

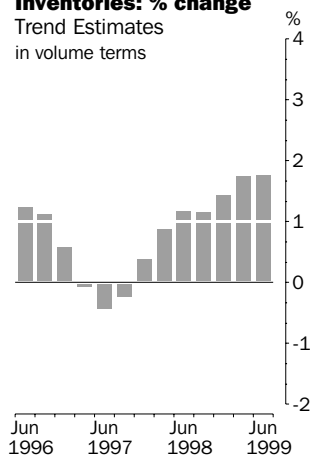


INVENTORIES AND SALES, SELECTED INDUSTRIES

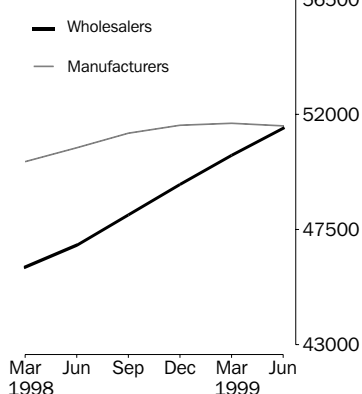
AUSTRALIA

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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 Stephen Butcher on 02 9268 4241, or Client Services in any ABS office as shown on the back cover of this publication.

JUNE QTR KEY FIGURES

TREND (a)

	Jun 1998	Mar 1999	Jun 1999	Mar 1999 to Jun 1999	Jun 1998 to Jun 1999
	\$m	\$m	\$m	% change	% change
Inventories	74 003	77 256	78 620	1.8	6.2
Sales by					
Manufacturers	50 691	51 641	51 555	-0.2	1.7
Wholesale trade	46 881	50 416	51 468	2.1	9.8

SEASONALLY ADJUSTED (a)

	Jun 1998	Mar 1999	Jun 1999	Mar 1999 to Jun 1999	Jun 1998 to Jun 1999
	\$m	\$m	\$m	% change	% change
Inventories	74 149	77 193	78 824	2.1	6.3
Sales by					
Manufacturers	50 847	51 949	51 175	-1.5	0.6
Wholesale trade	47 305	50 631	51 256	1.2	8.4

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

JUNE QTR KEY POINTS

INVENTORIES

- The trend estimate (in volume terms) of inventories held by private businesses increased by \$1,364m (1.8%) since March 1999, the seventh successive quarter of growth. The June 1999 estimate of \$78,620m is 6.2% (\$4,617m) higher than June 1998.
- Inventories held by Manufacturers increased by \$337m (1.1%) from March 1999 to \$30,590m. This is 6.3% (\$1,801m) higher than June 1998.
- Wholesale trade inventories in June 1999 were \$25,000m which is an increase of 2.3% (\$551m) on March 1999 and 7.0% (\$1,627m) on June 1998.
- Retail inventories increased 2.3% (\$402m) from March 1999 to \$17,879m. This is 8.1% (\$1,335m) more than June 1998.

SALES

- Growth in the trend of Manufacturers' sales has been relatively flat for the last three quarters (between -0.2% and 0.6% per quarter). The increase from June 1998 has been \$864m (1.7%).
- Wholesale sales increased by 2.1% (\$1,052m) from March 1999. This is the fourth quarter of growth rates over 2.0%. There has been a 9.8% (\$4,587m) increase on June 1998.

NOTES

FORTHCOMING ISSUES

ISSUE (Quarter)

RELEASE DATE

September 1999

29 November 1999

December 1999

28 February 2000



CHANGES IN THIS ISSUE

For some time now, the ABS has been using Australian Taxation Office (ATO) information on Group Employer (GE) registrations to add new businesses to the ABS Business Register. After detailed investigation, it has now been decided to use GE information to delete from the Business Register those businesses which have ceased trading or are no longer employing staff.

The process of using GE information to delete businesses from the ABS Business Register has been introduced for the June quarter 1999. The result is that a large number of businesses have been deleted from the population for the Survey of Inventories and Sales in this quarter. While the number of businesses deleted is relatively large, the impact on the estimates is minor.

The impact on June quarter results has been to reduce estimates of inventories by about 1.4% and to reduce estimates of sales by about 1.3%. To lessen the impact on previous quarter-to-quarter movements, estimates for the previous seven quarters have been adjusted in such a way as to phase in the impact over those quarters.

The adjustments to inventories and sales estimates will be reflected, where relevant, in the June quarter 1999 National Accounts but the impact will be negligible.

Quarterly chain volume data in this issue incorporate a new base year, 1997-98, which has resulted in revisions to growth rates, small in most cases, for the latest year. In addition, the reference year has been advanced to 1997-98, which has resulted in revisions to levels, but not growth rates, for all periods. For further information refer to paragraph 18 of the Explanatory Notes.



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

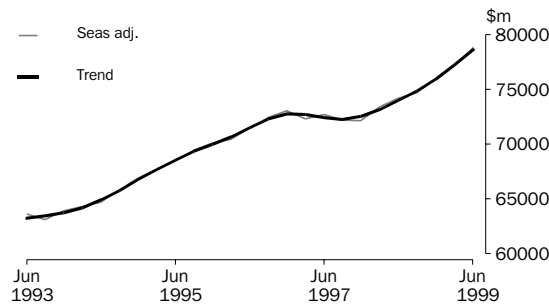
Readers should exercise care in the interpretation of the trend data as the data for the last three quarters in particular are likely to be revised with the addition of subsequent quarters' data. For further information and examples showing the sensitivity of trend data, refer to Trend Estimates in paragraph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

W. McLennan
Australian Statistician

INVENTORIES: Trend estimates—Chain volume measures(a)

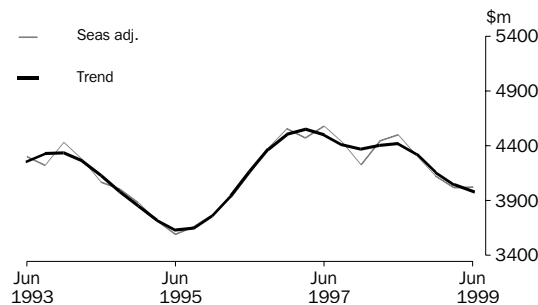
ALL SELECTED INDUSTRIES

Inventories held by private businesses continued its long term upward trend, increasing between 1.2% and 1.8% per quarter over the last five quarters.



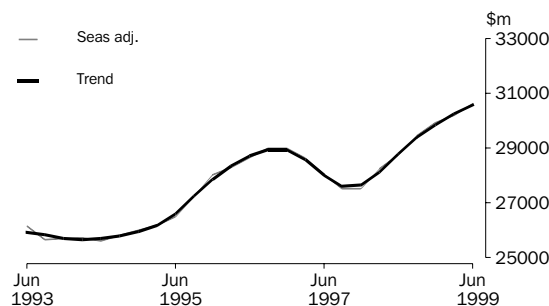
MINING

Apart from two quarters of growth in March and June quarters 1998 (0.7% and 0.5%), inventories held by the Mining industry have been in decline since March 1997. Inventories have fallen by \$443m (10.0%) since June 1998 and are \$574m (12.6%) lower than the peak recorded in March 1997.



MANUFACTURING

Growth rates for inventories held by Manufacturers have been between 1.1% and 2.4% per quarter for the last six quarters. The current estimate of \$30,590m is \$1,801m (6.3%) higher than for June 1998. Industries contributing most to this increase were Petroleum, coal and chemical \$520m (9.2%), Metal product \$491m (11.3%), Food, beverage and tobacco \$368m (6.0%) and Machinery and Equipment \$283m (4.5%).

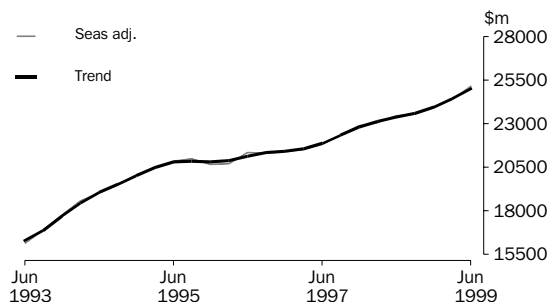


(a) Reference year for chain volume measures is 1997–1998.

INVENTORIES: Trend estimates—Chain volume measures(a)

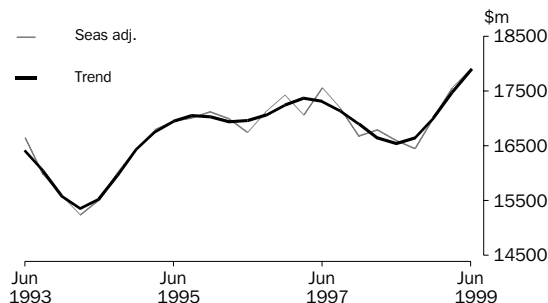
WHOLESALE TRADE

This is the fourteenth successive quarter of growth in inventories held by the Wholesale trade industry. The current estimate of \$25,000m is \$1,627m (7.0%) higher than for June 1998 and \$3,125m (14.3%) higher than June 1997.



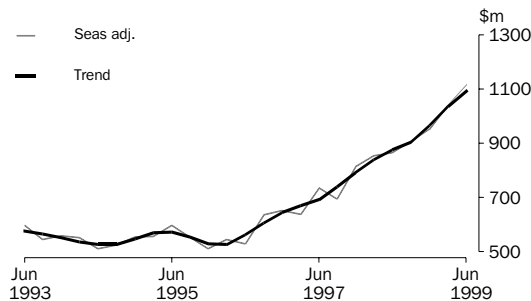
RETAIL TRADE

Inventories held by Retailers have increased in each of the last four quarters following five quarters of decline. The current estimate of \$17,879m is \$1,335m (8.1%) higher than in June 1998 and \$509m (2.9%) higher than the last peak recorded in March 1997.



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

Inventories held by Other selected industries have increased over the last three years with growth rates between 3.4% and 7.4% per quarter. The current estimate of \$1,092m is \$217m (24.8%) higher than for June 1998.

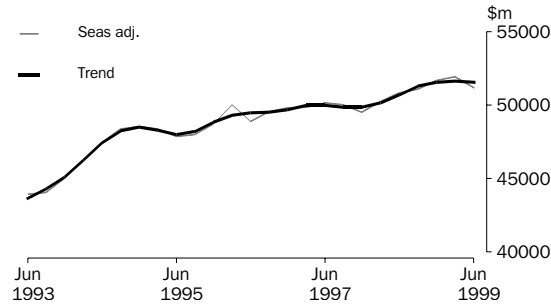


(a) Reference year for chain volume measures is 1997–1998.

SALES: Trend estimates—Chain volume measures(a)

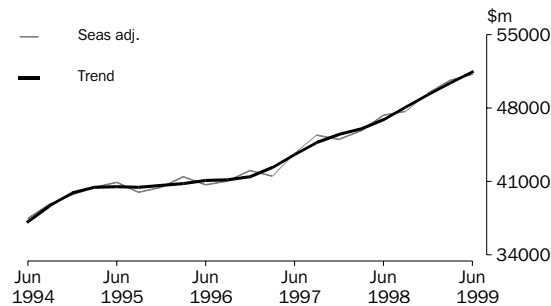
MANUFACTURERS' SALES

Level estimates for Manufacturers' sales have fallen by \$86m (0.2%) to \$51,555m in the current quarter after increasing for the previous six quarters. Since June quarter 1998, the trend estimate has increased by \$864m (1.7%). The industries contributing most to this increase are Machinery and equipment \$441m (4.5%), Non-metallic mineral product \$359m(14.8%) and Metal product \$221m (2.9%). Over the same period, Wood and paper products fell by \$267m (7.6%).



WHOLESALE TRADE SALES

Growth rates for Wholesale trade sales have been between 1.2% and 2.9% per quarter for the last ten quarters. The current estimate of \$51,468m is \$1,052m (2.1%) higher than March 1999 and \$4,587m (9.8%) higher than June 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	4 480	28 948	23 457	16 378	825	74 089
June 1999	3 931	30 191	24 846	17 897	1 105	77 969
1996–1997						
June	4 499	27 893	21 173	17 076	701	71 342
1997–1998						
September	4 440	27 379	22 321	17 187	675	72 002
December	4 276	27 309	23 117	16 869	868	72 438
March	4 458	28 573	23 161	16 913	847	73 952
June	4 480	28 948	23 457	16 378	825	74 089
1998–1999						
September	4 300	29 699	24 495	16 723	895	76 113
December	4 064	29 590	24 574	17 459	1 052	76 739
March	3 903	30 210	24 686	18 011	1 060	77 869
June	3 931	30 191	24 846	17 897	1 105	77 969
SEASONALLY ADJUSTED						
June 1997	4 530	27 787	21 478	17 461	731	71 987
June 1998	4 501	28 825	23 795	16 752	862	74 735
June 1999	3 944	30 060	25 203	18 309	1 156	78 672
1996–1997						
June	4 530	27 787	21 478	17 461	731	71 987
1997–1998						
September	4 415	27 400	22 129	17 103	690	71 737
December	4 274	27 680	22 964	16 665	807	72 390
March	4 461	28 289	23 194	16 819	858	73 621
June	4 501	28 825	23 795	16 752	862	74 735
1998–1999						
September	4 280	29 732	24 274	16 651	915	75 852
December	4 062	29 985	24 411	17 251	977	76 686
March	3 907	29 907	24 730	17 898	1 073	77 515
June	3 944	30 060	25 203	18 309	1 156	78 672
TREND ESTIMATES						
June 1997	4 469	27 753	21 580	17 217	686	71 705
June 1998	4 425	28 955	23 789	16 678	877	74 724
June 1999	3 875	30 049	25 115	18 339	1 144	78 522
1996–1997						
June	4 469	27 753	21 580	17 217	686	71 705
1997–1998						
September	4 401	27 546	22 147	17 066	735	71 895
December	4 389	27 700	22 773	16 875	791	72 528
March	4 424	28 230	23 333	16 698	838	73 523
June	4 425	28 955	23 789	16 678	877	74 724
1998–1999						
September	4 290	29 567	24 159	16 842	915	75 773
December	4 095	29 884	24 479	17 256	986	76 700
March	3 959	30 013	24 784	17 798	1 068	77 622
June	3 875	30 049	25 115	18 339	1 144	78 522

(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	4 547	28 136	21 500	17 171	704	72 052
June 1998	4 482	28 871	23 113	16 220	827	73 512
June 1999	4 010	30 762	24 789	17 507	1 066	78 134
1996–1997						
June	4 547	28 136	21 500	17 171	704	72 052
1997–1998						
September	4 459	27 491	22 535	17 278	679	72 444
December	4 231	27 145	23 043	16 885	874	72 183
March	4 440	28 528	23 036	16 880	843	73 727
June	4 482	28 871	23 113	16 220	827	73 512
1998–1999						
September	4 330	29 420	23 778	16 521	886	74 934
December	4 125	29 513	24 055	17 221	1 024	75 938
March	4 012	30 496	24 344	17 672	1 025	77 550
June	4 010	30 762	24 789	17 507	1 066	78 134
SEASONALLY ADJUSTED						
June 1997	4 577	28 025	21 810	17 557	735	72 699
June 1998	4 502	28 747	23 445	16 591	864	74 149
June 1999	4 024	30 630	25 146	17 909	1 115	78 824
1996–1997						
June	4 577	28 025	21 810	17 557	735	72 699
1997–1998						
September	4 434	27 511	22 341	17 193	694	72 172
December	4 229	27 512	22 891	16 681	813	72 128
March	4 443	28 242	23 069	16 785	853	73 392
June	4 502	28 747	23 445	16 591	864	74 149
1998–1999						
September	4 309	29 452	23 564	16 449	905	74 679
December	4 124	29 910	23 895	17 016	951	75 895
March	4 017	30 189	24 387	17 561	1 039	77 193
June	4 024	30 630	25 146	17 909	1 115	78 824
TREND ESTIMATES						
June 1997	4 502	28 004	21 875	17 318	693	72 390
June 1998	4 422	28 789	23 373	16 544	875	74 003
June 1999	3 979	30 590	25 000	17 879	1 092	78 620
1996–1997						
June	4 502	28 004	21 875	17 318	693	72 390
1997–1998						
September	4 407	27 610	22 329	17 140	739	72 225
December	4 369	27 650	22 792	16 899	793	72 504
March	4 400	28 119	23 139	16 643	839	73 141
June	4 422	28 789	23 373	16 544	875	74 003
1998–1999						
September	4 323	29 396	23 592	16 643	904	74 859
December	4 159	29 856	23 959	17 001	964	75 934
March	4 046	30 253	24 449	17 477	1 035	77 256
June	3 979	30 590	25 000	17 879	1 092	78 620

(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	-1.4	2.6	7.5	-5.5	17.4	2.0
June 1999	-10.5	6.5	7.3	7.9	29.0	6.3
1996-1997						
June	1.6	-2.7	0.0	0.2	11.9	-0.8
1997-1998						
September	-1.9	-2.3	4.8	0.6	-3.6	0.5
December	-5.1	-1.3	2.3	-2.3	28.7	-0.4
March	4.9	5.1	0.0	0.0	-3.6	2.1
June	0.9	1.2	0.3	-3.9	-1.9	-0.3
1998-1999						
September	-3.4	1.9	2.9	1.9	7.1	1.9
December	-4.7	0.3	1.2	4.2	15.6	1.3
March	-2.7	3.3	1.2	2.6	0.1	2.1
June	-0.1	0.9	1.8	-0.9	4.0	0.8
SEASONALLY ADJUSTED						
June 1997	10.2	-2.2	2.2	4.9	39.0	1.8
June 1998	-1.6	2.6	7.5	-5.5	17.5	2.0
June 1999	-10.6	6.6	7.3	7.9	29.1	6.3
1996-1997						
June	2.4	-2.1	1.4	2.9	15.4	0.5
1997-1998						
September	-3.1	-1.8	2.4	-2.1	-5.7	-0.7
December	-4.6	0.0	2.5	-3.0	17.2	-0.1
March	5.1	2.7	0.8	0.6	5.0	1.8
June	1.3	1.8	1.6	-1.2	1.3	1.0
1998-1999						
September	-4.3	2.5	0.5	-0.9	4.7	0.7
December	-4.3	1.6	1.4	3.4	5.1	1.6
March	-2.6	0.9	2.1	3.2	9.2	1.7
June	0.2	1.5	3.1	2.0	7.4	2.1
TREND ESTIMATES						
June 1997	8.0	-2.5	3.6	2.1	23.1	1.2
June 1998	-1.8	2.8	6.8	-4.5	26.2	2.2
June 1999	-10.0	6.3	7.0	8.1	24.9	6.2
1996-1997						
June	-1.1	-2.0	1.6	-0.3	3.5	-0.4
1997-1998						
September	-2.1	-1.4	2.1	-1.0	6.7	-0.2
December	-0.9	0.1	2.1	-1.4	7.3	0.4
March	0.7	1.7	1.5	-1.5	5.8	0.9
June	0.5	2.4	1.0	-0.6	4.2	1.2
1998-1999						
September	-2.2	2.1	0.9	0.6	3.4	1.2
December	-3.8	1.6	1.6	2.1	6.6	1.4
March	-2.7	1.3	2.0	2.8	7.4	1.7
June	-1.6	1.1	2.3	2.3	5.5	1.8

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

(b) See paragraph 2 of the Explanatory Notes.

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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	6 447	1 743	1 932	882	5 486	1 138	4 316	6 291	714	28 948
June 1999	6 690	1 612	2 014	882	5 841	1 315	4 564	6 582	692	30 191
1996–1997										
June	5 911	1 744	1 866	811	5 594	1 330	4 128	5 894	614	27 893
1997–1998										
September	5 740	1 762	1 918	835	5 497	1 283	4 081	5 617	646	27 379
December	5 671	1 742	1 886	906	5 535	1 192	4 057	5 679	642	27 309
March	6 130	1 636	1 913	934	5 537	1 188	4 266	6 236	732	28 573
June	6 447	1 743	1 932	882	5 486	1 138	4 316	6 291	714	28 948
1998–1999										
September	6 189	1 872	1 941	954	5 754	1 257	4 449	6 503	782	29 699
December	6 195	1 745	1 884	952	5 566	1 276	4 522	6 611	840	29 590
March	6 342	1 726	2 058	948	5 923	1 295	4 507	6 617	794	30 210
June	6 690	1 612	2 014	882	5 841	1 315	4 564	6 582	692	30 191
SEASONALLY ADJUSTED										
June 1997	5 706	1 750	1 845	818	5 622	1 319	4 188	5 926	613	27 787
June 1998	6 215	1 751	1 910	890	5 514	1 129	4 385	6 321	710	28 825
June 1999	6 445	1 620	1 992	891	5 871	1 305	4 639	6 611	686	30 060
1996–1997										
June	5 706	1 750	1 845	818	5 622	1 319	4 188	5 926	613	27 787
1997–1998										
September	5 793	1 744	1 929	828	5 464	1 277	4 059	5 655	651	27 400
December	5 849	1 754	1 916	904	5 629	1 213	4 038	5 735	642	27 680
March	6 112	1 635	1 895	937	5 448	1 183	4 245	6 104	730	28 289
June	6 215	1 751	1 910	890	5 514	1 129	4 385	6 321	710	28 825
1998–1999										
September	6 249	1 851	1 949	946	5 727	1 251	4 421	6 549	789	29 732
December	6 392	1 756	1 914	950	5 656	1 299	4 502	6 679	837	29 985
March	6 323	1 728	2 041	949	5 825	1 289	4 484	6 474	794	29 907
June	6 445	1 620	1 992	891	5 871	1 305	4 639	6 611	686	30 060
TREND ESTIMATES										
June 1997	5 686	1 758	1 840	818	5 648	1 313	4 209	5 884	597	27 753
June 1998	6 202	1 748	1 909	925	5 557	1 178	4 354	6 341	741	28 955
June 1999	6 422	1 637	2 015	911	5 861	1 307	4 600	6 568	728	30 049
1996–1997										
June	5 686	1 758	1 840	818	5 648	1 313	4 209	5 884	597	27 753
1997–1998										
September	5 783	1 744	1 900	849	5 549	1 275	4 070	5 743	633	27 546
December	5 914	1 711	1 918	888	5 504	1 215	4 087	5 793	670	27 700
March	6 062	1 709	1 913	914	5 515	1 171	4 213	6 036	697	28 230
June	6 202	1 748	1 909	925	5 557	1 178	4 354	6 341	741	28 955
1998–1999										
September	6 289	1 793	1 929	936	5 630	1 227	4 437	6 534	792	29 567
December	6 333	1 778	1 960	944	5 725	1 276	4 479	6 584	805	29 884
March	6 378	1 713	1 990	935	5 797	1 301	4 534	6 585	780	30 013
June	6 422	1 637	2 015	911	5 861	1 307	4 600	6 568	728	30 049

(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	5 995	1 751	1 881	819	5 602	1 329	4 173	5 961	617	28 136
June 1998	6 399	1 749	1 903	857	5 599	1 131	4 305	6 218	711	28 871
June 1999	6 822	1 629	1 991	835	6 131	1 328	4 790	6 560	675	30 762
1996-1997										
June	5 995	1 751	1 881	819	5 602	1 329	4 173	5 961	617	28 136
1997-1998										
September	5 779	1 764	1 932	848	5 477	1 289	4 083	5 661	646	27 491
December	5 619	1 733	1 894	915	5 422	1 195	4 032	5 680	642	27 145
March	6 116	1 630	1 906	928	5 578	1 189	4 255	6 190	731	28 528
June	6 399	1 749	1 903	857	5 599	1 131	4 305	6 218	711	28 871
1998-1999										
September	6 122	1 874	1 883	899	5 830	1 243	4 411	6 404	754	29 420
December	6 190	1 741	1 817	884	5 736	1 264	4 541	6 531	808	29 513
March	6 363	1 727	2 018	887	6 200	1 295	4 660	6 577	769	30 496
June	6 822	1 629	1 991	835	6 131	1 328	4 790	6 560	675	30 762
SEASONALLY ADJUSTED										
June 1997	5 786	1 757	1 859	826	5 630	1 318	4 234	5 993	614	28 025
June 1998	6 168	1 757	1 882	865	5 627	1 122	4 373	6 248	704	28 747
June 1999	6 571	1 637	1 970	843	6 163	1 319	4 869	6 590	668	30 630
1996-1997										
June	5 786	1 757	1 859	826	5 630	1 318	4 234	5 993	614	28 025
1997-1998										
September	5 833	1 747	1 943	840	5 444	1 282	4 062	5 699	653	27 511
December	5 796	1 746	1 924	912	5 514	1 217	4 013	5 736	642	27 512
March	6 098	1 629	1 888	931	5 489	1 183	4 234	6 058	730	28 242
June	6 168	1 757	1 882	865	5 627	1 122	4 373	6 248	704	28 747
1998-1999										
September	6 181	1 854	1 891	891	5 803	1 237	4 384	6 449	763	29 452
December	6 388	1 752	1 846	882	5 829	1 286	4 521	6 599	807	29 910
March	6 344	1 729	2 001	888	6 098	1 288	4 637	6 434	770	30 189
June	6 571	1 637	1 970	843	6 163	1 319	4 869	6 590	668	30 630
TREND ESTIMATES										
June 1997	5 771	1 770	1 854	828	5 617	1 317	4 273	5 966	600	28 004
June 1998	6 152	1 749	1 876	896	5 626	1 170	4 326	6 263	731	28 789
June 1999	6 520	1 657	1 983	860	6 146	1 312	4 817	6 546	715	30 590
1996-1997										
June	5 771	1 770	1 854	828	5 617	1 317	4 273	5 966	600	28 004
1997-1998										
September	5 807	1 743	1 913	861	5 512	1 278	4 072	5 781	634	27 610
December	5 897	1 705	1 926	894	5 468	1 218	4 070	5 791	672	27 650
March	6 020	1 706	1 905	907	5 524	1 170	4 192	5 993	696	28 119
June	6 152	1 749	1 876	896	5 626	1 170	4 326	6 263	731	28 789
1998-1999										
September	6 242	1 794	1 875	884	5 754	1 214	4 420	6 444	770	29 396
December	6 318	1 778	1 904	882	5 904	1 267	4 522	6 510	778	29 856
March	6 419	1 716	1 946	875	6 042	1 302	4 665	6 536	755	30 253
June	6 520	1 657	1 983	860	6 146	1 312	4 817	6 546	715	30 590

(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	6.7	-0.1	1.2	4.6	-0.1	-14.9	3.2	4.3	15.1	2.6
June 1999	6.6	-6.8	4.6	-2.5	9.5	17.5	11.3	5.5	-5.0	6.5
1996-1997										
June	3.9	-1.1	7.1	-1.1	-4.2	-1.7	-9.6	-7.2	13.2	-2.7
1997-1998										
September	-3.6	0.7	2.7	3.6	-2.2	-3.0	-2.1	-5.0	4.7	-2.3
December	-2.8	-1.8	-2.0	7.9	-1.0	-7.2	-1.3	0.3	-0.7	-1.3
March	8.8	-5.9	0.6	1.5	2.9	-0.6	5.5	9.0	13.9	5.1
June	4.6	7.3	-0.1	-7.7	0.4	-4.9	1.2	0.5	-2.8	1.2
1998-1999										
September	-4.3	7.2	-1.1	4.9	4.1	9.9	2.5	3.0	6.1	1.9
December	1.1	-7.1	-3.5	-1.7	-1.6	1.7	2.9	2.0	7.2	0.3
March	2.8	-0.8	11.0	0.4	8.1	2.5	2.6	0.7	-4.8	3.3
June	7.2	-5.7	-1.3	-5.9	-1.1	2.6	2.8	-0.2	-12.2	0.9
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	6.6	0.0	1.3	4.7	0.0	-14.8	3.3	4.3	14.7	2.6
June 1999	6.5	-6.8	4.6	-2.5	9.5	17.5	11.3	5.5	-5.2	6.6
1996-1997										
June	0.7	-0.6	6.9	-0.7	-2.3	-2.2	-7.8	-4.6	13.5	-2.1
1997-1998										
September	0.8	-0.6	4.5	1.7	-3.3	-2.7	-4.1	-4.9	6.3	-1.8
December	-0.6	-0.1	-0.9	8.6	1.3	-5.1	-1.2	0.7	-1.7	0.0
March	5.2	-6.7	-1.9	2.0	-0.5	-2.8	5.5	5.6	13.7	2.7
June	1.1	7.8	-0.3	-7.1	2.5	-5.1	3.3	3.1	-3.5	1.8
1998-1999										
September	0.2	5.5	0.5	3.1	3.1	10.2	0.2	3.2	8.4	2.5
December	3.3	-5.5	-2.4	-1.0	0.5	4.0	3.1	2.3	5.7	1.6
March	-0.7	-1.3	8.4	0.6	4.6	0.2	2.6	-2.5	-4.6	0.9
June	3.6	-5.3	-1.6	-5.0	1.1	2.4	5.0	2.4	-13.3	1.5
TREND ESTIMATES										
June 1997	1.8	4.5	9.5	-5.9	-2.3	-0.3	-10.3	-4.9	-8.7	-2.5
June 1998	6.6	-1.2	1.2	8.2	0.2	-11.2	1.2	5.0	21.7	2.8
June 1999	6.0	-5.3	5.7	-3.9	9.2	12.2	11.4	4.5	-2.1	6.3
1996-1997										
June	0.5	0.7	4.6	0.5	-1.7	-2.1	-7.0	-4.3	2.4	-2.0
1997-1998										
September	0.6	-1.6	3.2	4.0	-1.9	-3.0	-4.7	-3.1	5.7	-1.4
December	1.5	-2.1	0.7	3.9	-0.8	-4.7	0.0	0.2	5.9	0.1
March	2.1	0.0	-1.1	1.4	1.0	-3.9	3.0	3.5	3.6	1.7
June	2.2	2.5	-1.5	-1.3	1.8	0.0	3.2	4.5	4.9	2.4
1998-1999										
September	1.5	2.6	-0.1	-1.3	2.3	3.8	2.2	2.9	5.4	2.1
December	1.2	-0.9	1.6	-0.3	2.6	4.4	2.3	1.0	1.0	1.6
March	1.6	-3.5	2.2	-0.8	2.3	2.7	3.2	0.4	-3.0	1.3
June	1.6	-3.5	1.9	-1.6	1.7	0.8	3.3	0.1	-5.2	1.1

(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 manu-facturing	Total manu-facturing	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	167 061
June 1998	46 348	8 851	13 711	11 010	35 988	9 425	29 658	38 832	6 753	200 575	183 580
June 1999	47 014	9 135	13 481	10 998	35 735	10 858	30 148	41 181	7 049	205 599	196 850
1996-1997											
June	10 423	2 350	3 280	2 432	8 999	2 464	7 872	9 979	1 598	49 398	43 055
1997-1998											
September	11 694	2 279	3 433	2 649	8 945	2 445	7 624	10 043	1 768	50 881	44 883
December	12 626	2 267	3 544	2 974	8 996	2 372	7 468	9 886	1 809	51 942	47 314
March	10 830	2 129	3 112	2 650	8 753	2 294	6 964	8 937	1 496	47 164	43 694
June	11 198	2 176	3 623	2 737	9 294	2 315	7 601	9 966	1 679	50 588	47 690
1998-1999											
September	12 156	2 482	3 650	2 716	8 998	2 665	7 810	10 383	1 666	52 524	48 484
December	12 924	2 343	3 457	2 750	9 150	2 850	7 789	10 927	2 063	54 253	51 327
March	11 202	2 159	3 053	2 724	8 426	2 599	6 933	9 694	1 697	48 488	46 967
June	10 732	2 152	3 320	2 808	9 160	2 745	7 615	10 178	1 623	50 334	50 072
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	167 161
June 1998	46 351	8 857	13 716	11 048	36 003	9 443	29 628	38 841	6 757	200 642	183 412
June 1999	47 055	9 154	13 474	10 995	35 678	10 832	30 189	41 208	7 057	205 646	197 102
1996-1997											
June	10 948	2 367	3 338	2 499	8 789	2 500	7 841	9 874	1 637	49 793	43 076
1997-1998											
September	11 396	2 188	3 331	2 655	8 966	2 407	7 391	9 785	1 705	49 824	44 394
December	11 531	2 255	3 401	2 731	8 779	2 235	7 314	9 595	1 657	49 498	45 186
March	11 633	2 222	3 297	2 850	9 193	2 453	7 362	9 599	1 672	50 281	46 122
June	11 791	2 192	3 686	2 811	9 065	2 348	7 562	9 862	1 722	51 039	47 710
1998-1999											
September	11 894	2 403	3 544	2 666	8 976	2 587	7 658	10 112	1 604	51 444	48 389
December	11 669	2 276	3 321	2 578	9 068	2 748	7 558	10 609	1 906	51 733	48 879
March	12 179	2 309	3 233	2 866	8 704	2 713	7 402	10 415	1 881	51 702	49 741
June	11 314	2 166	3 377	2 885	8 930	2 785	7 571	10 073	1 666	50 767	50 092
TREND ESTIMATES											
Year to											
June 1997	43 777	9 085	13 166	9 664	34 800	9 687	31 709	38 719	6 471	197 079	167 292
June 1998	46 240	8 966	13 687	10 980	35 954	9 516	29 744	38 902	6 699	200 687	183 238
June 1999	47 123	9 096	13 474	11 053	35 687	10 788	30 134	41 230	7 148	205 718	197 135
1996-1997											
June	11 047	2 319	3 360	2 508	8 814	2 436	7 711	9 818	1 647	49 661	42 994
1997-1998											
September	11 275	2 267	3 337	2 636	8 862	2 391	7 479	9 762	1 677	49 687	44 164
December	11 523	2 214	3 356	2 758	8 966	2 340	7 343	9 641	1 681	49 823	45 273
March	11 689	2 220	3 455	2 818	9 039	2 343	7 386	9 641	1 669	50 259	46 362
June	11 753	2 265	3 539	2 768	9 087	2 441	7 536	9 858	1 672	50 918	47 439
1998-1999											
September	11 854	2 310	3 505	2 689	9 040	2 573	7 594	10 205	1 741	51 511	48 368
December	11 872	2 316	3 388	2 691	8 936	2 678	7 554	10 393	1 804	51 633	49 025
March	11 785	2 271	3 298	2 776	8 875	2 753	7 504	10 382	1 817	51 462	49 597
June	11 611	2 200	3 283	2 896	8 835	2 785	7 483	10 250	1 785	51 112	50 145

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

MANUFACTURING.....											WHOLESALE TRADE
Period	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	44 848	9 165	13 126	9 765	34 288	9 852	32 798	39 072	6 507	199 352	168 265
June 1998	46 348	8 851	13 711	11 010	35 988	9 425	29 658	38 832	6 753	200 574	183 580
June 1999	46 656	9 163	13 301	10 645	36 621	10 796	30 658	41 080	6 948	205 866	198 951
1996-1997											
June	10 613	2 347	3 281	2 460	8 962	2 477	7 979	10 064	1 598	49 788	43 810
1997-1998											
September	11 830	2 267	3 440	2 660	8 952	2 453	7 619	10 100	1 762	51 082	45 547
December	12 625	2 258	3 569	2 992	8 938	2 378	7 477	9 907	1 810	51 941	47 065
March	10 791	2 134	3 115	2 638	8 775	2 291	6 960	8 922	1 500	47 132	43 539
June	11 101	2 192	3 587	2 720	9 323	2 303	7 602	9 903	1 681	50 420	47 428
1998-1999											
September	11 965	2 496	3 602	2 634	9 113	2 644	7 764	10 313	1 642	52 173	47 813
December	12 806	2 344	3 414	2 665	9 277	2 831	7 896	10 904	2 034	54 172	51 664
March	11 100	2 163	3 017	2 633	8 748	2 585	7 130	9 697	1 677	48 749	48 090
June	10 785	2 159	3 268	2 713	9 483	2 736	7 868	10 165	1 594	50 772	51 384
SEASONALLY ADJUSTED											
Year to											
June 1997	44 848	9 165	13 126	9 765	34 288	9 852	32 798	39 072	6 507	199 352	168 265
June 1998	46 348	8 851	13 711	11 010	35 988	9 425	29 658	38 832	6 753	200 575	183 580
June 1999	46 656	9 163	13 301	10 645	36 621	10 796	30 658	41 080	6 948	205 866	198 951
1996-1997											
June	11 135	2 361	3 336	2 520	8 751	2 514	7 962	9 949	1 629	50 147	43 718
1997-1998											
September	11 526	2 174	3 336	2 656	8 968	2 411	7 399	9 837	1 694	50 001	45 419
December	11 533	2 245	3 424	2 738	8 716	2 236	7 333	9 614	1 657	49 492	45 018
March	11 597	2 226	3 301	2 829	9 211	2 445	7 364	9 582	1 677	50 235	45 838
June	11 691	2 205	3 650	2 787	9 093	2 334	7 563	9 799	1 724	50 847	47 305
1998-1999											
September	11 701	2 413	3 498	2 583	9 098	2 568	7 607	10 040	1 581	51 089	47 652
December	11 551	2 273	3 281	2 499	9 207	2 735	7 650	10 580	1 877	51 653	49 412
March	12 051	2 308	3 195	2 773	9 053	2 707	7 596	10 409	1 857	51 949	50 631
June	11 353	2 169	3 326	2 790	9 263	2 786	7 804	10 051	1 634	51 175	51 256
TREND ESTIMATES											
Year to											
June 1997	44 824	9 115	13 134	9 798	34 464	9 832	32 581	39 020	6 452	199 160	168 490
June 1998	46 216	8 960	13 681	10 933	35 938	9 497	29 762	38 892	6 691	200 568	183 076
June 1999	46 745	9 114	13 310	10 706	36 627	10 753	30 639	41 110	7 045	206 031	199 232
1996-1997											
June	11 231	2 313	3 354	2 526	8 757	2 454	7 833	9 886	1 637	49 984	43 569
1997-1998											
September	11 386	2 256	3 346	2 644	8 832	2 397	7 518	9 812	1 671	49 858	44 683
December	11 554	2 207	3 370	2 758	8 945	2 338	7 351	9 660	1 681	49 864	45 488
March	11 638	2 223	3 452	2 803	9 037	2 335	7 377	9 617	1 671	50 155	46 024
June	11 637	2 274	3 513	2 728	9 124	2 426	7 517	9 803	1 667	50 691	46 881
1998-1999											
September	11 699	2 318	3 464	2 623	9 145	2 556	7 596	10 147	1 724	51 273	48 079
December	11 731	2 318	3 345	2 608	9 128	2 665	7 632	10 355	1 779	51 562	49 269
March	11 701	2 270	3 255	2 684	9 159	2 746	7 673	10 363	1 788	51 641	50 416
June	11 614	2 208	3 246	2 791	9 195	2 785	7 738	10 244	1 754	51 555	51 468

(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	3.6
June 1998	3.3	-3.4	4.5	12.7	5.0	-4.3	-9.6	-0.6	3.8	0.6	9.1
June 1999	0.7	3.5	-3.0	-3.3	1.8	14.5	3.4	5.8	2.9	2.6	8.4
1996-1997											
June	3.6	4.6	3.8	6.8	8.9	6.3	5.4	9.3	7.7	6.5	11.4
1997-1998											
September	11.5	-3.4	4.8	8.1	-0.1	-0.9	-4.5	0.4	10.3	2.6	4.0
December	6.7	-0.4	3.7	12.5	-0.2	-3.1	-1.9	-1.9	2.7	1.7	3.3
March	-14.5	-5.5	-12.7	-11.8	-1.8	-3.7	-6.9	-9.9	-17.1	-9.3	-7.5
June	2.9	2.7	15.2	3.1	6.2	0.5	9.2	11.0	12.0	7.0	8.9
1998-1999											
September	7.8	13.9	0.4	-3.2	-2.3	14.8	2.1	4.1	-2.3	3.5	0.8
December	7.0	-6.1	-5.2	1.2	1.8	7.1	1.7	5.7	23.8	3.8	8.1
March	-13.3	-7.7	-11.6	-1.2	-5.7	-8.7	-9.7	-11.1	-17.5	-10.0	-6.9
June	-2.8	-0.2	8.3	3.0	8.4	5.9	10.3	4.8	-4.9	4.1	6.8
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	3.6
June 1998	3.3	-3.4	4.5	12.7	5.0	-4.3	-9.6	-0.6	3.8	0.6	9.1
June 1999	0.7	3.5	-3.0	-3.3	1.8	14.5	3.4	5.8	2.9	2.6	8.4
1996-1997											
June	0.8	0.2	-0.5	3.9	2.0	2.3	-1.7	0.7	-1.1	0.6	5.4
1997-1998											
September	3.5	-7.9	0.0	5.4	2.5	-4.1	-7.1	-1.1	4.0	-0.3	3.9
December	0.1	3.3	2.6	3.1	-2.8	-7.3	-0.9	-2.3	-2.2	-1.0	-0.9
March	0.6	-0.9	-3.6	3.3	5.7	9.3	0.4	-0.3	1.2	1.5	1.8
June	0.8	-0.9	10.6	-1.5	-1.3	-4.5	2.7	2.3	2.8	1.2	3.2
1998-1999											
September	0.1	9.4	-4.2	-7.3	0.1	10.0	0.6	2.5	-8.3	0.5	0.7
December	-1.3	-5.8	-6.2	-3.3	1.2	6.5	0.6	5.4	18.7	1.1	3.7
March	4.3	1.6	-2.6	11.0	-1.7	-1.0	-0.7	-1.6	-1.1	0.6	2.5
June	-5.8	-6.0	4.1	0.6	2.3	2.9	2.7	-3.4	-12.0	-1.5	1.2
TREND ESTIMATES											
Year to											
June 1997	0.4	2.3	9.9	-1.8	2.0	-5.1	-1.7	6.0	1.1	1.7	3.4
June 1998	3.1	-1.7	4.2	11.6	4.3	-3.4	-8.7	-0.3	3.7	0.7	8.7
June 1999	1.1	1.7	-2.7	-2.1	1.9	13.2	2.9	5.7	5.3	2.7	8.8
1996-1997											
June	0.2	-0.8	1.0	3.7	1.3	-0.8	-4.0	0.6	1.7	0.0	2.9
1997-1998											
September	1.4	-2.5	-0.2	4.7	0.9	-2.3	-4.0	-0.8	2.1	-0.3	2.6
December	1.5	-2.2	0.7	4.3	1.3	-2.5	-2.2	-1.5	0.6	0.0	1.8
March	0.7	0.7	2.4	1.6	1.0	-0.1	0.4	-0.4	-0.6	0.6	1.2
June	0.0	2.3	1.8	-2.7	1.0	3.9	1.9	1.9	-0.3	1.1	1.9
1998-1999											
September	0.5	1.9	-1.4	-3.9	0.2	5.3	1.1	3.5	3.4	1.1	2.6
December	0.3	0.0	-3.4	-0.6	-0.2	4.3	0.5	2.1	3.2	0.6	2.5
March	-0.3	-2.1	-2.7	2.9	0.3	3.0	0.5	0.1	0.5	0.2	2.3
June	-0.7	-2.7	-0.3	4.0	0.4	1.4	0.8	-1.2	-1.9	-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	0.50
June 1998	0.53	0.80	0.52	0.32	0.61	0.48	0.58	0.64	0.41	0.56	0.50
June 1999	0.57	0.75	0.59	0.31	0.66	0.47	0.61	0.66	0.41	0.59	0.50
1996–1997											
June	0.52	0.74	0.55	0.33	0.64	0.53	0.53	0.60	0.37	0.56	0.50
1997–1998											
September	0.51	0.80	0.58	0.31	0.61	0.53	0.55	0.58	0.38	0.55	0.50
December	0.51	0.78	0.56	0.33	0.64	0.54	0.55	0.60	0.39	0.56	0.51
March	0.53	0.74	0.57	0.33	0.59	0.48	0.58	0.64	0.44	0.56	0.50
June	0.53	0.80	0.52	0.32	0.61	0.48	0.58	0.64	0.41	0.56	0.50
1998–1999											
September	0.53	0.77	0.55	0.35	0.64	0.48	0.58	0.65	0.49	0.58	0.50
December	0.55	0.77	0.58	0.37	0.62	0.47	0.60	0.63	0.44	0.58	0.50
March	0.52	0.75	0.63	0.33	0.67	0.48	0.61	0.62	0.42	0.58	0.50
June	0.57	0.75	0.59	0.31	0.66	0.47	0.61	0.66	0.41	0.59	0.50

(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 have been revised each quarter. The aim was to further improve the quality of the survey estimates by selecting a sample which is more representative of the business population. The timing of sample selection is now consistent with other ABS surveys. This has led 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 are 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 is introduced and the reference year is 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

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' inventories 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' inventories 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

Estimates of	INVENTORIES(a).....					
	<i>Mining</i>	<i>Manu- facturing</i>	<i>Whole- sale trade</i>	<i>Retail trade</i>	<i>Other</i>	<i>Total selected industries</i>
	%	%	%	%	%	%
Total inventories	2.4	1.4	6.3	3.6	11.5	2.3
Movement(a)	0.7	0.4	0.8	1.1	2.5	0.4

INVENTORIES AND SALES, MANUFACTURERS' AND WHOLESALE TRADE

Estimates of	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</i>
	%	%	%	%	%	%	%	%	%	%	%
Total inventories– Level	3.0	4.6	5.2	10.3	3.0	6.5	1.4	4.4	8.1	1.4	6.3
Movement	0.7	1.6	1.4	2.3	0.9	2.8	0.5	1.4	2.6	0.4	0.8
Total sales– Level	2.1	5.7	4.2	12.8	2.8	7.0	1.5	4.0	7.5	1.4	7.7
Movement	0.8	2.2	1.5	3.3	1.0	3.3	0.6	1.3	2.9	0.5	0.9

(a) Quarter to quarter movement expressed as a percentage of total.

WHAT IF . . . ? REVISIONS TO TREND ESTIMATES

EFFECT OF NEW SEASONALLY ADJUSTED ESTIMATES ON TREND ESTIMATES

TREND REVISIONS

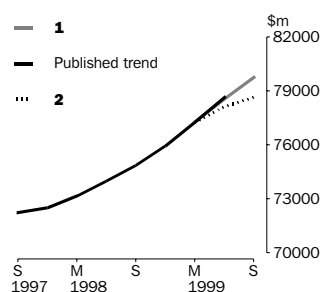
The examples in the tables below show two scenarios and the consequent revisions to previous trend estimates of inventories owned by private businesses and manufacturers' and wholesalers' sales.

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

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

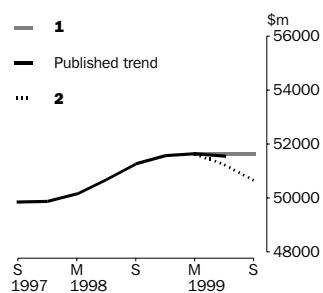
The percentages chosen are the long term average movements, without regard to sign, in the seasonally adjusted series.

INVENTORIES



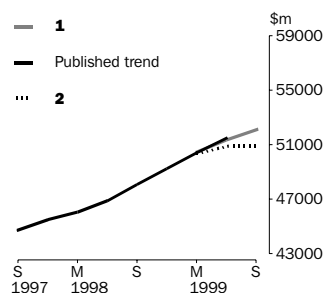
	TREND AS PUBLISHED		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	% change	1 rises by 1.0 on Jun 1999 \$m	% change	2 falls by 1.0 on Jun 1999 \$m	% change
1998						
September	74 859	1.2	74 859	1.2	74 859	1.2
December	75 934	1.4	75 917	1.4	76 010	1.5
1999						
March	77 256	1.7	77 257	1.8	77 225	1.6
June	78 620	1.8	78 576	1.7	78 131	1.2
September	—	—	79 733	1.5	78 676	0.7

MANUFACTURERS' SALES



	TREND AS PUBLISHED		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	% change	1 rises by 1.4 on Jun 1999 \$m	% change	2 falls by 1.4 on Jun 1999 \$m	% change
1998						
September	51 273	1.1	51 273	1.1	51 273	1.1
December	51 562	0.6	51 568	0.6	51 652	0.7
1999						
March	51 641	0.2	51 643	0.1	51 614	-0.1
June	51 555	-0.2	51 640	0.0	51 235	-0.7
September	—	—	51 629	0.0	50 669	-1.1

WHOLESALE TRADE SALES



	TREND AS PUBLISHED		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	% change	1 rises by 1.7 on Jun 1999 \$m	% change	2 falls by 1.7 on Jun 1999 \$m	% change
1998						
September	48 079	2.6	48 079	2.6	48 079	2.6
December	49 269	2.5	49 288	2.5	49 391	2.7
1999						
March	50 416	2.3	50 411	2.3	50 376	2.0
June	51 468	2.1	51 371	1.9	50 879	1.0
September	—	—	52 108	1.4	50 940	0.1

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