



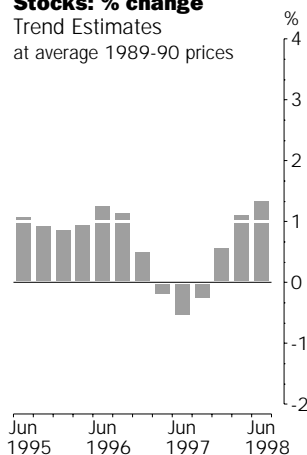
# STOCKS AND SALES, SELECTED INDUSTRIES

AUSTRALIA

EMBARGO: 11:30AM (CANBERRA TIME) MON 31 AUG 1998

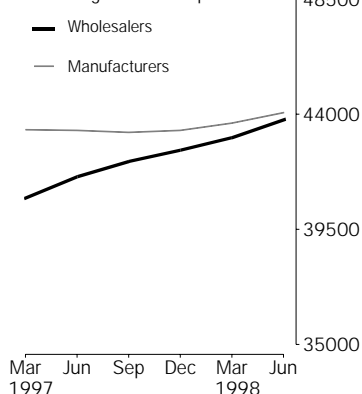
### Stocks: % change

Trend Estimates  
at average 1989-90 prices



### Sales

Trend Estimates  
at average 1989-90 prices



## JUNE QTR KEY FIGURES

### TREND ESTIMATES (a)

	Jun 97	Mar 98	Jun 98	Mar 98 to Jun 98	Jun 97 to Jun 98
	\$m	\$m	\$m	% change	% change
Stocks held by					
Private businesses	64 107	65 021	65 883	1.3	2.8
Sales by					
Manufacturers	43 371	43 648	44 053	0.9	1.6
Wholesale trade	41 546	43 075	43 786	1.7	5.4

### SEASONALLY ADJUSTED (a)

	Jun 97	Mar 98	Jun 98	Mar 98 to Jun 98	Jun 97 to Jun 98
	\$m	\$m	\$m	% change	% change
Stocks held by					
Private businesses	64 334	65 147	66 130	1.5	2.8
Sales by					
Manufacturers	43 569	43 592	44 294	1.6	1.7
Wholesale trade	41 878	43 118	44 096	2.3	5.3

(a) At average 1989-90 prices.

## JUNE QTR KEY POINTS

### STOCKS

- The trend estimate (in constant price terms) for stocks held by private businesses has increased by \$862m (1.3%) since March 1998. Rates of growth have been rising throughout 1997-98 from -0.2% in September 1997 to 1.3% this quarter.
- Stock levels for Manufacturing and Wholesale have been increasing since September 1997, while stocks levels held by Mining and Retail have been relatively stable during 1997-98. For the Manufacturing industry, the most significant increases in stock levels are in Machinery and equipment, Food, beverage and tobacco and Metal product industries.

### SALES

- Trend estimates for Manufacturers' sales increased by 0.9% and Wholesale trade sales increased by 1.7% from March quarter 1998.
- The first estimate (in current price terms) of Manufacturers' expected sales for 1998-99 is \$208,447m. This is \$7,155m (3.6%) higher than the actual sales in 1997-98 (\$201,292m).

- For further information about these and related statistics, contact John Stamolis on 02 9268 4241, or any ABS office shown on the back cover of this publication.

## NOTES

### FORTHCOMING ISSUES

*ISSUE (Quarter)*

*RELEASE DATE*

September 1998

30 November 1998

December 1998

1 March 1999



### CHANGES NEXT ISSUE

As announced on 19 March 1998 in the information paper entitled *Introduction of Chain Volume Measures in the Australian National Accounts* (Cat. no. 5248.0), chain volume measures will replace the existing constant price estimates contained in this publication from September 1998 onwards. More details, including the reasons for this change and the likely impact on indicator series, are contained in the information paper.



### SAMPLING ERRORS

The estimates in this publication are based on a sample survey of businesses. Because data are not collected from all businesses, the published estimates are subject to sampling variability.

Standard errors for estimates contained in this publication are shown on pages 23–24.



### REVISIONS TO TREND

Readers should exercise care in the interpretation of the trend data as the data for the last three quarters in particular are likely to be revised with the addition of subsequent quarters' data. For further information and examples showing the sensitivity of trend data, refer to Trend Estimates in paragraph 34 of the Explanatory Notes.

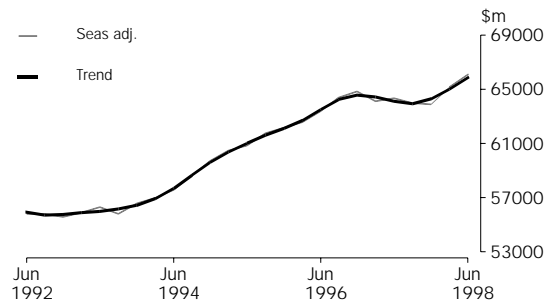
T.J. Skinner  
Acting Australian Statistician



# STOCKS: Trend estimates—Constant prices(a)

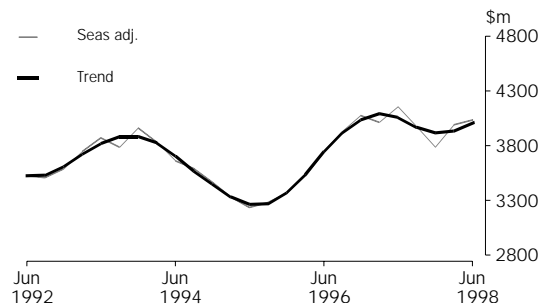
## ALL SELECTED INDUSTRIES

The current trend estimate of stocks held by private businesses is \$65,883m. Growth rates fell throughout 1996-97 from 1.1% to -0.5%. In 1997-98 this has been reversed, with growth rates increasing over the last four quarters to 1.3% in the current quarter.



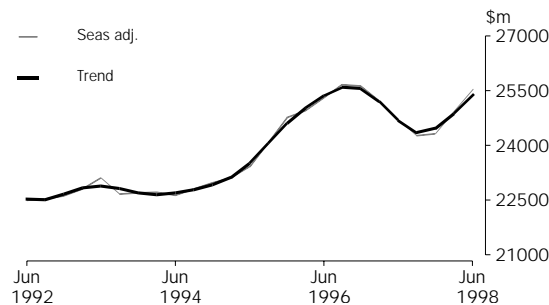
## MINING

The current estimate of stocks held by the Mining industry is \$4,007m. This is \$74m (1.9%) higher than March 1998. This is the second quarter of positive growth after three quarters in which estimates were falling.



## MANUFACTURING

The trend estimate of stocks held by the Manufacturing industry has increased by \$492m (2.0%) since March 1998. Contributing most to this increase were Machinery and equipment \$224m (4.2%), Food, beverages and tobacco \$120m (2.4%) and Metal product \$113m (2.9%).

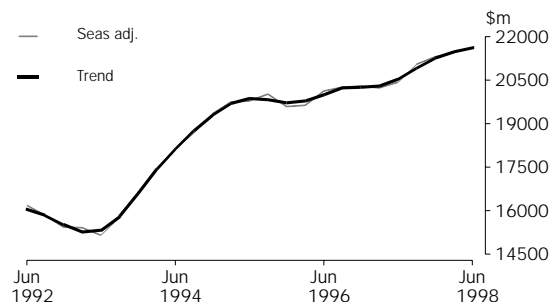


(a) At average 1989-90 prices

# STOCKS: Trend estimates—Constant prices(a)

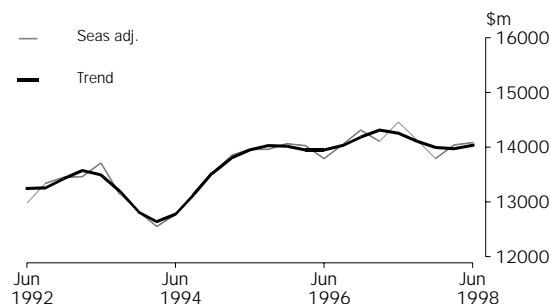
## WHOLESALE TRADE

Stocks held by the Wholesale trade industry have increased by \$147m (0.7%) since March 1998. Growth rates have been falling over the past three quarters from 1.9% in September 1997 to 0.7% this quarter.



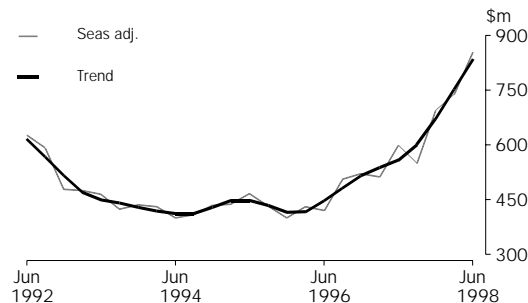
## RETAIL TRADE

Trend estimates for the Retail trade industry had fallen over the previous four quarters, but rose by \$73m (0.5%) to \$14,040m this quarter.



## OTHER SELECTED INDUSTRIES (Electricity and gas supply; accommodation, cafes and restaurants)

The current trend estimate of stocks held by Other Selected industries is \$832m. Rates of growth over the past two years have been very strong. Over the last financial year, the trend estimate grew by \$274m (49.2%), while for the previous year (to June 1997) the trend estimate increased by \$111m (24.9%).

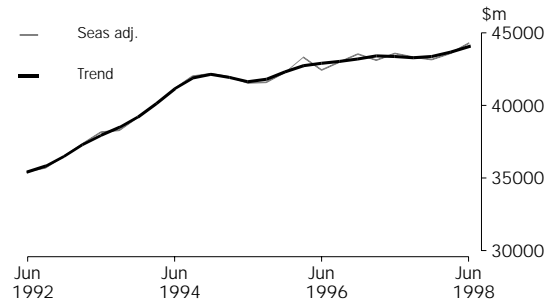


(a) At average 1989–90 prices

## SALES: Trend estimates—Constant prices(a)

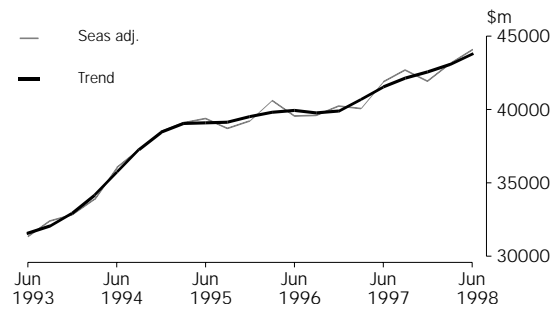
### MANUFACTURERS' SALES

Manufacturers' sales increased by \$405m (0.9%) to \$44,053m over the last quarter. After a period of relatively low growth between June 1996 and December 1997, growth rates for Manufacturers' sales have been steadily rising for the last two quarters (0.6% and 0.9% respectively).



### WHOLESALE TRADE SALES

The June quarter 1998 trend estimate for Wholesale sales is \$43,786m. Growth rates have been relatively steady over the past six quarters, between 1.0% and 2.1% per quarter.

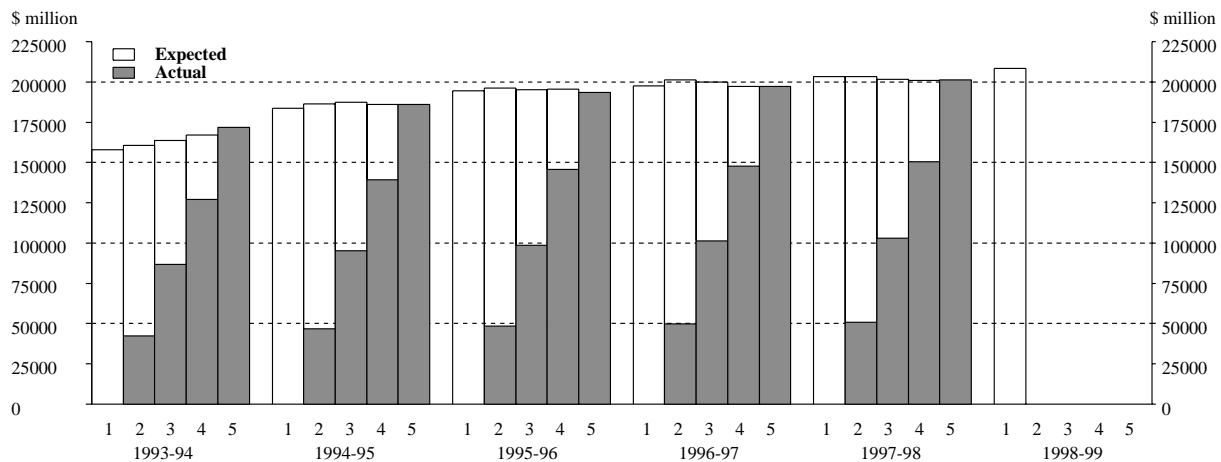


(a) At average 1989-90 prices

# MANUFACTURERS' ACTUAL AND EXPECTED SALES—Current prices

## SALES

The graph below shows the 5 estimates collected for each financial year:



## EXPLANATION OF TIMING OF ESTIMATES used in construction of graph above

### COMPOSITION OF ESTIMATE.....

Estimate	Based on data reported at:	Data on actual sales	Data on short term expected sales	Data on long term expected sales
1	Jul-Aug at beginning of period	Nil	6 months	6 months
2	Oct-Nov, 3-4 months into period	3 months	3 months	6 months
3	Jan-Feb, 6-7 months into period	6 months	6 months	Nil
4	Apr-May, 9-10 months into period	9 months	3 months	Nil
5	Jul-Aug at end of period	12 months	Nil	Nil

## BOOK VALUE OF STOCKS OWNED, By Industry—Current prices

At end of	Mining(a)	Manufacturing	Wholesale trade	Retail trade	Other selected industries(b)	Total selected industries(b)
	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL						
June 1996	4 004	28 431	21 293	16 146	495	70 369
June 1997	4 499	27 893	21 173	17 076	701	71 342
June 1998	4 409	29 209	23 535	16 894	1 044	75 092
<b>1995-96</b>						
June	4 004	28 431	21 293	16 146	495	70 369
<b>1996-97</b>						
September	4 307	28 584	21 439	17 015	609	71 953
December	4 502	28 162	21 385	17 472	685	72 207
March	4 433	28 484	21 211	17 016	617	71 762
June	4 499	27 893	21 173	17 076	701	71 342
<b>1997-98</b>						
September	4 441	27 415	22 371	17 245	677	72 149
December	4 279	27 446	23 219	16 985	949	72 878
March	4 461	28 723	23 321	17 087	931	74 523
June	4 409	29 209	23 535	16 894	1 044	75 092
SEASONALLY ADJUSTED						
June 1996	4 073	28 333	21 591	16 512	515	71 024
June 1997	4 576	27 778	21 469	17 473	730	72 027
June 1998	4 484	29 083	23 865	17 291	1 089	75 812
<b>1995-96</b>						
June	4 073	28 333	21 591	16 512	515	71 024
<b>1996-97</b>						
September	4 266	28 633	21 331	16 857	618	71 705
December	4 480	28 535	21 259	17 224	640	72 139
March	4 422	28 158	21 157	17 034	628	71 398
June	4 576	27 778	21 469	17 473	730	72 027
<b>1997-98</b>						
September	4 402	27 479	22 245	17 084	687	71 897
December	4 257	27 831	23 087	16 747	886	72 807
March	4 451	28 385	23 270	17 097	948	74 151
June	4 484	29 083	23 865	17 291	1 089	75 812
TREND ESTIMATES(c)						
June 1996	4 082	28 487	21 400	16 691	547	71 207
June 1997	4 481	27 764	21 590	17 231	685	71 751
June 1998	4 469	28 963	23 852	17 205	1 074	75 563
<b>1995-96</b>						
June	4 082	28 487	21 400	16 691	547	71 207
<b>1996-97</b>						
September	4 274	28 584	21 358	16 838	590	71 644
December	4 422	28 490	21 224	17 072	632	71 840
March	4 504	28 146	21 214	17 259	656	71 779
June	4 481	27 764	21 590	17 231	685	71 751
<b>1997-98</b>						
September	4 405	27 607	22 223	17 077	749	72 061
December	4 370	27 887	22 876	16 986	849	72 967
March	4 394	28 390	23 403	17 031	963	74 181
June	4 469	28 963	23 852	17 205	1 074	75 563

(a) In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattern.

(b) See paragraph 2 of the Explanatory Notes.

(c) Revised. See paragraph 34 of the Explanatory Notes.

## BOOK VALUE OF STOCKS OWNED, By Industry—Constant prices(a)

At end of	Mining(b)	Manufacturing	Wholesale trade	Retail trade	Other selected industries(c)	Total selected industries(c)
	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL						
June 1996	3 689	25 381	19 857	13 480	404	62 810
June 1997	4 085	24 798	20 133	14 128	575	63 719
June 1998	3 967	25 622	21 328	13 766	818	65 500
<b>1995-96</b>						
June	3 689	25 381	19 857	13 480	404	62 810
<b>1996-97</b>						
September	3 962	25 618	20 357	14 176	498	64 611
December	4 095	25 309	20 421	14 525	556	64 905
March	4 021	25 515	20 282	14 097	505	64 421
June	4 085	24 798	20 133	14 128	575	63 719
<b>1997-98</b>						
September	4 009	24 208	21 169	14 264	542	64 193
December	3 808	23 992	21 423	13 988	745	63 956
March	3 997	25 216	21 507	14 031	726	65 478
June	3 967	25 622	21 328	13 766	818	65 500
SEASONALLY ADJUSTED						
June 1996	3 753	25 305	20 134	13 786	420	63 397
June 1997	4 155	24 709	20 415	14 456	599	64 334
June 1998	4 034	25 527	21 627	14 089	853	66 130
<b>1995-96</b>						
June	3 753	25 305	20 134	13 786	420	63 397
<b>1996-97</b>						
September	3 925	25 658	20 255	14 044	505	64 387
December	4 075	25 633	20 302	14 318	520	64 847
March	4 011	25 225	20 230	14 112	513	64 091
June	4 155	24 709	20 415	14 456	599	64 334
<b>1997-98</b>						
September	3 974	24 259	21 050	14 131	549	63 964
December	3 788	24 318	21 300	13 793	695	63 895
March	3 988	24 921	21 460	14 040	739	65 147
June	4 034	25 527	21 627	14 089	853	66 130
TREND ESTIMATES(d)						
June 1996	3 745	25 370	20 002	13 952	447	63 515
June 1997	4 056	24 691	20 541	14 261	558	64 107
June 1998	4 007	25 375	21 630	14 040	832	65 883
<b>1995-96</b>						
June	3 745	25 370	20 002	13 952	447	63 515
<b>1996-97</b>						
September	3 919	25 589	20 225	14 027	481	64 241
December	4 036	25 567	20 259	14 182	516	64 560
March	4 093	25 210	20 298	14 309	537	64 447
June	4 056	24 691	20 541	14 261	558	64 107
<b>1997-98</b>						
September	3 966	24 349	20 923	14 112	600	63 950
December	3 916	24 476	21 261	13 994	670	64 316
March	3 933	24 883	21 483	13 967	753	65 021
June	4 007	25 375	21 630	14 040	832	65 883

(a) At average 1989-90 prices.

(c) See paragraph 2 of the Explanatory Notes.

(b) In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattern.

(d) Revised. See paragraph 34 of the Explanatory Notes.



PERCENTAGE CHANGES IN STOCKS OWNED, By Industry—Constant prices(a)

Year to/Quarter to	Mining(b)	Manufacturing	Wholesale trade	Retail trade	Other selected industries(c)	Total selected industries(c)
%	%	%	%	%	%	%
ORIGINAL						
June 1996	16.1	8.2	1.8	-1.2	-10.2	4.2
June 1997	10.8	-2.3	1.4	4.8	42.4	1.4
June 1998	-2.9	3.3	5.9	-2.6	42.3	2.8
<b>1995-96</b>						
June	4.5	0.6	0.8	-3.7	-4.7	-0.1
<b>1996-97</b>						
September	7.4	0.9	2.5	5.2	23.4	2.9
December	3.3	-1.2	0.3	2.5	11.6	0.5
March	-1.8	0.8	-0.7	-2.9	-9.2	-0.7
June	1.6	-2.8	-0.7	0.2	13.9	-1.1
<b>1997-98</b>						
September	-1.9	-2.4	5.1	1.0	-5.7	0.7
December	-5.0	-0.9	1.2	-1.9	37.4	-0.4
March	5.0	5.1	0.4	0.3	-2.5	2.4
June	-0.8	1.6	-0.8	-1.9	12.7	0.0
SEASONALLY ADJUSTED						
June 1996	15.9	8.1	1.8	-1.2	-10.1	4.2
June 1997	10.7	-2.4	1.4	4.9	42.8	1.5
June 1998	-2.9	3.3	5.9	-2.5	42.5	2.8
<b>1995-96</b>						
June	6.5	1.4	2.5	-1.8	-2.5	1.3
<b>1996-97</b>						
September	4.6	1.4	0.6	1.9	20.5	1.6
December	3.8	-0.1	0.2	2.0	2.8	0.7
March	-1.6	-1.6	-0.4	-1.4	-1.2	-1.2
June	3.6	-2.0	0.9	2.4	16.7	0.4
<b>1997-98</b>						
September	-4.4	-1.8	3.1	-2.2	-8.3	-0.6
December	-4.7	0.2	1.2	-2.4	26.5	-0.1
March	5.3	2.5	0.8	1.8	6.3	2.0
June	1.1	2.4	0.8	0.4	15.5	1.5
TREND ESTIMATES(d)						
June 1996	14.8	7.9	0.7	0.0	-0.3	4.1
June 1997	8.3	-2.7	2.7	2.2	24.9	0.9
June 1998	-1.2	2.8	5.3	-1.6	49.2	2.8
<b>1995-96</b>						
June	5.9	1.3	1.1	0.0	7.5	1.3
<b>1996-97</b>						
September	4.7	0.9	1.1	0.5	7.7	1.1
December	3.0	-0.1	0.2	1.1	7.2	0.5
March	1.4	-1.4	0.2	0.9	4.1	-0.2
June	-0.9	-2.1	1.2	-0.3	3.9	-0.5
<b>1997-98</b>						
September	-2.2	-1.4	1.9	-1.0	7.6	-0.2
December	-1.3	0.5	1.6	-0.8	11.7	0.6
March	0.5	1.7	1.0	-0.2	12.5	1.1
June	1.9	2.0	0.7	0.5	10.4	1.3

(a) At average 1989-90 prices.

(c) See paragraph 2 of the Explanatory Notes.

(b) In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattern.

(d) Revised. See paragraph 34 of the Explanatory Notes.

## BOOK VALUE OF STOCKS OWNED, By Manufacturing industries—Current prices

At end of	Food, beverage and tobacco	Textiles, clothing, footwear and leather	Wood and paper products	Printing, publishing and recorded media	Petroleum, coal, chemical and assoc. products	Non- metallic mineral product	Metal product(a)	Machinery and equipment(a)	Other manu- facturing	Total manu- facturing
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL										
June 1996	5 755	1 672	1 727	921	5 821	1 246	4 525	6 093	671	28 431
June 1997	5 911	1 744	1 866	811	5 594	1 330	4 128	5 894	614	27 893
June 1998	6 510	1 785	1 999	971	5 440	1 122	4 286	6 350	746	29 209
<b>1995-96</b>										
June	5 755	1 672	1 727	921	5 821	1 246	4 525	6 093	671	28 431
<b>1996-97</b>										
September	5 489	1 632	1 646	897	5 866	1 336	4 805	6 314	599	28 584
December	5 355	1 703	1 693	840	5 820	1 297	4 691	6 139	623	28 162
March	5 628	1 742	1 746	822	5 898	1 341	4 473	6 294	539	28 484
June	5 911	1 744	1 866	811	5 594	1 330	4 128	5 894	614	27 893
<b>1997-98</b>										
September	5 764	1 766	1 919	835	5 497	1 283	4 084	5 619	648	27 415
December	5 787	1 748	1 889	906	5 535	1 192	4 063	5 683	645	27 446
March	6 248	1 646	1 917	934	5 535	1 188	4 275	6 242	737	28 723
June	6 510	1 785	1 999	971	5 440	1 122	4 286	6 350	746	29 209
SEASONALLY ADJUSTED										
June 1996	5 582	1 667	1 699	923	5 830	1 230	4 594	6 140	669	28 333
June 1997	5 730	1 741	1 836	813	5 592	1 313	4 200	5 944	611	27 778
June 1998	6 309	1 783	1 966	973	5 432	1 108	4 365	6 407	741	29 083
<b>1995-96</b>										
June	5 582	1 667	1 699	923	5 830	1 230	4 594	6 140	669	28 333
<b>1996-97</b>										
September	5 533	1 637	1 669	889	5 842	1 330	4 779	6 350	603	28 633
December	5 516	1 712	1 723	842	5 900	1 322	4 667	6 215	639	28 535
March	5 596	1 734	1 721	826	5 839	1 340	4 448	6 129	525	28 158
June	5 730	1 741	1 836	813	5 592	1 313	4 200	5 944	611	27 778
<b>1997-98</b>										
September	5 807	1 770	1 948	828	5 483	1 278	4 057	5 657	652	27 479
December	5 966	1 756	1 919	909	5 610	1 215	4 043	5 751	662	27 831
March	6 212	1 638	1 892	939	5 477	1 186	4 249	6 075	718	28 385
June	6 309	1 783	1 966	973	5 432	1 108	4 365	6 407	741	29 083
TREND ESTIMATES(b)										
June 1996	5 513	1 674	1 703	916	5 835	1 364	4 650	6 181	650	28 487
June 1997	5 698	1 758	1 840	817	5 644	1 312	4 212	5 887	596	27 764
June 1998	6 328	1 721	1 933	978	5 455	1 120	4 345	6 346	736	28 963
<b>1995-96</b>										
June	5 513	1 674	1 703	916	5 835	1 364	4 650	6 181	650	28 487
<b>1996-97</b>										
September	5 544	1 668	1 683	885	5 882	1 341	4 706	6 248	628	28 584
December	5 549	1 690	1 700	850	5 872	1 330	4 647	6 258	594	28 490
March	5 599	1 728	1 755	820	5 778	1 328	4 451	6 107	579	28 146
June	5 698	1 758	1 840	817	5 644	1 312	4 212	5 887	596	27 764
<b>1997-98</b>										
September	5 830	1 750	1 902	844	5 551	1 275	4 075	5 744	635	27 607
December	5 992	1 729	1 923	891	5 524	1 225	4 103	5 821	679	27 887
March	6 164	1 717	1 927	938	5 498	1 172	4 212	6 053	709	28 390
June	6 328	1 721	1 933	978	5 455	1 120	4 345	6 346	736	28 963

(a) In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattern.

(b) Revised. See paragraph 34 of the Explanatory Notes.

## BOOK VALUE OF STOCKS OWNED, By Manufacturing industries—Constant prices(a)

At end of	Food, beverage and tobacco	Textiles, clothing, footwear and leather	Wood and paper products	Printing, publishing and recorded media	Petroleum, coal, chemical and assoc. products	Non- metallic mineral product	Metal product(b)	Machinery and equipment(b)	Other manu- facturing	Total manu- facturing
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL										
June 1996	4 905	1 498	1 520	779	5 160	1 126	4 328	5 453	612	25 381
June 1997	4 976	1 548	1 652	716	5 004	1 196	3 894	5 254	558	24 798
June 1998	5 317	1 587	1 730	822	4 981	1 000	3 986	5 531	669	25 622
<b>1995-96</b>										
June	4 905	1 498	1 520	779	5 160	1 126	4 328	5 453	612	25 381
<b>1996-97</b>										
September	4 680	1 466	1 462	773	5 176	1 217	4 629	5 669	548	25 618
December	4 587	1 540	1 504	727	5 068	1 183	4 588	5 541	569	25 309
March	4 785	1 565	1 542	724	5 223	1 218	4 305	5 660	493	25 515
June	4 976	1 548	1 652	716	5 004	1 196	3 894	5 254	558	24 798
<b>1997-98</b>										
September	4 770	1 567	1 698	735	4 896	1 154	3 810	4 993	585	24 208
December	4 719	1 539	1 663	793	4 854	1 068	3 766	5 008	581	23 992
March	5 121	1 453	1 676	804	5 001	1 064	3 976	5 458	663	25 216
June	5 317	1 587	1 730	822	4 981	1 000	3 986	5 531	669	25 622
SEASONALLY ADJUSTED										
June 1996	4 758	1 493	1 495	781	5 169	1 111	4 394	5 495	611	25 305
June 1997	4 824	1 545	1 624	718	5 002	1 181	3 962	5 299	555	24 709
June 1998	5 153	1 585	1 701	823	4 974	987	4 060	5 581	664	25 527
<b>1995-96</b>										
June	4 758	1 493	1 495	781	5 169	1 111	4 394	5 495	611	25 305
<b>1996-97</b>										
September	4 717	1 470	1 483	766	5 154	1 211	4 604	5 702	550	25 658
December	4 725	1 548	1 530	728	5 138	1 206	4 565	5 610	583	25 633
March	4 758	1 557	1 520	728	5 170	1 216	4 282	5 512	481	25 225
June	4 824	1 545	1 624	718	5 002	1 181	3 962	5 299	555	24 709
<b>1997-98</b>										
September	4 806	1 571	1 724	728	4 883	1 149	3 784	5 027	587	24 259
December	4 865	1 547	1 689	795	4 920	1 090	3 748	5 068	596	24 318
March	5 091	1 446	1 653	808	4 949	1 061	3 953	5 312	648	24 921
June	5 153	1 585	1 701	823	4 974	987	4 060	5 581	664	25 527
TREND ESTIMATES(c)										
June 1996	4 708	1 498	1 485	768	5 155	1 185	4 445	5 534	593	25 370
June 1997	4 786	1 567	1 628	721	5 014	1 183	3 989	5 262	542	24 691
June 1998	5 157	1 525	1 676	831	4 973	1 002	4 025	5 523	664	25 375
<b>1995-96</b>										
June	4 708	1 498	1 485	768	5 155	1 185	4 445	5 534	593	25 370
<b>1996-97</b>										
September	4 737	1 502	1 492	759	5 172	1 184	4 553	5 617	574	25 589
December	4 740	1 523	1 511	741	5 162	1 204	4 509	5 635	543	25 567
March	4 762	1 551	1 555	720	5 109	1 212	4 285	5 488	529	25 210
June	4 786	1 567	1 628	721	5 014	1 183	3 989	5 262	542	24 691
<b>1997-98</b>										
September	4 827	1 549	1 681	744	4 930	1 146	3 803	5 097	573	24 349
December	4 916	1 527	1 692	777	4 913	1 098	3 812	5 129	611	24 476
March	5 037	1 518	1 683	808	4 941	1 048	3 912	5 299	638	24 883
June	5 157	1 525	1 676	831	4 973	1 002	4 025	5 523	664	25 375

(a) At average 1989-90 prices.

(b) In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattern.

(c) Revised. See paragraph 34 of the Explanatory Notes.

## PERCENTAGE CHANGES IN MANUFACTURERS' STOCKS—Constant prices(a)

Year to/Quarter to	Food, beverage and tobacco	Textiles, clothing, footwear and leather	Wood and paper products	Printing, publishing and recorded media	Petroleum, coal, chemical and assoc. products	Non- metallic mineral product	Metal product(b)	Machinery and equipment(b)	Other manu- facturing	Total manu- facturing
	%	%	%	%	%	%	%	%	%	%
ORIGINAL										
June 1996	9.8	-5.4	15.6	4.7	6.3	-1.1	7.7	13.9	9.0	<b>8.2</b>
June 1997	1.4	3.3	8.7	-8.0	-3.0	6.2	-10.0	-3.6	-8.9	<b>-2.3</b>
June 1998	6.9	2.5	4.7	14.7	-0.5	-16.4	2.4	5.3	19.9	<b>3.3</b>
<b>1995-96</b>										
June	5.1	-4.1	4.1	4.4	-0.5	-10.5	0.2	0.4	2.0	<b>0.6</b>
<b>1996-97</b>										
September	-4.6	-2.2	-3.8	-0.7	0.3	8.1	7.0	4.0	-10.5	<b>0.9</b>
December	-2.0	5.1	2.8	-6.0	-2.1	-2.7	-0.9	-2.2	3.8	<b>-1.2</b>
March	4.3	1.6	2.6	-0.3	3.1	2.9	-6.2	2.1	-13.4	<b>0.8</b>
June	4.0	-1.1	7.1	-1.1	-4.2	-1.8	-9.6	-7.2	13.2	<b>-2.8</b>
<b>1997-98</b>										
September	-4.1	1.3	2.8	2.6	-2.2	-3.5	-2.2	-5.0	4.9	<b>-2.4</b>
December	-1.1	-1.8	-2.1	7.9	-0.8	-7.5	-1.1	0.3	-0.6	<b>-0.9</b>
March	8.5	-5.6	0.8	1.4	3.0	-0.4	5.6	9.0	14.0	<b>5.1</b>
June	3.8	9.2	3.2	2.2	-0.4	-6.0	0.2	1.3	0.9	<b>1.6</b>
SEASONALLY ADJUSTED										
June 1996	9.6	-5.4	15.5	4.6	6.0	-1.0	8.1	13.9	8.8	<b>8.1</b>
June 1997	1.4	3.5	8.6	-8.1	-3.2	6.2	-9.8	-3.6	-9.1	<b>-2.4</b>
June 1998	6.8	2.6	4.7	14.7	-0.6	-16.4	2.5	5.3	19.8	<b>3.3</b>
<b>1995-96</b>										
June	2.5	-4.0	4.0	4.2	0.8	-11.7	2.2	3.7	4.0	<b>1.4</b>
<b>1996-97</b>										
September	-0.9	-1.5	-0.8	-1.9	-0.3	9.0	4.8	3.8	-9.9	<b>1.4</b>
December	0.2	5.3	3.2	-4.9	-0.3	-0.4	-0.9	-1.6	6.0	<b>-0.1</b>
March	0.7	0.6	-0.6	0.0	0.6	0.8	-6.2	-1.8	-17.4	<b>-1.6</b>
June	1.4	-0.8	6.8	-1.5	-3.2	-2.9	-7.5	-3.9	15.3	<b>-2.0</b>
<b>1997-98</b>										
September	-0.4	1.7	6.1	1.4	-2.4	-2.7	-4.5	-5.1	5.8	<b>-1.8</b>
December	1.2	-1.5	-2.0	9.2	0.8	-5.2	-1.0	0.8	1.6	<b>0.2</b>
March	4.6	-6.5	-2.1	1.7	0.6	-2.6	5.5	4.8	8.6	<b>2.5</b>
June	1.2	9.6	2.9	1.8	0.5	-7.0	2.7	5.0	2.6	<b>2.4</b>
TREND ESTIMATES(c)										
June 1996	7.2	-6.6	13.5	4.8	7.4	3.0	8.4	13.9	4.3	<b>7.9</b>
June 1997	1.7	4.6	9.6	-6.2	-2.7	-0.1	-10.2	-4.9	-8.6	<b>-2.7</b>
June 1998	7.7	-2.7	2.9	15.3	-0.8	-15.3	0.9	5.0	22.6	<b>2.8</b>
<b>1995-96</b>										
June	1.5	-2.0	1.5	0.5	1.0	-2.5	2.9	2.1	0.2	<b>1.3</b>
<b>1996-97</b>										
September	0.6	0.2	0.5	-1.2	0.3	-0.1	2.4	1.5	-3.2	<b>0.9</b>
December	0.1	1.4	1.2	-2.4	-0.2	1.7	-1.0	0.3	-5.3	<b>-0.1</b>
March	0.5	1.9	2.9	-2.7	-1.0	0.7	-5.0	-2.6	-2.6	<b>-1.4</b>
June	0.5	1.0	4.7	0.1	-1.8	-2.4	-6.9	-4.1	2.4	<b>-2.1</b>
<b>1997-98</b>										
September	0.8	-1.2	3.3	3.2	-1.7	-3.2	-4.7	-3.1	5.9	<b>-1.4</b>
December	1.8	-1.4	0.7	4.5	-0.3	-4.2	0.2	0.6	6.5	<b>0.5</b>
March	2.5	-0.6	-0.5	3.9	0.6	-4.5	2.6	3.3	4.4	<b>1.7</b>
June	2.4	0.5	-0.4	2.9	0.6	-4.4	2.9	4.2	4.1	<b>2.0</b>

(a) At average 1989-90 prices.

(b) In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattern.

(c) Revised. See paragraph 34 of the Explanatory Notes.

## MANUFACTURERS' AND WHOLESALE TRADE SALES—Current prices

Period	MANUFACTURING.....										WHOLESALE TRADE
	Food, beverage and tobacco	Textiles, clothing, footwear and leather	Wood and paper products	Printing, publishing and recorded media	Petroleum, coal, chemical and assoc. products	Non-metallic mineral product	Metal product	Machinery and equipment	Other manufacturing	Total manufacturing	Total wholesale
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL											
<b>Year to</b>											
June 1996	42 875	8 796	12 323	9 596	34 436	10 114	32 767	36 361	6 225	193 494	<b>167 187</b>
June 1997	43 749	9 128	13 150	9 623	34 630	9 718	31 930	38 732	6 508	197 168	<b>167 061</b>
June 1998	46 723	8 993	13 727	11 243	36 017	9 431	29 561	38 733	6 863	201 292	<b>184 626</b>
<b>1995-96</b>											
June	9 961	2 105	3 070	2 355	9 023	2 418	7 926	9 528	1 471	47 858	<b>41 199</b>
<b>1996-97</b>											
September	11 055	2 246	3 266	2 396	8 371	2 461	8 378	9 891	1 799	49 863	<b>41 259</b>
December	12 261	2 297	3 424	2 521	8 914	2 495	8 301	9 727	1 628	51 568	<b>43 690</b>
March	10 010	2 236	3 180	2 273	8 345	2 299	7 379	9 135	1 483	46 340	<b>39 057</b>
June	10 423	2 350	3 280	2 432	8 999	2 464	7 872	9 979	1 598	49 398	<b>43 055</b>
<b>1997-98</b>											
September	11 727	2 283	3 439	2 655	8 948	2 445	7 626	10 043	1 776	50 943	<b>44 995</b>
December	12 691	2 277	3 555	2 986	9 002	2 372	7 472	9 886	1 826	52 067	<b>47 533</b>
March	10 992	2 143	3 129	2 667	8 762	2 294	6 970	8 937	1 521	47 414	<b>44 018</b>
June	11 314	2 290	3 605	2 935	9 305	2 321	7 493	9 867	1 739	50 869	<b>48 079</b>
SEASONALLY ADJUSTED											
<b>Year to</b>											
June 1996	42 845	8 771	12 296	9 561	34 417	10 118	32 710	36 314	6 172	193 203	<b>166 817</b>
June 1997	43 792	9 130	13 162	9 640	34 632	9 705	31 928	38 757	6 524	197 270	<b>167 102</b>
June 1998	46 720	8 999	13 732	11 296	36 027	9 446	29 576	38 733	6 868	201 398	<b>184 733</b>
<b>1995-96</b>											
June	10 368	2 106	3 137	2 428	8 836	2 445	7 945	9 441	1 505	48 212	<b>41 349</b>
<b>1996-97</b>											
September	10 939	2 163	3 176	2 356	8 300	2 389	8 156	9 608	1 727	48 815	<b>41 110</b>
December	11 184	2 270	3 259	2 353	8 855	2 409	8 104	9 507	1 504	49 446	<b>41 597</b>
March	10 795	2 346	3 380	2 424	8 671	2 416	7 770	9 744	1 656	49 202	<b>41 219</b>
June	10 873	2 351	3 347	2 507	8 805	2 492	7 897	9 897	1 637	49 807	<b>43 177</b>
<b>1997-98</b>											
September	11 482	2 210	3 350	2 636	8 879	2 396	7 423	9 748	1 699	49 824	<b>44 866</b>
December	11 628	2 268	3 383	2 729	8 894	2 258	7 296	9 682	1 688	49 826	<b>45 257</b>
March	11 795	2 229	3 321	2 908	9 154	2 444	7 337	9 512	1 699	50 399	<b>46 435</b>
June	11 815	2 292	3 677	3 024	9 101	2 348	7 520	9 791	1 782	51 349	<b>48 195</b>
TREND ESTIMATES(a)											
<b>Year to</b>											
June 1996	43 036	8 775	12 311	9 520	34 287	10 104	32 792	36 330	6 243	193 399	<b>167 107</b>
June 1997	43 768	9 083	13 168	9 668	34 802	9 685	31 745	38 711	6 470	197 100	<b>167 354</b>
June 1998	46 565	9 040	13 706	11 289	36 028	9 480	29 662	38 749	6 850	201 368	<b>184 338</b>
<b>1995-96</b>											
June	10 780	2 132	3 138	2 407	8 684	2 453	8 159	9 490	1 556	48 799	<b>41 590</b>
<b>1996-97</b>											
September	10 856	2 176	3 195	2 373	8 628	2 408	8 081	9 548	1 592	48 858	<b>41 239</b>
December	10 920	2 265	3 271	2 367	8 637	2 405	8 023	9 617	1 611	49 118	<b>41 189</b>
March	10 957	2 325	3 335	2 418	8 732	2 441	7 925	9 733	1 619	49 487	<b>41 868</b>
June	11 034	2 317	3 366	2 510	8 805	2 432	7 715	9 813	1 647	49 638	<b>43 057</b>
<b>1997-98</b>											
September	11 322	2 269	3 345	2 623	8 854	2 390	7 495	9 770	1 681	49 749	<b>44 359</b>
December	11 618	2 244	3 361	2 753	8 966	2 359	7 369	9 670	1 694	50 033	<b>45 542</b>
March	11 775	2 251	3 441	2 889	9 061	2 357	7 356	9 638	1 722	50 490	<b>46 640</b>
June	11 850	2 276	3 559	3 025	9 146	2 375	7 442	9 671	1 752	51 096	<b>47 797</b>

(a) Revised. See paragraph 34 of the Explanatory Notes.

## MANUFACTURERS' AND WHOLESALE TRADE SALES—Constant prices(a)

Period	MANUFACTURING.....										WHOLESALE TRADE
	Food, beverage and tobacco	Textiles, clothing, and footwear and leather	Wood and paper products	Printing, publishing and recorded media	Petroleum, coal, chemical and assoc. products	Non- metallic mineral product	Metal product	Machinery and equipment	Other manu- facturing	Total manu- facturing	Total wholesale
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL											
<b>Year to</b>											
June 1996	36 141	7 870	10 500	7 423	30 976	8 777	30 542	32 243	5 387	169 858	<b>158 053</b>
June 1997	36 430	8 094	11 552	7 238	31 320	8 341	30 321	34 245	5 552	173 095	<b>161 814</b>
June 1998	37 946	7 944	12 081	8 333	32 894	7 985	27 322	33 945	5 856	174 305	<b>171 804</b>
<b>1995-96</b>											
June	8 409	1 881	2 684	1 801	8 151	2 094	7 476	8 398	1 264	42 158	<b>39 555</b>
<b>1996-97</b>											
September	9 266	1 998	2 872	1 812	7 579	2 125	7 980	8 734	1 540	43 905	<b>39 640</b>
December	10 219	2 042	3 011	1 896	8 041	2 147	7 964	8 622	1 384	45 328	<b>42 281</b>
March	8 324	1 981	2 782	1 707	7 514	1 972	7 001	8 068	1 265	40 615	<b>37 948</b>
June	8 621	2 073	2 888	1 824	8 186	2 097	7 376	8 821	1 363	43 248	<b>41 945</b>
<b>1997-98</b>											
September	9 636	2 006	3 033	1 976	8 179	2 077	7 044	8 852	1 510	44 313	<b>42 699</b>
December	10 307	2 003	3 150	2 227	8 169	2 013	6 914	8 682	1 559	45 024	<b>44 041</b>
March	8 895	1 897	2 756	1 968	8 023	1 939	6 438	7 819	1 301	41 037	<b>40 872</b>
June	9 109	2 037	3 142	2 162	8 524	1 955	6 925	8 591	1 485	43 930	<b>44 192</b>
SEASONALLY ADJUSTED											
<b>Year to</b>											
June 1996	36 114	7 847	10 480	7 393	30 958	8 780	30 493	32 200	5 340	169 606	<b>158 084</b>
June 1997	36 462	8 096	11 562	7 250	31 319	8 330	30 316	34 266	5 565	173 167	<b>161 773</b>
June 1998	37 936	7 949	12 083	8 370	32 904	7 996	27 335	33 943	5 861	174 378	<b>171 832</b>
<b>1995-96</b>											
June	8 753	1 882	2 742	1 857	7 982	2 117	7 494	8 321	1 293	42 441	<b>39 538</b>
<b>1996-97</b>											
September	9 169	1 925	2 793	1 781	7 514	2 063	7 768	8 485	1 478	42 976	<b>39 601</b>
December	9 322	2 018	2 865	1 770	7 988	2 073	7 776	8 427	1 279	43 519	<b>40 248</b>
March	8 977	2 079	2 957	1 820	7 807	2 073	7 373	8 606	1 412	43 103	<b>40 046</b>
June	8 994	2 074	2 947	1 879	8 010	2 121	7 399	8 749	1 396	43 569	<b>41 878</b>
<b>1997-98</b>											
September	9 435	1 942	2 955	1 962	8 116	2 035	6 857	8 592	1 444	43 338	<b>42 688</b>
December	9 443	1 996	2 998	2 035	8 071	1 916	6 751	8 504	1 440	43 155	<b>41 930</b>
March	9 545	1 973	2 926	2 146	8 381	2 067	6 777	8 322	1 454	43 592	<b>43 118</b>
June	9 512	2 039	3 204	2 227	8 337	1 978	6 950	8 525	1 522	44 294	<b>44 096</b>
TREND ESTIMATES(b)											
<b>Year to</b>											
June 1996	36 236	7 851	10 496	7 366	30 846	8 770	30 592	32 215	5 402	169 775	<b>158 380</b>
June 1997	36 450	8 054	11 569	7 273	31 474	8 314	30 119	34 216	5 517	172 986	<b>161 873</b>
June 1998	37 806	7 987	12 059	8 359	32 889	8 025	27 433	33 959	5 848	174 366	<b>171 600</b>
<b>1995-96</b>											
June	9 056	1 903	2 726	1 834	7 843	2 124	7 712	8 386	1 337	42 921	<b>39 920</b>
<b>1996-97</b>											
September	9 103	1 939	2 805	1 796	7 793	2 080	7 700	8 434	1 361	43 012	<b>39 749</b>
December	9 118	2 013	2 876	1 783	7 795	2 070	7 666	8 505	1 374	43 200	<b>39 887</b>
March	9 107	2 059	2 928	1 814	7 895	2 091	7 521	8 610	1 379	43 404	<b>40 692</b>
June	9 121	2 043	2 961	1 879	7 991	2 073	7 231	8 668	1 402	43 371	<b>41 546</b>
<b>1997-98</b>											
September	9 289	1 996	2 954	1 957	8 063	2 031	6 951	8 611	1 433	43 286	<b>42 158</b>
December	9 459	1 977	2 969	2 046	8 179	2 000	6 811	8 494	1 445	43 379	<b>42 580</b>
March	9 525	1 992	3 027	2 138	8 278	1 993	6 794	8 430	1 471	43 648	<b>43 075</b>
June	9 532	2 022	3 108	2 218	8 368	2 002	6 878	8 425	1 499	44 053	<b>43 786</b>

(a) At average 1989-90 prices.

(b) Revised. See paragraph 34 of the Explanatory Notes.

## MANUFACTURERS' ACTUAL AND EXPECTED SALES WITH REALISATION RATIOS(a)

Period	Food, beverage and tobacco	Textiles, clothing and leather	Wood and paper products	Printing, publishing and recorded media	Petroleum, coal, chemical and assoc. products	Non- metallic mineral product	Metal product	Machinery and equipment	Other manu- facturing	Total manu- facturing
ACTUAL SALES (\$ million)										
<b>1995-96</b>	42 875	8 796	12 323	9 596	34 436	10 114	32 767	36 361	6 225	193 494
<b>1996-97</b>	43 749	9 128	13 150	9 623	34 630	9 718	31 930	38 732	6 508	197 168
<b>1997-98</b>	46 723	8 993	13 727	11 243	36 017	9 431	29 561	38 733	6 863	201 292
<b>1995-96</b>										
June	9 961	2 105	3 070	2 355	9 023	2 418	7 926	9 528	1 471	47 858
<b>1996-97</b>										
September	11 055	2 246	3 266	2 396	8 371	2 461	8 378	9 891	1 799	49 863
December	12 261	2 297	3 424	2 521	8 914	2 495	8 301	9 727	1 628	51 568
March	10 010	2 236	3 180	2 273	8 345	2 299	7 379	9 135	1 483	46 340
June	10 423	2 350	3 280	2 432	8 999	2 464	7 872	9 979	1 598	49 398
<b>1997-98</b>										
September	11 727	2 283	3 439	2 655	8 948	2 445	7 626	10 043	1 776	50 943
December	12 691	2 277	3 555	2 986	9 002	2 372	7 472	9 886	1 826	52 067
March	10 992	2 143	3 129	2 667	8 762	2 294	6 970	8 937	1 521	47 414
June	11 314	2 290	3 605	2 935	9 305	2 321	7 493	9 867	1 739	50 869
EXPECTED SALES (\$ million)										
<b>1998-99</b>										
6 mths to Dec	25 069	4 627	7 351	6 157	18 884	4 700	15 284	19 562	3 616	105 249
6 mths to Jun	23 446	4 570	7 373	6 303	19 165	4 532	14 733	19 466	3 610	103 198
Total 1998-99(b)	48 515	9 197	14 724	12 460	38 049	9 232	30 017	39 028	7 226	208 447
REALISATION RATIOS: 6 MONTHS TO DECEMBER (Actual/Jun E1)										
<b>1994</b>	1.02	0.87	1.07	1.04	1.27	1.10	1.04	1.04	1.15	1.07
<b>1995</b>	1.00	0.98	1.06	0.97	1.04	1.09	1.09	0.99	1.11	1.03
<b>1996</b>	0.98	0.98	1.00	1.05	0.99	0.96	1.02	1.05	1.08	1.01
<b>1997</b>	1.02	1.06	1.01	0.97	1.00	0.97	1.07	1.00	1.16	1.02
<b>1998</b>	1.05	0.95	1.00	1.16	1.01	0.95	0.98	0.96	1.14	1.01
5 year average	1.01	0.97	1.03	1.04	1.06	1.01	1.04	1.01	1.13	1.03
REALISATION RATIOS: 6 MONTHS TO JUNE (Actual/Jun E2)										
<b>1994</b>	1.07	0.94	1.10	1.09	1.28	1.20	1.03	1.08	1.57	1.11
<b>1995</b>	0.96	0.95	1.02	0.87	1.05	1.01	1.11	0.93	1.07	1.00
<b>1996</b>	0.96	0.86	0.96	1.02	1.00	0.90	0.99	1.06	0.89	0.98
<b>1997</b>	0.96	1.04	0.99	0.95	0.97	0.97	0.99	0.97	1.07	0.98
<b>1998</b>	1.03	0.91	0.97	1.13	0.99	0.92	0.94	0.88	1.07	0.97
5 year average	0.99	0.94	1.01	1.01	1.06	1.00	1.01	0.98	1.13	1.01
REALISATION RATIOS: 12 MONTHS TO JUNE (Actual/sum of Jun E1 and Jun E2)										
<b>1994</b>	1.04	0.90	1.09	1.06	1.28	1.15	1.04	1.06	1.34	1.09
<b>1995</b>	0.98	0.96	1.04	0.92	1.05	1.05	1.10	0.96	1.09	1.01
<b>1996</b>	0.97	0.92	0.98	1.04	0.99	0.93	1.01	1.05	0.99	0.99
<b>1997</b>	0.99	1.05	1.00	0.96	0.98	0.97	1.03	0.98	1.11	1.00
<b>1998</b>	1.04	0.93	0.99	1.14	1.00	0.93	0.96	0.92	1.11	0.99
5 year average	1.00	0.95	1.02	1.03	1.06	1.01	1.03	1.00	1.13	1.02

(a) See paragraphs 22 to 25 of the Explanatory Notes.

(b) Derived by adding expected sales for 6 months ending December 1998 and expected sales for 6 months ending June 1999.

## MANUFACTURING AND WHOLESALE TRADE STOCKS/SALES RATIO—Current prices(a)

Year to/Quarter to	MANUFACTURING.....										WHOLESALE TRADE
	<i>Food, beverage and tobacco</i>	<i>Textiles, clothing, footwear and leather</i>	<i>Wood and paper products</i>	<i>Printing, publishing and recorded media</i>	<i>Petroleum, coal, chemical and assoc. products</i>	<i>Non- metallic mineral product</i>	<i>Metal product</i>	<i>Machinery and equipment</i>	<i>Other manu- facturing</i>	<i>Total manu- facturing</i>	<i>Total wholesale</i>
June 1996	0.54	0.79	0.54	0.38	0.66	0.50	0.58	0.65	0.44	0.59	<b>0.52</b>
June 1997	0.53	0.74	0.55	0.32	0.64	0.53	0.53	0.60	0.37	0.56	<b>0.50</b>
June 1998	0.53	0.78	0.53	0.32	0.60	0.47	0.58	0.65	0.42	0.57	<b>0.50</b>
<b>1995-96</b>											
June	0.54	0.79	0.54	0.38	0.66	0.50	0.58	0.65	0.44	0.59	<b>0.52</b>
<b>1996-97</b>											
September	0.51	0.76	0.53	0.38	0.70	0.56	0.59	0.66	0.35	0.59	<b>0.52</b>
December	0.49	0.75	0.53	0.36	0.67	0.55	0.58	0.65	0.42	0.58	<b>0.51</b>
March	0.52	0.74	0.51	0.34	0.67	0.55	0.57	0.63	0.32	0.57	<b>0.51</b>
June	0.53	0.74	0.55	0.32	0.64	0.53	0.53	0.60	0.37	0.56	<b>0.50</b>
<b>1997-98</b>											
September	0.51	0.80	0.58	0.31	0.62	0.53	0.55	0.58	0.38	0.55	<b>0.50</b>
December	0.51	0.77	0.57	0.33	0.63	0.54	0.55	0.59	0.39	0.56	<b>0.51</b>
March	0.53	0.73	0.57	0.32	0.60	0.49	0.58	0.64	0.42	0.56	<b>0.50</b>
June	0.53	0.78	0.53	0.32	0.60	0.47	0.58	0.65	0.42	0.57	<b>0.50</b>

(a) Seasonally adjusted series.



## EXPLANATORY NOTES

### INTRODUCTION

**1** This publication contains estimates of the book value of stocks owned by private businesses, estimates of sales by wholesalers and sales and expected sales of goods manufactured or assembled by manufacturers in Australia. The series have been compiled from data collected by the Australian Bureau of Statistics (ABS) in its quarterly Survey of Stocks and Sales.

### SCOPE AND COVERAGE

**2** The scope of the survey:

- includes the following industries (Australian and New Zealand Standard Industrial Classification 1993 [ANZSIC] Divisions and Subdivisions):

Mining (Division B)

Manufacturing (Division C)

Food, beverages and tobacco (21)

Textiles, clothing, footwear and leather (22)

Wood and paper products (23)

Printing, publishing and recorded media (24)

Petroleum, coal, chemical and associated products (25)

Non-metallic mineral products (26)

Metal products (27)

Machinery and equipment (28)

Other manufacturing (29)

Wholesale Trade (Division F)

Basic materials (45)

Machinery and motor vehicles (46)

Personal and household goods (47)

Retail Trade (Division G excluding 5322, 5323 and 5329)

Food (51)

Personal and household goods (52)

Motor vehicle retailing and services (53 excluding 5322, 5323 and 5329)

Other Selected Industries

Electricity and gas supply (36)

Accommodation, cafes and restaurants (Division H)

- excludes the following industries:

Agriculture, forestry and fishing

Water supply, sewerage and drainage services

Construction

Transport and storage

Communication services

Finance and insurance

Property and business services

Government administration and defence

Education, health and community services

Cultural and recreational services

Personal and other services

- in addition the scope excludes public sector business units (i.e. all departments, authorities and other organisations owned and/or controlled by Commonwealth, State and Local Governments). Primary producer marketing boards are classified as public sector and are also excluded.

## EXPLANATORY NOTES

### SURVEY METHODOLOGY

**3** The survey is conducted by mail on a quarterly basis. It is based on a stratified random sample of approximately 8,000 private businesses selected from the ABS register of businesses. The sample is stratified by industry and number of employees. All business units with over 250 employees, and other statistically significant units, such as many joint venture partners, are included. The figures obtained from these businesses are also supplemented by adjustments for new businesses not yet included in the sample framework.

**4** Respondents are asked to provide data on the same basis as their own management accounts. Where a selected business unit does not respond in a given survey, an estimate is substituted. Revisions may be made to these estimate adjustments if data are provided subsequently from those businesses. Aggregates are calculated from original data using the 'number raised' estimation technique. Data are edited at both individual unit level and at aggregate level.

**5** Adjustments are included in the estimates to allow for lags in processing new businesses to the ABS business register, and the omission of some businesses from the business register. The majority of businesses affected and to which the adjustments apply are small in size. The adjustments contributed 4.8% to the current quarter's estimate of reported stocks and 4.8% to reported sales. These adjustments were introduced in the June quarter 1997 publication and have been made back to the June quarter 1984. For further information see the June quarter 1997 publication or an Information Paper — *Improvements to ABS Economic Statistics 1997* (Cat. No. 1357.0) issued on 22 August 1997.

### TIMING AND CONSTRUCTION OF SURVEY CYCLE

**6** Surveys are conducted in respect of each quarter and returns are completed during the 8 or 9 week period after the end of the quarter to which survey data relate e.g. December quarter survey returns are completed during January and February.

**7** In addition to data on stocks, manufacturers and wholesalers are requested to provide sales figures for actual sales made during the reference quarter. Manufacturers are also requested to provide expected sales for future periods:

- a short term expectation (E1); and
- a longer term expectation (E2).

**8** Full details of the reporting cycle are shown in the table below.

Survey quarter	Period to which reported data relates									
	1996-97			1997-98			1998-99			
	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	
June 1997	Actual	E1	E2							
September 1997		Actual	E1	E2						
December 1997			Actual	E1	E2					
March 1998				Actual	E1	E2				
June 1998					Actual	E1	E2			

## EXPLANATORY NOTES

### TIMING AND CONSTRUCTION OF SURVEY CYCLE *continued*

**9** For the manufacturing industry this survey cycle produces estimates of sales and expected sales for the next 9 or 12 months. Realisation ratios (actual sales divided by expected sales) are published in this issue as an aid in interpreting expectation statistics. Since realisation ratios tend to vary according to factors such as the stage of the economic cycle, caution should be used when interpreting the data on expected sales and realisation ratios.

### SAMPLE REVISION

**10** Prior to the June quarter 1996 survey, the survey frames and samples were revised annually to ensure that they remained representative of the survey population. Adjustments were made to the survey estimates each quarter to reflect changes in the size of the survey frame throughout the year. From the June quarter 1996 survey, the survey frames and samples are being revised each quarter. The aim is to further improve the quality of the survey estimates by selecting a sample which will be more representative of the business population. The timing of sample selection will now be consistent with other ABS surveys. This will lead to greater consistency when comparing data across these surveys.

**11** With these revisions to the sample, some of the business units are rotated out of the survey and are replaced by others to spread the reporting workload equitably. The rate of rotation under quarterly sample selection is slightly higher than one quarter of the previous annual rate of rotation.

**12** When frames and samples were updated annually some data would be revised as a consequence. No data revisions of this nature will be needed given quarterly updates to frames and samples. Data may be revised however on the basis of further processing.

### STATISTICAL UNIT

**13** This survey uses the management unit as the statistical unit. The management unit is the highest-level accounting unit within a business, having regard to industry homogeneity, for which accounts are maintained. In nearly all cases it coincides with the legal entity owning the business (i.e. company, partnership, trust, sole operator, etc.). In the case of large diversified businesses, however, there may be more than one management unit, each coinciding with a 'division' or 'line of business'. A division or line of business is defined where separate and comprehensive accounts are compiled for it. Prior to 1989, the survey was on a different business unit basis. Further details are available on request.

### CLASSIFICATION BY INDUSTRY

**14** The Australian and New Zealand Standard Industrial Classification (ANZSIC) has been developed for use in both countries for the production and analysis of industry statistics. It replaces the Australian Standard Industrial Classification (ASIC) and the New Zealand Standard Industrial Classification (NZSIC).

**15** For more information, users are referred to *Australian & New Zealand Standard Industrial Classification, 1993, ANZSIC*, ABS (1292.0) and Statistics New Zealand (19.005.0092).

**16** In order to classify stocks and sales data by industry, each statistical unit (as defined above) is classified to the Australian and New Zealand Standard Industrial Classification (ANZSIC) industry in which it *mainly* operates.

**17** All of the stocks, sales and expected sales of each statistical unit are classified to that unit's industry even though it may have activities in other industries.

### DESCRIPTION OF TERMS

**18** *Manufacturers' Sales*. All sales of goods manufactured by the business unit or manufactured for it on commission. Excludes commission earned by the business for manufacturing work done on customers' materials and sales of goods not manufactured (e.g. merchanted goods) by the business.

## EXPLANATORY NOTES

### DESCRIPTION OF TERMS *continued*

**19** *Wholesale trade Sales.* All sales of goods by businesses classified to the Wholesale Trade Industry.

**20** *Stocks.* All stocks of materials etc., work in progress and finished goods owned by the business, whether held at locations of the business or elsewhere.

### CONSTANT PRICES

**21** The level and changes in the level of stocks and sales valued at constant prices (average 1989–90 prices) are obtained by dividing the current price values (in the case of stocks these are book values), at the most detailed industry level possible, by fixed weighted price indexes. These price indexes are compiled by combining, in fixed proportions, a wide range of price data. The composition and weighting of the indexes have been determined by estimates of the commodity composition of the value of sales or stocks owned by firms in those industries in 1989–90. A measure of the change in stocks at average 1989–90 prices is calculated by taking the difference between opening and closing stocks at constant prices.

### DERIVATION AND USEFULNESS OF REALISATION RATIOS

**22** Once the actual level of manufacturers' sales is known, it is useful to investigate the relationship between it and each of the previous expected estimates. The resultant realisation ratios (subsequent actual sales divided by expected sales) then indicate how the value of actual sales compared with the value of expected sales at the various times of reporting. Realisation ratios can also be formed separately for 3 or 6 month expectations as well as the 12 month estimates or combinations of estimates containing at least some expectation components (e.g. 6 months actual and 6 months expected sales).

**23** Realisation ratios provide an important tool in understanding and interpreting expectations statistics for future periods. The application of realisation ratios enables the adjustment of expectations data for known under (or over) realisation patterns in the past and hence provides a valid basis for comparison with other expectations data and actual sales estimates. For example, if one wished to predict actual sales for 1998–99 based on the June 1998 survey results and compare these with 1997–98 actual sales, it is necessary to apply relevant realisation factors to the expectation to put both estimates on the same basis. Once this has been done the predictions can be validly compared with each other and with previously derived estimates of actual sales for earlier years.

**24** There are many ways in which realisation ratios can be applied to make predictions of sales for a future period. For instance, the adjusted estimates could be derived using realisation ratios which are the average of the latest available five observations or any of the five could be used. Realisation ratios are provided in table 9 on page 15.

**25** In using realisation ratios to adjust expectations data, attention should be paid to the range of values that has occurred in the past. A wide range of values is indicative of volatility in the realisation patterns and hence greater caution should be exercised in the application of realisation ratios. This is particularly the case with the twelve month expectations collected in the December and June surveys.

### RELIABILITY OF THE ESTIMATES

**26** Two types of error are possible in an estimate based on a sample survey: sampling error and non-sampling error. Sampling error is explained and quantified on pages 23 and 24.

## EXPLANATORY NOTES

### RELIABILITY OF THE ESTIMATES *continued*

*Non-sampling error* arises from inaccuracies in collecting, recording and processing the data. The major errors of concern and which may affect the data are:

- misreporting of data by respondents; and
- deficiencies in the register of economic units, particularly in respect of small units.

Every effort is made to minimise the non-sampling error by careful design of questionnaires, efficient operating procedures, and appropriate methodology.

### SEASONAL ADJUSTMENT

**27** The quarterly stocks and sales series in this publication are affected to some extent by seasonal influences and it is useful to recognise and take account of this element of variation.

**28** Seasonal adjustment may be carried out by various methods and the results may vary slightly depending on the procedure adopted. Accordingly, seasonally adjusted statistics are only indicative and should not be regarded as in any way definitive. In interpreting seasonally adjusted data it is important therefore to bear in mind the methods by which they have been derived and the limitations to which the methods used are subject.

**29** Seasonal adjustment is a means of reassessing the estimated effects of normal seasonal variations for the series so that the effects of other influences can be more clearly recognised.

**30** In the seasonal adjustment of the series, account has been taken of both normal seasonal factors and 'trading' day effects (arising from the varying length of each quarter) and the varying numbers of Sundays, Mondays, Tuesdays etc in the quarter. Seasonal adjustment does not remove from the series the effect of irregular or non-seasonal influences (e.g. change in interest rates).

**31** At least once each year the seasonally adjusted series are revised to take account of the latest available data. The most recent reanalysis takes into account data up to and including the March quarter 1998 survey. The nature of the seasonal adjustment is such that the magnitude of some revisions resulting from reanalysis may be quite significant especially for data for more recent quarters. Care should be exercised when interpreting quarter to quarter movements in the seasonally adjusted series in the publication, particularly for recent quarters.

**32** It should be noted that the seasonally adjusted figures necessarily reflect the sampling and other errors to which the original figures are subject.

**33** Details of the seasonal adjustment methods used for stocks and sales, together with selected measures of variability for these series are available on request.

### TREND ESTIMATES

**34** The trend estimates are derived by applying a 7-term Henderson moving average to the seasonally adjusted series. The 7-term Henderson average (like all Henderson averages) is symmetric, but as the end of a time series is approached, asymmetric forms of the average are applied. Unlike the weights of the standard 7-term Henderson moving average, the weights employed here have been tailored to suit the particular characteristics of individual series. While the asymmetric weights enable trend estimates for recent quarters to be produced, it does result in revisions to the estimates for the most recent three quarters as additional observations become available. There may also be revisions because of changes in the original data and as a result of the re-estimation of the seasonal factors. For further information, see *A Guide to Interpreting Time Series — Monitoring 'Trend' An Overview* (1348.0) or contact the Assistant Director, Time Series Analysis.

## EXPLANATORY NOTES

### COMPARISON WITH OTHER ABS STATISTICS

**35** The data collected in the Survey of Stocks and Sales are used to compile estimates of the increase in book value of non-farm stocks in the quarterly and annual national accounts. For further details see *Australian National Accounts: Concepts, Sources and Methods* (5216.0).

**36** The statistics shown for the movement in the book value of stocks in this publication will differ from corresponding data for private non-farm stocks shown in the national accounts publications because the national accounts estimates include estimates for the construction and transport industries.

### RELATED PUBLICATIONS

**37** Users may also wish to refer to the following publications:

- *Private New Capital Expenditure and Expected Expenditure, Australia* (5625.0)
- *State Estimates of Private New Capital Expenditure* (5646.0)
- *Company Profits, Australia* (5651.0)
- *Australian Business Expectations* (5250.0)
- *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
- *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
- *Manufacturing Production, Australia* (8301.0)
- *Business Operations and Industry Performance, Australia* (8140.0).

**38** 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 *Release Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Release Advice are available from any ABS office.

### UNPUBLISHED DATA

**39** In addition to the data contained in this and related publications, more detailed industry information may be made available on request. Data are available at the ANZSIC Group (i.e. 3 digit) level for stocks and manufacturers' sales.

### SYMBOLS AND OTHER USAGES

ANZSIC *Australian and New Zealand Standard Industrial Classification* (1292.0)  
1993 edition

## STANDARD ERRORS

The estimates in this publication are based on information gained from a sample survey. Because the entire population of businesses is not surveyed, the published estimates are subject to sampling error and this can be quantified in a number of ways. A common measure is *standard error*. In this publication standard errors are presented as a percentage of the estimate to which they apply (i.e. *relative standard error*). In the case of the relative standard errors of movement, they are expressed as a percentage of the estimate of the data level for the earlier period.

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 businesses had been included in the survey, and there are about nineteen chances in twenty that the difference will be less than two standard errors. Put another way, this means that we can be 67% confident that the 'true' figure is within plus or minus one standard error of the sample estimate and 95% confident that the 'true' figure is within two standard errors of the sample estimate. Tables of relative standard errors are presented on the next page and examples of their application are given below.

### LEVEL ESTIMATES

To illustrate, let us say the published level estimate for manufacturers' stocks is \$21,000m. The relative standard error for this case, obtained from the table on the next page, is 1.4%. This relative standard error is then used to interpret the level estimate of \$21,000m. For instance, the relative standard error of 1.4% indicates that:

- There are approximately two chances in three that the real value falls within the range \$20,706m to \$21,294m ( $\$21,000\text{m} \pm 1.4\% \times \$21,000\text{m}$ )
- There are approximately nineteen chances in twenty that the real value falls within the range \$20,412m to \$21,588m ( $\$21,000\text{m} \pm 2 \times 1.4\% \times \$21,000\text{m}$ )

The real value in this case is the result we would obtain if the total population had been enumerated.

The following tables show the relative standard errors for this quarter's level estimates.

### MOVEMENT ESTIMATES

The following example illustrates how to use the standard error to interpret a movement estimate. Suppose that for one quarter the published level estimate for manufacturers' stocks in Australia is \$22,100m; the next quarter the published level estimate is \$22,400m. The relative standard error for the movement estimates, obtained from the next page, is 0.4%. This relative standard error is then used to interpret the published movement estimate of +\$300m. For instance the relative standard error of 0.4% indicates that:

- There are approximately two chances in three that the real movement over the two quarters falls within the range \$212m to \$388m ( $\$300\text{m} \pm 0.4\% \times \$22,100\text{m}$ )
- There are approximately nineteen chances in twenty that the real value falls within the range \$123m to \$477m ( $\$300\text{m} \pm 2 \times 0.4\% \times \$22,100\text{m}$ ).

The following tables show the relative standard errors for this quarter's movement estimates.

## STANDARD ERRORS *continued*

### APPROXIMATE RELATIVE STANDARD ERRORS

#### STOCKS OWNED BY PRIVATE BUSINESSES(a).....

Estimates of	<i>Mining</i>	<i>Manu- facturing</i>	<i>Whole- sale trade</i>	<i>Retail trade</i>	<i>Other</i>	<b><i>Total selected industries</i></b>
	%	%	%	%	%	%
Total stocks	2.4	1.4	6.3	3.6	11.5	<b>2.3</b>
Quarter to quarter movement(a)	0.7	0.4	0.8	1.1	2.5	<b>0.4</b>

### STOCKS AND SALES, PRIVATE MANUFACTURING AND WHOLESALE TRADE BUSINESSES

#### MANUFACTURING.....

#### WHOLESALE TRADE

Estimates of	<i>Food, beverage and tobacco</i>	<i>Textiles, clothing, footwear and leather</i>	<i>Wood and paper products</i>	<i>Printing, publishing and recorded media</i>	<i>Petroleum, coal, chemical and assoc. products</i>	<i>Non- metallic mineral product</i>	<i>Metal product</i>	<i>Machinery and equipment</i>	<i>Other manu- facturing</i>	<b><i>Total manu- facturing</i></b>	<b><i>Total</i></b>
	%	%	%	%	%	%	%	%	%	%	%
Total stocks– Level	3.0	4.6	5.2	10.3	3.0	6.5	1.4	4.4	8.1	<b>1.4</b>	<b>6.3</b>
Movement	0.7	1.6	1.4	2.3	0.9	2.8	0.5	1.4	2.6	<b>0.4</b>	<b>0.8</b>
Total sales– Level	2.1	5.7	4.2	12.8	2.8	7.0	1.5	4.0	7.5	<b>1.4</b>	<b>7.7</b>
Movement	0.8	2.2	1.5	3.3	1.0	3.3	0.6	1.3	2.9	<b>0.5</b>	<b>0.9</b>

(a) Expressed as a percentage of total.



# WHAT IF...? REVISIONS TO TREND ESTIMATES

## EFFECT OF NEW SEASONALLY ADJUSTED ESTIMATES ON TREND ESTIMATES

Each time new seasonally adjusted estimates become available, trend estimates are revised (see paragraph 34 of Explanatory notes).

### TREND REVISIONS

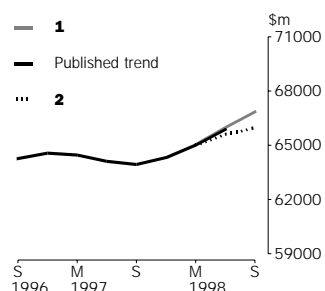
The examples in the tables below show two scenarios and the consequent revisions to previous trend estimates of stocks owned by private businesses and manufacturers' and wholesalers' sales.

**1** The September quarter seasonally adjusted estimate is higher than the June quarter estimate by the percentage shown.

**2** The September quarter seasonally adjusted estimate is lower than the June quarter estimate by the percentage shown.

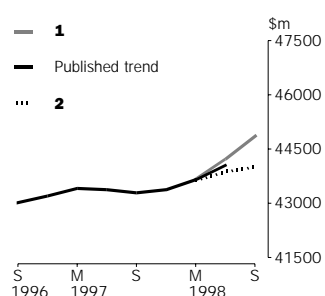
The percentages chosen are approximately the long term average movements, without regard to sign, in the seasonally adjusted series.

### STOCKS OWNED BY PRIVATE BUSINESSES



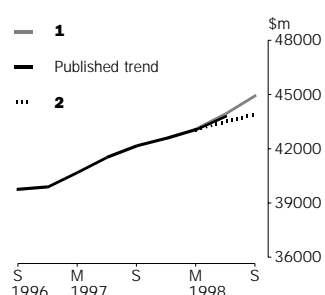
	TREND AS PUBLISHED		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	% change	<b>1</b> rises by 1.0 on Jun 1998 \$m	% change	<b>2</b> falls by 1.0 on Jun 1998 \$m	% change
1997						
September	63 950	-0.2	63 950	-0.2	63 950	-0.2
December	64 316	0.6	64 258	0.5	64 336	0.6
1998						
March	65 021	1.1	65 035	1.2	65 008	1.0
June	65 883	1.3	65 988	1.5	65 614	0.9
September	—	—	66 883	1.4	65 997	0.6

### MANUFACTURERS' SALES



	TREND AS PUBLISHED		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	% change	<b>1</b> rises by 1.4 on Jun 1998 \$m	% change	<b>2</b> falls by 1.4 on Jun 1998 \$m	% change
1997						
September	43 286	-0.2	43 286	-0.2	43 286	-0.2
December	43 379	0.2	43 328	0.1	43 401	0.3
1998						
March	43 648	0.6	43 664	0.8	43 638	0.5
June	44 053	0.9	44 235	1.3	43 885	0.6
September	—	—	44 853	1.4	44 022	0.3

### WHOLESALE TRADE SALES



	TREND AS PUBLISHED		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	% change	<b>1</b> rises by 1.7 on Jun 1998 \$m	% change	<b>2</b> falls by 1.7 on Jun 1998 \$m	% change
1997						
September	42 158	1.5	42 158	1.5	42 158	1.5
December	42 580	1.0	42 565	1.0	42 653	1.2
1998						
March	43 075	1.2	43 089	1.2	43 059	1.0
June	43 786	1.7	43 947	2.0	43 524	1.1
September	—	—	44 940	2.3	43 915	0.9





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