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### RETAIL TRADE AUSTRALIA, FEBRUARY 1990

#### PHONE INQUIRIES

- about these statistics and the availability of related unpublished statistics — contact Maurie Low on Canberra (06) 252 7442 or any ABS State office.
- about the constant price estimates — contact Mr Graeme Groves on Canberra (06) 252 6807
- about other statistics and ABS services — contact Information Services on Canberra (06) 252 6627, 252 5402, 252 6007 or any ABS State office.

#### MAIL INQUIRIES

- write to Information Services, ABS, P.O. Box 10, Belconnen, A.C.T. 2616 or any ABS State office.

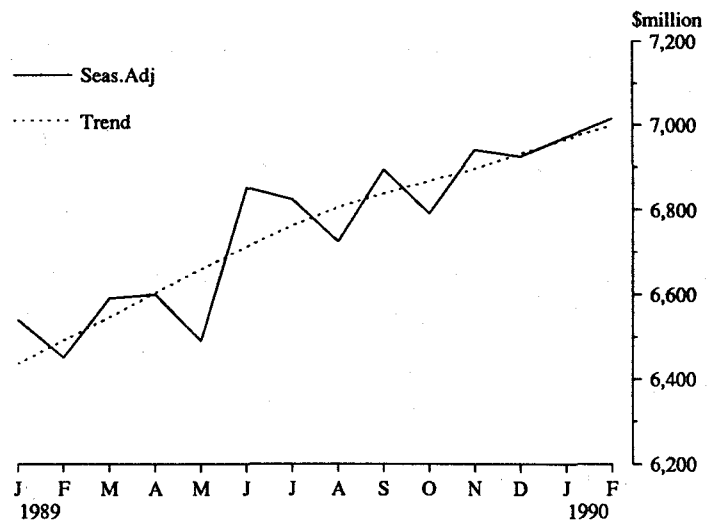
#### ELECTRONIC SERVICES

- on DISCOVERY — key \*656#.
- on AUSSTATS — phone (06) 252 6017.
- on TELESTATS — phone (06) 252 5404 Foreign Trade statistics inquiries, (06) 252 5405 Main Economic Indicator inquiries.

Trend estimates for the most recent months may be revised as data for subsequent months become available. For example, if the March seasonally adjusted estimate shows a 1.0 per cent rise, then the movement in the trend estimate for March would be 0.4 per cent and the movement for both February and January would be revised upwards by 0.1 percentage points. Alternatively a 1.0 per cent fall in the seasonally adjusted estimate would give a 0.1 per cent movement in the trend estimate and revise the February movement downwards by 0.2 percentage points and the January movement downwards by 0.1 percentage point. See paragraphs 23 and 24 of the Explanatory Notes.

### SUMMARY OF FINDINGS

TURNOVER OF RETAIL ESTABLISHMENTS  
CHART 1: MONTHLY ESTIMATES, AUSTRALIA



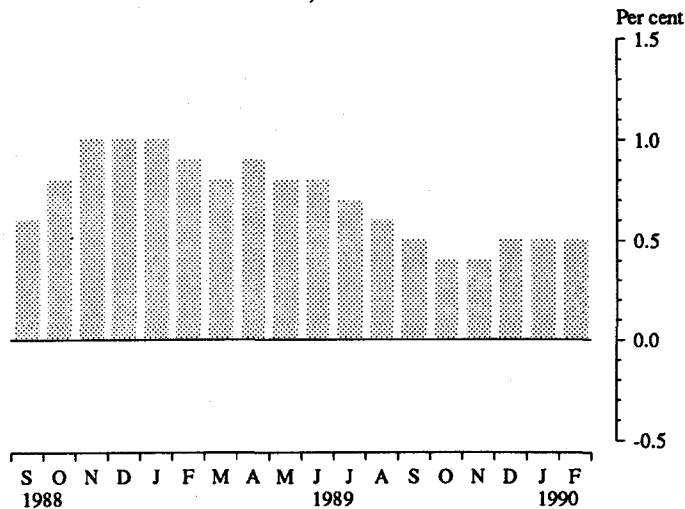
#### Australian Estimates

The turnover for retail establishments in Australia, including selected service establishments but excluding motor vehicle dealers, service stations etc, currently shows weak growth with trend estimates averaging a 0.5 per cent per month increase for the three months ending February.

This continuing trend of weak growth follows a seasonally adjusted increase in turnover of 0.7 per cent in February (from \$6,970 million to \$7,015 million) and 0.6 per cent in January. The original February estimate fell 7.6 per cent to \$6,174 million.

With the addition of February data, the trend estimates continue the pattern of slow growth apparent since September 1989. The annual rate of growth (February 1989 to February 1990) also continues to moderate and is currently 7.8 per cent.

**TURNOVER OF RETAIL ESTABLISHMENTS, AUSTRALIA**  
**CHART 2: MONTHLY PERCENTAGE CHANGES IN TREND**  
**ESTIMATES, CURRENT PRICES**



#### **Industry Trends**

The majority of the industries for which trend series are calculated (6 out of 13) are displaying either weak or moderate growth (refer Charts 3 to 8). Of the remainder, 3 industries are in decline and 4 are exhibiting relatively strong to strong growth.

Two of the four largest industries are recording a decline.

- Department and general stores are currently averaging a decline of 0.4 per cent per month over the last 3 months.
- Hotels, liquor stores and licensed clubs (the second largest industry) are averaging a decline of 0.2 per cent per month over the last 3 months.

The largest industry, Grocers, confectioners and tobacconists along with the Clothing and fabrics industry is exhibiting weak growth averaging 0.5 per cent per month over the last 3 months.

#### **State Trends**

With the exception of Western Australia which is currently exhibiting a decline averaging 0.3 per cent per month over the last 3 months, all States are exhibiting weak to moderate rates of growth (refer Charts 9 to 14).

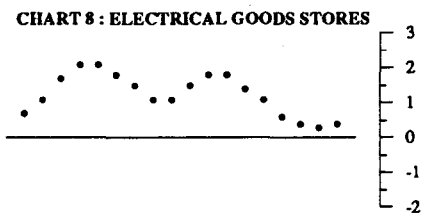
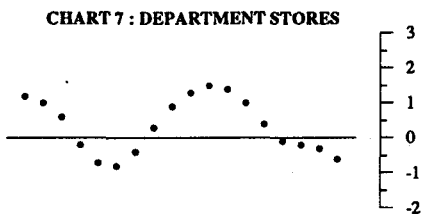
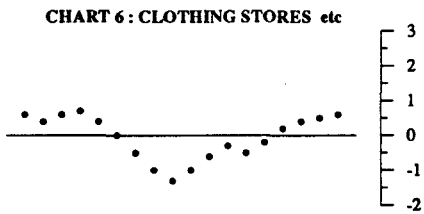
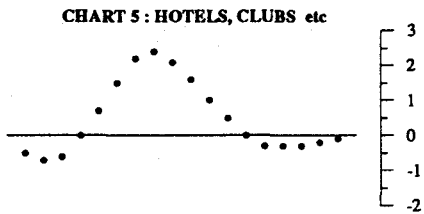
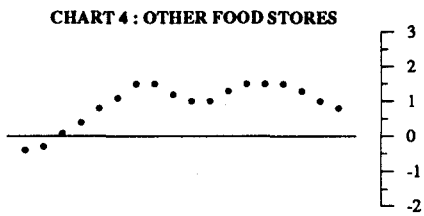
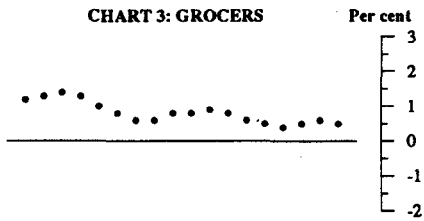
The three largest States - New South Wales, Victoria and Queensland are averaging 0.4, 0.8 and 0.5 per cent per month respectively over the last 3 months.

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NOTE: Explanatory Notes are at the back of this publication.

**TURNOVER OF RETAIL ESTABLISHMENTS  
AUSTRALIA**

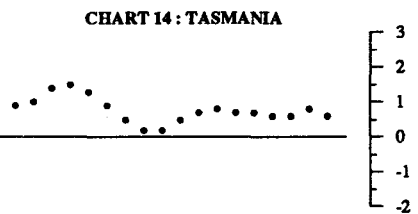
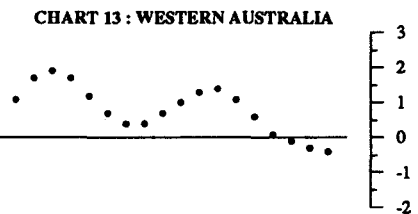
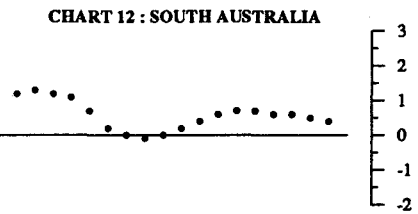
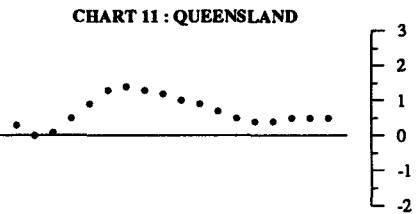
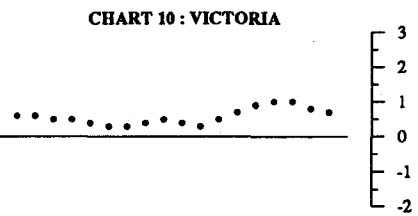
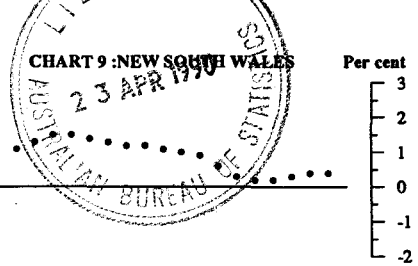
**TREND ESTIMATES, MONTHLY CHANGES  
CURRENT PRICES, SELECTED INDUSTRIES**  
Percentage change from preceding month



SONDJFMAMJJASONDJF  
1988 1989 1990

**TURNOVER OF RETAIL ESTABLISHMENTS**

**TREND ESTIMATES, MONTHLY CHANGES  
CURRENT PRICES, STATES**  
Percentage change from preceding month



SONDJFMAMJJASONDJF  
1988 1989 1990

TABLE 1. TURNOVER OF RETAIL ESTABLISHMENTS,  
MONTHLY ESTIMATES, AT CURRENT PRICES, AUSTRALIA (a)

Month	Original			Seasonally adjusted		Trend estimates (b)		
	\$m	% change from preceding month	% change from corresponding month of previous year	\$m	% change from preceding month	\$m	% change from preceding month	% change from corresponding month of previous year
<b>1988</b>								
December	8,786.5	35.1	8.5	6,330.7	1.2	6,375.2	1.0	8.9
<b>1989</b>								
January	6,133.1	-30.2	10.6	6,539.9	3.3	6,436.1	1.0	9.4
February	5,680.1	-7.4	5.6	6,451.2	-1.4	6,491.5	0.9	9.7
March	6,460.9	13.7	9.0	6,590.0	2.2	6,545.8	0.8	9.9
April	6,215.0	-3.8	8.8	6,598.6	0.1	6,603.4	0.9	10.1
May	6,502.0	4.6	10.4	6,489.7	-1.7	6,659.0	0.8	10.3
June	6,547.2	0.7	11.5	6,851.1	5.6	6,712.1	0.8	10.4
July	6,440.6	-1.6	10.1	6,822.7	-0.4	6,762.3	0.7	10.5
August	6,559.2	1.8	11.6	6,724.0	-1.4	6,805.3	0.6	10.5
September	6,729.2	2.6	10.3	6,892.9	2.5	6,838.4	0.5	10.3
October	6,722.0	-0.1	8.7	6,790.6	-1.5	6,867.6	0.4	9.9
November	7,198.5	7.1	10.7	6,940.3	2.2	6,897.0	0.4	9.3
December	9,364.9	30.1	6.6	6,924.6	-0.2	6,932.0	0.5	8.7
<b>1990</b>								
January	6,681.7	-28.7	8.9	6,969.5	0.6	6,967.0	0.5	8.2
February	6,174.4	-7.6	8.7	7,014.9	0.7	6,999.0	0.5	7.8
<b>Standard error (c) of</b>								
Latest month	52.2							
Change from previous month	28.6	0.4						

(a) Excludes motor vehicle dealers, petrol stations, etc. (b) Subject to revision - see from paragraph 21 of Explanatory Notes. (c) See paragraphs 9 to 13 of Explanatory Notes.

TABLE 2. TURNOVER OF RETAIL ESTABLISHMENTS,  
QUARTERLY ESTIMATES, AUSTRALIA (a)

Quarter	Original			Seasonally adjusted		
	\$m	% change from preceding quarter	% change from corresponding quarter of previous year	\$m	% change from preceding quarter	% change from corresponding quarter of previous year
AT CURRENT PRICES						
<b>1988</b>						
December	21,477.1	20.5	8.0	18,874.1	2.6	7.9
<b>1989</b>						
March	18,274.1	-14.9	8.4	19,581.1	3.7	10.0
June	19,264.2	5.4	10.3	19,939.4	1.8	10.0
September	19,729.0	2.4	10.7	20,439.6	2.5	11.1
December	23,285.4	18.0	8.4	20,655.5	1.1	9.4
AT CONSTANT (AVERAGE 1984-85) PRICES						
<b>1988</b>						
December	16,251.2	19.0	1.0	14,300.9	1.5	0.9
<b>1989</b>						
March	13,687.7	-15.8	1.7	14,633.5	2.3	3.1
June	14,148.7	3.4	3.9	14,652.1	0.1	3.6
September	14,281.3	0.9	4.6	14,798.4	1.0	5.0
December	16,697.1	16.9	2.7	14,830.8	0.2	3.7

(a) Excludes motor vehicle dealers, petrol stations, etc.

TABLE 3. TURNOVER OF RETAIL ESTABLISHMENTS, MONTHLY ESTIMATES BY INDUSTRY, AT CURRENT PRICES, AUSTRALIA (a)

Month	ORIGINAL \$ million											Total				
	Grocers, confectioners, tobacconists	Butchers	Other food stores	Hotels, liquor stores, licensed clubs	Cafes and restaurants	Clothing and fabrics stores	Department & general stores	Footwear stores	Domestic hardware stores, jewellers	Electrical goods stores	Furniture stores		Floor coverings stores	Pharmacies	Newsagents	Other stores
1988																
December	2,085.0	199.8	431.0	1,063.5	318.1	764.4	1,544.7	102.7	447.3	525.2	165.1	68.3	311.0	286.8	473.8	8,786.5
1989																
January	1,725.7	161.1	415.2	856.8	293.1	492.4	621.0	81.3	215.4	347.0	126.9	48.1	230.0	235.5	283.6	6,133.1
February	1,674.2	148.2	374.5	775.8	262.7	419.5	543.1	64.9	197.9	321.5	122.6	52.8	213.8	235.8	272.7	5,680.1
March	1,902.4	169.9	405.4	878.1	294.0	470.9	707.3	76.4	210.5	363.0	132.1	53.6	238.4	245.2	313.8	6,460.9
April	1,762.1	160.8	393.4	847.5	282.1	507.2	686.1	86.2	202.8	360.4	130.5	56.7	228.9	228.1	282.4	6,215.0
May	1,781.8	172.8	398.4	838.4	289.0	541.4	752.3	91.1	219.4	410.8	141.5	60.1	250.4	245.2	309.3	6,502.0
June	1,818.2	177.7	410.3	849.6	299.4	533.5	773.5	102.8	187.3	404.6	144.4	58.3	245.5	235.0	307.3	6,547.2
July	1,810.0	168.9	409.3	856.5	313.2	508.0	703.5	92.1	190.7	400.6	134.4	61.4	247.2	237.4	307.4	6,440.6
August	1,892.0	169.7	415.0	862.1	309.1	476.4	712.1	80.7	193.7	412.8	140.6	62.6	263.3	251.1	318.3	6,559.2
September	1,889.4	168.2	430.4	912.0	321.6	499.9	745.2	89.9	203.2	409.5	142.7	62.8	268.1	244.3	342.2	6,729.2
October	1,841.4	164.7	458.1	917.2	319.1	508.0	739.3	90.2	216.4	411.9	151.2	58.5	264.7	244.5	336.8	6,722.0
November	1,928.8	167.3	457.6	950.9	327.2	549.2	908.4	95.8	257.0	437.0	165.0	66.8	280.6	249.0	357.9	7,198.5
December	2,249.0	213.8	500.8	1,193.3	412.0	727.3	1,544.1	116.6	408.8	590.5	176.0	61.5	350.1	300.7	520.7	9,364.9
1990																
January	1,878.3	172.3	492.1	944.5	341.8	459.0	667.2	97.7	196.5	400.8	141.1	49.5	263.6	254.2	323.1	6,681.7
February	1,834.6	166.3	426.2	851.5	301.1	388.0	582.4	73.5	180.6	374.9	130.6	53.3	244.3	262.4	304.8	6,174.4
Standard error (b) of Level	19.1	11.7	19.0	22.8	16.9	13.1	0.0	6.1	10.9	13.3	7.7	2.8	10.2	13.8	13.8	52.2
Change	9.8	2.9	10.8	12.6	12.9	7.6	0.0	2.1	5.9	6.0	4.0	2.0	4.5	5.4	8.3	28.6
TREND ESTIMATES (c) \$ million																
1988																
December	1,768.6	163.0	390.6	821.5	n.p.	536.7	773.5	82.1	218.2	367.4	136.3	61.1	238.3	228.5	n.p.	6,375.2
1989																
January	1,786.5	165.9	393.6	827.2	n.p.	539.0	768.1	81.6	224.0	375.0	138.0	59.9	240.3	234.0	n.p.	6,436.1
February	1,800.3	168.8	398.0	839.8	n.p.	539.1	761.6	81.8	230.1	381.9	139.8	58.8	242.7	238.9	n.p.	6,491.5
March	1,811.2	171.3	403.8	858.0	n.p.	536.2	758.2	83.2	234.8	387.5	141.4	58.0	245.1	243.0	n.p.	6,545.8
April	1,822.7	173.0	409.8	878.7	n.p.	530.6	760.3	85.7	237.7	391.8	142.4	57.9	247.6	246.2	n.p.	6,603.4
May	1,836.4	173.4	414.7	897.4	n.p.	523.8	766.8	88.3	238.2	396.3	142.4	58.5	250.1	249.1	n.p.	6,659.0
June	1,851.2	172.4	418.9	911.9	n.p.	518.5	776.6	90.3	237.1	402.3	141.6	59.4	252.8	251.6	n.p.	6,712.1
July	1,867.7	170.4	423.2	921.4	n.p.	515.2	788.4	91.7	234.4	409.5	140.7	60.0	256.3	253.1	n.p.	6,762.3
August	1,882.7	168.2	428.5	925.9	n.p.	513.4	799.6	92.4	230.4	416.7	140.7	59.9	260.3	253.0	n.p.	6,805.3
September	1,894.6	167.0	434.8	925.5	n.p.	510.8	807.7	92.7	225.3	422.4	142.1	59.4	264.5	251.4	n.p.	6,838.4
October	1,903.7	168.1	441.5	922.6	n.p.	509.9	810.6	92.9	220.6	426.9	144.8	59.1	268.4	250.0	n.p.	6,867.6
November	1,911.3	171.1	448.1	919.4	n.p.	510.7	809.4	93.5	216.4	429.5	147.4	59.0	271.5	249.3	n.p.	6,897.0
December	1,921.1	174.8	453.9	916.9	n.p.	512.9	807.4	94.4	212.5	431.2	149.3	59.1	273.7	249.8	n.p.	6,932.0
1990																
January	1,932.0	178.6	458.6	914.9	n.p.	515.5	805.2	95.3	209.1	432.6	150.6	59.3	275.2	251.4	n.p.	6,967.0
February	1,942.3	182.2	462.2	914.2	n.p.	518.8	800.6	96.1	207.4	434.3	151.2	59.8	276.3	253.6	n.p.	6,999.0

See footnotes at end of table.

TABLE 3. TURNOVER OF RETAIL ESTABLISHMENTS.  
MONTHLY ESTIMATES BY INDUSTRY, AT CURRENT PRICES, AUSTRALIA (a) —continued

Month	Grocers, confectioners, tobacconists		Hotels, liquor stores, licensed clubs		Cafes and restaurants	Clothing and fabrics stores	Departmental general stores	Footwear stores	Domestic hardware stores, jewellers	Electrical goods stores	Furniture stores	Floor coverings stores	Pharmacies	Newsagents	Other stores	Total
	Butchers	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores
TREND ESTIMATES (c)																
% change from preceding month																
1988																
December 1989	1.3	1.7	0.4	0.0	n.p.	0.7	-0.2	-0.4	2.2	2.1	0.7	-1.5	0.8	2.6	n.p.	1.0
January 1989	1.0	1.8	0.8	0.7	n.p.	0.4	-0.7	-0.6	2.7	2.1	1.2	-2.0	0.8	2.4	n.p.	1.0
February	0.8	1.7	1.1	1.5	n.p.	0.0	-0.8	0.2	2.7	1.8	1.3	-1.8	1.0	2.1	n.p.	0.9
March	0.6	1.5	1.5	2.2	n.p.	-0.5	-0.4	1.7	2.0	1.5	1.1	-1.4	1.0	1.7	n.p.	0.8
April	0.6	1.0	1.5	2.4	n.p.	-1.0	0.3	3.0	1.2	1.1	0.7	-0.2	1.0	1.3	n.p.	0.9
May	0.8	0.2	1.2	2.1	n.p.	-1.3	0.9	3.0	0.2	1.1	0.0	1.0	1.0	1.2	n.p.	0.8
June	0.8	-0.6	1.0	1.6	n.p.	-1.0	1.3	2.3	-0.5	1.5	-0.6	1.5	1.1	1.0	n.p.	0.8
July	0.9	-1.2	1.0	1.0	n.p.	-0.6	1.5	1.6	-1.1	1.8	-0.6	1.0	1.4	0.6	n.p.	0.7
August	0.8	-1.3	1.3	0.5	n.p.	-0.3	1.4	0.8	-1.7	1.8	0.0	-0.2	1.6	0.0	n.p.	0.6
September	0.6	-0.7	1.5	0.0	n.p.	-0.5	1.0	0.3	-2.2	1.4	1.0	-0.8	1.6	-0.6	n.p.	0.5
October	0.5	0.7	1.5	-0.3	n.p.	-0.2	0.4	0.2	-2.1	1.1	1.9	-0.5	1.5	-0.6	n.p.	0.4
November	0.4	1.8	1.5	-0.3	n.p.	0.2	-0.1	0.6	-1.9	0.6	1.8	-0.2	1.2	-0.3	n.p.	0.4
December 1990	0.5	2.2	1.3	-0.3	n.p.	0.4	-0.2	1.0	-1.8	0.4	1.3	0.2	0.8	0.2	n.p.	0.5
January 1990	0.6	2.2	1.0	-0.2	n.p.	0.5	-0.3	1.0	-1.6	0.3	0.9	0.3	0.5	0.6	n.p.	0.5
February	0.5	2.0	0.8	-0.1	n.p.	0.6	-0.6	0.8	-0.8	0.4	0.4	0.8	0.4	0.9	n.p.	0.5
TREND ESTIMATES (c)																
% change from corresponding month of previous year																
1988																
December 1989	10.3	17.9	6.8	0.3	n.p.	8.2	7.4	1.5	15.0	6.7	4.3	11.9	16.9	9.0	n.p.	8.9
January 1989	10.8	20.0	6.9	0.6	n.p.	8.3	5.9	-1.2	17.6	7.5	4.8	7.9	17.4	11.9	n.p.	9.4
February	11.1	21.8	6.8	1.7	n.p.	7.8	4.3	-2.7	19.3	8.6	4.3	4.4	18.0	14.1	n.p.	9.7
March	11.3	22.9	6.8	3.6	n.p.	6.7	3.4	-1.9	19.4	9.8	3.2	2.1	17.9	15.4	n.p.	9.9
April	11.5	23.0	6.9	5.7	n.p.	5.0	3.6	1.2	18.2	11.1	2.2	0.9	17.3	16.4	n.p.	10.1
May	11.8	21.5	6.9	7.6	n.p.	2.8	4.3	5.0	16.1	12.7	1.6	0.7	16.2	17.7	n.p.	10.3
June	12.0	18.7	7.1	9.0	n.p.	0.5	5.3	8.0	14.0	15.0	1.4	0.8	14.9	18.9	n.p.	10.4
July	12.1	15.1	7.9	9.9	n.p.	-1.2	6.0	10.2	12.2	17.7	1.5	0.2	13.9	19.7	n.p.	10.5
August	11.9	11.4	9.5	10.7	n.p.	-2.1	6.2	11.3	10.0	19.9	2.6	-1.8	13.5	19.3	n.p.	10.5
September	11.3	8.3	11.6	11.2	n.p.	-3.1	5.9	11.8	7.4	20.7	4.4	-4.2	13.7	17.4	n.p.	10.3
October	10.5	6.9	13.6	11.6	n.p.	-3.7	5.2	12.5	4.5	20.6	7.0	-5.3	14.2	14.7	n.p.	9.9
November	9.4	6.8	15.2	11.9	n.p.	-4.2	4.5	13.5	1.3	19.4	8.9	-4.8	14.8	11.9	n.p.	9.3
December 1990	8.6	7.2	16.2	11.6	n.p.	-4.4	4.4	15.0	-2.6	17.4	9.5	-3.3	14.9	9.3	n.p.	8.7
January 1990	8.1	7.7	16.5	10.6	n.p.	-4.4	4.8	16.8	-6.7	15.4	9.1	-1.0	14.5	7.4	n.p.	8.2
February	7.9	7.9	16.1	8.9	n.p.	-3.8	5.1	17.5	-9.9	13.7	8.2	1.7	13.8	6.2	n.p.	7.8

(a) Excludes motor vehicle dealers, petrol stations, etc. (b) The standard error of the estimates for the latest month and of the latest month from the preceding month - see paragraphs 9 to 13 of Explanatory Notes. (c) Subject to revision - see from paragraph 21 of Explanatory Notes.

TABLE 4. TURNOVER OF RETAIL ESTABLISHMENTS,  
QUARTERLY ESTIMATES BY INDUSTRY, AT CONSTANT (AVERAGE 1984-85) PRICES, AUSTRALIA (a)

Quarter	Grocers,		Hotels,		Cafes and restaurants	Clothing and fabrics stores	Departmental and general stores	Domestic hardware stores, jewellery stores	Electrical goods stores	Furniture stores	Floor coverings stores	Pharmacies	Newsagents	Other stores	Total
	confectioners, tobacconists	Butchers	Other food stores	liquor stores, licensed clubs											
ORIGINAL \$ million															
1988															
December	4,259.4	414.3	863.9	2,046.9	622.0	1,327.7	2,344.1	201.3	703.8	1,041.1	140.3	606.7	490.9	843.5	16,251.2
1989															
March	4,007.3	377.9	828.0	1,850.1	638.7	999.5	1,399.2	167.0	496.9	875.2	106.3	523.5	485.5	645.3	13,687.7
June	3,963.9	383.7	792.4	1,830.1	641.5	1,115.7	1,626.0	202.8	474.4	998.9	119.5	552.9	477.9	661.0	14,148.7
September	4,043.4	377.0	801.9	1,861.5	680.0	1,042.0	1,577.8	191.7	456.2	1,034.5	126.2	584.6	495.6	702.3	14,281.3
December	4,305.1	405.5	921.5	2,131.3	755.3	1,225.5	2,294.4	218.4	680.8	1,209.0	123.3	670.1	533.0	870.1	16,697.1
SEASONALLY ADJUSTED ESTIMATES \$ million															
1988															
December	4,011.3	380.6	826.6	1,833.9	n.p.	1,120.0	1,768.5	185.8	497.9	912.0	130.4	549.0	453.6	n.p.	14,300.9
1989															
March	4,100.4	398.0	832.2	1,863.2	n.p.	1,190.0	1,701.8	184.6	551.6	967.4	117.0	559.0	488.7	n.p.	14,633.5
June	4,047.6	396.3	818.3	1,947.2	n.p.	1,120.9	1,695.3	192.3	557.9	1,016.4	121.4	571.7	500.7	n.p.	14,652.1
September	4,112.4	378.2	812.5	1,962.7	n.p.	1,074.1	1,737.8	200.6	542.1	1,061.2	125.6	587.2	516.2	n.p.	14,798.4
December	4,101.0	374.7	883.8	1,916.6	n.p.	1,047.3	1,767.0	204.4	490.5	1,078.8	113.2	612.0	495.1	n.p.	14,830.8
% change from preceding quarter															
1988															
December	2.0	2.2	-0.9	-2.0	n.p.	-5.0	3.3	-0.7	-0.5	1.8	-0.7	3.1	5.0	n.p.	1.5
1989															
March	2.2	4.6	0.7	1.6	n.p.	6.2	-3.8	-0.6	10.8	6.1	-2.2	1.8	7.7	n.p.	2.3
June	-1.3	-0.4	-1.7	4.5	n.p.	-5.8	-0.4	4.2	1.1	5.1	6.7	2.3	2.5	n.p.	0.1
September	1.6	-4.6	-0.7	0.8	n.p.	-4.2	2.5	4.3	-2.8	4.4	-6.5	2.7	3.1	n.p.	1.0
December	-0.3	-0.9	8.8	-2.3	n.p.	-2.5	1.7	1.8	-9.5	1.7	5.3	4.2	-4.1	n.p.	0.2
% change from corresponding quarter of previous year															
1988															
December	-0.1	4.7	-5.4	-4.2	n.p.	-2.0	3.2	-2.2	8.3	2.2	0.8	7.3	-3.4	n.p.	0.9
1989															
March	2.8	9.5	-2.9	-2.4	n.p.	2.0	-1.5	-9.2	16.4	4.9	-5.6	-9.5	5.9	n.p.	3.1
June	2.6	11.9	-5.1	3.1	n.p.	-1.4	-1.6	-1.9	13.1	12.0	-0.8	-0.7	13.2	n.p.	3.6
September	4.6	1.5	-2.6	4.9	n.p.	-8.9	1.5	7.2	8.3	18.4	-2.3	-4.4	19.5	n.p.	5.0
December	2.2	-1.5	6.9	4.5	n.p.	-6.5	-0.1	10.0	-1.5	18.3	2.6	-13.2	9.2	n.p.	3.7

(a) Excludes motor vehicle dealers, petrol stations, etc.

TABLE 5. TURNOVER OF RETAIL ESTABLISHMENTS,  
MONTHLY ESTIMATES, AT CURRENT PRICES, AUSTRALIA, STATES AND TERRITORIES (a)

Month	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia	
										ORIGINAL \$ million
1988										
December	3,096.2	2,330.3	1,429.1	715.3	764.5	221.2	72.2	157.7	8,786.5	
1989										
January	2,153.2	1,582.4	1,039.5	495.2	551.5	152.4	55.5	103.4	6,133.1	
February	1,979.0	1,495.8	939.8	452.8	513.3	147.3	53.4	98.7	5,680.1	
March	2,268.8	1,687.8	1,066.0	519.8	583.0	164.0	59.9	111.5	6,460.9	
April	2,215.1	1,606.4	1,024.3	501.3	549.0	152.6	58.0	108.2	6,215.0	
May	2,307.4	1,680.3	1,084.4	517.1	575.3	160.7	64.4	112.5	6,502.0	
June	2,331.0	1,657.5	1,129.2	509.7	578.5	161.6	67.6	112.0	6,547.2	
July	2,298.6	1,624.5	1,106.2	508.1	562.5	154.8	69.7	116.1	6,440.6	
August	2,323.2	1,659.7	1,122.3	521.7	580.0	163.4	72.8	116.1	6,559.2	
September	2,404.8	1,689.1	1,167.3	518.2	604.0	163.4	67.8	114.7	6,729.2	
October	2,398.8	1,706.8	1,150.8	519.5	598.3	163.0	66.4	118.3	6,722.0	
November	2,586.6	1,824.1	1,195.0	577.1	647.2	177.5	66.5	124.6	7,198.5	
December	3,334.5	2,494.2	1,537.3	711.3	821.0	231.4	78.0	157.2	9,364.9	
1990										
January	2,357.6	1,724.0	1,152.8	523.5	587.2	164.4	59.5	112.7	6,681.7	
February	2,201.2	1,590.2	1,039.3	475.5	544.8	159.0	58.2	106.2	6,174.4	
Level	36.4	28.1	20.1	9.6	9.4	3.5	1.7	2.3	52.2	
Change	20.1	15.0	12.1	5.0	3.6	1.4	1.5	1.4	28.6	
TREND ESTIMATES (c) \$ million										
1988										
December	2,229.4	1,676.6	1,055.6	519.7	566.0	159.1	n.p.	114.8	6,375.2	
1989										
January	2,260.0	1,682.5	1,065.1	523.5	572.7	161.2	n.p.	115.0	6,436.1	
February	2,289.7	1,686.8	1,078.8	524.8	576.5	162.7	n.p.	114.5	6,491.5	
March	2,318.2	1,691.7	1,094.0	524.6	578.7	163.5	n.p.	113.7	6,545.8	
April	2,346.2	1,698.5	1,108.7	524.1	581.2	163.9	n.p.	113.1	6,603.4	
May	2,371.7	1,706.6	1,121.9	523.9	585.0	164.3	n.p.	113.2	6,659.0	
June	2,395.2	1,712.9	1,133.4	524.9	590.7	165.1	n.p.	114.1	6,712.1	
July	2,416.1	1,718.5	1,143.7	527.1	598.2	166.2	n.p.	115.5	6,762.3	
August	2,430.9	1,726.9	1,151.3	530.4	606.4	167.5	n.p.	117.0	6,805.3	
September	2,438.6	1,739.4	1,156.6	534.0	612.8	168.7	n.p.	118.5	6,838.4	
October	2,443.8	1,755.8	1,161.3	537.9	616.4	169.8	n.p.	119.7	6,867.6	
November	2,448.1	1,774.0	1,166.2	541.3	617.1	170.8	n.p.	120.8	6,897.0	
December	2,455.2	1,791.9	1,171.7	544.4	616.3	171.9	n.p.	121.9	6,932.0	
1990										
January	2,465.0	1,806.8	1,177.3	546.9	614.5	173.2	n.p.	122.8	6,967.0	
February	2,475.2	1,820.0	1,182.8	549.3	612.2	174.2	n.p.	123.7	6,999.0	

See footnotes at end of table.



TABLE 5. TURNOVER OF RETAIL ESTABLISHMENTS,  
MONTHLY ESTIMATES, AT CURRENT PRICES, AUSTRALIA, STATES AND TERRITORIES (a) —continued

Month	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
	TREND ESTIMATES (c) % change from preceding month								
1988									
December	1.5	0.5	0.5	1.1	1.7	1.5	n.p.	1.0	1.0
1989									
January	1.4	0.4	0.9	0.7	1.2	1.3	n.p.	0.2	1.0
February	1.3	0.3	1.3	0.2	0.7	0.9	n.p.	-0.4	0.9
March	1.2	0.3	1.4	0.0	0.4	0.5	n.p.	-0.7	0.8
April	1.2	0.4	1.3	-0.1	0.4	0.2	n.p.	-0.5	0.9
May	1.1	0.5	1.2	0.0	0.7	0.2	n.p.	0.1	0.8
June	1.0	0.4	1.0	0.2	1.0	0.5	n.p.	0.8	0.8
July	0.9	0.3	0.9	0.4	1.3	0.7	n.p.	1.2	0.7
August	0.6	0.5	0.7	0.6	1.4	0.8	n.p.	1.3	0.6
September	0.3	0.7	0.5	0.7	1.1	0.7	n.p.	1.3	0.5
October	0.2	0.9	0.4	0.7	0.6	0.7	n.p.	1.0	0.4
November	0.2	1.0	0.4	0.6	0.1	0.6	n.p.	0.9	0.4
December	0.3	1.0	0.5	0.6	-0.1	0.6	n.p.	0.9	0.5
1990									
January	0.4	0.8	0.5	0.5	-0.3	0.8	n.p.	0.7	0.5
February	0.4	0.7	0.5	0.4	-0.4	0.6	n.p.	0.7	0.5
1988									
December	9.5	6.8	13.8	8.2	7.8	8.7	n.p.	2.0	8.9
1989									
January	9.9	7.1	13.8	9.1	9.5	9.4	n.p.	2.0	9.4
February	10.4	6.9	13.9	9.3	10.4	9.9	n.p.	1.7	9.7
March	11.1	6.6	13.7	9.1	10.7	10.1	n.p.	1.3	9.9
April	12.2	6.3	13.0	8.8	10.8	10.1	n.p.	1.3	10.1
May	13.5	6.1	11.9	8.3	11.1	10.2	n.p.	2.1	10.3
June	14.6	5.7	10.8	7.9	11.9	10.2	n.p.	3.4	10.4
July	15.3	5.4	10.2	7.6	13.1	10.4	n.p.	4.9	10.5
August	15.1	5.3	10.0	7.2	14.1	10.4	n.p.	6.2	10.5
September	14.2	5.4	10.2	6.6	14.1	10.3	n.p.	6.7	10.3
October	12.9	5.8	10.7	6.0	12.9	9.8	n.p.	6.6	9.9
November	11.4	6.4	11.0	5.4	10.9	8.9	n.p.	6.2	9.3
December	10.1	6.9	11.0	4.8	8.9	8.0	n.p.	6.2	8.7
1990									
January	9.1	7.4	10.5	4.5	7.3	7.4	n.p.	6.8	8.2
February	8.1	7.9	9.6	4.7	6.2	7.1	n.p.	8.0	7.8

(a) Excludes motor vehicle dealers, petrol stations, etc. (b) The standard error of the estimates for the latest month and of the latest month from the preceding month - see paragraphs 9 to 13 of Explanatory Notes. (c) Subject to revision - see from paragraph 21 of Explanatory Notes.

TABLE 6. TURNOVER OF RETAIL ESTABLISHMENTS,  
 QUARTERLY ESTIMATES, AT CONSTANT (AVERAGE 1984-85) PRICES, AUSTRALIA, STATES AND TERRITORIES (a)

Quarter	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
ORIGINAL \$ million									
1988 December	5,767.2	4,269.6	2,654.3	1,316.2	1,402.0	399.3	146.7	296.0	16,251.2
1989 March	4,846.7	3,546.1	2,268.0	1,100.8	1,215.8	344.0	126.0	240.2	13,687.7
June	5,090.3	3,597.7	2,355.9	1,124.5	1,242.3	347.9	139.6	250.5	14,148.7
September	5,134.8	3,558.2	2,444.7	1,124.0	1,260.4	348.2	152.6	258.3	14,281.3
December	6,038.7	4,255.4	2,775.0	1,304.5	1,472.8	406.7	149.8	294.0	16,697.1
SEASONALLY ADJUSTED ESTIMATES \$ million									
1988 December	5,026.8	3,757.3	2,375.6	1,169.3	1,254.1	350.2	n.p.	264.7	14,300.9
1989 March	5,202.0	3,755.2	2,413.8	1,178.1	1,278.6	364.9	n.p.	263.1	14,633.5
June	5,303.6	3,720.7	2,458.3	1,152.5	1,277.5	360.0	n.p.	254.6	14,652.1
September	5,326.4	3,732.4	2,483.0	1,162.1	1,312.8	365.2	n.p.	262.6	14,798.4
December	5,323.8	3,759.9	2,495.9	1,171.8	1,329.4	362.3	n.p.	265.7	14,830.8
% change from preceding quarter									
1988 December	2.8	1.2	-1.2	2.5	4.8	0.8	n.p.	2.8	1.5
1989 March	3.5	-0.1	1.6	0.8	1.9	4.2	n.p.	-0.6	2.3
June	2.0	-0.9	1.8	-2.2	-0.1	-1.3	n.p.	-3.2	0.1
September	0.4	0.3	1.0	0.8	2.8	1.4	n.p.	3.2	1.0
December	0.0	0.7	0.5	0.8	1.3	-0.8	n.p.	1.1	0.2
% change from corresponding quarter of previous year									
1988 December	2.5	-1.2	6.2	0.3	-2.6	0.6	n.p.	-4.5	0.9
1989 March	3.3	0.6	6.2	1.3	4.9	3.5	n.p.	-4.1	3.1
June	7.7	-0.5	5.5	2.2	3.3	4.1	n.p.	-3.9	3.6
September	8.9	0.5	3.3	1.9	9.7	5.1	n.p.	2.0	5.0
December	5.9	0.1	5.1	0.2	6.0	3.4	n.p.	0.4	3.7

(a) Excludes motor vehicle dealers, petrol stations, etc.



TABLE 7. TURNOVER OF RETAIL ESTABLISHMENTS,  
MONTHLY ESTIMATES, AT CURRENT PRICES, BY INDUSTRY, STATES AND ACT (a) —continued

Month	Grocers, confectioners, tobacconists		Hotels, liquor stores, licensed clubs		Cafes and restaurants		Clothing and fabrics stores		Department & general stores		Footwear stores		Domestic hardware stores, jewellers		Electrical goods stores		Furniture stores		Floor coverings stores		Pharmacies		Newsagents		Other stores		Total
	Butchers	Other food stores	Other liquor licensed	Cafes and restaurants	Clothing and fabrics stores	Department & general stores	Footwear stores	Domestic hardware stores, jewellers	Electrical goods stores	Furniture stores	Floor coverings stores	Pharmacies	Newsagents	Other stores													
VICTORIA																											
ORIGINAL \$ million																											
1988																											
December 1989	597.1	42.7	115.1	228.9	74.9	234.7	383.0	29.6	140.9	135.3	41.6	20.8	82.6	65.4	137.6	2,330.3											
January	497.3	34.5	101.8	185.6	68.3	146.4	140.2	21.6	68.3	85.1	34.6	12.4	56.1	54.6	75.7	1,582.4											
February	478.7	32.2	101.8	165.7	68.3	135.5	128.8	18.1	61.0	78.3	34.2	14.1	51.0	49.2	78.8	1,495.8											
March	552.8	40.0	104.3	173.6	81.1	137.9	164.4	20.7	67.8	92.6	38.8	15.3	58.6	55.3	84.5	1,687.8											
April	497.0	39.2	104.8	158.0	78.4	147.4	159.0	24.7	64.5	95.7	37.3	17.8	55.3	51.0	76.3	1,606.4											
May	509.4	43.7	103.0	154.0	82.5	155.7	174.6	25.1	71.9	108.3	37.5	18.2	60.7	55.6	80.0	1,680.3											
June	511.7	45.6	101.5	154.4	81.7	146.2	189.8	24.6	60.0	97.7	39.5	15.9	56.9	56.8	75.2	1,657.5											
July	509.1	38.1	100.0	153.1	87.9	136.8	157.3	22.0	68.7	101.9	35.2	18.4	58.6	55.6	81.6	1,624.5											
August	541.3	38.7	95.8	155.6	85.1	131.0	163.2	18.5	61.8	108.2	38.6	17.4	62.2	61.8	80.4	1,659.7											
September	524.9	35.9	103.4	173.6	90.8	132.0	169.5	19.3	68.4	110.9	36.8	16.1	63.1	60.5	83.9	1,689.1											
October	517.5	35.0	120.0	173.0	88.9	135.9	172.5	20.3	72.5	110.5	39.9	14.5	61.1	60.8	84.3	1,706.8											
November	547.4	34.0	119.2	185.3	89.2	144.6	208.8	22.4	76.5	116.2	44.7	18.6	65.1	63.1	89.0	1,824.1											
December 1990	645.2	53.8	126.6	248.0	116.0	209.9	390.8	28.1	132.2	157.9	42.1	16.9	85.5	89.2	152.0	2,494.2											
1990																											
January	544.5	45.1	114.1	185.8	88.9	118.2	151.3	21.8	71.4	106.5	34.4	12.5	65.7	76.2	87.8	1,724.0											
February	520.9	41.6	101.1	169.5	85.4	106.9	136.5	18.8	61.1	100.2	30.4	14.6	59.7	69.6	73.6	1,590.2											
Standard error (b) of Level	12.9	7.6	9.5	9.6	9.7	5.8	0.0	1.5	3.4	6.1	3.5	1.5	4.7	10.8	7.3	28.1											
Change	6.9	1.6	3.7	7.1	5.8	2.7	0.0	1.1	1.6	3.2	0.9	0.6	1.8	2.8	6.5	15.0											
TREND ESTIMATES (c)																											
\$ million																											
1989																											
September	536.1	37.0	107.3	175.2	n.p.	138.4	189.2	21.4	74.1	111.5	37.1	16.4	63.3	63.4	n.p.	1,739.4											
October	538.2	37.6	110.2	177.4	n.p.	138.7	192.0	21.5	73.0	114.0	37.2	15.8	63.6	64.4	n.p.	1,755.8											
November	541.1	39.5	112.6	178.6	n.p.	139.4	193.5	21.9	72.2	115.5	37.2	15.4	64.0	65.8	n.p.	1,774.0											
December 1989	545.2	42.0	113.8	179.0	n.p.	139.9	193.9	22.2	71.5	116.4	37.0	15.2	64.6	67.4	n.p.	1,791.9											
1990																											
January	549.6	44.5	114.0	178.7	n.p.	140.2	193.6	22.6	70.8	117.1	36.8	15.2	65.3	69.2	n.p.	1,806.8											
February	553.6	46.8	113.7	178.1	n.p.	140.2	191.2	22.8	71.0	117.7	36.4	15.3	66.2	70.8	n.p.	1,820.0											
% change from preceding month																											
1989																											
September	0.3	-2.4	2.5	1.6	n.p.	-0.4	2.0	-0.9	-1.7	2.7	-0.3	-4.1	0.8	1.6	n.p.	0.7											
October	0.4	1.6	2.7	1.3	n.p.	0.2	1.5	0.5	-1.5	2.2	0.3	-3.7	0.5	1.6	n.p.	0.9											
November	0.5	5.1	2.2	0.7	n.p.	0.5	0.8	1.9	-1.1	1.3	0.0	-2.5	0.6	2.2	n.p.	1.0											
December 1989	0.8	6.3	1.1	0.2	n.p.	0.4	0.2	1.4	-1.0	0.8	-0.5	-1.3	0.9	2.4	n.p.	1.0											
1990																											
January	0.8	6.0	0.2	-0.2	n.p.	0.2	-0.2	1.8	-1.0	0.6	-0.5	0.0	1.1	2.7	n.p.	0.8											
February	0.7	5.2	-0.3	-0.3	n.p.	0.0	-1.2	0.9	0.3	0.5	-1.1	0.7	1.4	2.3	n.p.	0.7											

See footnotes at end of table.

TABLE 7. TURNOVER OF RETAIL ESTABLISHMENTS.  
MONTHLY ESTIMATES, AT CURRENT PRICES, BY INDUSTRY, STATES AND ACT (a)—continued

Month	QUEENSLAND											Total				
	Grocers, confectioners, tobacconists	Butchers	Other food stores	Hotels, liquor stores, licensed clubs	Cafes and restaurants	Clothing and fabrics stores	Department & general stores	Footwear stores	Domestic hardware stores, jewellers	Electrical goods stores	Furniture stores		Floor coverings stores	Pharmacies	Newsagents	Other stores
ORIGINAL \$ million																
1988																
December	341.3	43.1	74.8	175.9	33.8	144.9	234.1	19.3	57.6	96.5	27.0	10.8	40.8	58.4	70.7	1,429.1
1989																
January	295.0	33.3	81.4	130.7	36.1	96.9	97.2	17.7	28.6	66.3	19.0	8.5	29.9	50.7	48.2	1,039.5
February	281.5	30.1	64.0	121.2	31.5	78.0	88.3	11.9	27.0	61.6	18.1	9.9	27.3	45.6	43.7	939.8
March	316.4	33.8	72.1	136.4	35.7	88.0	108.6	13.8	29.9	66.6	19.4	8.6	34.7	50.0	51.9	1,066.0
April	301.6	30.8	70.2	128.4	34.6	90.0	99.8	15.4	27.3	66.1	19.5	8.4	36.7	48.3	47.1	1,024.3
May	301.1	33.8	73.5	132.2	33.9	101.6	115.2	16.6	28.1	72.5	19.3	10.0	41.5	50.6	54.6	1,084.4
June	316.9	36.5	74.0	137.6	38.9	109.4	125.7	20.6	27.6	76.4	21.0	9.4	40.5	43.1	51.5	1,129.2
July	315.0	36.7	77.7	140.6	41.9	101.3	109.5	17.6	24.1	77.0	18.0	9.0	40.1	43.4	54.5	1,106.2
August	322.7	34.9	79.4	135.1	41.8	98.7	117.0	14.6	25.2	81.9	19.5	9.7	41.3	45.3	55.4	1,122.3
September	331.6	37.3	83.1	146.2	43.9	101.9	125.8	18.3	27.0	79.1	18.9	9.8	40.3	42.9	61.2	1,167.3
October	319.4	36.0	82.5	148.7	40.8	104.8	121.0	16.9	29.8	81.4	20.1	9.4	38.5	43.5	57.9	1,150.8
November	326.3	38.1	80.7	152.1	38.5	107.6	140.0	18.8	34.0	81.8	21.4	9.9	41.1	43.9	60.7	1,195.0
December	375.7	38.4	85.8	193.5	53.7	130.2	235.3	20.9	54.2	115.9	27.7	9.6	54.9	50.3	91.1	1,537.3
1990																
January	321.0	31.4	92.2	154.7	53.4	90.8	111.8	19.9	30.9	75.7	23.0	7.3	39.1	45.7	56.0	1,152.8
February	318.1	29.9	76.9	133.7	33.2	71.4	96.2	12.1	29.2	74.8	21.8	8.6	35.2	43.8	54.3	1,039.3
Standard error (b) of																
Level	8.8	3.8	8.4	8.2	3.7	6.9	0.0	1.3	3.4	5.2	1.9	1.7	4.1	5.3	4.6	20.1
Change	2.3	0.6	6.4	3.9	7.0	2.9	0.0	0.6	0.9	2.7	0.7	0.7	1.1	3.7	1.7	12.1
TREND ESTIMATES (c)																
\$ million																
1989																
September	327.4	35.5	81.1	144.2	n.p.	99.8	128.7	17.4	28.9	82.6	18.7	9.7	39.7	44.8	n.p.	1,156.6
October	328.1	35.0	81.0	146.7	n.p.	97.9	129.1	17.7	29.2	82.7	19.6	9.4	39.9	44.0	n.p.	1,161.3
November	328.3	34.5	80.7	149.4	n.p.	96.6	129.0	17.8	29.9	82.1	20.9	9.2	40.5	43.3	n.p.	1,166.2
December	328.9	34.0	80.4	151.8	n.p.	95.8	129.0	17.9	30.8	81.4	22.3	9.0	41.1	42.7	n.p.	1,171.7
1990																
January	329.9	33.5	80.3	153.8	n.p.	95.2	129.2	17.8	31.7	80.8	23.7	8.9	41.7	42.3	n.p.	1,177.3
February	330.9	33.2	80.3	155.4	n.p.	95.2	129.0	17.7	32.7	80.4	24.8	8.7	42.2	42.2	n.p.	1,182.8
% change from preceding month																
1989																
September	0.6	-1.1	0.4	1.4	n.p.	-2.1	1.1	1.8	-1.4	1.1	1.1	0.0	-1.0	-2.6	n.p.	0.5
October	0.2	-1.4	-0.1	1.7	n.p.	-1.9	0.3	1.7	1.0	0.1	4.8	-3.1	0.5	-1.8	n.p.	0.4
November	0.1	-1.4	-0.4	1.8	n.p.	-1.3	-0.1	0.6	2.4	-0.7	6.6	-2.1	1.5	-1.6	n.p.	0.4
December	0.2	-1.4	-0.4	1.6	n.p.	-0.8	0.0	0.6	3.0	-0.9	6.7	-2.2	1.5	-1.4	n.p.	0.5
1990																
January	0.3	-1.5	-0.1	1.3	n.p.	-0.6	0.2	-0.6	2.9	-0.7	6.3	-1.1	1.5	-0.9	n.p.	0.5
February	0.3	-0.9	0.0	1.0	n.p.	0.0	-0.2	-0.6	3.2	-0.5	4.6	-2.2	1.2	-0.2	n.p.	0.5

See footnotes at end of table.

TABLE 7. TURNOVER OF RETAIL ESTABLISHMENTS,  
MONTHLY ESTIMATES, AT CURRENT PRICES, BY INDUSTRY, STATES AND ACT (a) —continued

Month	SOUTH AUSTRALIA											Total				
	Grocers, confect- ioners, tobacc- onists	Butchers	Other food stores	Hotels, liquor stores, licensed clubs	Cafes and rest- aurants	Clothing and fabrics stores	Depart- ment & general stores	Footwear stores	Jewellers	Domestic hardware stores	Elec- trical goods stores		Furni- ture stores	Floor cover- ings stores	Pharma- cies	News- agents
1988	ORIGINAL \$ million															
December	183.9	15.6	37.2	83.9	37.1	45.2	141.4	8.0	21.3	48.3	18.4	4.6	21.6	16.2	32.6	715.3
1989	149.4	12.5	35.9	64.1	22.2	33.5	64.3	6.2	11.0	33.5	13.1	4.0	15.7	11.3	18.4	495.2
January	144.0	12.0	31.8	56.3	20.2	26.1	55.4	5.2	9.5	31.6	12.7	3.8	15.2	11.4	17.6	452.8
February	158.3	12.7	38.4	66.6	24.1	30.0	70.4	6.2	11.0	32.6	14.0	4.5	16.2	12.5	22.6	519.8
March	143.6	12.7	37.7	62.5	24.0	32.9	74.6	7.2	10.1	31.4	12.9	5.0	15.9	11.0	19.9	501.3
April	149.4	12.9	36.2	59.0	24.4	34.5	78.6	7.3	10.4	34.8	14.7	5.1	15.9	11.9	22.1	517.1
May	150.1	12.3	34.8	57.8	20.9	34.8	76.5	7.3	11.1	34.0	13.0	5.1	17.5	11.4	23.1	509.7
June	150.1	12.2	33.5	57.8	24.8	33.7	73.6	6.9	10.9	33.6	13.6	5.5	17.7	11.6	22.6	508.1
July	157.2	12.7	35.0	58.3	23.7	30.8	76.0	6.0	13.6	35.4	14.3	5.5	18.7	12.3	22.2	521.7
August	153.7	12.4	37.3	58.0	21.0	34.6	75.2	6.8	13.4	30.2	14.4	5.6	19.0	11.8	25.0	518.2
September	155.2	12.5	38.1	58.9	20.8	36.0	75.7	6.8	14.8	29.1	14.1	5.5	18.5	11.2	22.3	519.5
October	161.5	13.2	39.2	66.0	25.8	36.7	102.8	7.8	16.0	30.6	15.0	5.9	21.7	12.1	22.8	577.1
November	183.3	17.2	42.4	79.9	26.2	47.6	147.0	8.6	24.1	42.2	16.8	4.9	23.9	17.8	29.5	711.3
1990	158.1	13.0	39.0	60.9	21.3	35.3	70.4	7.3	13.7	32.6	15.0	4.8	18.1	13.2	20.8	523.5
January	148.1	12.1	34.6	55.4	20.4	27.7	63.3	5.3	12.8	28.6	13.4	5.0	16.7	12.5	19.7	475.5
February	2.8	2.0	3.6	4.1	4.3	3.7	0.0	0.4	1.1	2.1	1.5	0.4	2.5	0.9	1.7	9.6
Level	1.2	0.4	2.0	2.4	0.3	2.5	0.0	0.2	0.4	1.5	1.8	0.1	0.6	1.0	1.1	5.0
Change																
TREND ESTIMATES (c)																
\$ million																
1989	155.9	12.8	35.8	62.2	n.p.	35.1	81.5	7.1	14.3	32.0	14.0	5.4	18.7	11.9	n.p.	534.0
September	157.4	13.0	36.3	61.4	n.p.	35.2	83.2	7.2	14.4	31.8	14.6	5.4	19.1	12.3	n.p.	537.9
October	158.9	13.2	37.0	60.7	n.p.	35.4	84.7	7.3	14.3	32.0	15.1	5.3	19.3	12.9	n.p.	541.3
November	160.4	13.3	37.6	60.0	n.p.	35.8	85.9	7.4	14.4	32.3	15.5	5.2	19.4	13.5	n.p.	544.4
December	161.8	13.3	38.1	59.4	n.p.	36.2	86.9	7.4	14.5	32.7	15.8	5.1	19.3	14.0	n.p.	546.9
1990	163.0	13.4	38.5	59.0	n.p.	36.6	87.4	7.4	14.6	33.1	16.0	5.1	19.2	14.4	n.p.	549.3
January	% change from preceding month															
February	1.1	0.8	0.6	-1.1	n.p.	0.3	2.0	2.9	2.1	-1.8	3.7	0.0	2.7	2.6	n.p.	0.7
September	1.0	1.6	1.4	-1.3	n.p.	0.3	2.1	1.4	0.7	-0.6	4.3	0.0	2.1	3.4	n.p.	0.7
October	1.0	1.5	1.9	-1.1	n.p.	0.6	1.8	1.4	-0.7	0.6	3.4	-1.9	1.0	4.9	n.p.	0.6
November	0.9	0.8	1.6	-1.2	n.p.	1.1	1.4	1.4	0.7	0.9	2.6	-1.9	0.5	4.7	n.p.	0.6
December	0.9	0.0	1.3	-1.0	n.p.	1.1	1.2	0.0	0.7	1.2	1.9	-1.9	-0.5	3.7	n.p.	0.5
1990	0.7	0.8	1.0	-0.7	n.p.	1.1	0.6	0.0	0.7	1.2	1.3	0.0	-0.5	2.9	n.p.	0.4

See footnotes at end of table.

TABLE 7. TURNOVER OF RETAIL ESTABLISHMENTS,  
MONTHLY ESTIMATES, AT CURRENT PRICES, BY INDUSTRY, STATES AND ACT (a) —continued

Month	WESTERN AUSTRALIA										Total					
	Grocers, confect- ioners, tobacc- onists	Hotels, liquor stores, licensed clubs	Other food stores	Butchers	Cafes and rest- aurants	Clothing and fabrics stores	Depart- ment & general stores	Footwear stores	Domestic hardware stores, jewellers	Elec- trical goods stores		Furni- ture stores	Floor cover- ings stores	Pharma- cies	News- agents	Other stores
	ORIGINAL \$ million															
1988																
December	222.7	85.4	33.4	6.5	21.2	53.2	135.6	10.1	23.7	53.3	14.6	7.8	31.1	21.6	44.3	764.5
1989																
January	182.6	70.8	30.3	5.6	20.6	33.7	59.9	7.1	10.2	39.0	12.6	8.0	21.5	21.0	28.7	551.5
February	175.4	66.3	29.9	5.5	20.3	30.3	51.2	6.0	10.7	35.0	12.2	7.7	20.0	17.0	25.8	513.3
March	196.1	76.9	33.8	6.6	25.3	35.6	66.3	6.9	11.7	41.2	9.2	7.9	20.7	16.0	28.6	583.0
April	177.4	69.5	30.2	6.5	23.5	40.9	67.5	7.1	10.8	40.7	9.9	6.7	19.4	12.6	26.3	549.0
May	183.1	73.3	32.3	7.3	20.9	43.6	74.2	8.2	12.3	48.0	11.7	5.8	21.2	14.5	25.2	575.3
June	187.8	71.2	33.8	7.5	21.4	39.1	73.6	7.5	13.0	43.1	9.3	7.3	21.9	16.1	25.8	578.5
July	182.1	70.6	31.3	7.4	24.4	39.3	63.5	7.7	14.2	41.9	9.5	6.9	21.1	16.0	26.7	562.5
August	191.3	72.7	34.9	7.8	23.7	39.1	66.2	6.5	15.2	39.2	9.0	7.6	22.2	17.7	26.8	580.0
September	195.1	77.2	36.4	7.5	30.1	37.3	70.6	7.4	15.3	39.4	8.3	8.7	24.4	16.9	29.6	604.0
October	186.6	78.1	39.0	6.9	29.2	39.4	68.5	7.6	15.5	40.3	9.1	7.6	24.2	17.5	29.1	598.3
November	197.8	81.0	39.0	6.9	29.4	41.9	85.2	7.9	20.1	46.5	8.8	8.1	25.9	18.4	30.3	647.2
December	225.4	96.6	44.0	9.7	41.2	50.1	139.5	8.7	30.0	57.4	10.9	7.6	36.2	20.4	43.3	821.0
1990																
January	193.1	73.7	39.4	7.1	30.1	33.9	63.6	7.9	12.8	38.6	9.1	7.8	23.5	17.6	29.1	587.2
February	185.9	72.1	34.4	7.2	24.7	27.9	54.0	5.6	13.0	35.5	8.7	8.1	22.7	18.4	26.8	544.8
Standard error (b) of																
Level	3.3	4.1	3.1	1.3	4.5	2.0	0.0	0.2	1.3	1.1	1.2	0.8	2.4	2.0	3.2	9.4
Change	0.7	1.7	2.0	0.3	1.4	1.0	0.0	0.1	0.5	0.8	0.4	0.5	0.7	0.3	0.8	3.6
	TREND ESTIMATES (c)															
	\$ million															
1989																
September	195.5	79.2	36.4	7.4	n.p.	39.4	75.1	7.3	16.4	41.5	8.6	7.3	23.4	17.7	n.p.	612.8
October	195.9	78.1	37.5	7.5	n.p.	39.1	75.1	7.4	16.2	42.0	8.5	7.7	24.3	17.8	n.p.	616.4
November	195.8	76.6	38.3	7.7	n.p.	38.5	74.9	7.4	15.9	42.4	8.7	7.9	25.1	17.7	n.p.	617.1
December	195.8	75.0	38.6	7.9	n.p.	37.8	74.8	7.4	15.7	42.6	8.9	8.2	25.7	17.7	n.p.	616.3
1990																
January	195.9	73.5	38.5	8.0	n.p.	37.3	74.7	7.5	15.5	42.5	9.1	8.5	26.1	17.7	n.p.	614.5
February	196.0	72.3	38.1	8.1	n.p.	36.7	74.2	7.5	15.4	42.5	9.4	8.8	26.4	17.8	n.p.	612.2
	% change from preceding month															
1989																
September	0.7	-0.3	3.7	1.4	n.p.	-0.8	0.0	0.0	0.0	0.5	-3.4	4.3	3.1	2.3	n.p.	1.1
October	0.2	-1.4	3.0	1.4	n.p.	-0.8	0.0	1.4	-1.2	1.2	-1.2	5.5	3.8	0.6	n.p.	0.6
November	-0.1	-1.9	2.1	2.7	n.p.	-1.5	-0.3	0.0	-1.9	1.0	2.4	2.6	3.3	-0.6	n.p.	0.1
December	0.0	-2.1	0.8	2.6	n.p.	-1.8	-0.1	0.0	-1.3	0.5	2.3	3.8	2.4	0.0	n.p.	-0.1
1990																
January	0.1	-2.0	-0.3	1.3	n.p.	-1.3	-0.1	1.4	-1.3	-0.2	2.2	3.7	1.6	0.0	n.p.	-0.3
February	0.1	-1.6	-1.0	1.3	n.p.	-1.6	-0.7	0.0	-0.6	0.0	3.3	3.5	1.1	0.6	n.p.	-0.4

See footnotes at end of table.

TABLE 7. TURNOVER OF RETAIL ESTABLISHMENTS,  
MONTHLY ESTIMATES, AT CURRENT PRICES, BY INDUSTRY, STATES AND ACT (a) —continued

Month	Grocers, confect- ioners, tobacc- onists	Hotels, liquor stores, licensed clubs	Cafes and rest- aurants	Clothing and fabrics stores	Depart- ment & general stores	Footwear stores	Domestic hardware stores, jewellers	Elec- trical goods stores	Furni- ture stores	Floor cover- ings stores	Pharma- cies	News- agents	Other stores	Total
	TASMANIA													
ORIGINAL \$ million														
1988														
December	60.2	29.8	6.2	19.2	34.8	3.4	6.6	11.0	4.9	1.3	7.7	7.6	13.2	221.2
1989														
January	48.7	24.1	5.0	11.1	14.0	2.0	2.8	7.0	3.4	0.9	5.9	4.9	9.6	152.4
February	47.0	21.6	4.5	11.2	14.0	2.4	2.6	6.4	3.6	1.2	5.6	5.3	9.8	147.3
March	53.8	24.8	4.9	11.7	16.1	2.2	2.7	8.8	3.5	1.4	6.2	5.6	9.5	164.0
April	49.5	21.9	4.3	11.8	16.3	2.5	2.5	8.6	3.6	1.3	6.0	4.8	8.3	152.6
May	50.9	21.7	4.4	13.1	17.6	2.7	2.8	10.1	4.0	1.5	6.3	5.2	8.3	160.7
June	52.4	22.2	5.4	13.3	18.2	2.9	2.3	9.4	3.5	1.5	6.1	5.1	7.7	161.6
July	50.5	21.9	5.9	10.9	15.4	2.5	2.4	9.0	3.7	1.4	6.5	4.9	7.4	154.8
August	53.5	22.7	5.6	11.7	16.7	2.4	2.9	9.5	3.7	1.6	6.8	5.8	8.0	163.4
September	54.8	22.8	5.1	12.3	17.0	2.3	2.8	8.9	3.8	1.5	5.9	5.7	8.4	163.4
October	53.3	23.7	5.0	12.5	16.9	2.3	2.8	7.9	3.6	1.6	6.4	5.8	8.5	163.0
November	56.2	25.3	4.7	13.9	20.7	2.6	3.6	9.4	4.0	1.9	6.8	6.4	9.1	177.5
December	64.3	32.4	6.7	19.0	35.0	3.4	5.7	13.2	4.1	1.4	7.1	10.0	11.8	231.4
1990														
January	52.7	26.2	5.6	11.8	15.8	2.6	2.5	8.5	3.1	1.5	6.2	7.1	7.8	164.4
February	52.0	23.4	4.7	11.5	14.9	2.6	2.4	8.4	3.4	1.3	5.4	8.4	7.5	159.0
Standard error (b) of														
Level	1.3	2.1	1.3	0.9	0.0	0.3	0.3	0.3	0.1	0.1	0.3	1.1	0.9	3.5
Change	0.5	0.9	0.5	0.3	0.0	0.0	0.1	0.2	0.1	0.1	0.3	0.2	0.2	1.4
TREND ESTIMATES(c)														
\$ million														
1989														
September	54.0	24.2	n.p.	13.3	18.4	2.6	3.1	8.9	3.7	1.5	6.4	6.1	n.p.	168.7
October	54.3	24.4	n.p.	13.4	18.5	2.6	3.1	9.0	3.7	1.5	6.4	6.4	n.p.	169.8
November	54.5	24.5	n.p.	13.4	18.8	2.6	3.0	9.2	3.6	1.5	6.3	6.7	n.p.	170.8
December	54.8	24.7	n.p.	13.2	19.0	2.7	2.9	9.5	3.6	1.5	6.2	7.1	n.p.	171.9
1990														
January	55.1	24.8	n.p.	13.1	19.2	2.7	2.8	9.9	3.6	1.6	6.2	7.5	n.p.	173.2
February	55.2	24.9	n.p.	12.9	19.3	2.7	2.8	10.3	3.6	1.6	6.1	7.8	n.p.	174.2
% change from preceding month														
1989														
September	0.6	2.4	0.4	1.5	0.5	0.0	0.0	-1.1	0.0	0.0	-1.5	5.2	n.p.	0.7
October	0.6	2.5	0.8	0.8	0.5	0.0	0.0	1.1	0.0	0.0	0.0	4.9	n.p.	0.7
November	0.4	2.4	0.4	0.0	1.6	0.0	-3.2	2.2	-2.7	0.0	-1.6	4.7	n.p.	0.6
December	0.6	4.8	2.2	-1.5	1.1	3.8	-3.3	3.3	0.0	0.0	-1.6	6.0	n.p.	0.6
1990														
January	0.5	0.0	1.1	-0.8	1.1	0.0	-3.4	4.2	0.0	6.7	0.0	5.6	n.p.	0.8
February	0.2	2.3	1.1	-1.5	0.5	0.0	0.0	4.0	0.0	0.0	-1.6	4.0	n.p.	0.6

See footnotes at end of table.



TABLE 7. TURNOVER OF RETAIL ESTABLISHMENTS.  
MONTHLY ESTIMATES, AT CURRENT PRICES, BY INDUSTRY, STATES AND ACT (a) — continued

Month	Grocers, confectioners, tobacconists		Hotels, liquor stores, licensed clubs		Cafes and restaurants		Clothing and fabrics stores		Departmental stores		Footwear stores		Domestic hardware stores, jewellers		Electrical goods stores		Furniture stores		Floor coverings stores		Pharmacies		Newsagents		Other stores		Total	
	Butchers	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores	Other food stores			
AUSTRALIAN CAPITAL TERRITORY																												
ORIGINAL \$ million																												
1988																												
December	31.1	2.1	6.7	15.1	9.5	11.7	33.4	1.6	10.2	10.0	3.8	1.3	4.2	7.3	9.7	157.7												
1989																												
January	25.8	1.7	6.2	11.6	7.6	9.6	12.4	1.1	3.8	5.7	2.9	1.1	3.4	4.4	6.1	103.4												
February	25.6	1.8	5.4	10.1	6.8	7.5	10.6	1.2	3.7	6.7	3.1	1.1	3.2	4.8	6.9	98.7												
March	27.9	2.0	5.7	12.1	7.5	10.3	14.9	1.5	2.8	6.9	3.1	1.3	3.5	5.0	7.0	111.5												
April	26.2	2.1	5.7	11.7	6.5	11.2	14.6	1.5	3.0	6.7	3.0	1.4	3.7	4.6	6.3	108.2												
May	26.5	2.0	5.7	11.6	7.4	11.4	15.2	1.6	2.9	6.7	3.5	1.3	4.2	5.2	6.3	112.5												
June	29.0	1.9	5.2	12.1	6.5	12.3	14.2	1.8	3.1	6.9	3.4	1.5	4.5	4.1	5.4	112.0												
July	29.9	2.1	5.8	12.7	7.4	12.9	15.8	1.4	3.0	6.2	2.8	1.3	4.6	4.2	6.0	116.1												
August	31.1	2.5	6.0	12.9	7.2	11.3	14.2	1.4	3.0	6.3	2.8	1.6	5.1	4.8	6.0	116.1												
September	31.8	2.2	6.5	13.0	6.6	10.2	12.7	1.5	3.6	6.8	2.7	1.2	4.7	4.5	6.9	114.7												
October	31.8	2.2	6.4	13.4	6.3	10.1	14.9	1.9	3.5	6.7	3.2	1.3	4.7	4.3	7.7	118.3												
November	31.8	2.1	6.2	13.6	6.7	10.3	20.5	1.5	4.1	7.2	3.1	1.4	4.9	4.3	6.8	124.6												
December	35.1	2.4	7.3	15.4	7.3	11.9	34.3	2.0	6.8	8.3	4.7	1.5	5.2	5.8	9.2	157.2												
1990																												
January	30.2	1.9	7.1	11.9	6.7	8.0	15.4	1.8	3.3	6.6	3.9	1.2	4.1	4.1	6.4	112.7												
February	30.9	2.0	6.0	10.7	6.4	6.7	12.7	1.5	3.1	6.4	3.8	1.2	3.8	5.2	5.8	106.2												
Standard error (b) of																												
Level	1.2	0.3	0.6	0.8	1.2	0.5	0.0	0.0	0.2	0.3	0.1	0.0	0.4	0.6	0.6	2.3												
Change	0.6	0.2	0.8	0.3	0.5	0.7	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.2	0.3	1.4												
TREND ESTIMATES (c)																												
\$ million																												
1989																												
September	31.6	2.2	5.8	13.2	n.p.	11.1	16.2	1.7	3.7	6.4	3.7	1.4	4.7	4.5	n.p.	118.5												
October	31.9	2.2	6.1	13.2	n.p.	10.7	16.8	1.7	3.6	6.7	3.7	1.4	4.6	4.5	n.p.	119.7												
November	31.9	2.1	6.4	13.1	n.p.	10.2	17.4	1.7	3.6	7.1	3.6	1.4	4.5	4.6	n.p.	120.8												
December	31.9	2.1	6.6	12.9	n.p.	9.8	17.9	1.7	3.5	7.3	3.6	1.4	4.4	4.7	n.p.	121.9												
1990																												
January	32.0	2.1	6.8	12.7	n.p.	9.5	18.3	1.8	3.5	7.5	3.6	1.5	4.4	4.9	n.p.	122.8												
February	32.0	2.1	7.0	12.4	n.p.	9.2	18.5	1.7	3.5	7.7	3.6	1.4	4.3	5.1	n.p.	123.7												
1989																												
September	2.3	0.0	1.8	1.5	n.p.	-2.6	3.2	6.3	0.0	1.6	0.0	7.7	0.0	-2.2	n.p.	1.3												
October	0.9	0.0	5.2	0.0	n.p.	-3.6	3.7	0.0	-2.7	4.7	0.0	0.0	-2.1	0.0	n.p.	1.0												
November	0.0	-4.5	4.9	-0.8	n.p.	-4.7	3.6	0.0	0.0	6.0	-2.7	0.0	-2.2	2.2	n.p.	0.9												
December	0.0	0.0	3.1	-1.5	n.p.	-3.9	2.9	0.0	-2.8	2.8	0.0	0.0	-2.2	2.2	n.p.	0.9												
1990																												
January	0.3	0.0	3.0	-1.6	n.p.	-3.1	2.2	5.9	0.0	2.7	0.0	7.1	0.0	4.3	n.p.	0.7												
February	0.0	0.0	2.9	-2.4	n.p.	-3.2	1.1	-5.6	0.0	2.7	0.0	-6.7	-2.3	4.1	n.p.	0.7												

% change from preceding month

(a) Excludes motor vehicle dealers, petrol stations, etc. (b) The standard error of the estimates for the latest month and of the latest month from the preceding month - see paragraphs 9 to 13 of Explanatory Notes. (c) Subject to revision - see from paragraph 21 of Explanatory Notes.

TABLE 8. TURNOVER OF RETAIL ESTABLISHMENTS,  
MONTHLY ESTIMATES AT CURRENT PRICES, NORTHERN TERRITORY (a)

Month	Food stores, liquor stores, and licensed clubs (b)		All other stores		Total	
	\$ million	% change from preceding month	\$ million	% change from preceding month	\$ million	% change from preceding month
<b>1988</b>						
December	45.6	13.7	26.8	36.0	72.2	20.7
<b>1989</b>						
January	39.6	-13.2	15.8	-41.0	55.5	-23.1
February	38.4	-3.0	15.0	-5.1	53.4	-3.8
March	42.5	10.7	17.3	15.3	59.9	12.2
April	41.0	-3.5	17.1	-1.2	58.0	-3.2
May	45.8	11.7	18.6	8.8	64.4	11.0
June	46.6	1.7	21.0	12.9	67.6	5.0
July	47.6	2.1	21.8	3.8	69.7	3.1
August	49.9	4.8	23.1	6.0	72.8	4.4
September	45.7	-8.4	22.1	-4.3	67.8	-6.9
October	45.3	-0.9	21.0	-5.0	66.4	-2.1
November	44.3	-2.2	22.1	5.2	66.5	0.2
December	46.1	4.1	31.7	43.4	78.0	17.3
<b>1990</b>						
January	41.0	-11.1	18.6	-41.3	59.5	-23.7
February	40.7	-0.7	17.5	-5.9	58.2	-2.2
<b>Standard error (c) of</b>						
Level	1.6		0.7		1.7	
Change	1.4		0.3		1.5	

Note: Series is not long enough to provide sufficient information to allow reliable seasonal adjustment estimates. (a) Excludes motor vehicle dealers, petrol stations, etc. (b) Includes Grocers, confectioners and tobacconists, Butchers, Other food stores, Hotels, liquor stores, licensed clubs, Cafes and restaurants. (c) The standard error of the estimates for the latest month and of the latest month from the preceding month - see paragraphs 9 to 13 of Explanatory Notes.

## EXPLANATORY NOTES

### Introduction

This publication presents monthly retail trade series based on estimates of the value of turnover of retail establishments classified by industry, and by State. These series replace the statistics based on the value of retail sales published up to June 1988.

2. From June 1988 the series in this publication are based on turnover data obtained from a sample of retail establishments. For the period until June 1988 the series have been adjusted to a turnover basis using movements in the previous retail sales series. Linked historical data are available on AUSSTATS, or can be provided by the ABS. More information on the survey methodology and the procedures used to link statistics for the new series with those for months prior to June 1988 are contained in the Information Paper: *Introduction of Improved Monthly Retail Trade Statistics (8511.0)*.

### Scope and coverage

3. The estimates of turnover are derived from a survey covering all States and the two Territories. It includes in its scope all retail trade establishments classified to ASIC subdivision 48, *except* motor vehicle dealers, service stations, etc (ASIC classes 4861-4868); milk and bread vendors (4878-4879); shoe repairers (4846); and electrical appliance repairers n.e.c. (4857). *Also included* are cafes and restaurants (9231); hotels, etc. (mainly drinking places) (9232); licensed clubs (9241-9243); and hairdressers (9351-9352).

4. Retail establishments which do not have employees are excluded from the coverage of the survey.

### Definition of Turnover

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

### Industry Detail

6. The names of the industries for which statistics are published in this bulletin align with the titles given in ASIC, except for the following groupings:

Other food stores: ASIC classes 4883, 4885, 4886

Hotels, liquor stores, licensed clubs: ASIC classes 9232, 4884, 9241, 9242, 9243

Clothing and fabrics stores: ASIC classes 4843, 4844, 4847

Electrical goods stores: ASIC classes 4855, 4856

Other stores: ASIC classes 4892, 4893, 4895, 4896, 4897, 9351, 9352

### Constant Price Statistics

7. To enable analysis of the movement of retail activity in 'real' terms, estimates of retail turnover at constant (average 1984-85) prices are compiled each quarter. Constant price retail turnover series are derived by deflating the original current price series of retail turnover by specially compiled indexes of price change.

### Reliability of Estimates

8. Retail trade statistics may be subject to error from various sources, which are usually classified as either sample or non-sample error.

### Sample error

9. Since retail turnover is estimated from a survey which includes a sampled component, the estimates are subject to sampling error. That is, they may differ from figures that would have resulted if all enterprises with retail establishments were included in the survey. One measure of the likely difference is given by the standard error. 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 in-scope 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 change since the preceding month are shown in the tables. An example of the use of these standard errors is given below:

The *estimated change* of -\$507.3 million (-7.6 per cent) in the total value of turnover between January 1990 and February 1990 has a standard error of about \$28.6 million (0.4 per cent). Therefore, there are two chances in three that the change which would have been obtained if all units had been included in the survey would be within the range -\$478.7 million to -\$535.9 million (-7.2 per cent to -8.0 per cent) and nineteen chances in twenty that the change would be within -\$450.1 million to -\$564.5 million (-6.8 per cent to -8.4 per cent).

11. The standard errors for some industries in some States are relatively high and users are advised to exercise caution in interpreting movements for such series. Some users may wish to combine such industries to obtain an estimate of the combined group which is more accurate than the components. 1

1. The standard error of level of any such combination of industries may be calculated by squaring the standard error for each of the component industries, adding the squared standard errors together, and taking the square root of that sum. For example, suppose the standard error of level for Industry A is \$1.5 million and the standard error for Industry B is \$2.0 million. Then the standard error for the combination of Industries A and B is  $\sqrt{(1.5)^2 + (2.0)^2} = \$2.5$  million.

12. Standard errors of estimates of change between non-consecutive months are not shown in publication tables. These standard errors are generally much higher than the standard errors of change between consecutive months. For example, the standard error of change between the latest month and the corresponding month of the previous year is, on average, approximately 1.4 times the standard error of level of the latest month.

13. Seasonally adjusted, trend and constant price estimates are also subject to sampling variability. For seasonally adjusted estimates, the standard errors are approximately the same percentage of the estimate as for the unadjusted series. For trend estimates, the standard errors are generally not larger than for the seasonally adjusted estimates and are likely to be smaller. For constant price estimates, the standard errors may be up to 10 per cent 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.

#### Non-sample error

14. This category includes a number of possible errors that arise in any type of collection, whether or not sampling of units is undertaken. The most significant of these errors are: misreporting of data items; deficiencies in coverage; non-response; and processing errors. In some cases the presence of these errors would, at least in part, be reflected in the size of the standard error.

15. *Reporting error.* Such error may arise because of poor form design, inability by survey respondents to provide requested data, or simply because of clerical error. Every effort is made to minimise reporting error by the careful design and testing of forms, and by examining inconsistencies both between different respondents and between the reports in successive months for each respondent.

16. Turnover is a relatively simple data item to collect accurately because it corresponds closely to total takings by respondents. While some reporting errors will be random and thus cancel out, others may be consistently in one direction and lead to bias in the results.

17. *Under coverage.* Because of limited sources available to identify enterprises with no employees, only enterprises with employees are included in the new survey. Non-employed units are estimated to account for approximately 6% of total turnover but their significance varies substantially from industry to industry. While the exclusion of such units will therefore lead to consistent underestimation of the level of turnover, their exclusion is considered to have a negligible effect on short term movements in Retail Trade.

18. Some error may also arise because of lags in the identification of new businesses. Studies undertaken by the ABS suggest that these lags also have a negligible impact on short term movements but lead to a small consistent underestimation of the level of turnover each month.

19. *Non-response.* The survey of Retail Trade is a monthly survey conducted to tight timetables so that not all forms are received in time for publication. Extensive telephone follow up is undertaken each month to obtain details for respondents who have not returned forms by the due date. Despite this, it is necessary to impute responses for approximately 5% of selected units (which are, in the main, small retailers). The consequences of this imputation for data quality are also reflected, in part, in the size of the standard error.

20. *Processing errors.* Such errors may arise at any stage of processing. Editing procedures should detect significant errors at data entry stage, while all processing systems are thoroughly tested. Published tables are produced directly from 'camera-ready' computer output to avoid the possibility of clerical transcription errors at the tabulation stage.

#### Seasonally Adjusted and Trend Estimates

21. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences can be more clearly recognised.

22. In the seasonal adjustment of the turnover estimates, account has been taken of both normal seasonal factors and 'trading-day' effects (arising from the varying length of each month and the varying numbers of Sundays, Mondays, Tuesdays, etc. in the month). For total turnover for Australia, adjustment has also been made for the effects of change in the date of Easter and Australia Day holidays. Seasonal adjustment does not remove from the series the effect of irregular influences (e.g. abnormal weather, industrial disputes) and the seasonally adjusted estimates still reflect the sampling and non-sampling errors to which the original estimates are subject.

23. The smoothing of seasonally adjusted series to create trend estimates is a means of reducing the impact of the irregular component of the series. The trend estimates are derived by applying a 13-term Henderson-weighted moving average to the respective seasonally adjusted series. These trend series are used to analyse the underlying behaviour of the series over time.

24. While this smoothing technique enables estimates of trend to be produced for the latest month, it does result in revisions to the estimates for the most recent months as data for subsequent months become available. Generally, subsequent revisions become smaller and after 3 months have a negligible impact on the series. To illustrate the effect of the seasonally adjusted results on the trend series movement, if the March seasonally adjusted result shows a +1.0% movement, then the trend movement would be 0.4% for March, and 0.6% for February and January. A -1.0% seasonally adjusted result would return trend movements of 0.1%, 0.3% and 0.4% respectively.

25. Users may wish to refer to the ABS Information Papers *A Guide to Smoothing Time Series - Estimates of 'Trend'* (1316.0) and *Time Series Decomposition - An*

*Overview* (1317.0) for more detailed information on smoothing seasonally adjusted time series data.

#### Related publications

26. Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, 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

ASIC Australian Standard Industrial Classification  
r revised

#### Electronic services

DISCOVERY Key \*656# for selected current economic, (VIATEL). social and demographic statistics.

AUSSTATS. Thousands of up-to-date time series are available on this ABS on-line service through PAXUS COMNET. For further information phone the AUSSTATS Help Desk on (06) 252 6017.

TELESTATS. This service provides:

- foreign trade statistics tailored to users' requirements. Further information is available on (06) 252 5404.
- text and tables for selected Main Economic Indicator publications. Further information is available on (06) 252 5405.

#### Floppy disk service

Selected ABS services are available on floppy disk. Further information is available on (06) 252 6684.

**IAN CASTLES**  
Australian Statistician

The ABS released a new publication on **Hotels and Bars and Accommodation industries** (Catalogue 8656.0) on 10 April 1990. It contains informative statistics and commentary on several industries included in Retail Trade Australia (Cafes and restaurants, licensed clubs and hotels).

For more information about this publication, contact Peter White in Canberra on (06) 252 5633 or order your publication through your local ABS Information Services.

