.8	2 782.4	2 194.3	18 398.3
November	7 691.5	1 501.8	1 271.7	2 975.5	2 785.5	2 197.5	18 423.1
December	na	na	na	na	na	na	na
2009							
January	na	na	na	na	na	na	na
February	na	na	na	na	na	na	na
March	na	na	na	na	na	na	na
April	na	na	na	na	na	na	na

na not available

(a) See paragraph 6 of Explanatory Notes.

(b) Trend calculated on data up to November 2008.

2 RETAIL TURNOVER, By Industry Group(a)

Month	Food retailing	Department stores	Clothing & soft good retailing	Household good retailing	Other retailing	Cafes, restaurants & takeaway food services	Total
			ORIGINAL (% change from preceding month)				
2008							
February	–5.7	–18.4	–15.5	–11.6	–2.3	–3.4	–7.6
March	7.7	18.5	6.9	2.4	1.9	3.4	6.1
April	–5.9	3.3	13.3	1.2	–1.8	–0.5	–1.5
May	4.0	1.8	2.8	3.3	6.5	1.4	3.6
June	–5.6	–1.4	–8.9	4.2	–7.4	–3.9	–4.0
July	7.1	12.9	4.3	–1.2	6.0	3.8	5.3
August	1.6	–19.8	–4.6	–0.1	1.3	1.4	–1.0
September	–3.4	9.1	4.3	–2.9	–1.7	–3.6	–1.7
October	7.6	5.0	4.2	5.3	8.4	8.3	7.0
November	–0.2	15.4	1.0	1.9	3.6	–2.7	1.7
December	15.3	72.2	42.8	36.5	40.6	10.0	29.0
2009							
January	–9.5	–49.7	–29.2	–26.7	–35.6	–6.4	–22.8
February	–10.2	–27.2	–21.6	–16.8	–6.2	–10.5	–12.9
March	9.5	31.3	23.7	10.6	9.8	11.3	12.2
April	–1.7	8.8	6.0	–3.0	–3.6	–1.1	–0.8
			SEASONALLY ADJUSTED (% change from preceding month)				
2008							
February	–0.2	0.0	2.0	–2.5	1.2	1.1	0.0
March	1.5	–1.2	–2.2	1.5	–0.9	–2.1	0.2
April	–1.3	1.4	2.4	0.5	–0.7	0.7	–0.2
May	1.2	–0.9	–0.6	–0.6	2.6	0.1	0.7
June	–0.1	–5.2	–4.9	0.8	–2.0	0.0	–1.0
July	1.8	10.9	6.6	–0.5	–0.3	–0.2	1.9
August	2.0	–6.3	–0.1	0.1	0.9	0.6	0.5
September	–2.0	2.7	–1.9	–3.3	–1.1	–1.4	–1.6
October	1.4	–2.0	–2.5	1.3	1.9	1.7	1.0
November	2.0	–1.8	1.4	–1.8	–0.2	0.0	0.4
December	1.4	8.3	5.8	9.9	2.6	1.7	3.8
2009							
January	1.8	–0.5	0.8	–4.0	0.2	3.3	0.5
February	–0.4	–9.8	–2.7	–3.8	–0.3	–1.3	–2.0
March	0.4	13.2	6.4	1.3	1.5	1.4	2.2
April	–0.2	–2.8	0.8	3.9	0.1	–0.5	0.3
			TREND (% change from preceding month)(b)				
2008							
February	0.1	0.0	0.0	–0.2	0.5	–0.3	0.0
March	0.2	–0.2	–0.2	0.0	0.3	–0.3	0.0
April	0.3	–0.2	–0.1	0.1	0.1	–0.2	0.1
May	0.5	0.0	0.1	0.1	0.0	–0.1	0.2
June	0.6	0.1	0.1	0.0	–0.1	0.0	0.3
July	0.7	0.1	0.0	–0.3	0.0	0.1	0.3
August	0.8	0.0	–0.1	–0.6	0.1	0.1	0.2
September	0.7	–0.2	–0.2	–0.7	0.1	0.1	0.2
October	0.7	–0.4	–0.3	–0.8	0.2	0.1	0.2
November	0.7	–0.3	–0.3	–0.7	0.1	0.1	0.1
December	na	na	na	na	na	na	na
2009							
January	na	na	na	na	na	na	na
February	na	na	na	na	na	na	na
March	na	na	na	na	na	na	na
April	na	na	na	na	na	na	na

na not available

(a) See paragraph 6 of Explanatory Notes.

(b) Trend calculated on data up to November 2008.

3 RETAIL TURNOVER, By state

Month	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
				ORIGINAL ($ million)					
2008									
February	5 206.1	4 119.9	3 352.5	1 181.6	1 819.4	369.9	162.6	326.1	16 538.2
March	5 502.5	4 367.4	3 578.2	1 245.0	1 941.0	387.0	174.4	345.2	17 540.6
April	5 403.1	4 307.7	3 470.8	1 233.2	1 955.6	379.4	180.3	341.3	17 271.3
May	5 574.5	4 443.4	3 625.2	1 278.1	2 034.8	394.0	194.6	353.9	17 898.6
June	5 358.6	4 239.6	3 511.0	1 234.9	1 940.9	370.9	196.3	338.5	17 190.7
July	5 486.3	4 416.2	3 852.5	1 315.4	2 081.7	400.1	217.1	340.0	18 109.3
August	5 437.9	4 413.8	3 803.6	1 286.1	2 026.1	395.3	218.9	339.7	17 921.4
September	5 362.4	4 316.0	3 748.1	1 265.2	1 995.4	385.6	209.7	332.6	17 615.0
October	5 752.4	4 705.7	3 921.6	1 366.4	2 105.2	420.7	212.1	359.9	18 844.0
November	5 932.4	4 827.1	3 921.3	1 369.6	2 111.8	427.4	206.0	371.9	19 167.4
December	7 706.5	6 257.4	4 994.3	1 772.5	2 715.2	562.7	245.1	463.5	24 717.2
2009									
January	5 975.8	4 748.2	3 941.9	1 360.4	2 079.7	426.7	193.9	356.3	19 082.9
February	5 185.4	4 196.0	3 354.3	1 178.1	1 818.3	388.9	181.4	325.6	16 627.9
March	5 745.2	4 746.3	3 816.1	1 332.1	2 026.3	428.6	209.1	359.5	18 663.2
April	5 762.3	4 697.0	3 764.9	1 305.9	1 997.3	423.1	203.2	356.7	18 510.5
				SEASONALLY ADJUSTED ($ million)					
2008									
February	5 728.6	4 480.7	3 708.8	1 276.6	1 994.3	389.6	187.8	355.9	18 122.2
March	5 678.2	4 502.6	3 741.1	1 279.9	2 022.8	391.1	188.3	354.4	18 158.6
April	5 686.4	4 466.6	3 706.3	1 284.3	2 038.9	397.5	191.7	354.4	18 126.1
May	5 709.1	4 506.5	3 731.7	1 302.3	2 049.1	402.7	192.3	354.5	18 248.3
June	5 646.2	4 422.9	3 698.0	1 308.9	2 051.1	398.4	192.7	347.9	18 066.2
July	5 642.1	4 550.5	3 826.4	1 336.1	2 102.4	409.5	197.6	348.9	18 413.4
August	5 659.1	4 598.1	3 839.3	1 339.4	2 104.7	412.3	201.4	345.9	18 500.3
September	5 526.7	4 523.4	3 799.5	1 331.0	2 064.5	409.8	204.1	344.8	18 203.6
October	5 635.1	4 601.8	3 790.2	1 330.7	2 048.6	413.8	203.0	354.4	18 377.7
November	5 634.1	4 648.1	3 823.9	1 331.3	2 040.0	416.8	207.8	355.5	18 457.5
December	5 910.7	4 829.8	3 944.4	1 363.1	2 096.7	434.2	217.9	366.0	19 162.8
2009									
January	6 024.2	4 788.9	3 943.5	1 364.4	2 125.7	421.4	217.1	371.6	19 256.8
February	5 878.1	4 727.4	3 854.9	1 331.1	2 068.3	426.8	216.9	369.9	18 873.4
March	5 950.3	4 856.9	3 978.8	1 363.7	2 114.1	436.3	226.1	369.4	19 295.7
April	6 028.4	4 857.9	4 011.8	1 362.4	2 064.0	438.5	215.6	372.9	19 351.4
				TREND ($ million) (a)					
2008									
February	5 712.7	4 498.3	3 709.9	1 273.7	2 009.8	391.5	188.6	353.2	18 137.8
March	5 705.5	4 490.1	3 711.4	1 282.6	2 019.0	393.5	189.3	354.1	18 145.1
April	5 693.9	4 484.0	3 720.8	1 292.6	2 034.5	396.2	190.4	353.7	18 165.7
May	5 677.1	4 485.2	3 737.4	1 303.6	2 053.0	399.7	192.3	352.1	18 200.4
June	5 658.6	4 498.0	3 758.1	1 314.3	2 068.7	403.3	194.8	350.1	18 245.9
July	5 640.9	4 520.2	3 778.5	1 323.5	2 076.5	406.6	197.5	348.7	18 292.4
August	5 625.6	4 546.5	3 796.2	1 330.0	2 076.7	409.5	200.1	348.5	18 333.1
September	5 614.0	4 573.8	3 809.9	1 333.9	2 072.1	412.0	202.6	349.2	18 367.5
October	5 606.0	4 601.1	3 820.4	1 336.4	2 064.8	414.3	205.0	350.3	18 398.3
November	5 600.6	4 626.9	3 827.5	1 337.1	2 055.4	416.4	207.3	351.9	18 423.1
December	na	na	na	na	na	na	na	na	na
2009									
January	na	na	na	na	na	na	na	na	na
February	na	na	na	na	na	na	na	na	na
March	na	na	na	na	na	na	na	na	na
April	na	na	na	na	na	na	na	na	na

na not available

(a) Trend calculated on data up to November 2008.

4 RETAIL TURNOVER PERCENTAGE CHANGE, By state

Month	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
ORIGINAL (% change from preceding month)									
2008									
February	–7.8	–7.5	–9.2	–6.9	–6.6	–5.7	–1.7	–2.7	–7.6
March	5.7	6.0	6.7	5.4	6.7	4.6	7.3	5.8	6.1
April	–1.8	–1.4	–3.0	–0.9	0.8	–2.0	3.4	–1.1	–1.5
May	3.2	3.2	4.4	3.6	4.1	3.9	7.9	3.7	3.6
June	–3.9	–4.6	–3.1	–3.4	–4.6	–5.9	0.9	–4.3	–4.0
July	2.4	4.2	9.7	6.5	7.3	7.9	10.6	0.4	5.3
August	–0.9	–0.1	–1.3	–2.2	–2.7	–1.2	0.8	–0.1	–1.0
September	–1.4	–2.2	–1.5	–1.6	–1.5	–2.5	–4.2	–2.1	–1.7
October	7.3	9.0	4.6	8.0	5.5	9.1	1.1	8.2	7.0
November	3.1	2.6	0.0	0.2	0.3	1.6	–2.9	3.3	1.7
December	29.9	29.6	27.4	29.4	28.6	31.7	19.0	24.6	29.0
2009									
January	–22.5	–24.1	–21.1	–23.3	–23.4	–24.2	–20.9	–23.1	–22.8
February	–13.2	–11.6	–14.9	–13.4	–12.6	–8.9	–6.5	–8.6	–12.9
March	10.8	13.1	13.8	13.1	11.4	10.2	15.3	10.4	12.2
April	0.3	–1.0	–1.3	–2.0	–1.4	–1.3	–2.8	–0.8	–0.8
SEASONALLY ADJUSTED (% change from preceding month)									
2008									
February	0.3	–1.0	0.5	0.1	–0.1	0.1	1.1	1.1	0.0
March	–0.9	0.5	0.9	0.3	1.4	0.4	0.3	–0.4	0.2
April	0.1	–0.8	–0.9	0.3	0.8	1.6	1.8	0.0	–0.2
May	0.4	0.9	0.7	1.4	0.5	1.3	0.3	0.0	0.7
June	–1.1	–1.9	–0.9	0.5	0.1	–1.0	0.3	–1.9	–1.0
July	–0.1	2.9	3.5	2.1	2.5	2.8	2.5	0.3	1.9
August	0.3	1.0	0.3	0.2	0.1	0.7	1.9	–0.9	0.5
September	–2.3	–1.6	–1.0	–0.6	–1.9	–0.6	1.4	–0.3	–1.6
October	2.0	1.7	–0.2	0.0	–0.8	1.0	–0.6	2.8	1.0
November	0.0	1.0	0.9	0.0	–0.4	0.7	2.4	0.3	0.4
December	4.9	3.9	3.2	2.4	2.8	4.2	4.8	3.0	3.8
2009									
January	1.9	–0.8	0.0	0.1	1.4	–2.9	–0.4	1.5	0.5
February	–2.4	–1.3	–2.2	–2.4	–2.7	1.3	–0.1	–0.5	–2.0
March	1.2	2.7	3.2	2.4	2.2	2.2	4.2	–0.1	2.2
April	1.3	0.0	0.8	–0.1	–2.4	0.5	–4.6	0.9	0.3
TREND (% change from preceding month)(a)									
2008									
February	–0.1	–0.1	0.0	0.7	0.1	0.3	0.4	0.4	0.0
March	–0.1	–0.2	0.0	0.7	0.5	0.5	0.4	0.2	0.0
April	–0.2	–0.1	0.3	0.8	0.8	0.7	0.6	–0.1	0.1
May	–0.3	0.0	0.4	0.9	0.9	0.9	1.0	–0.5	0.2
June	–0.3	0.3	0.6	0.8	0.8	0.9	1.3	–0.6	0.3
July	–0.3	0.5	0.5	0.7	0.4	0.8	1.4	–0.4	0.3
August	–0.3	0.6	0.5	0.5	0.0	0.7	1.3	–0.1	0.2
September	–0.2	0.6	0.4	0.3	–0.2	0.6	1.3	0.2	0.2
October	–0.1	0.6	0.3	0.2	–0.4	0.6	1.2	0.3	0.2
November	–0.1	0.6	0.2	0.1	–0.5	0.5	1.1	0.5	0.1
December	na	na	na	na	na	na	na	na	na
2009									
January	na	na	na	na	na	na	na	na	na
February	na	na	na	na	na	na	na	na	na
March	na	na	na	na	na	na	na	na	na
April	na	na	na	na	na	na	na	na	na

na not available

(a) Trend calculated on data up to November 2008.

EXPLANATORY NOTES

INTRODUCTION

1 This publication presents monthly trend estimates of the value of turnover of retail businesses classified by industry, and by state and territory. The estimates of turnover are compiled from the monthly Retail Business Survey (RBS).

2 About 500 'large' businesses are included in the survey every month, while a sample of about 2,700 'smaller' businesses is selected. The 'large' business' contribution of approximately 62% of the total estimate ensures a highly reliable Australian total turnover estimate.

3 Quarterly chain volume measures at the state and industry levels are updated with the March, June, September and December issues of this publication.

SCOPE AND COVERAGE

4 The scope of the RBS is all employing businesses with at least one retail outlet. Like most Australian Bureau of Statistics (ABS) economic surveys, the frame used for the RBS is taken from the ABS Business Register which includes registrations to the Australian Taxation Office's (ATO) pay-as-you-go withholding (PAYGW) scheme. Each statistical unit (as defined below) included on the ABS Business Register is classified to the Australian and New Zealand Standard Industrial Classification (ANZSIC) industry in which it mainly operates. The frame is supplemented with information about businesses which are classified as non-retail but which have significant retail activity.

5 The frame is updated quarterly to take account of new businesses, businesses which have ceased employing, changes in industry and other general business changes. The estimates include an allowance for the time it takes a newly registered business to get on to the survey frame. Businesses which have ceased employing are identified when the ATO cancels their Australian Business Number (ABN) and/or PAYGW registration. In addition, businesses with less than 50 employees which do not remit under the PAYGW scheme in each of the previous five quarters are removed from the frame.

6 The following industries included in the survey are as defined in ANZSIC:

- Food retailing
  - Supermarkets and grocery stores (5110) and non-petrol sales of convenience stores of selected petrol stations
  - Liquor retailing (5123)
  - Other food retailing
    - Fresh meat, fish and poultry retailing (5121)
    - Fruit and vegetable retailing (5122)
    - Bread and cake retailing (5124)
    - Specialised food retailing n.e.c. (5129)
- Department stores (5210)
- Clothing and soft good retailing
  - Clothing retailing (5221)
  - Footwear, fabric and other soft good retailing
    - Footwear retailing (5222)
    - Fabric and other soft good retailing (5223)
- Household good retailing
  - Furniture and floor covering retailing
    - Furniture retailing (5231)
    - Floor covering retailing (5232)
  - Domestic hardware and houseware retailing (5233)
  - Domestic appliance and recorded music retailing
    - Domestic appliance retailing (5234)
    - Recorded music retailing (5235)

SCOPE AND COVERAGE *continued*

- Other retailing
  - Newspaper, book and stationery retailing (5243)
  - Other recreational goods retailing
    - Sport and camping equipment retailing (5241)
    - Toy and game retailing (5242)
    - Photographic equipment retailing (5244)
  - Pharmaceutical, cosmetic and toiletry retailing (5251)
  - Other retailing n.e.c.
    - Antique and used good retailing (5252)
    - Garden supplies retailing (5253)
    - Flower retailing (5254)
    - Watch and jewellery retailing (5255)
    - Retailing n.e.c. (5259)
- Cafes, restaurants and takeaway food services
  - Takeaway food retailing (5125)
  - Cafes and restaurants (5730).

STATISTICAL UNITS DEFINED ON THE ABS BUSINESS REGISTER

7 The ABS uses an economic statistics units model on the ABS Business Register to describe the characteristics of businesses, and the structural relationships between related businesses. The units model is also used to break groups of related businesses into relatively homogeneous components that can provide data to the ABS.

8 The units model allocates businesses to one of two sub-populations. The vast majority of businesses are in what is called the ATO Maintained Population, while the remaining businesses are in the ABS Maintained Population. Together, these two sub-populations make up the ABS Business Register population.

ATO Maintained Population

9 Most businesses and organisations in Australia need to obtain an ABN, and are then included on the ATO Australian Business Register. Most of these businesses have simple structures; therefore the unit registered for an ABN will satisfy ABS statistical requirements. The businesses with simple structures constitute the ATO Maintained Population, and the ABN unit is used as the statistical unit for all economic collections.

ABS Maintained Population

10 For the population of businesses where the ABN unit is not suitable for ABS statistical requirements, the ABS maintains its own units structure through direct contact with each business. These businesses constitute the ABS Maintained Population. This

ABS Maintained Population continued

population consists typically of large, complex and diverse businesses. The statistical units model described below is used for these businesses.

Enterprise Group: This is a unit covering all the operations in Australia of one or more legal entities under common ownership and/or control. It covers all the operations in Australia of legal entities which are related in terms of the current Corporations Law (as amended by the *Corporations Legislation Amendment Act 1991*), including legal entities such as companies, trusts, and partnerships. Majority ownership is not required for control to be exercised.

Enterprise: The enterprise is an institutional unit comprising (i) a single legal entity or business entity, or (ii) more than one legal entity or business entity within the same Enterprise Group and in the same institutional subsector (i.e. they are all classified to a single Standard Institutional Sector Classification of Australia subsector).

Type of Activity Unit (TAU): The TAU is comprised of one or more business entities, sub-entities or branches of a business entity within an Enterprise Group that can report production and employment data for similar economic activities. When a minimum set of data items are available, a TAU is created which covers all the operations within an industry subdivision (and the TAU is classified to the relevant subdivision of the ANZSIC). Where a business cannot supply adequate data for each industry, a TAU is formed which contains activity in more than one industry subdivision.

SURVEY METHODOLOGY

11 The survey is conducted monthly primarily by telephone interview although a small number of questionnaires are mailed to businesses. The businesses included in the survey are selected by random sample from a frame stratified by state, industry and business size. The survey uses annualised turnover as the measure of business size. For the ATO Maintained Population, the annualised turnover is based on the ATO's Business Activity Statement item Total sales and for the ABS Maintained Population a modelled annualised turnover is used. For stratification purposes the annualised turnover allocated to each business is not updated each quarter as to do so would result in increased volatility in the estimates.

12 Generalised regression estimation methodology is used for estimation. For estimation purposes, the annualised turnover allocated to each business is updated each quarter.

13 The July 2008 issue saw the introduction of a 'one in two out' strategy for collecting data from sampled units. Businesses in the sample sector were allocated evenly across the three months of a quarter with approximately 900 sample sector businesses included each month. These businesses were required to provide a monthly estimate of turnover for the month of the quarter to which they had been allocated. They were then not required to report data for the next two months i.e. a business allocated to the first month of a quarter were required to report a monthly estimate for the July and October reference months. This strategy ceased in October 2008.

14 Each quarter, some businesses in the sample are replaced, at random, by other businesses so that the reporting load can be spread across smaller retailers.

15 Most businesses can provide turnover on a calendar month basis and this is how the data are presented. When businesses cannot provide turnover on a calendar month basis, the reported data and the period they relate to are used to estimate turnover for the calendar month.

SURVEY METHODOLOGY *continued*

16 Most retailers operate in a single state/territory. For this reason, estimates of turnover by state/territory are only collected from the larger retailers which are included in the survey each month. These retailers are asked to provide turnover for sales from each state/territory in which the business operates. Turnover for the smaller businesses is allocated to the state of their head office or main outlet.

DEFINITION OF TURNOVER

17 Turnover includes retail sales; wholesale sales; takings from repairs, meals and hiring of goods (except for rent, leasing and hiring of land and buildings); commissions from agency activity (e.g. commissions received from collecting dry cleaning, selling lottery tickets, etc.). From July 2000, turnover includes the goods and services tax.

COMPARABILITY OF ESTIMATES

18 Due to the increased sampling error and rotation of the 'one in two out' sampling methodology, detailed industry by state data for July to October 2008 were of limited use for measuring month to month movements and were suppressed. Due to the independent sample sectors selected for each month in a quarter, the monthly estimates could differ due to the businesses included in each sample. However, this methodology enabled reliable quarterly estimates to be derived from a small sample, while providing reliable broad level monthly trend estimates. In the March 2009 issue of this publication, modelled state by industry subgroup estimates for these months were introduced and are available from the Downloads tab of this issue.

SEASONAL ADJUSTMENT AND TREND ESTIMATION

19 Seasonally adjusted estimates are derived by estimating and removing systematic calendar related effects from the original series. In the Retail trade series, these calendar related effects are known as seasonal (e.g. increased spending in December as a result of Christmas) and trading day influences (arising from the varying length of each month and the varying number of Sundays, Mondays, Tuesdays, etc. in each month). Each influence is estimated by separate seasonal and trading day factors which, when combined, are referred to as the combined adjustment factors.

20 The seasonally adjusted estimates also have an allowance for an Easter proximity effect, which is caused when Easter falls late in March or early in April. This effect, when present, is combined with the seasonal and trading day factors to form the combined adjustment factors. There is also a similar allowance for the variable timing of Father's Day. See the Appendix of the July 2001 and August 2002 issues, respectively, of this publication for more information.

21 From the November 2008 issue, forward factors are used to seasonally adjust the Retail series. For more information about forward factors methodology, see *Information Paper: Introduction of Concurrent Seasonal Adjustment into the Retail Trade Series* (cat. no. 8514.0).

22 Autoregressive integrated moving average (ARIMA) modelling can improve the revision properties of the seasonally adjusted and trend estimates. ARIMA modelling relies on the characteristics of the series being analysed to project future period data. The projected values are temporary, intermediate values, that are only used internally to improve the estimation of the seasonal factors. The projected data do not affect the original estimates and are discarded at the end of the seasonal adjustment process. The retail collection uses an individual ARIMA model for each of the industry totals and state totals published monthly. The ARIMA model is assessed as part of the annual reanalysis. For more information on ARIMA modelling see *Feature article: Use of ARIMA modelling to reduce revisions in the October 2004* issue of *Australian Economic Indicators* (cat. no. 1350.0).

23 The seasonal and trading day factors are reviewed annually at a more detailed level than possible in the monthly processing cycle. The annual reanalysis will not normally result in significant changes. For Retail Trade, the results of the latest review are normally included in the July issue.

SEASONAL ADJUSTMENT AND TREND ESTIMATION *continued*

24 A "two-dimensional reconciliation" methodology has been used on the seasonally adjusted time series in this publication to force additivity - that is, to force the sum of fine-level (state by industry) estimates to be equal to the Australian total.

25 In the seasonal adjustment process, both the seasonal and trading day factors evolve over time to reflect changes in spending and trading patterns. Examples of this evolution include the slow move in spending from December to January; and, increased trading activity on weekends and public holidays. The seasonally adjusted estimates still reflect the sampling and non-sampling errors to which the original estimates are subject. This is why it is recommended that trend series be used to analyse month-to-month movements.

26 The monthly trend estimates are derived by applying a 13-term Henderson moving average to the seasonally adjusted estimates (7-term for quarterly series). The Henderson moving average is symmetric, but as the end of a time series is approached, asymmetric forms of the moving average have to be applied. The asymmetric moving averages have been tailored to suit the particular characteristics of individual series and enable trend estimates for recent periods to be produced. A standard end-weight parameter 3.5 of the asymmetric moving average is used to produce trend estimates for all monthly Retail series. Estimates of the trend will be improved at the current end of the time series as additional observations become available. This improvement is due to the application of different asymmetric moving averages for the most recent six months (or three quarters). As a result of the improvement, most revisions to the trend estimates will be observed for the most recent six months (or three quarters).

27 Trend estimates are used to analyse the underlying behaviour of the series over time. As a result of the introduction of The New Tax System, a break in the monthly trend series has been inserted between June and July 2000. Care should therefore be taken if comparisons span this period. For more details refer to the Appendix in the December 2000 issue of this publication.

28 For further information on trend estimates, see *Information Paper: A Guide to Interpreting Time Series - Monitoring Trends, 2003* (cat. no. 1349.0) or contact the Assistant Director, Time Series Analysis on Canberra (02) 6252 6345 or by email at <time.series.analysis@abs.gov.au>.

ANALYSING TREND ESTIMATES

29 The following terms are used in this publication to describe month to month movements in the trend series:

- in decline – percentage change in trend estimate less than zero
- no change or flat – percentage change in the trend estimate equal to zero
- weak growth – percentage change in the trend estimate of 0.1 to 0.3%
- moderate growth – percentage change in the trend estimate of 0.4 to 0.7%
- strong growth – percentage change in the trend estimate greater than 0.7%.

CHAIN VOLUME MEASURES

30 The chain volume measures of retail turnover appearing in this publication are annually reweighted chain Laspeyres indexes referenced to current price values in a chosen reference year. The reference year is advanced each September issue and is currently 2006–07. Each year's data in the Retail chain volume series are based on the prices of the previous year, except for the quarters of the latest incomplete year. Data for the 2007–08 financial year will initially be based upon price data for the 2006–07 financial year. Comparability with previous years is achieved by linking (or chaining) the series together to form a continuous time series. While current price estimates reflect both price and volume changes, chain volume estimates measure changes in value after the direct effects of price changes have been eliminated and hence only reflect volume changes. Further information on the nature and concepts of chain volume measures is

CHAIN VOLUME MEASURES *continued*

contained in the ABS publication *Information Paper: Introduction of Chain Volume Measures in the Australian National Accounts* (cat. no. 5248.0).

RELIABILITY OF ESTIMATES

31 There are two types of error possible in estimates of retail turnover:

Sampling error which occurs because a sample, rather than the entire population, is surveyed. One measure of the likely difference resulting from not including all establishments in the survey is given by the standard error, see below. Sampling error for each month will be influenced by the rotation effect of having a different third of the sample reporting each month and by some businesses in each month being replaced by other businesses so that the reporting load can be spread across retailers.

Non sampling error which arises from inaccuracies in collecting, recording and processing the data. The most significant of these errors are: misreporting of data items; deficiencies in coverage; non-response; and processing errors. Every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures.

STANDARD ERRORS

32 Seasonally adjusted and trend estimates and chain volume measures are also subject to sampling variability. For seasonally adjusted estimates, the standard errors are approximately the same as for the original estimates. For trend estimates, the standard errors are likely to be smaller. For quarterly chain volume measures, the standard errors may be up to 10% higher than those for the corresponding current price estimates because of the sampling variability contained in the prices data used to deflate the current price estimates.

33 Estimates, in original terms, are available from the Downloads tab of this publication. Estimates that have an estimated relative standard error (RSE) between 10% and 25% are annotated with the symbol '^'. These estimates should be used with caution as they are subject to sampling variability too high for some purposes. Estimates with a RSE between 25% and 50% are annotated with the symbol '*', indicating that the estimates should be used with caution as they are subject to sampling variability too high for most practical purposes. Estimates with a RSE greater than 50% are annotated with the symbol '**' indicating that the sampling variability causes the estimates to be considered too unreliable for general use.

34 To further assist users in assessing the reliability of estimates, key data series has been given a grading of A to B. Where:

- A represents a relative standard error on level of less than 2%. The published estimates are highly reliable for movement analysis.
- B represents a relative standard error on level between 2% and 5%, meaning the estimates is reliable for movement analysis purposes.

35 The tables below provide an indicator of reliability for the estimates in original terms. The reliability indicator is based on an average RSE derived over four years.

RELATIVE STANDARD ERRORS BY INDUSTRY GROUP

	Food retailing	*Department Stores*	*Clothing and soft good retailing*	*Household good retailing*	*Other retailing*	*Cafes, restaurants and takeaway food services*	*Total*
RSE (%)	A	A	B	A	B	B	A

STANDARD ERRORS *continued*

RELATIVE STANDARD ERRORS BY STATE

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
RSE (%)	A	A	A	A	A	B	B	B	A

RELIABILITY OF TREND ESTIMATES

36 The trending process dampens the volatility in the original and seasonally adjusted estimates. However, trend estimates are subject to revisions as future observations become available.

ABS DATA AVAILABLE ON REQUEST

37 As well as the statistics included in this and related publication, the ABS may have other relevant data available. Inquires should be made to the Retail Business Survey contact officer on (02) 6252 5990 or any ABS office.

RELATED PUBLICATIONS

38 Current publications and other products released by the ABS are available from the *Statistics View* of the ABS web site <http://www.abs.gov.au>. The ABS also issues a daily *Release Advice* on the web site which details products to be released in the week ahead.

ABBREVIATIONS

ABN	Australian Business Number
ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
ARIMA	autoregressive integrated moving average
ATO	Australian Taxation Office
n.e.c.	not elsewhere classified
PAYGW	pay-as-you-go withholding
RBS	Retail Business Survey
RSE	relative standard error
TAU	type of activity unit

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INTERNET **www.abs.gov.au** the ABS website is the best place for data from our publications and information about the ABS.

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