

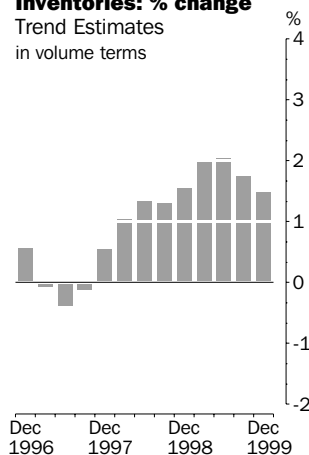


INVENTORIES AND SALES, SELECTED INDUSTRIES

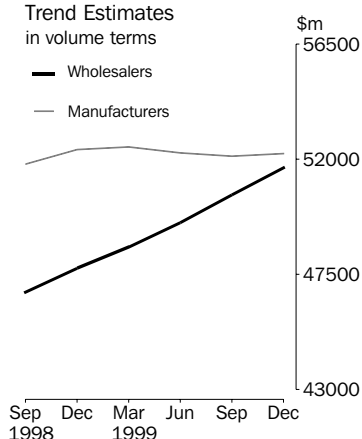
AUSTRALIA

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Inventories: % change

Trend Estimates
in volume terms

Sales

Trend Estimates
in volume terms

- For further information about these and related statistics, contact Tracy Painting on 02 9268 4241, or Client Services in any ABS office as shown on the back cover of this publication.

DECEMBER QTR KEY FIGURES

TREND (a)

	Dec 1998	Sep 1999	Dec 1999	Sep 1999 to Dec 1999 % change	Dec 1998 to Dec 1999 % change
	\$m	\$m	\$m		
Inventories	76 592	81 152	82 355	1.5	7.5
Sales by					
Manufacturers	52 384	52 114	52 220	0.2	-0.3
Wholesale trade	47 753	50 614	51 677	2.1	8.2

SEASONALLY ADJUSTED (a)

	Dec 1998	Sep 1999	Dec 1999	Sep 1999 to Dec 1999 % change	Dec 1998 to Dec 1999 % change
	\$m	\$m	\$m		
Inventories	76 587	81 236	82 229	1.2	7.4
Sales by					
Manufacturers	52 402	51 474	52 880	2.7	0.9
Wholesale trade	48 014	50 848	51 807	1.9	7.9

(a) Estimates for private businesses, in volume terms.

DECEMBER QTR KEY POINTS

INVENTORIES

- The trend estimate (in volume terms) of inventories held by private businesses have increased by \$1,203m (1.5%) from the revised September quarter 1999 estimate of \$81,152m. The major contributor to the increase was Wholesale Trade (\$940m), while inventories for Manufacturing and Retail increased marginally (\$166m and \$133m respectively) and inventories held by Mining decreased by \$77m.
- The growth in Wholesale inventory levels of 3.6% over September quarter represents the sixteenth successive quarterly increase. The current estimate of \$27,317m is \$3,418m (14.3%) higher than December quarter 1998. Manufacturers' inventories have grown for each of the last nine quarters, with the current estimate \$1,330m or 4.3% higher than in the December quarter 1998.
- The Y2K issue was not a significant influence on inventory levels in December quarter 1999 (see Note on Page 2 for more detail).

SALES

- The trend estimate of Manufacturers' sales increased by 0.2% to \$52,220m in December quarter 1999 and is 0.3% lower than in December quarter 1998 in volume terms. The trend estimate of Wholesale sales increased by 2.1% from September quarter 1999, the sixteenth successive quarter of growth.

NOTES

FORTHCOMING ISSUES

<i>ISSUE (Quarter)</i>	<i>RELEASE DATE</i>
March 2000	29 May 2000
June 2000	4 September 2000

CURRENT ISSUES

Privatised Marketing Authorities

The series presented in this publication have not yet been adjusted to take account of the privatisation of the Australian Wheat Board, Wool International and the Barley Board on 1 July 1999. As advised in the September quarter 1999 publication, options are being evaluated to incorporate these businesses without causing a significant break in series. It is now expected that these businesses will be included in the March 2000 quarter release of this publication.

In the December quarter 1999, inventories held by the three privatised marketing authorities declined by around \$130m in seasonally adjusted chain volume measure terms. Combined with statistics elsewhere in this publication, this will provide an indication of the total change in private non-farm inventories for the December quarter 1999.

Effects of Y2K

A telephone supplementary survey was undertaken in conjunction with the December quarter 1999 survey to determine the possible impact of Y2K on the level of inventories and sales. Preliminary findings reveal that of the 400 units contacted, under ten percent reported an impact on either the level of their inventories or sales in the December quarter 1999. This result is broadly consistent with the results released in ABS Cat No. 8152.0 *Year 2000 Problem* where only nine percent of businesses reported that they would increase their inventories to limit possible Y2K disruptions. The December result is also consistent with that from the September quarter 1999 telephone survey where under ten percent predicted an impact in the level of either their inventories or sales. The impact may be higher in some industries than others, with anecdotal evidence indicating that the greatest impact of the Y2K issue was in food retailing .

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 21–22.

REVISIONS TO TREND

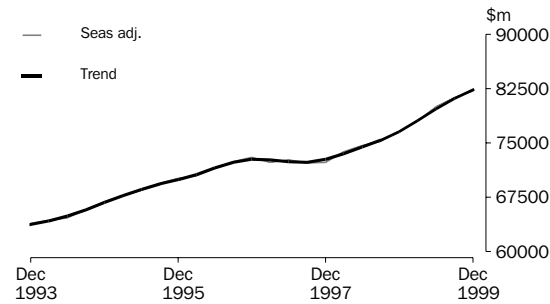
Readers should exercise care in the interpretation of the trend data as the data for the last three quarters in particular are likely to be revised with the addition of subsequent quarters' data. For further information refer to Trend Estimates in paragraph 28 of the Explanatory Notes and for examples refer to page 23.

W. McLennan
Australian Statistician

INVENTORIES: Trend estimates—Chain volume measures(a)

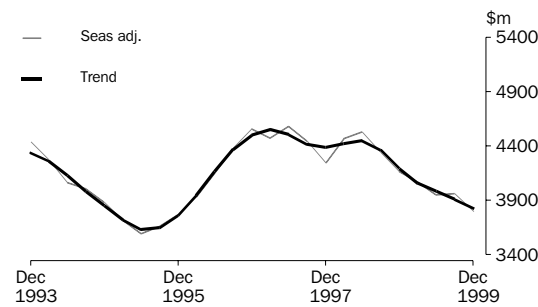
ALL SELECTED INDUSTRIES

The trend estimate (in volume terms) of inventories held by private businesses increased by \$1,203m (1.5%) since September 1999.



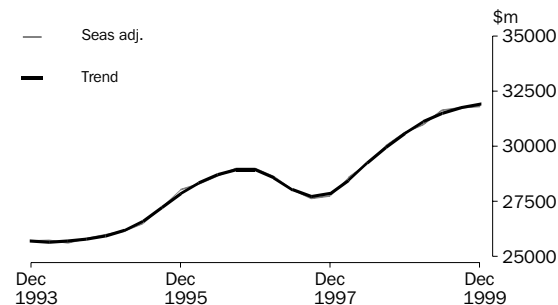
MINING

Mining inventories have fallen over the last six quarters with growth rates between -1.9% and -4.0% per quarter. The current estimate of \$3,830m is \$77m (1.9%) lower than September 1999 and \$360m (8.6%) lower than December 1998.



MANUFACTURING

Manufacturers' inventory levels have increased for the last nine quarters. The current estimate of \$31,905m is \$166m (0.5%) higher than September 1999 and \$1,330m (4.3%) higher than December 1998. Industries contributing most to the increase from December 1998 were Machinery and equipment (up \$1,213m or 18.6%) and Food, beverage and tobacco (up \$643m or 10.0%).

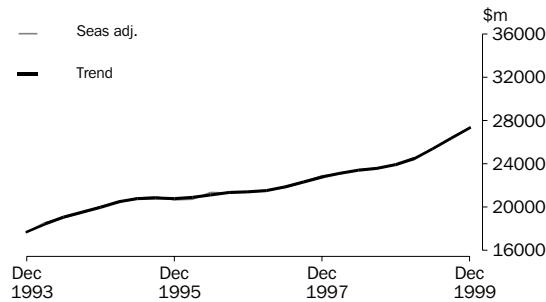


(a) Reference year for chain volume measures is 1997–1998.

INVENTORIES: Trend estimates—Chain volume measures(a)

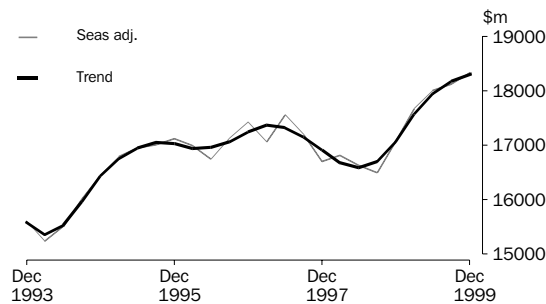
WHOLESALE TRADE

This is the sixteenth successive quarter of growth in inventories held by the Wholesale trade, with growth rates between 0.4% and 3.9% per quarter. The current estimate of \$27,317m is \$940m (3.6%) higher than September 1999 and \$3,418m (14.3%) higher than December 1998.



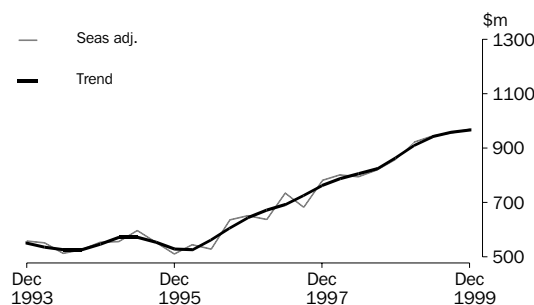
RETAIL TRADE

Inventories held by the Retail trade have increased for the last six quarters after five quarters of decline from June 1997 to June 1998. The current estimate of \$18,305m is \$1,241m (7.3%) higher than December 1998 and \$133m (0.7%) higher than September 1999.



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

Inventories held by Other selected industries have risen over the last fifteen quarters with growth rates between 0.8% and 7.5%. The current estimate of \$967m is \$8m (0.8%) higher than September 1999 and \$103m (11.9%) higher than December 1998.

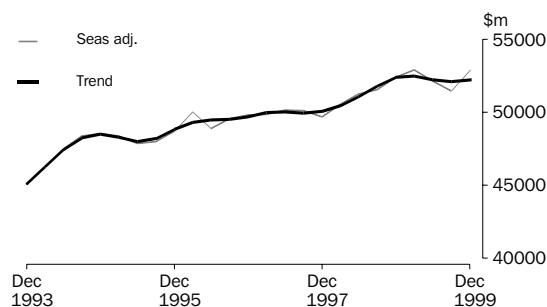


(a) Reference year for chain volume measures is 1997–1998.

SALES: Trend estimates—Chain volume measures(a)

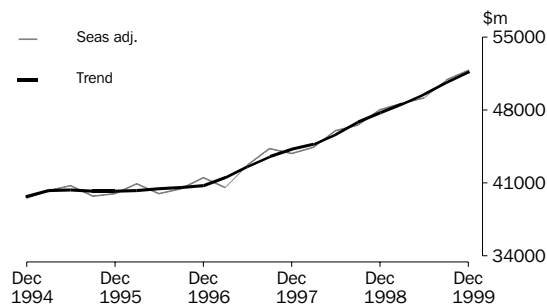
MANUFACTURERS' SALES

After falling in June and September 1999 (by 0.4% and 0.2% respectively), the level estimate for Manufacturers' sales rose by \$106m (0.2%) to \$52,220. Since December quarter 1998, the estimate has fallen by \$164m (0.3%). The industries contributing most to this fall were Textile, clothing and footwear (down \$310m or 12.9%), Non-metallic mineral product (down \$306m or 11.2%) and Machinery and equipment (down \$240 or 2.3%). Over the same period, Wood and paper product increased by \$359m (10.1%).



WHOLESALE TRADE SALES

Growth rates for Wholesale trade sales have been between 1.1% and 2.6% per quarter for the last eleven quarters. The current estimate of \$51,677m is \$1,063m (2.1%) higher than September 1999 and \$3,924m (8.2%) higher than December 1998.



(a) Reference year for chain volume measures is 1997–1998.

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INVENTORIES, By Industry—Current prices

At end of	Mining \$m	Manufacturing \$m	Wholesale trade \$m	Retail trade \$m	Other selected industries(a) \$m	Total selected industries \$m
ORIGINAL						
June 1997	4 499	27 893	21 173	17 076	701	71 342
June 1998	4 508	29 405	23 457	16 418	757	74 546
June 1999	3 857	31 185	25 170	17 993	937	79 141
1997-1998						
December	4 290	27 536	23 117	16 889	833	72 664
March	4 479	28 912	23 161	16 943	796	74 291
June	4 508	29 405	23 457	16 418	757	74 546
1998-1999						
September	4 334	30 270	24 495	16 773	810	76 683
December	4 105	30 280	24 574	17 519	950	77 428
March	3 951	31 015	24 686	18 129	941	78 721
June	3 857	31 185	25 170	17 993	937	79 141
1999-2000						
September	4 052	31 524	26 761	18 673	981	81 990
December	4 052	31 810	27 709	19 102	1 105	83 778
SEASONALLY ADJUSTED						
June 1997	4 530	27 787	21 478	17 461	731	71 987
June 1998	4 529	29 280	23 795	16 793	791	75 188
June 1999	3 870	31 046	25 532	18 407	980	79 835
1997-1998						
December	4 288	27 912	22 964	16 685	774	72 623
March	4 482	28 626	23 194	16 848	806	73 956
June	4 529	29 280	23 795	16 793	791	75 188
1998-1999						
September	4 314	30 301	24 274	16 701	828	76 418
December	4 103	30 684	24 411	17 310	882	77 390
March	3 955	30 704	24 730	18 015	953	78 357
June	3 870	31 046	25 532	18 407	980	79 835
1999-2000						
September	4 034	31 573	26 514	18 597	1 002	81 720
December	4 050	32 249	27 525	18 877	1 025	83 726
TREND ESTIMATES						
June 1997	4 471	27 776	21 580	17 219	684	71 730
June 1998	4 453	29 410	23 789	16 716	808	75 176
June 1999	3 940	31 118	25 576	18 350	979	79 963
1997-1998						
December	4 403	27 918	22 773	16 894	760	72 748
March	4 445	28 568	23 333	16 728	786	73 860
June	4 453	29 410	23 789	16 716	808	75 176
1998-1999						
September	4 331	30 136	24 140	16 894	833	76 334
December	4 114	30 586	24 442	17 324	885	77 351
March	3 960	30 818	24 840	17 901	941	78 460
June	3 940	31 118	25 576	18 350	979	79 963
1999-2000						
September	3 982	31 594	26 495	18 644	1 005	81 720
December	4 049	32 136	27 466	18 869	1 023	83 543

(a) See paragraph 2 of the Explanatory Notes.

INVENTORIES, By Industry—Chain volume measures(a)

At end of	Mining \$m	Manufacturing \$m	Wholesale trade \$m	Retail trade \$m	Other selected industries(b) \$m	Total selected industries \$m
ORIGINAL						
June 1997	4 546	28 137	21 485	17 171	705	72 037
June 1998	4 510	29 327	23 119	16 260	760	73 975
June 1999	3 934	31 781	25 048	17 600	904	79 268
1997-1998						
December	4 245	27 371	23 034	16 905	840	72 400
March	4 461	28 867	23 033	16 910	792	74 062
June	4 510	29 327	23 119	16 260	760	73 975
1998-1999						
September	4 361	29 987	23 791	16 570	802	75 512
December	4 165	30 199	24 048	17 280	924	76 615
March	4 062	31 302	24 323	17 788	909	78 384
June	3 934	31 781	25 048	17 600	904	79 268
1999-2000						
September	3 976	31 707	26 687	18 198	936	81 504
December	3 797	31 366	27 516	18 554	1 044	82 276
SEASONALLY ADJUSTED						
June 1997	4 577	28 025	21 795	17 557	736	72 684
June 1998	4 530	29 202	23 451	16 632	794	74 608
June 1999	3 947	31 641	25 408	18 005	945	79 947
1997-1998						
December	4 243	27 741	22 882	16 701	780	72 350
March	4 464	28 578	23 065	16 815	802	73 723
June	4 530	29 202	23 451	16 632	794	74 608
1998-1999						
September	4 341	30 019	23 577	16 498	819	75 254
December	4 163	30 604	23 889	17 074	857	76 587
March	4 066	30 989	24 366	17 676	921	78 019
June	3 947	31 641	25 408	18 005	945	79 947
1999-2000						
September	3 959	31 756	26 441	18 124	956	81 236
December	3 796	31 797	27 333	18 335	969	82 229
TREND ESTIMATES						
June 1997	4 503	28 029	21 860	17 320	691	72 402
June 1998	4 449	29 243	23 379	16 581	806	74 459
June 1999	3 980	31 483	25 394	17 953	942	79 745
1997-1998						
December	4 383	27 868	22 783	16 919	763	72 716
March	4 421	28 457	23 138	16 673	788	73 477
June	4 449	29 243	23 379	16 581	806	74 459
1998-1999						
September	4 364	29 961	23 581	16 694	823	75 423
December	4 190	30 575	23 899	17 064	864	76 592
March	4 058	31 113	24 487	17 576	910	78 144
June	3 980	31 483	25 394	17 953	942	79 745
1999-2000						
September	3 907	31 739	26 377	18 172	959	81 152
December	3 830	31 905	27 317	18 305	967	82 355

(a) Reference year for chain volume measures is 1997-1998.

(b) See paragraph 2 of the Explanatory Notes.

PERCENTAGE CHANGES IN INVENTORIES, By Industry—Chain volume measures(a)

Year to/Quarter to	Mining	Manufacturing	Wholesale trade	Retail trade	Other selected industries(b)	Total selected industries
	%	%	%	%	%	%
ORIGINAL						
June 1997	10.5	-2.1	2.2	4.8	38.7	1.8
June 1998	-0.8	4.2	7.6	-5.3	7.8	2.7
June 1999	-12.8	8.4	8.3	8.2	19.0	7.2
1997-1998						
December	-4.9	-0.8	2.3	-2.2	25.4	-0.2
March	5.1	5.5	0.0	0.0	-5.7	2.3
June	1.1	1.6	0.4	-3.8	-4.1	-0.1
1998-1999						
September	-3.3	2.2	2.9	1.9	5.6	2.1
December	-4.5	0.7	1.1	4.3	15.2	1.5
March	-2.5	3.7	1.1	2.9	-1.6	2.3
June	-3.1	1.5	3.0	-1.1	-0.5	1.1
1999-2000						
September	1.1	-0.2	6.5	3.4	3.6	2.8
December	-4.5	-1.1	3.1	2.0	11.5	0.9
SEASONALLY ADJUSTED						
June 1997	10.2	-2.2	2.2	4.9	39.0	1.8
June 1998	-1.0	4.2	7.6	-5.3	7.9	2.6
June 1999	-12.9	8.4	8.3	8.3	19.1	7.2
1997-1998						
December	-4.5	0.5	2.5	-2.9	14.2	0.1
March	5.2	3.0	0.8	0.7	2.8	1.9
June	1.5	2.2	1.7	-1.1	-1.0	1.2
1998-1999						
September	-4.2	2.8	0.5	-0.8	3.2	0.9
December	-4.1	2.0	1.3	3.5	4.7	1.8
March	-2.3	1.3	2.0	3.5	7.4	1.9
June	-2.9	2.1	4.3	1.9	2.7	2.5
1999-2000						
September	0.3	0.4	4.1	0.7	1.2	1.6
December	-4.1	0.1	3.4	1.2	1.3	1.2
TREND ESTIMATES						
June 1997	8.1	-2.4	3.6	2.1	22.8	1.3
June 1998	-1.2	4.3	6.9	-4.3	16.5	2.8
June 1999	-10.5	7.7	8.6	8.3	16.9	7.1
1997-1998						
December	-0.7	0.6	2.1	-1.3	4.9	0.5
March	0.9	2.1	1.6	-1.5	3.3	1.0
June	0.6	2.8	1.0	-0.5	2.2	1.3
1998-1999						
September	-1.9	2.5	0.9	0.7	2.1	1.3
December	-4.0	2.0	1.3	2.2	5.0	1.6
March	-3.1	1.8	2.5	3.0	5.4	2.0
June	-1.9	1.2	3.7	2.1	3.5	2.0
1999-2000						
September	-1.9	0.8	3.9	1.2	1.9	1.8
December	-1.9	0.5	3.6	0.7	0.8	1.5

(a) Reference year for chain volume measures is 1997-1998.

(b) See paragraph 2 of the Explanatory Notes.

INVENTORIES, By Manufacturing industries—Current prices

At end of	Food, beverage and tobacco	Textiles, clothing, footwear and leather(a)	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
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL										
June 1997	5 911	1 744	1 866	811	5 594	1 330	4 128	5 894	614	27 893
June 1998	6 528	1 803	2 015	882	5 569	1 138	4 427	6 330	714	29 405
June 1999	6 990	1 719	2 200	843	6 000	1 320	4 787	6 643	682	31 185
1997-1998										
December	5 709	1 772	1 928	906	5 577	1 192	4 113	5 698	642	27 536
March	6 187	1 681	1 976	934	5 599	1 188	4 349	6 265	732	28 912
June	6 528	1 803	2 015	882	5 569	1 138	4 427	6 330	714	29 405
1998-1999										
September	6 290	1 947	2 045	954	5 858	1 257	4 588	6 551	782	30 270
December	6 321	1 835	2 009	952	5 691	1 276	4 688	6 669	840	30 280
March	6 489	1 831	2 204	948	6 068	1 295	4 701	6 685	794	31 015
June	6 990	1 719	2 200	843	6 000	1 320	4 787	6 643	682	31 185
1999-2000										
September	6 811	1 646	2 100	922	6 137	1 094	4 622	7 415	777	31 524
December	6 828	1 586	2 140	836	6 350	983	4 519	7 856	710	31 810
SEASONALLY ADJUSTED										
June 1997	5 706	1 750	1 845	818	5 622	1 319	4 188	5 926	613	27 787
June 1998	6 293	1 811	1 992	890	5 597	1 129	4 498	6 360	710	29 280
June 1999	6 734	1 728	2 176	851	6 031	1 310	4 867	6 673	676	31 046
1997-1998										
December	5 888	1 785	1 959	904	5 672	1 213	4 094	5 755	642	27 912
March	6 169	1 680	1 958	937	5 509	1 183	4 328	6 132	730	28 626
June	6 293	1 811	1 992	890	5 597	1 129	4 498	6 360	710	29 280
1998-1999										
September	6 351	1 925	2 053	946	5 830	1 251	4 559	6 597	789	30 301
December	6 522	1 847	2 041	950	5 783	1 299	4 667	6 738	837	30 684
March	6 469	1 833	2 186	949	5 967	1 289	4 677	6 540	794	30 704
June	6 734	1 728	2 176	851	6 031	1 310	4 867	6 673	676	31 046
1999-2000										
September	6 878	1 627	2 108	914	6 112	1 089	4 592	7 468	785	31 573
December	7 047	1 596	2 174	835	6 451	1 000	4 499	7 939	708	32 249
TREND ESTIMATES										
June 1997	5 691	1 761	1 845	818	5 651	1 313	4 214	5 886	597	27 776
June 1998	6 281	1 808	1 992	925	5 640	1 178	4 466	6 379	741	29 410
June 1999	6 703	1 729	2 157	898	6 035	1 240	4 730	6 880	746	31 118
1997-1998										
December	5 951	1 740	1 959	888	5 543	1 215	4 140	5 812	670	27 918
March	6 119	1 754	1 975	914	5 577	1 171	4 296	6 065	697	28 568
June	6 281	1 808	1 992	925	5 640	1 178	4 466	6 379	741	29 410
1998-1999										
September	6 385	1 869	2 032	938	5 735	1 226	4 576	6 583	792	30 136
December	6 455	1 879	2 093	942	5 852	1 292	4 665	6 605	803	30 586
March	6 556	1 815	2 140	928	5 926	1 310	4 739	6 623	781	30 818
June	6 703	1 729	2 157	898	6 035	1 240	4 730	6 880	746	31 118
1999-2000										
September	6 874	1 651	2 155	873	6 190	1 132	4 648	7 342	729	31 594
December	7 051	1 578	2 144	850	6 358	1 011	4 535	7 884	725	32 136

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

INVENTORIES, By Manufacturing industries—Chain volume measures(a)

At end of	Food, beverage and tobacco	Textiles, clothing, footwear and leather(b)	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
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL										
June 1997	5 994	1 751	1 881	819	5 604	1 329	4 172	5 961	617	28 137
June 1998	6 479	1 809	1 986	857	5 682	1 131	4 416	6 257	711	29 327
June 1999	7 126	1 739	2 177	798	6 296	1 334	5 023	6 622	666	31 781
1997-1998										
December	5 657	1 763	1 936	915	5 465	1 195	4 087	5 699	642	27 371
March	6 173	1 675	1 969	928	5 640	1 189	4 338	6 218	731	28 867
June	6 479	1 809	1 986	857	5 682	1 131	4 416	6 257	711	29 327
1998-1999										
September	6 221	1 949	1 985	899	5 933	1 243	4 551	6 452	754	29 987
December	6 315	1 831	1 940	884	5 859	1 264	4 709	6 588	808	30 199
March	6 508	1 832	2 161	887	6 346	1 295	4 861	6 644	769	31 302
June	7 126	1 739	2 177	798	6 296	1 334	5 023	6 622	666	31 781
1999-2000										
September	6 909	1 689	2 075	879	6 093	1 099	4 853	7 354	757	31 707
December	6 817	1 634	2 078	795	5 989	983	4 659	7 723	689	31 366
SEASONALLY ADJUSTED										
June 1997	5 786	1 757	1 859	826	5 631	1 318	4 233	5 993	614	28 025
June 1998	6 245	1 817	1 963	865	5 711	1 122	4 487	6 287	704	29 202
June 1999	6 865	1 748	2 154	805	6 329	1 324	5 107	6 652	659	31 641
1997-1998										
December	5 834	1 776	1 967	912	5 558	1 217	4 068	5 756	642	27 741
March	6 155	1 674	1 950	931	5 550	1 183	4 317	6 086	730	28 578
June	6 245	1 817	1 963	865	5 711	1 122	4 487	6 287	704	29 202
1998-1999										
September	6 282	1 928	1 993	891	5 905	1 237	4 522	6 497	763	30 019
December	6 517	1 843	1 971	882	5 955	1 286	4 688	6 656	807	30 604
March	6 489	1 834	2 144	888	6 241	1 288	4 836	6 500	770	30 989
June	6 865	1 748	2 154	805	6 329	1 324	5 107	6 652	659	31 641
1999-2000										
September	6 978	1 670	2 083	872	6 068	1 093	4 821	7 406	766	31 756
December	7 037	1 643	2 111	794	6 084	1 000	4 638	7 804	687	31 797
TREND ESTIMATES										
June 1997	5 775	1 774	1 859	828	5 623	1 317	4 278	5 968	600	28 029
June 1998	6 230	1 809	1 958	896	5 709	1 170	4 438	6 302	731	29 243
June 1999	6 791	1 747	2 126	848	6 222	1 245	4 938	6 841	725	31 483
1997-1998										
December	5 934	1 735	1 967	894	5 508	1 218	4 123	5 810	672	27 868
March	6 077	1 751	1 967	907	5 586	1 170	4 275	6 022	696	28 457
June	6 230	1 809	1 958	896	5 709	1 170	4 438	6 302	731	29 243
1998-1999										
September	6 337	1 869	1 976	886	5 857	1 214	4 559	6 493	770	29 961
December	6 438	1 878	2 033	878	6 049	1 282	4 710	6 531	775	30 575
March	6 606	1 819	2 096	868	6 193	1 311	4 885	6 579	756	31 113
June	6 791	1 747	2 126	848	6 222	1 245	4 938	6 841	725	31 483
1999-2000										
September	6 952	1 687	2 121	830	6 166	1 137	4 860	7 275	710	31 739
December	7 081	1 643	2 098	818	6 082	1 036	4 721	7 744	709	31 905

(a) Reference year for chain volume measures is 1997-1998.

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

PERCENTAGE CHANGES IN MANUFACTURERS' INVENTORIES—Chain volume measures(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	Machinery and equipment	Other manu- facturing	Total manu- facturing
	%	%	%	%	%	%	%	%	%	%
ORIGINAL										
June 1997	1.4	3.4	8.6	-8.0	-2.6	5.9	-10.0	-3.6	-9.0	-2.1
June 1998	8.1	3.3	5.6	4.6	1.4	-14.9	5.9	5.0	15.1	4.2
June 1999	10.0	-3.9	9.7	-6.9	10.8	17.9	13.7	5.8	-6.3	8.4
1997-1998										
December	-2.4	-0.9	-0.9	7.9	-0.6	-7.2	-0.5	0.5	-0.7	-0.8
March	9.1	-5.0	1.7	1.5	3.2	-0.6	6.2	9.1	13.9	5.5
June	5.0	8.0	0.9	-7.7	0.7	-4.9	1.8	0.6	-2.8	1.6
1998-1999										
September	-4.0	7.8	0.0	4.9	4.4	9.9	3.0	3.1	6.1	2.2
December	1.5	-6.1	-2.3	-1.7	-1.2	1.7	3.5	2.1	7.2	0.7
March	3.1	0.0	11.4	0.4	8.3	2.5	3.2	0.8	-4.8	3.7
June	9.5	-5.0	0.8	-10.1	-0.8	3.0	3.3	-0.3	-13.4	1.5
1999-2000										
September	-3.0	-2.9	-4.7	10.2	-3.2	-17.6	-3.4	11.1	13.6	-0.2
December	-1.3	-3.3	0.1	-9.5	-1.7	-10.5	-4.0	5.0	-8.9	-1.1
SEASONALLY ADJUSTED										
June 1997	1.2	3.6	8.6	-7.9	-2.6	6.1	-9.8	-3.6	-9.3	-2.2
June 1998	7.9	3.4	5.6	4.7	1.4	-14.8	6.0	4.9	14.7	4.2
June 1999	9.9	-3.8	9.7	-6.9	10.8	18.0	13.8	5.8	-6.5	8.4
1997-1998										
December	-0.3	0.8	0.2	8.6	1.8	-5.1	-0.4	0.8	-1.7	0.5
March	5.5	-5.7	-0.9	2.0	-0.2	-2.8	6.1	5.7	13.7	3.0
June	1.5	8.6	0.7	-7.1	2.9	-5.1	3.9	3.3	-3.5	2.2
1998-1999										
September	0.6	6.1	1.5	3.1	3.4	10.2	0.8	3.3	8.4	2.8
December	3.7	-4.4	-1.1	-1.0	0.8	4.0	3.7	2.5	5.7	2.0
March	-0.4	-0.5	8.8	0.6	4.8	0.2	3.2	-2.4	-4.6	1.3
June	5.8	-4.7	0.5	-9.3	1.4	2.8	5.6	2.3	-14.4	2.1
1999-2000										
September	1.6	-4.5	-3.3	8.3	-4.1	-17.4	-5.6	11.3	16.3	0.4
December	0.8	-1.6	1.3	-8.9	0.3	-8.5	-3.8	5.4	-10.3	0.1
TREND ESTIMATES										
June 1997	1.8	4.7	9.8	-5.9	-2.2	-0.3	-10.2	-4.9	-8.7	-2.4
June 1998	7.9	2.0	5.4	8.2	1.5	-11.2	3.7	5.6	21.7	4.3
June 1999	9.0	-3.4	8.5	-5.4	9.0	6.4	11.3	8.6	-0.8	7.7
1997-1998										
December	1.9	-1.3	1.7	3.9	-0.4	-4.7	0.7	0.3	5.9	0.6
March	2.4	1.0	0.0	1.4	1.4	-3.9	3.7	3.7	3.6	2.1
June	2.5	3.3	-0.4	-1.3	2.2	0.0	3.8	4.6	4.9	2.8
1998-1999										
September	1.7	3.3	0.9	-1.0	2.6	3.7	2.7	3.0	5.5	2.5
December	1.6	0.5	2.9	-0.9	3.3	5.7	3.3	0.6	0.6	2.0
March	2.6	-3.1	3.1	-1.2	2.4	2.2	3.7	0.7	-2.5	1.8
June	2.8	-4.0	1.4	-2.3	0.5	-5.0	1.1	4.0	-4.1	1.2
1999-2000										
September	2.4	-3.5	-0.2	-2.0	-0.9	-8.7	-1.6	6.4	-2.1	0.8
December	1.9	-2.6	-1.1	-1.5	-1.4	-8.9	-2.9	6.4	-0.1	0.5

(a) Reference year for chain volume measures is 1997-1998.

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											
Year to											
June 1997	43 749	9 128	13 150	9 623	34 630	9 718	31 930	38 732	6 508	197 168	164 912
June 1998	46 348	8 991	13 851	11 083	36 019	9 508	29 994	39 010	6 753	201 556	178 534
June 1999	47 110	9 494	14 462	11 206	35 681	11 097	31 020	41 615	7 067	208 750	190 358
1997–1998											
December	12 626	2 295	3 572	2 989	9 003	2 389	7 536	9 922	1 809	52 141	46 098
March	10 830	2 171	3 154	2 672	8 763	2 319	7 066	8 990	1 496	47 460	42 342
June	11 198	2 232	3 679	2 766	9 308	2 348	7 736	10 037	1 679	50 982	46 303
1998–1999											
September	12 161	2 552	3 720	2 752	9 015	2 707	7 978	10 472	1 666	53 021	47 263
December	12 930	2 427	3 731	2 794	9 171	2 900	7 990	11 034	2 063	55 040	49 968
March	11 209	2 257	3 335	2 775	8 450	2 657	7 168	9 818	1 726	49 394	45 225
June	10 811	2 259	3 676	2 885	9 044	2 833	7 883	10 291	1 612	51 295	47 903
1999–2000											
September	11 561	2 327	3 889	3 185	8 803	2 587	7 996	10 656	1 726	52 731	50 607
December	13 734	2 063	4 284	3 191	9 585	2 507	8 368	10 728	1 773	56 233	54 230
SEASONALLY ADJUSTED											
Year to											
June 1997	43 816	9 136	13 161	9 632	34 622	9 707	31 894	38 762	6 525	197 257	164 980
June 1998	46 351	8 999	13 858	11 122	36 034	9 527	29 967	39 021	6 757	201 635	178 356
June 1999	47 155	9 516	14 465	11 204	35 628	11 072	31 066	41 644	7 078	208 826	190 574
1997–1998											
December	11 531	2 283	3 428	2 745	8 786	2 251	7 380	9 630	1 657	49 691	44 024
March	11 633	2 266	3 342	2 874	9 203	2 480	7 470	9 656	1 672	50 596	44 694
June	11 791	2 248	3 743	2 841	9 079	2 382	7 696	9 933	1 722	51 435	46 322
1998–1999											
September	11 898	2 470	3 611	2 701	8 993	2 627	7 823	10 199	1 604	51 926	47 170
December	11 674	2 357	3 584	2 620	9 089	2 797	7 754	10 713	1 906	52 494	47 585
March	12 186	2 414	3 530	2 920	8 729	2 773	7 652	10 548	1 914	52 666	47 897
June	11 397	2 274	3 739	2 964	8 816	2 874	7 837	10 185	1 654	51 740	47 922
1999–2000											
September	11 182	2 202	3 776	3 190	8 934	2 574	7 775	10 376	1 676	51 685	50 348
December	12 572	2 054	4 117	2 960	9 351	2 382	8 104	10 417	1 634	53 591	51 654
TREND ESTIMATES											
Year to											
June 1997	43 777	9 087	13 167	9 665	34 799	9 687	31 712	38 720	6 471	197 084	165 120
June 1998	46 241	9 105	13 815	11 053	35 985	9 598	30 078	39 079	6 698	201 652	178 237
June 1999	47 084	9 456	14 493	11 288	35 682	10 960	31 013	41 695	7 149	208 820	191 020
1997–1998											
December	11 523	2 242	3 384	2 773	8 971	2 356	7 409	9 676	1 681	50 015	44 034
March	11 689	2 263	3 487	2 841	9 049	2 369	7 489	9 695	1 669	50 551	45 022
June	11 754	2 320	3 595	2 797	9 101	2 474	7 670	9 929	1 670	51 310	46 117
1998–1999											
September	11 853	2 379	3 625	2 723	9 066	2 612	7 760	10 294	1 744	52 056	47 081
December	11 912	2 410	3 598	2 716	8 941	2 752	7 761	10 518	1 821	52 429	47 508
March	11 728	2 378	3 580	2 850	8 831	2 836	7 725	10 503	1 831	52 262	47 786
June	11 590	2 288	3 691	2 999	8 844	2 760	7 768	10 380	1 753	52 073	48 646
1999–2000											
September	11 679	2 187	3 855	3 068	8 997	2 610	7 879	10 327	1 662	52 264	49 978
December	11 959	2 079	4 043	3 067	9 240	2 433	8 021	10 361	1 611	52 814	51 467

MANUFACTURERS' AND WHOLESALE TRADE SALES—Chain volume measures(a)

Period	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 manufacturing</i>	<i>Total manufacturing</i>	<i>Total wholesale</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
.....											
ORIGINAL											
Year to											
June 1997	44 848	9 165	13 126	9 765	34 288	9 852	32 798	39 073	6 507	199 354	165 177
June 1998	46 348	8 991	13 851	11 083	36 019	9 508	29 994	39 010	6 753	201 555	178 534
June 1999	46 752	9 523	14 268	10 846	36 567	11 033	31 547	41 511	6 965	209 012	192 331
1997-1998											
December	12 625	2 286	3 597	3 007	8 945	2 395	7 545	9 943	1 810	52 141	45 835
March	10 791	2 176	3 157	2 660	8 785	2 316	7 062	8 975	1 500	47 427	42 202
June	11 101	2 248	3 643	2 749	9 337	2 336	7 737	9 974	1 681	50 813	46 104
1998-1999											
September	11 970	2 567	3 671	2 669	9 130	2 686	7 931	10 401	1 642	52 667	46 701
December	12 812	2 428	3 685	2 708	9 299	2 880	8 100	11 011	2 034	54 957	50 195
March	11 106	2 261	3 294	2 682	8 773	2 643	7 372	9 821	1 706	49 657	46 174
June	10 864	2 267	3 618	2 787	9 365	2 824	8 145	10 278	1 583	51 730	49 261
1999-2000											
September	11 537	2 343	3 796	2 983	8 869	2 567	8 172	10 601	1 676	52 545	51 015
December	13 515	2 072	4 185	2 987	9 546	2 490	8 388	10 598	1 726	55 506	54 155
.....											
SEASONALLY ADJUSTED											
Year to											
June 1997	44 848	9 165	13 126	9 765	34 288	9 852	32 798	39 073	6 507	199 354	165 177
June 1998	46 348	8 991	13 851	11 083	36 019	9 508	29 994	39 010	6 753	201 556	178 534
June 1999	46 752	9 523	14 268	10 846	36 567	11 033	31 547	41 511	6 965	209 012	192 331
1997-1998											
December	11 533	2 273	3 451	2 751	8 723	2 252	7 399	9 649	1 657	49 683	43 843
March	11 597	2 270	3 345	2 852	9 222	2 471	7 471	9 639	1 677	50 546	44 432
June	11 691	2 261	3 705	2 816	9 107	2 367	7 696	9 868	1 724	51 237	45 987
1998-1999											
September	11 705	2 481	3 563	2 617	9 115	2 608	7 770	10 125	1 580	51 564	46 548
December	11 555	2 353	3 539	2 539	9 227	2 783	7 847	10 683	1 876	52 402	48 014
March	12 057	2 412	3 487	2 824	9 078	2 767	7 853	10 542	1 888	52 907	48 622
June	11 434	2 276	3 680	2 866	9 147	2 875	8 078	10 161	1 621	52 138	49 147
1999-2000											
September	11 141	2 211	3 685	2 991	9 018	2 564	7 928	10 313	1 624	51 474	50 848
December	12 351	2 057	4 021	2 774	9 331	2 373	8 104	10 281	1 587	52 880	51 807
.....											
TREND ESTIMATES											
Year to											
June 1997	44 824	9 116	13 136	9 799	34 463	9 833	32 583	39 022	6 452	199 170	165 371
June 1998	46 217	9 098	13 807	11 005	35 970	9 579	30 093	39 067	6 689	201 521	178 128
June 1999	46 676	9 464	14 292	10 920	36 549	10 917	31 491	41 556	7 038	208 903	192 684
1997-1998											
December	11 554	2 234	3 397	2 772	8 951	2 354	7 416	9 695	1 681	50 055	44 234
March	11 638	2 265	3 484	2 825	9 047	2 360	7 480	9 671	1 671	50 443	44 722
June	11 639	2 330	3 567	2 757	9 137	2 459	7 649	9 873	1 665	51 076	45 635
1998-1999											
September	11 697	2 387	3 580	2 656	9 171	2 595	7 762	10 235	1 726	51 810	46 818
December	11 769	2 411	3 552	2 636	9 151	2 739	7 848	10 482	1 795	52 384	47 753
March	11 656	2 377	3 531	2 754	9 124	2 829	7 911	10 488	1 800	52 470	48 574
June	11 553	2 289	3 630	2 874	9 103	2 755	7 970	10 350	1 717	52 239	49 539
1999-2000											
September	11 609	2 192	3 774	2 904	9 138	2 604	8 021	10 256	1 617	52 114	50 614
December	11 810	2 101	3 911	2 865	9 219	2 433	8 069	10 242	1 566	52 220	51 677

(a) Reference year for chain volume measures is 1997-1998.

PERCENTAGE CHANGES IN SALES—Chain volume measures(a)

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
	%	%	%	%	%	%	%	%	%	%	%
ORIGINAL											
Year to											
June 1997	0.8	2.9	10.0	-2.5	1.1	-5.0	-0.7	6.2	3.1	1.9	2.9
June 1998	3.3	-1.9	5.5	13.5	5.0	-3.5	-8.5	-0.2	3.8	1.1	8.1
June 1999	0.9	5.9	3.0	-2.1	1.5	16.0	5.2	6.4	3.1	3.7	7.7
1997-1998											
December	6.7	0.2	4.1	12.8	-0.1	-2.7	-1.4	-1.7	2.7	1.9	3.2
March	-14.5	-4.8	-12.2	-11.5	-1.8	-3.3	-6.4	-9.7	-17.1	-9.0	-7.9
June	2.9	3.3	15.4	3.3	6.3	0.9	9.6	11.1	12.0	7.1	9.2
1998-1999											
September	7.8	14.2	0.8	-2.9	-2.2	15.0	2.5	4.3	-2.3	3.6	1.3
December	7.0	-5.4	0.4	1.5	1.8	7.3	2.1	5.9	23.8	4.3	7.5
March	-13.3	-6.9	-10.6	-0.9	-5.7	-8.3	-9.0	-10.8	-16.1	-9.6	-8.0
June	-2.2	0.3	9.8	3.9	6.8	6.9	10.5	4.7	-7.2	4.2	6.7
1999-2000											
September	6.2	3.4	4.9	7.0	-5.3	-9.1	0.3	3.1	5.9	1.6	3.6
December	17.1	-11.6	10.3	0.1	7.6	-3.0	2.6	0.0	2.9	5.6	6.2
SEASONALLY ADJUSTED											
Year to											
June 1997	0.8	2.9	10.0	-2.5	1.1	-5.0	-0.7	6.2	3.1	1.9	2.9
June 1998	3.3	-1.9	5.5	13.5	5.0	-3.5	-8.5	-0.2	3.8	1.1	8.1
June 1999	0.9	5.9	3.0	-2.1	1.5	16.0	5.2	6.4	3.1	3.7	7.7
1997-1998											
December	0.1	3.9	3.0	3.3	-2.7	-6.9	-0.4	-2.1	-2.2	-0.8	-1.0
March	0.5	-0.1	-3.1	3.7	5.7	9.7	1.0	-0.1	1.2	1.7	1.3
June	0.8	-0.4	10.8	-1.2	-1.2	-4.2	3.0	2.4	2.8	1.4	3.5
1998-1999											
September	0.1	9.7	-3.8	-7.1	0.1	10.2	1.0	2.6	-8.3	0.6	1.2
December	-1.3	-5.1	-0.7	-3.0	1.2	6.7	1.0	5.5	18.7	1.6	3.1
March	4.3	2.5	-1.5	11.3	-1.6	-0.6	0.1	-1.3	0.6	1.0	1.3
June	-5.2	-5.6	5.5	1.5	0.8	3.9	2.9	-3.6	-14.1	-1.5	1.1
1999-2000											
September	-2.6	-2.9	0.1	4.4	-1.4	-10.8	-1.9	1.5	0.2	-1.3	3.5
December	10.9	-7.0	9.1	-7.3	3.5	-7.4	2.2	-0.3	-2.3	2.7	1.9
TREND ESTIMATES											
Year to											
June 1997	0.4	2.3	10.0	-1.8	2.0	-5.1	-1.7	6.0	1.1	1.7	2.7
June 1998	3.1	-0.2	5.1	12.3	4.4	-2.6	-7.6	0.1	3.7	1.2	7.7
June 1999	1.0	4.0	3.5	-0.8	1.6	14.0	4.6	6.4	5.2	3.7	8.2
1997-1998											
December	1.5	-1.5	1.2	4.6	1.3	-2.1	-1.7	-1.4	0.6	0.2	1.6
March	0.7	1.4	2.5	1.9	1.1	0.2	0.9	-0.3	-0.6	0.8	1.1
June	0.0	2.8	2.4	-2.4	1.0	4.2	2.3	2.1	-0.4	1.3	2.0
1998-1999											
September	0.5	2.4	0.4	-3.7	0.4	5.5	1.5	3.7	3.7	1.4	2.6
December	0.6	1.0	-0.8	-0.7	-0.2	5.5	1.1	2.4	4.0	1.1	2.0
March	-1.0	-1.4	-0.6	4.5	-0.3	3.3	0.8	0.1	0.3	0.2	1.7
June	-0.9	-3.7	2.8	4.4	-0.2	-2.6	0.7	-1.3	-4.6	-0.4	2.0
1999-2000											
September	0.5	-4.2	4.0	1.0	0.4	-5.5	0.6	-0.9	-5.8	-0.2	2.2
December	1.7	-4.2	3.6	-1.3	0.9	-6.5	0.6	-0.1	-3.2	0.2	2.1

(a) Reference year for chain volume measures is 1997-1998.

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

Year to/Quarter to	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
June 1997	0.52	0.74	0.55	0.33	0.64	0.53	0.53	0.60	0.37	0.56	0.51
June 1998	0.53	0.81	0.53	0.31	0.62	0.47	0.58	0.64	0.41	0.57	0.51
June 1999	0.59	0.76	0.58	0.29	0.68	0.46	0.62	0.66	0.41	0.60	0.53
1997-1998											
December	0.51	0.78	0.57	0.33	0.65	0.54	0.55	0.60	0.39	0.56	0.52
March	0.53	0.74	0.59	0.33	0.60	0.48	0.58	0.64	0.44	0.57	0.52
June	0.53	0.81	0.53	0.31	0.62	0.47	0.58	0.64	0.41	0.57	0.51
1998-1999											
September	0.53	0.78	0.57	0.35	0.65	0.48	0.58	0.65	0.49	0.58	0.51
December	0.56	0.78	0.57	0.36	0.64	0.46	0.60	0.63	0.44	0.58	0.51
March	0.53	0.76	0.62	0.33	0.68	0.46	0.61	0.62	0.41	0.58	0.52
June	0.59	0.76	0.58	0.29	0.68	0.46	0.62	0.66	0.41	0.60	0.53
1999-2000											
September	0.62	0.74	0.56	0.29	0.68	0.42	0.59	0.72	0.47	0.61	0.53
December	0.56	0.78	0.53	0.28	0.69	0.42	0.56	0.76	0.43	0.60	0.53

(a) Seasonally adjusted series.

EXPLANATORY NOTES

INTRODUCTION

1 This publication contains estimates of the book value of inventories, estimates of sales by wholesalers and 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 Inventories and Sales. The survey collects data from private businesses only.

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 7,500 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. If data are subsequently provided, the estimate is replaced with the reported data. 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 3.9% to the current quarter's estimate of reported inventories and 3.5% 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 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.

SAMPLE REVISION

7 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.

8 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.

9 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.

EXPLANATORY NOTES

STATISTICAL UNIT

10 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

11 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).

12 For more information, users are referred to *Australian & New Zealand Standard Industrial Classification, 1993, ANZSIC*, ABS (Cat. no. 1292.0) and Statistics New Zealand (Cat. no. 19.005.0092).

13 In order to classify inventories 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.

14 All of the inventories and sales of each statistical unit are classified to that unit's industry even though it may have activities in other industries.

DESCRIPTION OF TERMS

15 *Manufacturers' Sales*. All sales of goods manufactured by the business 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.

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

17 *Inventories*. All inventories of materials etc., work in progress and finished goods owned by the business, whether held at locations of the business or elsewhere.

CHAIN VOLUME MEASURES

18 The chain volume measures appearing in this publication are annually reweighted chain Laspeyres indexes referenced to current price values in the chosen reference year (currently 1997–1998). Chain volume measures were introduced in September quarter 1998, replacing constant price estimates. Chain volume measures can be thought of as current price values re-expressed in (i.e. based on) the prices of the previous year and linked together to form continuous time series. Each year's quarter-to-quarter growth rates in the chain volume series are based on the prices of the previous year, except for those of the quarters of the latest incomplete year which are based upon the second most recent financial year. With each release of the June quarter of this publication, a new base year will be introduced and the reference year will be advanced one year to coincide with it. This means that with the release of the June quarter 1999 issue of this publication, the chain volume measures for 1998–1999 have 1997–1998 (the previous financial year) as their base year rather than 1996–1997, and the reference year is 1997–1998. A change in reference year changes levels but not growth rates.

EXPLANATORY NOTES

CHAIN VOLUME MEASURES *continued* **19** Chain volume measures are not generally additive. In other words, component chain volume measures do not, in general, sum to a total in the way original current price components do. For inventories and sales this means that the original chain volume estimates for industry groups will not add to total inventories and sales for Australia. However, by using the latest base year as the reference year, non-additivity does not exist for the quarters following the reference year and is relatively small for the quarters in the reference year and those immediately preceding it. For further information on chain volume measures refer to the information paper *Introduction of Chain Volume Measures in the Australian National Accounts* (Cat. no. 5248.0).

RELIABILITY OF THE ESTIMATES **20** 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 20 and 21.

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 **21** The quarterly inventories 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.

22 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.

23 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.

24 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).

25 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 collected up to and including the March quarter 1999 survey. Data for periods after March 1999 are seasonally adjusted on the basis of extrapolation of historical patterns. 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.

EXPLANATORY NOTES

SEASONAL ADJUSTMENT

continued

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

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

TREND ESTIMATES

28 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* (Cat. no. 1348.0) or contact the Assistant Director, Time Series Analysis.

COMPARISON WITH OTHER ABS STATISTICS

29 The data collected in the Survey of Inventories and Sales are used to compile estimates of the increase in book value of non-farm inventories in the quarterly and annual national accounts. For further details see *Australian National Accounts: Concepts, Sources and Methods* (Cat. no. 5216.0).

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

RELATED PUBLICATIONS

31 Users may also wish to refer to the following publications:

- *Australian Business Expectations* (Cat. no. 5250.0)
- *Australian National Accounts: Concepts, Sources and Methods* (Cat. no. 5216.0)
- *Australian National Accounts: National Income, Expenditure and Product* (Cat. no. 5206.0)
- *Business Operations and Industry Performance, Australia* (Cat. no. 8140.0).
- *Company Profits, Australia* (Cat. no. 5651.0)
- *Introduction of Chain Volume Measures in the Australian National Accounts* (Cat. no. 5248.0)
- *Manufacturing Production, Australia* (Cat. no. 8301.0)
- *Private New Capital Expenditure and Expected Expenditure, Australia* (Cat. no. 5625.0)
- *State Estimates of Private New Capital Expenditure* (Cat. no. 5646.0)

32 Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia* (Cat. no. 1101.0). The ABS also issues on Tuesdays and Fridays a *Release Advice* (Cat. no. 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

33 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 inventories and manufacturers' sales.

SYMBOLS AND OTHER USAGES

ANZSIC *Australian and New Zealand Standard Industrial Classification* (Cat. no. 1292.0) 1993 edition

STANDARD ERRORS

INTRODUCTION

The estimates in this publication are based on a sample drawn from units in the surveyed population. Because the entire population is not surveyed, the published estimates are subject to sampling error. The most common way of quantifying such sampling error is to calculate the standard error for the published estimate or statistic.

LEVEL ESTIMATES

To illustrate, let us say that the published level estimate for total inventories is \$77,000m and the calculated standard error in this case is \$965m. The standard error is then used to interpret the level estimate of \$77,000m.

For instance, the standard error of \$965m indicates that:

- There are approximately two chances in three that the real value falls within the range \$76,035m to \$77,965m ($\$77,000\text{m} \pm \965m)
- There are approximately nineteen chances in twenty that the real value falls within the ranges \$75,070m and \$78,930m ($\$77,000\text{m} \pm \$1,930\text{m}$)

The real value in this case is the result we would obtain if we could enumerate the total population.

The following table shows the standard errors for national quarterly level estimates. These standard errors are based on a smoothed average of inventories and sales estimates.

	Inventories \$m	Sales \$m
Mining	88	n.a.
Manufacturing	438	865
Wholesale trade	667	1 536
Retail trade	530	n.a.
Other	75	n.a.
Total selected industries	965	n.a.

STANDARD ERRORS *continued*

MOVEMENT ESTIMATES

The following example illustrates how to use the standard error to interpret a movement estimate. Let us say that one quarter the published level estimate for total inventories is \$77,000m, and the next quarter the published level estimate is \$79,000m. In this example the calculated standard error for the movement estimate is \$754m. The standard error is then used to interpret the published movement estimate of +\$2,000m.

For instance, the standard error of \$754m indicates that:

- There are approximately two chances in three that the real movement over the two quarter period falls within the range \$1,246m to \$2,754m ($\$2,000m \pm \$754m$)
- There are approximately nineteen chances in twenty that the real movement falls within the range \$492m to \$3,508m ($\$2,000m \pm \$1,508m$)

The following table shows the standard errors for national quarterly movement estimates. These standard errors are based on a smoothed average of inventories and sales estimates.

	Inventories \$m	Sales \$m
Mining	98	n.a.
Manufacturing	329	682
Wholesale trade	490	1 309
Retail trade	449	n.a.
Other	92	n.a.
Total selected industries	754	n.a.

WHAT IF...? REVISIONS TO TREND ESTIMATES

EFFECT OF NEW SEASONALLY ADJUSTED ESTIMATES ON TREND ESTIMATES

TREND REVISIONS

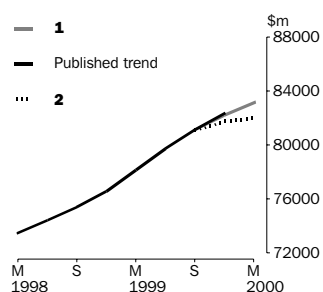
The examples in the tables below show two scenarios and the consequent revisions to previous trend estimates of inventories owned by private businesses and manufacturers' and wholesalers' sales.

1 The March quarter seasonally adjusted estimate of chain volume measures is higher than the December quarter estimate by the percentage shown.

2 The March quarter seasonally adjusted estimate of chain volume measures is lower than the December quarter estimate by the percentage shown.

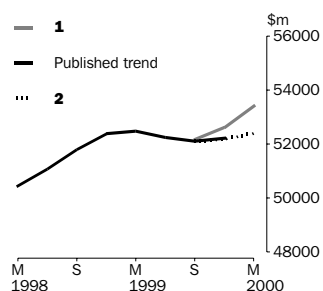
The percentages chosen are the long term average movements, without regard to sign, in the seasonally adjusted series.

INVENTORIES



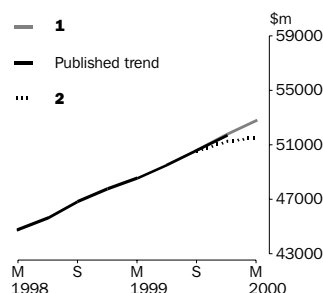
	TREND AS PUBLISHED		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	% change	1 rises by 1.0 on Dec 1999		2 falls by 1.0 on Dec 1999	
	\$m	% change	\$m	% change	\$m	% change
1999						
March	78 144	2.0	78 144	2.0	78 144	2.0
June	79 745	2.0	79 790	2.1	79 886	2.2
September	81 152	1.8	81 132	1.7	81 100	1.5
December	82 355	1.5	82 220	1.3	81 756	0.8
2000						
March	—	—	83 143	1.1	82 018	0.3

MANUFACTURERS' SALES



	TREND AS PUBLISHED		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	% change	1 rises by 1.4 on Dec 1999		2 falls by 1.4 on Dec 1999	
	\$m	% change	\$m	% change	\$m	% change
1999						
March	52 470	0.2	52 470	0.2	52 470	0.2
June	52 239	-0.4	52 174	-0.6	52 261	-0.4
September	52 114	-0.2	52 143	-0.1	52 112	-0.3
December	52 220	0.2	52 627	0.9	52 209	0.2
2000						
March	—	—	53 402	1.5	52 410	0.4

WHOLESALE TRADE SALES



	TREND AS PUBLISHED		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	% change	1 rises by 1.7 on Dec 1999		2 falls by 1.7 on Dec 1999	
	\$m	% change	\$m	% change	\$m	% change
1999						
March	48 574	1.7	48 574	1.7	48 574	1.7
June	49 539	2.0	49 527	2.0	49 630	2.2
September	50 614	2.2	50 615	2.2	50 579	1.9
December	51 677	2.1	51 755	2.3	51 257	1.3
2000						
March	—	—	52 780	2.0	51 600	0.7

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- CPI INFOLINE* For current and historical Consumer Price Index data, call 1902 981 074 (call cost 75c per minute).
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	Sydney	02 9268 4611	02 9268 4668
	Melbourne	03 9615 7755	03 9615 7798
	Brisbane	07 3222 6351	07 3222 6283
	Perth	08 9360 5140	08 9360 5955
	Adelaide	08 8237 7400	08 8237 7566
	Hobart	03 6222 5800	03 6222 5995
	Darwin	08 8943 2111	08 8981 1218

POST Client Services, ABS, PO Box 10, Belconnen ACT 2616

EMAIL client.services@abs.gov.au



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