

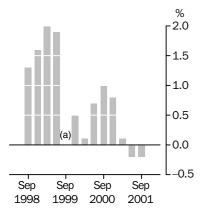
INVENTORIES AND SALES, SELECTED INDUSTRIES

AUSTRALIA

EMBARGO: 11:30AM (CANBERRA TIME) MON 3 DEC 2001

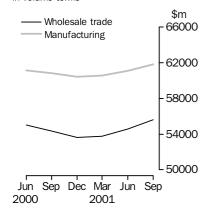
Inventories % change

Trend Estimates in volume terms



Sales

Trend Estimates in volume terms



 For further information about these and related statistics, contact Mark Wise on 02 9268 4241, or the National Information and Referral Service on 1300 135 070.

SEPTEMBER QTR KEY FIGURES

TREND(b)

	Sep 2000	Jun 2001	Sep 2001	Jun 2001 to Sep 2001	Sep 2000 to Sep 2001	
	\$ <i>m</i>	\$ <i>m</i>	\$m	% change	% change	
Inventories Sales	87 319	87 935	87 724	-0.2	0.5	
Manufacturing	60 821	61 090	61 801	1.2	1.6	
Wholesale trade	54 337	54 563	55 616	1.9	2.4	

SEASONALLY ADJUSTED(b)

	Sep 2000	Jun 2001	Sep 2001	Jun 2001 to Sep 2001	Sep 2000 to Sep 2001
	\$m	\$m	\$m	% change	% change
Inventories Sales	87 591	88 186	87 732	-0.5	0.2
Manufacturing	60 962	61 329	61 893	0.9	1.5
Wholesale trade	54 586	54 453	55 857	2.6	2.3

⁽a) A break in series occurred in Wholesale Trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

SEPTEMBER QTR KEY POINTS

INVENTORIES

- The trend estimate (in volume terms) of inventories held by private businesses for the September quarter 2001 is \$87,724m, a decrease of \$211m (-0.2%) from the revised June quarter estimate of \$87,935m. The September quarter 2001 estimate is 0.5% higher than the September quarter 2000 estimate.
- Wholesale trade (down \$387m, -1.3%) was the major contributor to the fall in inventories in the September quarter 2001, with a decrease also recorded in Mining (down \$50m, -1.5%). These decreases were partially offset by an increase in Retail trade (up \$228m, 1.0%).

SALES

• The trend estimate for Wholesale trade sales increased by \$1,053m (1.9%), continuing the growth in the previous two quarters. The trend estimate for Manufacturing sales has also increased in the past three quarters.

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

NOTES

FINALISSUE

As foreshadowed in the information paper, *Improvements to Australian Bureau of Statistics Quarterly Business Indicators* (Cat. no. 5677.0), this is the final issue of *Inventories and Sales, Selected Industries, Australia.*

This publication will be replaced by a new publication titled *Business Indicators*, *Australia* (Cat. no. 5676.0). The first release of 5676.0 will be in respect of the September quarter 2001 and will be released on 30 January 2002. The first release of the new publication will be sent to subscribers of this publication.

The new publication will include series for inventories and income from sales of goods and services which are largely consistent with those in this publication. Series will be adjusted using the concurrent seasonal adjustment method rather than the existing annual forward factor method, as this method produces more accurate initial seasonally adjusted estimates. From the December quarter 2001, the new publication will include current price estimates and chain volume measures for income from sales of goods and services in original, seasonally adjusted and trend terms for most industries (with the exceptions being Mining, Construction, Electricity gas and water, and Services to finance and insurance where original data only will be available from the March quarter 2001). In addition, the new publication will include original data for income from sales of goods and services by state/territory.

In addition to inventories and income from sales of goods and services, *Business Indicators*, *Australia* will also include series relating to profits, and from December quarter 2001, wages and salaries.

FORTHCOMING ISSUES:

Business Indicators, Australia (Cat no. 5676.0)

September Quarter 2001 December Quarter 2001 30 January 2002

4 March 2002

CHANGES IN THIS ISSUE

This issue incorporates revised seasonal factors following an annual reanalysis.

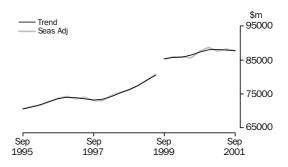
REVISIONS

Revisions have been made to the June quarter 2001 estimates as a result of responses received or revised after publication of the previous issue.

As advised in the last issue, following the introduction of the Quarterly Economic Activity Survey, the ABS used the results of a parallel run of this survey and the previous Survey of Inventories, Sales and Services conducted in the March quarter 2001, to link the estimates from the previous survey to the new survey. As a result, estimates for earlier quarters were revised in the June quarter 2001 publication. Following the identification of a small number of reporting errors, the ABS has again revised estimates for earlier quarters, but the linking process has ensured that the movement estimates are largely unchanged. Seasonally adjusted and trend estimates have also been revised as a result of the annual review discussed above. Revisions are applied to all series in this publication and the impact can vary at the industry level.

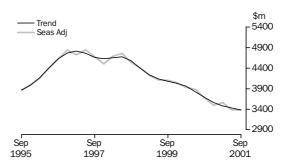
Dennis Trewin Australian Statistician ALL SELECTED INDUSTRIES(b)

The trend estimate (in volume terms) of inventories held by private businesses has declined in the last two quarters after slowing growth rates in the previous two quarters.



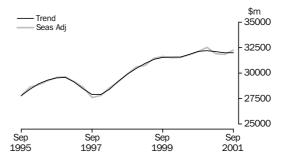
MINING

The trend estimate for Mining inventories has continued to fall from the most recent peak in June quarter 1998. Mining inventories are at the lowest level since June quarter 1989, however the rate of decline has slowed in the last four quarters.



MANUFACTURING

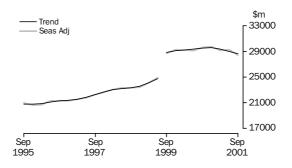
The trend estimate for Manufacturing inventories has remained unchanged in the September quarter 2001, after decreasing in the previous two quarters. Metal product manufacturing recorded the largest decrease (down \$170m, -4.0%). This was offset by increases in Machinery and equipment and Food, beverage and tobacco (up 100m, 1.3% and 100m, 1.2% respectively).



- (a) Reference year for chain volume measures is 1999–2000.
- (b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

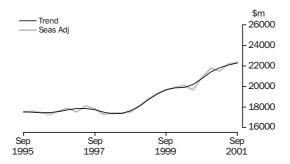
WHOLESALE TRADE(b)

The trend estimate for Wholesale trade inventories has declined for the third successive quarter. The September quarter 2001 estimate is 3.0% lower than September quarter 2000.



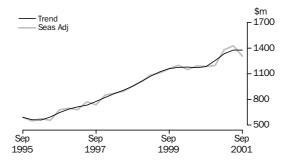
RETAIL TRADE

Growth in the trend estimate for Retail trade inventories has slowed in the past three quarters. The September quarter 2001 estimate is 228m (1.0%) higher than the June quarter 2001 estimate and 41,541m (7.4%) higher than September quarter 2000.



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

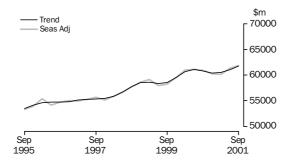
The trend estimate for inventories held by Other selected industries has remained unchanged after recording increases in the previous four quarters. The September quarter 2001 estimate of \$1,377m is \$191m (16.1%) higher than September quarter 2000.



- (a) Reference year for chain volume measures is 1999–2000.
- (b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

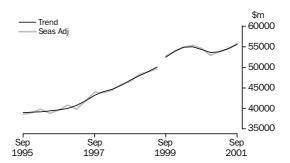
MANUFACTURING SALES

The trend estimate for Manufacturing sales has increased in the past three quarters and is \$980m (1.6%) greater than the estimate for September quarter 2000. The major contributor to the increase in the current quarter was Wood and paper products which has recorded the third consecutive quarter of growth. Textiles, clothing and footwear and Non-metallic mineral product manufacturing have both recorded decreases for the fourth consecutive quarter.



WHOLESALE TRADE SALES(b)

Wholesale trade sales have increased by 1.9% in the current quarter following increases in the previous two quarters. The September quarter 2001 estimate of \$55,616m is \$1,279m (2.4%) higher than September quarter 2000.



- (a) Reference year for chain volume measures is 1999–2000.
- (b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.



INVENTORIES, By Industry—Current prices

	Mining	Manufacturing	Wholesale trade(a)	Retail trade	Other selected industries(b)	Total selected industries(a)
At end of	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • •		• • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • •	
			ORIGINA	AL		
June 1999	3 799	30 590	24 564	18 690	1 051	78 694
June 2000	4 101	33 226	28 968	19 403	1 196	86 894
June 2001	3 667	34 735	31 116	21 701	1 445	92 664
1999-2000						
September	3 987	30 924	27 297	19 494	1 110	82 812
December	4 032	30 752	30 183	20 243	1 277	86 487
March	4 116	32 493	29 509	20 361	1 163	87 642
June	4 101	33 226	28 968	19 403	1 196	86 894
2000-2001						
September	4 085	33 818	29 851	20 251	1 145	89 151
December	3 903	33 996	33 109	21 626	1 273	93 907
March	3 924	34 608	31 609	21 549	1 392	93 082
June	3 667	34 735	31 116	21 701	1 445	92 664
2001-2002						
September	3 678	34 889	31 064	22 411	1 330	93 372
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •
			SEASONALLY A	DJUSTED		
June 1999	3 811	30 439	25 485	19 167	1 082	79 984
June 2000	4 117	33 043	29 625	19 891	1 229	87 905
June 2001	3 684	34 512	32 134	22 251	1 485	94 066
1999–2000						
September	3 954	30 905	27 669	19 537	1 142	83 207
December	4 074	31 295	28 709	19 920	1 198	85 196
March	4 093	32 126	29 068	20 136	1 174	86 597
June	4 117	33 043	29 625	19 891	1 229	87 905
2000-2001						
September	4 050	33 780	30 531	20 321	1 181	89 863
December	3 944	34 618	31 544	21 275	1 193	92 574
March	3 900	34 219	31 279	21 300	1 404	92 102
June	3 684	34 512	32 134	22 251	1 485	94 066
2001–2002	3 004	3+ 31Z	32 13 4	22 231	1 400	34 000
September	3 646	34 869	32 843	22 502	1 373	95 233
• • • • • • • • • • • •	• • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • •
			TREND ESTII	MATES		
June 1999	3 864	30 450	25 390	19 117	1 095	79 916
June 2000	4 100	33 054	29 724	20 110	1 190	88 178
June 2001	3 736	34 531	32 123	22 072	1 425	93 887
1999–2000						
September	3 933	30 823	27 984	19 600	1 142	83 482
December	4 044	31 395	28 499	19 881	1 179	84 998
March	4 109	32 167	29 059	19 966	1 200	86 501
June	4 100	33 054	29 724	20 110	1 190	88 178
2000–2001	÷ 100	JJ 0J4	25 124	20 110	1 130	00 110
September	4 052	33 767	30 595	20 432	1 193	90 039
December	3 966	34 137	31 153	20 973	1 261	91 490
March	3 852	34 315	31 627	21 563	1 357	92 714
June	3 736	34 531	32 123	22 072	1 425	93 887
2001-2002						
September	3 625	34 797	32 630	22 517	1 450	95 019

⁽a) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

⁽b) Includes Electricity and gas supply and Accommodation, cafes and restaurants.



INVENTORIES, By Industry—Chain volume measures(a)

	Mining	Manufacturing	Wholesale trade(b)	Retail trade	Other selected industries(c)	Total selected industries(b)
At end of	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • •
			ORIGINA	AL .		
June 1999	4 098	31 599	24 601	18 849	1 082	80 140
June 2000	3 864	31 996	28 536	19 193	1 160	84 749
June 2001	3 367	32 062	28 579	21 683	1 391	87 082
1999–2000						
September	4 136	31 653	27 658	19 584	1 129	84 129
December	4 005	30 968	31 128	20 261	1 279	87 688
March	3 951	31 904	29 679	20 301	1 140	86 992
June	3 864	31 996	28 536	19 193	1 160	84 749
2000–2001	3 004	31 990	20 330	19 195	1 100	04 143
September	3 712	32 155	28 946	20 857	1 152	86 822
December	3 454	31 948	31 521	22 112	1 276	90 311
March	3 580	32 283	29 511	21 774	1 368	88 515
June	3 367	32 062	28 579	21 683	1 391	87 082
2001–2002 September	3 412	32 285	27 742	22 234	1 264	86 937
			SEASONALLY A	DJUSTED		
June 1999	4 110	31 446	24 904	19 330	1 114	80 810
June 2000	3 879	31 811	29 108	19 675	1 193	85 665
June 2001	3 382	31 851	29 291	22 233	1 429	88 186
1999–2000						
September	4 102	31 642	28 715	19 627	1 162	85 230
December	4 046	31 524	29 304	19 937	1 199	86 006
March	3 930	31 552	29 245	20 077	1 151	85 956
June	3 879	31 811	29 108	19 675	1 193	85 665
2000–2001	00.0	01 011	20 200	20 0.0	1 100	00 000
September	3 680	32 124	29 670	20 929	1 188	87 591
December	3 491	32 536	29 754	21 752	1 196	88 729
March	3 558	31 925	29 161	21 522	1 380	87 547
June	3 382	31 851	29 291	22 233	1 429	88 186
2001–2002	0 002	01 001	20 201	22 200	1 120	00 100
September	3 383	32 267	28 452	22 324	1 305	87 732
• • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • •	• • • • • • • • •
			TREND ESTII	MATES		
June 1999	4 140	31 344	24 743	19 275	1 125	80 519
June 2000	3 828	31 855	29 382	20 193	1 171	86 430
June 2001	3 427	32 021	29 028	22 082	1 376	87 935
			-	-	-	
1999–2000	4.094	24 542	20.060	10.605	1 164	05 242
September	4 081	31 543	28 868	19 695	1 161	85 343
December	4 033	31 588	29 134	19 847	1 176	85 771
March	3 960	31 607	29 232	19 887	1 180	85 862
June	3 828	31 855	29 382	20 193	1 171	86 430
2000–2001	0.000	00.450	00.543	00.700	4.400	
September	3 686	32 159	29 518	20 769	1 186	87 319
December	3 563	32 226	29 596	21 414	1 257	88 057
March	3 483	32 107	29 389	21 833	1 334	88 146
June	3 427	32 021	29 028	22 082	1 376	87 935
2001–2002	0.077	00.010	00.044	00.010	4.077	07.70
September	3 377	32 019	28 641	22 310	1 377	87 724

⁽a) Reference year for chain volume measures is 1999–2000.

⁽c) Includes Electricity and gas supply and Accommodation, cafes and restaurants.

⁽b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.



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

	Mining	Manufacturing	Wholesale trade(b)	Retail trade	Other selected industries(c)	Total selected industries(b)
Year to/Quarter to	%	%	%	%	%	%
• • • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • •
			ORIGIN	AL		
June 1999	-13.6	7.8	6.9	11.0	24.1	7.1
June 2000	-5.7	1.3	16.0	1.8	7.3	5.8
June 2001	-12.9	0.2	0.2	13.0	19.9	2.8
1999–2000						
September	0.9	0.2	12.4	3.9	4.4	5.0
December	-3.2	-2.2	12.5	3.5	13.3	4.2
March	-1.3	3.0	-4.7	0.2	-10.9	-0.8
June	-2.2	0.3	-3.9	-5.5	1.8	-2.6
2000-2001						
September	-4.0	0.5	1.4	8.7	-0.7	2.4
December	-6.9	-0.6	8.9	6.0	10.7	4.0
March	3.6	1.0	-6.4	-1.5	7.2	-2.0
June	-5.9	-0.7	-3.2	-0.4	1.7	-1.6
2001-2002						
September	1.3	0.7	-2.9	2.5	-9.1	-0.2
• • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •	• • • • • • •
			SEASONALLY	ADJUSTED		
June 1999	-13.7	7.7	6.8	11.0	24.0	7.1
June 2000	-5.6	1.2	16.9	1.8	7.1	6.0
June 2001	-12.8	0.1	0.6	13.0	19.8	2.9
1999–2000						
September	-0.2	0.6	15.3	1.5	4.3	5.5
December	-1.4	-0.4	2.1	1.6	3.2	0.9
March	-2.9	0.1	-0.2	0.7	-4.0	-0.1
June	-1.3	0.8	-0.5	-2.0	3.6	-0.3
2000-2001	1.0				0.0	
September	-5.1	1.0	1.9	6.4	-0.4	2.2
December	-5.1	1.3	0.3	3.9	0.7	1.3
March	1.9	-1.9	-2.0	-1.1	15.4	-1.3
June	-4.9	-0.2	0.4	3.3	3.6	0.7
2001–2002						
September	0.0	1.3	-2.9	0.4	-8.7	-0.5
• • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • • • • • •	TREND EST	IMATES	• • • • • • • • • • • • • •	• • • • • • •
June 1999	-11.5	7.2	6.5	10.9	23.6	6.9
June 2000	-7.5	1.6	18.7	4.8	4.0	7.3
June 2001	-10.5	0.5	-1.2	9.4	17.6	1.7
1999–2000						
September	-1.4	0.6	n.p.	2.2	3.2	n.p.
December	-1.2	0.1	0.9	0.8	1.3	0.5
March	-1.8	0.1	0.3	0.2	0.3	0.1
June	-3.3	0.8	0.5	1.5	-0.8	0.7
2000–2001	-3.7	1.0	0.5	2.9	1.3	1.0
September December						
March	-3.3 2.2	0.2 -0.4	0.3	3.1	6.0	0.8
June	-2.2 1.6		-0.7	2.0	6.1	0.1
	-1.6	-0.3	-1.2	1.1	3.2	-0.2
2001–2002 September	-1.5	0.0	-1.3	1.0	0.0	-0.2

⁽a) Reference year for chain volume measures is 1999–2000.

⁽c) Includes Electricity and gas supply and Accommodation, cafes and restaurants.

⁽b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.



INVENTORIES, By Manufacturing industries—Current prices

	Food,	Textiles,		Printing,	Petroleum,	Non-				
	beverage	clothing,	Wood	publishing	coal, chemical			Machinery	Other	Total
	and tobacco	footwear and leather(a)	and paper products	and recorded media	and assoc. products	mineral product	Metal product	and equipment	manu- facturing	manu– facturing
At end of	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • •
				C	RIGINAL					
June 1999	7 031	1 799	2 188	781	5 300	1 353	4 992	6 374	771	30 590
June 2000	7 793	1 652	2 124	862	6 125	1 213	4 585	7 983	889	33 226
June 2001	8 449	1 704	2 271	787	6 855	1 310	4 446	8 092	821	34 735
1999–2000										
September	6 858	1 736	2 086	852	5 419	1 131	4 853	7 112	878	30 924
December	6 722	1 829	2 109	787	5 502	1 021	4 565	7 380	837	30 752
March	7 306	1 818	2 118	815	6 110	1 127	4 723	7 547	931	32 493
June	7 793	1 652	2 124	862	6 125	1 213	4 585	7 983	889	33 226
2000-2001										
September	7 468	1 736	1 860	877	6 845	1 355	4 671	8 099	908	33 818
December	7 522	1 743	1 994	830	6 462	1 262	5 218	8 066	898	33 996
March	8 043	1 808	2 156	787	6 922	1 170	4 813	8 115	796	34 608
June	8 449	1 704	2 271	787	6 855	1 310	4 446	8 092	821	34 735
2001–2002										
September	8 575	1 622	2 152	840	6 686	1 220	4 540	8 488	766	34 889
• • • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • • • •	• • • • • •
				SEASON	ALLY ADJUS	TED				
June 1999	6 733	1 841	2 151	795	5 332	1 344	5 046	6 403	794	30 439
June 2000	7 456	1 698	2 088	878	6 164	1 199	4 633	8 008	919	33 043
June 2001	8 079	1 755	2 232	802	6 899	1 292	4 491	8 112	850	34 512
1000 2000										
1999–2000 September	6 930	1 718	2 100	843	5 371	1 111	4 840	7 114	970	20.005
December	7 008	1 827	2 108 2 150	785	5 634	1 111 1 046	4 602	7 410	870 833	30 905 31 295
March	7 257	1 794	2 091	811	5 986	1 132	4 646	7 410	917	32 126
June	7 456	1 698	2 088	878	6 164	1 199	4 633	8 008	919	33 043
2000–2001	7 430	1 030	2 000	070	0 104	1 199	4 000	8 008	919	33 043
September	7 550	1 715	1 879	867	6 777	1 331	4 662	8 101	898	33 780
December	7 846	1 743	2 036	829	6 627	1 294	5 265	8 087	891	34 618
March	7 988	1 781	2 125	783	6 777	1 177	4 730	8 073	785	34 219
June	8 079	1 755	2 232	802	6 899	1 292	4 491	8 112	850	34 512
2001–2002										
September	8 672	1 600	2 175	830	6 616	1 198	4 532	8 490	756	34 869
• • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	TDEN		• • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • • • •	• • • • • •
				IREN	D ESTIMATE	5				
June 1999	6 717	1 813	2 146	835	5 304	1 269	4 924	6 608	834	30 450
June 2000	7 421	1 735	2 071	854	6 299	1 221	4 635	7 902	916	33 054
June 2001	8 230	1 720	2 181	803	6 772	1 230	4 584	8 206	805	34 531
1999–2000										
September	6 876	1 791	2 141	807	5 435	1 156	4 828	6 955	834	30 823
December	7 068	1 782	2 122	805	5 628	1 084	4 697	7 343	866	31 395
March	7 237	1 766	2 105	828	5 946	1 115	4 610	7 662	898	32 167
June	7 421	1 735	2 071	854	6 299	1 221	4 635	7 902	916	33 054
2000-2001										
September	7 619	1 718	2 042	859	6 567	1 280	4 707	8 072	903	33 767
December	7 778	1 749	2 066	829	6 742	1 280	4 730	8 095	868	34 137
March	7 978	1 758	2 125	804	6 787	1 251	4 678	8 100	834	34 315
June	8 230	1 720	2 181	803	6 772	1 230	4 584	8 206	805	34 531
2001–2002 September	9.510	1 655	2 210	015	6 747	1 220	1 196	9 267	770	24 707
September	8 510	1 655	2 219	815	6 747	1 220	4 486	8 367	778	34 797

⁽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)

	Food,	Textiles,	14//	Printing,	Petroleum,	Non-		Markinson	Other	Takal
	beverage and tobacco	clothing, footwear and leather(b)	Wood and paper products	publishing and recorded media	coal, chemical and assoc. products	metallic mineral product	Metal product	Machinery and equipment	Other manu- facturing	Total manu- facturing
At end of	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • •	• • • • • • •	• • • • • • • • •	• • • • • • •			• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •
				0	RIGINAL					
June 1999	7 154	1 796	2 258	774	5 868	1 368	5 157	6 473	777	31 599
June 2000	7 664	1 619	2 027	860	5 558	1 194	4 351	7 845	878	31 996
June 2001	7 790	1 578	2 137	735	5 966	1 263	4 084	7 757	753	32 062
1999–2000										
September	6 938	1 758	2 155	852	5 780	1 137	5 002	7 170	884	31 653
December	6 699	1 862	2 134	789	5 635	1 023	4 624	7 386	839	30 968
March	7 244	1 825	2 060	819	5 811	1 117	4 620	7 498	929	31 904
June	7 664	1 619	2 027	860	5 558	1 194	4 351	7 845	878	31 996
2000-2001										
September	7 317	1 673	1 732	855	6 020	1 319	4 357	8 003	879	32 155
December	7 276	1 659	1 834	792	5 652	1 221	4 808	7 870	838	31 948
March	7 652	1 687	1 986	739	6 073	1 128	4 425	7 851	743	32 283
June	7 790	1 578	2 137	735	5 966	1 263	4 084	7 757	753	32 062
2001–2002										
September	7 786	1 494	2 038	783	5 998	1 177	4 198	8 104	706	32 285
• • • • • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • •	CEACONA	LLV ADJUCT		• • • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • •
				SEASUNA	LLY ADJUSTI	בט				
June 1999	6 851	1 838	2 220	788	5 903	1 359	5 212	6 503	797	31 446
June 2000	7 333	1 664	1 993	876	5 594	1 180	4 397	7 870	905	31 811
June 2001	7 449	1 624	2 100	749	6 005	1 245	4 126	7 776	777	31 851
1999–2000										
September	7 011	1 740	2 178	843	5 729	1 117	4 989	7 172	877	31 642
December	6 984	1 860	2 176	788	5 771	1 048	4 662	7 416	839	31 524
March	7 195	1 801	2 033	815	5 693	1 122	4 545	7 444	912	31 552
June	7 333	1 664	1 993	876	5 594	1 180	4 397	7 870	905	31 811
2000-2001										
September	7 398	1 653	1 750	845	5 960	1 295	4 348	8 005	869	32 124
December	7 589	1 659	1 872	790	5 796	1 252	4 852	7 890	837	32 536
March	7 600	1 662	1 959	735	5 946	1 135	4 349	7 811	730	31 925
June	7 449	1 624	2 100	749	6 005	1 245	4 126	7 776	777	31 851
2001–2002 September	7 873	1 474	2 059	773	5 936	1 156	4 192	8 106	698	32 267
				TREND	ESTIMATES .					
June 1999	6 800	1 812	2 212	827	5 826	1 278	5 081	6 697	838	31 344
June 2000	7 309	1 708	1 928	849	5 724	1 200	4 437	7 803	901	31 855
June 2001	7 625	1 593	2 050	749	5 957	1 185	4 246	7 876	740	32 021
1999–2000										
September	6 941	1 811	2 202	807	5 811	1 165	4 970	7 016	840	31 543
December	7 071	1 807	2 149	809	5 721	1 085	4 743	7 346	870	31 588
March	7 172	1 772	2 054	831	5 686	1 106	4 493	7 607	895	31 607
June	7 309	1 708	1 928	849	5 724	1 200	4 437	7 803	901	31 855
2000–2001	-		-				-		-	
September	7 456	1 656	1 840	839	5 796	1 246	4 517	7 935	872	32 159
December	7 519	1 659	1 862	792	5 886	1 239	4 544	7 906	819	32 226
March	7 560	1 646	1 959	756	5 933	1 207	4 429	7 841	773	32 107
June	7 625	1 593	2 050	749	5 957	1 185	4 246	7 876	740	32 021
2001-2002										
September	7 716	1 532	2 092	758	5 987	1 181	4 076	7 976	722	32 019

⁽a) Reference year for chain volume measures is 1999–2000.

⁽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 MANUFACTURING INVENTORIES—Chain volume measures(a)

	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
Year to/Quarter to	%	%	%	%	%	%	%	%	%	%
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •
				(ORIGINAL					
June 1999	9.8	-1.8	9.7	-11.1	9.5	18.8	14.0	3.4	-0.5	7.8
June 2000	7.1	-9.8	-10.2	11.1	-5.3	-12.8	-15.6	21.2	13.0	1.3
June 2001	1.6	-2.5	5.4	-14.5	7.3	5.8	-6.2	-1.1	-14.2	0.2
1999–2000										
September	-3.0	-2.1	-4.6	10.1	-1.5	-16.9	-3.0	10.8	13.7	0.2
December	-3.5	5.9	-1.0	-7.4	-2.5	-10.0	-7.6	3.0	-5.1	-2.2
March	8.1	-2.0	-3.5	3.7	3.1	9.2	-0.1	1.5	10.8	3.0
June	5.8	-11.3	-1.6	5.0	-4.3	6.8	-5.8	4.6	-5.5	0.3
2000–2001										
September	-4.5	3.4	-14.6	-0.5	8.3	10.5	0.1	2.0	0.0	0.5
December	-0.6	-0.9	5.9	-7.4	-6.1	-7.4	10.4	-1.7	-4.7	-0.6
March	5.2	1.7	8.3	-6.7	7.5	-7.6	-8.0	-0.2	-11.4	1.0
June	1.8	-6.4	7.6	-0.6	-1.8	12.0	-7.7	-1.2	1.4	-0.7
2001–2002 September	-0.1	-5.3	-4.6	6.5	0.5	-6.8	2.8	4.5	-6.3	0.7
September	-0.1	-5.5	-4.0	0.5	0.5	-0.0	2.0	4.5	-0.3	0.7
• • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • •	SEASON	ALLY ADJUS	TED	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •
June 1999	9.6	-1.2	9.6	-10.9	9.7	18.5	13.9	3.2	0.1	7.7
June 2000	7.0	-1.2 -9.5	-10.2	11.2	-5.2	-13.2	-15.6	21.0	13.5	1.2
June 2001	1.6	-3.5 -2.4	5.4	-14.6	7.3	5.5	-6.2	-1.2	-14.1	0.1
34110 2001										V
1999-2000										
September	2.3	-5.3	-1.9	7.0	-3.0	-17.8	-4.3	10.3	10.0	0.6
December	-0.4	6.9	-0.1	-6.6	0.7	-6.2	-6.6	3.4	-4.3	-0.4
March	3.0	-3.2	-6.5	3.4	-1.3	7.1	-2.5	0.4	8.7	0.1
June	1.9	-7.6	-2.0	7.5	-1.7	5.1	-3.3	5.7	-0.8	0.8
2000–2001										
September	0.9	-0.7	-12.2	-3.5	6.5	9.8	-1.1	1.7	-3.9	1.0
December	2.6	0.4	7.0	-6.5	-2.8	-3.3	11.6	-1.4	-3.8	1.3
March	0.1	0.2	4.6	-7.0	2.6	-9.3	-10.4	-1.0	-12.8	-1.9
June	-2.0	-2.2	7.2	1.8	1.0	9.7	-5.1	-0.5	6.5	-0.2
2001–2002 September	5.7	-9.2	-2.0	3.3	-1.2	-7.2	1.6	4.3	-10.2	1.3
Оорсонноог	0.7	0.2	2.0	0.0	1.2		1.0	1.0	10.2	1.0
• • • • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • •	TREN	D ESTIMATE	S	• • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • •
	6 =	4.5	0.1	0.	0.4	- .	44.5	0.4	4.6	
June 1999	8.7	-1.2	9.1	-9.4	8.1	7.4	11.9	6.1	4.2	7.2
June 2000	7.5	-5.8 -6.7	-12.8	2.7	-1.7 4.1	-6.2	-12.7 -4.3	16.5 0.9	7.5 -17.9	1.6 0.5
June 2001	4.3	-6.7	6.3	-11.7	4.1	-1.2	-4.3	0.9	-17.9	0.5
1999–2000										
September	2.1	-0.1	-0.5	-2.4	-0.2	-8.9	-2.2	4.8	0.2	0.6
December	1.9	-0.2	-2.4	0.3	-1.6	-6.8	-4.6	4.7	3.6	0.1
March	1.4	-1.9	-4.4	2.8	-0.6	1.9	-5.3	3.5	2.8	0.1
June	1.9	-3.6	-6.1	2.1	0.7	8.5	-1.3	2.6	0.6	0.8
2000–2001	2.5	2.2			4.5			. =	6.6	
September	2.0	-3.0	-4.5	-1.2	1.3	3.9	1.8	1.7	-3.2	1.0
December	0.8	0.1	1.2	-5.5 4.6	1.6	-0.6	0.6	-0.4	-6.0	0.2
March	0.5	-0.8	5.2	-4.6	0.8	-2.6	-2.5	-0.8	-5.6 4.2	-0.4
June	0.9	-3.2	4.6	-0.9	0.4	-1.8	-4.1	0.4	-4.3	-0.3
2001–2002 September	1.2	-3.8	2.1	1.1	0.5	-0.4	-4.0	1.3	-2.4	0.0

⁽a) Reference year for chain volume measures is 1999–2000.



MANUFACTURING AND WHOLESALE TRADE SALES—Current prices

	MANUFA	ACTURING									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(a)
Period	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • • •	•••••	• • • • • • • •	ORIGINA	• • • • • • • • • • • • • • • • • • •	• • • • • •	• • • • • • • •	• • • • • •	• • • • • • •	• • • • • • • • • •
Year to					Omanivi	_					
June 1999	49 159	11 867	15 648	15 986	37 121	11 232	33 529	45 517	7 759	227 820	191 232
June 2000	52 137	11 248	18 268	17 244	39 046	9 639	34 206	50 412	7 746	239 945	216 907
June 2001	59 340	10 877	16 513	16 402	45 585	10 435	35 315	52 022	7 162	253 652	232 819
1999–2000											
September	11 961	2 919	4 319	4 360	9 644	2 408	8 456	12 323	1 903	58 292	51 900
December	13 970	2 747	4 696	4 568	9 951	2 279	8 627	12 847	2 046	61 730	55 281
March	12 727	2 768	4 509	3 973	9 483	2 344	8 276	12 088	1 737	57 905	52 581
June	13 479	2 814	4 744	4 343	9 968	2 608	8 847	13 154	2 060	62 018	57 145
2000-2001											
September	14 453	2 851	4 175	4 300	11 100	2 947	8 464	13 544	1 948	63 782	57 509
December	16 154	2 893	4 007	4 178	11 218	2 691	9 421	13 204	1 968	65 734	59 601
March	13 980	2 597	3 895	3 785	10 916	2 304	8 242	11 914	1 529	59 164	55 403
June	14 753	2 536	4 436	4 138	12 351	2 494	9 188	13 359	1 717	64 972	60 306
2001–2002 September	16 022	2 602	4 636	4 616	11 522	2 379	9 250	13 635	2 039	66 702	60 620
Copterniser	10 022	2 002	+ 000	4 010	11 322	2313	3 230	13 000	2 000	00 702	00 020
• • • • • • • • • • • •	• • • • • • • •	• • • • • • •	• • • • • •	SEAS	SONALLY AD	JUSTED	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • • • • •
Year to											
June 1999	49 181	11 896	15 634	15 978	37 080	11 207	33 570	45 548	7 759	227 852	190 355
June 2000	52 054	11 207	18 228	17 227	38 998	9 644	34 071	50 350	7 757	239 537	215 493
June 2001	59 408	10 881	16 517	16 372	45 655	10 433	35 342	52 040	7 144	253 790	232 607
1999–2000											
September	11 738	2 816	4 279	4 334	9 603	2 356	8 264	11 913	1 895	57 198	51 631
December	12 751	2 767	4 568	4 303	9 689	2 224	8 396	12 428	1 884	59 010	52 328
March	13 486	2 808	4 727	4 270	9 877	2 466	8 729	12 909	1 898	61 170	55 037
June	14 079	2 816	4 654	4 320	9 829	2 598	8 682	13 101	2 080	62 159	56 497
2000–2001											
September	14 358	2 794	4 142	4 194	10 981	2 860	8 317	13 096	1 924	62 666	56 852
December	14 721	2 889	3 905	3 963	11 035	2 659	9 322	12 761	1 771	63 026	57 459
March	14 939	2 658	4 126	4 107	11 460	2 435	8 695	12 873	1 716	63 009	58 283
June 2001–2002	15 390	2 540	4 344	4 107	12 179	2 479	9 009	13 309	1 732	65 089	60 013
September	15 944	2 555	4 603	4 547	11 406	2 316	9 174	13 185	1 998	65 728	60 159
• • • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	•••••		• • • • • • •	• • • • • •	• • • • • •	• • • • • • • •	• • • • • •	• • • • • • •	• • • • • • • • • •
Voor to				TF	REND ESTIN	MATES					
Year to	40.024	11 648	15 600	16.051	27 242	11 000	22 //10	4E 600	7 001	227 642	190 851
June 1999 June 2000	49 034 52 126	11 648	15 680 18 062	16 051 17 165	37 242 39 153	11 028 9 823	33 418 34 001	45 683 50 166	7 831 7 687	227 612 239 411	190 851 214 637
June 2001	59 513	10 913	16 683	16 501	45 108	10 349	35 512	52 003	7 257	253 841	232 729
	33 313	10 313	10 000	10 301	45 100	10 040	33 312	32 003	7 237	255 041	202 123
1999–2000	40.0==	0.005	4 0==		0.505	c	0.05=	44.0:-	4.0==		F0 222
September	12 072	2 836	4 275	4 284	9 509	2 443	8 335	11 813	1 857	57 424	50 908
December March	12 606	2 791	4 566	4 302	9 657	2 321	8 482	12 397	1 884	59 006	52 904 54 801
March	13 415	2 786	4 691	4 320	9 826	2 417	8 551	12 889 12 067	1 961	60 856 62 125	54 801 56 024
June 2000–2001	14 033	2 818	4 529	4 258	10 162	2 641	8 633	13 067	1 984	62 125	56 024
September	14 399	2 838	4 219	4 162	10 627	2 736	8 720	13 002	1 925	62 628	57 098
December	14 681	2 793	4 020	4 051	10 627	2 670	8 830	12 911	1 795	62 938	57 590
March	15 013	2 793 2 693	4 110	4 051	11 187	2 531	8 946	12 911	1 795	63 635	58 508
June	15 013	2 589	4 334	4 071	11 733	2 413	9 016	13 121	1 741	64 640	59 533
2001–2002	10 420	2 303	- 354	4 ZIO	11 100	~ +10	2 010	10 141	T 130	O 4 040	55 555
September	15 843	2 506	4 577	4 434	11 804	2 336	9 045	13 288	1 898	65 731	60 394

⁽a) A break in series occurred in Wholesale trade between the June and September 1999 quarters.

See paragraphs 39 and 40 of the Explanatory Notes.



MANUFACTURING AND WHOLESALE TRADE SALES—Chain volume measures(a)

	MANUFA	CTURING									WHOLESAI TRADE
	Food, beverage and tobacco	Textiles, clothing, footwear and leather	Wood and paper	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(b)
Period	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
	Ψ111	ψ	• • • • • • •	ψ	Ψ	• • • • • •	ψ	Ψ	ψιιι • • • • • • •	Ψ	ψ
					ORIGINA	L					
Year to	40.000	44.000	45.000	40.740	00.000	44.070	04.004	40.400	7.070	000 505	100.000
June 1999	49 839 52 139	11 899 11 246	15 939 18 264	16 713 17 244	39 023 39 046	11 270 9 639	34 694 34 207	46 183 50 417	7 973 7 746	233 505 239 948	193 326 216 907
June 2000 June 2001	52 139 57 245	10 659	15 595	15 828	42 034	10 338	33 593	50 417	6 730	239 946 242 714	216 907
1999–2000	40.450	0.027	4.000	4.200	0.000	0.446	0.740	10 100	4 004	F0 070	F0.000
September December	12 152	2 937	4 380	4 369	9 932	2 416	8 743	12 433	1 931	59 279	52 869
	13 998	2 759	4 737	4 572	10 112	2 288	8 742	12 886	2 088	62 178	55 853 52 548
March	12 711	2 754	4 477	3 981	9 397	2 341	8 161	12 084	1 725	57 637	52 548 55 637
June 2000–2001	13 279	2 796	4 670	4 323	9 606	2 594	8 562	13 015	2 002	60 855	55 637
September	14 334	2 845	3 959	4 177	10 365	2 925	8 155	13 383	1 869	62 012	54 772
December	14 334 15 777	2 838	3 959 3 761	4 177	10 365	2 925 2 666	8 155 8 905	13 383	1 839	62 908	54 772 54 788
March	13 381	2 526	3 678	3 642	10 167	2 278	7 843	12 910	1 426	56 509	51 490
June	13 752	2 449	4 196	3 971	11 335	2 470	8 690	12 827	1 595	61 285	54 714
2001–2002	13 132	۷ ۱4 ۵	4 190	3 311	11 000	2 +10	0 090	17 071	T 090	01 200	J4 114
September	14 823	2 508	4 367	4 332	10 702	2 354	8 885	13 017	1 890	62 877	55 966
• • • • • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • • •		• • • • • • • •			• • • • • • •			• • • • • • • •
				SEA	SONALLY AD	JUSTED					
ear to	40.000	44.000	4= 000	40.740		44.070		40.400			400.000
June 1999	49 839	11 899	15 939	16 713	39 023	11 270	34 694	46 183	7 973	233 505	193 326
June 2000 June 2001	52 139 57 245	11 246 10 659	18 264 15 595	17 244 15 828	39 046 42 034	9 639 10 338	34 207 33 593	50 417 50 692	7 746 6 730	239 948 242 714	216 907 215 765
Julie 2001	57 245	10 059	15 595	10 020	42 034	10 336	33 393	50 692	0 730	242 / 14	215 705
1999–2000											
September	11 942	2 841	4 349	4 347	9 907	2 365	8 571	12 030	1 920	58 252	52 786
December	12 803	2 790	4 620	4 310	9 863	2 232	8 548	12 483	1 921	59 563	53 858
March	13 500	2 806	4 705	4 282	9 800	2 461	8 651	12 925	1 884	61 023	54 913
June	13 894	2 809	4 590	4 305	9 476	2 581	8 436	12 978	2 022	61 110	55 351
2000–2001	14.040	2 702	2.024	4.004	10 047	0.000	8 006	12.046	1 050	60.060	E4 E06
September December	14 249	2 793	3 931	4 081	10 247	2 838	8 026	12 946	1 850	60 962	54 586
	14 375	2 834	3 665	3 838 3 960	9 986	2 635	8 806	12 482	1 660	60 282	52 886 53 840
March	14 288	2 583	3 893		10 651	2 408	8 260	12 493	1 605	60 141	
June	14 332	2 449	4 105	3 949	11 150	2 457	8 502	12 771	1 615	61 329	54 453
2001–2002 September	14 737	2 458	4 332	4 277	10 569	2 293	8 792	12 579	1 858	61 893	55 857
•	• • • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • • •							• • • • • • • • •
_				Т	REND ESTIM	1ATES					
rear to	40.000	14.050	1E 000	16 770	20.427	11 000	24 507	40.040	0.054	000.004	100 705
June 1999	49 698	11 656	15 986	16 770	39 137	11 088	34 567	46 318	8 054	233 381	193 735
June 2000	52 290	11 273	18 070	17 203	39 191	9 822	34 257	50 255	7 679	239 937	216 366
June 2001	57 324	10 686	15 785	15 956	41 607	10 253	34 023	50 649	6 834	242 874	216 266
1999–2000											
September	12 265	2 856	4 347	4 347	9 874	2 457	8 632	11 935	1 893	58 590	52 466
December	12 696	2 807	4 611	4 318	9 816	2 326	8 597	12 459	1 902	59 547	53 934
March	13 391	2 795	4 679	4 314	9 745	2 412	8 520	12 881	1 950	60 674	54 962
June	13 938	2 815	4 433	4 224	9 756	2 627	8 508	12 979	1 934	61 126	55 004
2000–2001		2				_					
September	14 220	2 819	4 039	4 075	9 911	2 714	8 505	12 829	1 842	60 821	54 337
December	14 312	2 748	3 790	3 927	10 273	2 645	8 485	12 636	1 693	60 412	53 609
March	14 351	2 621	3 867	3 922	10 614	2 505	8 493	12 576	1 627	60 550	53 757
June	14 441	2 498	4 088	4 032	10 809	2 389	8 539	12 608	1 672	61 090	54 563
2001–2002 September	14 570	2 416	4 288	4 171	10 893	2 319	8 626	12 672	1 754	61 801	55 616
,				easures is 1999						e between the	
	(a) Nototell	55 Jour 101 0116	volumo m	0.000.00 10 100.	2000.	and Se				ns 39 and 40	

Explanatory Notes.



PERCENTAGE CHANGES IN SALES—Chain volume measures(a)

	MANUFACTURING										
	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(b)
Period	%	%	%	%	%	%	%	%	%	%	%
	• • • • • • • •	• • • • • • •	• • • • • •		• • • • • • • •	• • • • • •	• • • • • •	• • • • • • • •	• • • • • •	• • • • • • •	
					ORIGINA	L					
Year to		40.4		0.5	0 =		= 0				0.0
June 1999	0.9	12.4	6.2	2.5	0.7	16.4	7.2	5.3	5.3	4.5	8.6
June 2000 June 2001	4.6 9.8	-5.5 -5.2	14.6 -14.6	3.2 -8.2	0.1 7.7	-14.5 7.3	-1.4 -1.8	9.2 0.5	-2.8 -13.1	2.8 1.2	12.2 -0.5
June 2001	9.0	-5.2	-14.0	-0.2	1.1	1.5	-1.0	0.5	-13.1	1.2	-0.5
1999-2000											
September	4.7	0.2	6.5	1.3	0.2	-15.4	-1.8	9.6	5.6	2.6	6.0
December	15.2	-6.1	8.1	4.6	1.8	-5.3	0.0	3.6	8.2	4.9	5.6
March	-9.2	-0.2	-5.5	-12.9	-7.1	2.3	-6.6	-6.2	-17.4	-7.3	-5.9
June	4.5	1.5	4.3	8.6	2.2	10.8	4.9	7.7	16.0	5.6	5.9
2000-2001											
September	7.9	1.8	-15.2	-3.4	7.9	12.8	-4.7	2.8	-6.6	1.9	-1.6
December	10.1	-0.3	-5.0	-3.3	-1.9	-8.9	9.2	-3.5	-1.6	1.4	0.0
March	-15.2	-11.0	-2.2	-9.8	0.0	-14.6	-11.9	-10.4	-22.5	-10.2	-6.0
June	2.8	-3.1	14.1	9.0	11.5	8.5	10.8	10.9	11.8	8.5	6.3
2001–2002	7.0	2.4	1 1	0.1	F.C	4.7	2.2	1 =	10 E	0.6	2.2
September	7.8	2.4	4.1	9.1	-5.6	-4.7	2.2	1.5	18.5	2.6	2.3
• • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • •	SFA	SONALLY AD	IIISTED	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • • • • • •
Year to				OLA	JONALLI AL	JOSILD					
June 1999	0.9	12.4	6.2	2.5	0.7	16.4	7.2	5.3	5.3	4.5	8.6
June 2000	4.6	-5.5	14.6	3.2	0.1	-14.5	-1.4	9.2	-2.8	2.8	12.2
June 2001	9.8	-5.2	-14.6	-8.2	7.7	7.3	-1.8	0.5	-13.1	1.2	-0.5
1999–2000											
September	-1.8	-3.1	7.3	0.9	1.1	-17.3	-2.2	6.5	3.8	0.4	6.5
December	7.2	-3.1 -1.8	6.2	-0.9	-0.5	-5.6	-0.3	3.8	0.0	2.3	2.0
March	5.4	0.6	1.8	-0.6	-0.6	10.2	1.2	3.5	-1.9	2.5	2.0
June	2.9	0.1	-2.4	0.5	-3.3	4.9	-2.5	0.4	7.3	0.1	0.8
2000-2001											
September	2.6	-0.5	-14.4	-5.2	8.1	10.0	-4.9	-0.2	-8.5	-0.2	-1.4
December	0.9	1.4	-6.8	-6.0	-2.5	-7.2	9.7	-3.6	-10.3	-1.1	-3.1
March	-0.6	-8.9	6.2	3.2	6.7	-8.6	-6.2	0.1	-3.3	-0.2	1.8
June	0.3	-5.2	5.5	-0.3	4.7	2.0	2.9	2.2	0.6	2.0	1.1
2001–2002											
September	2.8	0.4	5.5	8.3	-5.2	-6.7	3.4	-1.5	15.0	0.9	2.6
• • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • •				• • • • • •	• • • • • • • •	• • • • • •	• • • • • • •	• • • • • • • • • • • •
Year to				Т	REND ESTIN	IAIES					
June 1999	1.0	9.5	6.7	3.5	1.2	13.3	6.2	5.5	7.3	4.4	9.1
June 2000	5.2	-3.3	13.0	2.6	0.1	-11.4	-0.9	8.5	-4.6	2.8	11.7
June 2001	9.6	-5.2	-12.6	-7.2	6.2	4.4	-0.9 -0.7	0.8	-4.0 -11.0	1.2	0.0
1999–2000	0.0	0.0	0.1	0.0	0.5	0.4	0.4	2.2	4.0	0.4	
September	0.3	-2.3	6.1	-0.3	0.5	-9.1	-0.4	2.6	-4.3	0.4	n.p.
December	3.5	-1.7 0.5	6.1	-0.7	-0.6 0.7	-5.3	-0.4	4.4	0.5	1.6	2.8
March	5.5 4.1	-0.5 0.7	1.5	-0.1 2.1	-0.7 0.1	3.7	-0.9 0.3	3.4	2.5	1.9	1.9
June 2000–2001	4.1	0.7	-5.3	-2.1	0.1	8.9	-0.2	8.0	-0.8	0.7	0.1
September	2.0	0.1	-8.9	-3.5	1.6	3.3	0.0	-1.2	-4.8	-0.5	-1.2
December	0.6	-2.5	-6.2	-3.6	3.7	-2.5	-0.2	-1.2 -1.5	-4.8 -8.0	-0.5 -0.7	-1.2 -1.3
March	0.3	-4.6	2.0	-0.1	3.3	-5.3	0.1	-0.5	-3.9	0.2	0.3
June	0.6	-4.7	5.7	2.8	1.8	-3.5 -4.6	0.5	0.3	2.8	0.2	1.5
2001–2002	0.0		J	0			0.0	0.0		3.0	
September	0.9	-3.3	4.9	3.5	0.8	-2.9	1.0	0.5	4.9	1.2	1.9

⁽a) Reference year for chain volume measures is 1999–2000.

⁽b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

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

and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

	MANUFA	CTURING.									WHOLESALE TRADE
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	Total wholesale(b)
• • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • • • • • • • • • • • • • •
June 1999	0.57	0.63	0.54	0.19	0.58	0.47	0.60	0.58	0.44	0.54	0.53
June 2000	0.53	0.60	0.45	0.20	0.63	0.46	0.53	0.61	0.44	0.53	0.52
June 2001	0.52	0.69	0.51	0.20	0.57	0.52	0.50	0.61	0.49	0.53	0.54
1999–2000											
September	0.59	0.61	0.49	0.19	0.56	0.47	0.59	0.60	0.46	0.54	0.54
December	0.55	0.66	0.47	0.18	0.58	0.47	0.55	0.60	0.44	0.53	0.55
March	0.54	0.64	0.44	0.19	0.61	0.46	0.53	0.58	0.48	0.53	0.53
June	0.53	0.60	0.45	0.20	0.63	0.46	0.53	0.61	0.44	0.53	0.52
2000-2001											
September	0.53	0.61	0.45	0.21	0.62	0.47	0.56	0.62	0.47	0.54	0.54
December	0.53	0.60	0.52	0.21	0.60	0.49	0.56	0.63	0.50	0.55	0.55
March	0.53	0.67	0.52	0.19	0.59	0.48	0.54	0.63	0.46	0.54	0.54
June	0.52	0.69	0.51	0.20	0.57	0.52	0.50	0.61	0.49	0.53	0.54
2001-2002											
September	0.54	0.63	0.47	0.18	0.58	0.52	0.49	0.64	0.38	0.53	0.55
	(a) Season	ally adjusted	series.		(b) A break in	series occur	red in Wholes	sale trade bet	ween the Jun	ie	



EXPERIMENTAL ESTIMATES, Income from Sales of Goods and Services—Current prices

Quarter to	Manufactu- ring	Wholesale trade	Motor vehicle retail and services	Accomm- odation	Transport and storage	Commun- ication services	Property and business services	Cultural and recreational services	Personal services	Total selected industries
				ORIGINA	L ESTIMATE:	S (\$million)				
1998-1999										
March	53 954	45 467	13 129	1 549	11 025	2 543	22 277	4 755	889	155 588
June	56 123	48 352	13 594	1 620	11 272	2 660	23 677	4 757	1 011	163 066
1999-2000										
September	58 292	51 900	13 913	1 676	12 407	2 592	26 716	5 365	1 178	174 039
December	61 730	55 281	14 139	1 790	13 264	2 873	25 712	5 418	1 185	181 392
March	57 905	52 581	14 444	1 795	12 675	3 009	25 387	5 482	1 210	174 488
June	62 018	57 145	14 448	1 836	13 184	3 141	27 706	5 811	1 179	186 468
2000-2001										
September	63 782	57 509	12 999	1 933	13 173	3 296	26 927	5 613	1 172	186 404
December	65 734	59 601	14 355	2 148	13 884	3 719	28 915	5 915	1 245	195 516
March	59 164	55 403	14 333	1 877	12 840	3 872	27 796	5 135	1 228	181 648
June	64 972	60 306	15 047	1 981	13 723	3 700	31 008	5 766	1 284	197 787
2001-2002										
September	66 702	60 620	14 962	2 398	14 013	3 559	28 864	5 704	1 197	198 019
• • • • • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • •
			CI	HANGE FRO	M PREVIOU	S QUARTER	(%)			
1998–1999										
June	4.0	6.3	3.5	4.6	2.2	4.6	6.3	0.0	13.7	4.8
1999–2000										
September	3.9	7.3	2.3	3.5	10.1	-2.6	12.8	12.8	16.5	6.7
December	5.9	6.5	1.6	6.8	6.9	10.8	-3.8	1.0	0.6	4.2
March	-6.2	-4.9	2.2	0.3	-4.4	4.7	-1.3	1.2	2.1	-3.8
June	7.1	8.7	0.0	2.3	4.0	4.4	9.1	6.0	-2.6	6.9
2000-2001										
September	2.8	0.6	-10.0	5.3	-0.1	4.9	-2.8	-3.4	-0.6	0.0
December	3.1	3.6	10.4	11.1	5.4	12.8	7.4	5.4	6.2	4.9
March	-10.0	-7.0	-0.2	-12.6	-7.5	4.1	-3.9	-13.2	-1.4	-7.1
June	9.8	8.8	5.0	5.5	6.9	-4.4	11.6	12.3	4.6	8.9
2001-2002										
September	2.7	0.5	-0.6	21.0	2.1	-3.8	-6.9	-1.1	-6.8	0.1

INTRODUCTION

1 This publication contains estimates of the book value of inventories and income from sales of goods and services for selected industries in Australia. The series have been compiled from data collected by the Australian Bureau of Statistics (ABS) in its Quarterly Economic Activity Survey. The survey collects data from private businesses only. Prior to June quarter 2001, the data were collected in the Survey of Inventories, Sales and Services. For more information on the introduction of the Quarterly Economic Activity Survey, see the information paper, Improvements to ABS Quarterly Business Indicators (Cat no. 5677.0).

SCOPE AND COVERAGE

2 The industries, classified according to the Australian and New Zealand Standard Industrial Classification 1993 (ANZSIC), included in this publication are:

lad othica	Inventories	Income from sales of goods and services
Industries	inventories	and services
	• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
Mining (Division B)	Χ	
Manufacturing (Division C)	X	X
Electricity and gas supply (36)	Χ	
Wholesale trade (Division F)	Χ	X
Retail Trade (Division G) Food (51)	X	
Personal and household goods (52)	X	
Motor vehicle retailing (531)	X	X
Automotive fuel retailing (5321)	X	X
Automotive electrical services (5322)		X
Smash repairs (5323)		Χ
Tyre retailing (5324)	X	Χ
Automotive repair and services nec. (5239)		Х
Accommodation, cafes and restaurants (Division H)		
Accommodation (571)	Χ	X
Pubs, taverns and bars (572)	Χ	
Cafes and restaurants (573)	X	
Clubs (Hospitality) (574)	Χ	
Transport and storage (Division I)		x
Communication services (Division J)		X
Property and business services (Division L)		X
Cultural and recreational services (Division P) excluding: Libraries (921), Museums (922) and Parks and gardens (923)		X
Personal services (95) excluding: Video hire outlets (9511) and Hairdressing and beauty salons (9526)		х

3 The scope excludes public sector business units (i.e. all departments, authorities and other organisations owned and controlled by Commonwealth, State and Local Government).

SCOPE AND COVERAGE continued

- **4** The Quarterly Economic Activity Survey, like most ABS economic collections, takes its frame from the ABS Business Register which is primarily based on registrations to the Australian Taxation Office's Pay As You Go Withholding (PAYGW) scheme (and prior to 1 July 2000 its Group Employer scheme). The frame is updated quarterly to take account of new businesses, businesses which have ceased employing, changes in employment levels, changes in industry and other general business changes.
- **5** Businesses which have ceased employing are identified when the Australian Taxation Office cancels their PAYGW registration (or previously their GE registration). In addition, from September quarter 1999, businesses which did not remit under the GE scheme for the previous five quarters were removed from the frame. A similar process will be adopted to remove businesses who do not remit under the PAYGW scheme.
- **6** The statistics in this publication exclude non-employing businesses. Though there are a substantial number of these businesses, it is expected that they would not contribute significantly to the estimates, although the impact would vary from industry to industry.
- **7** Inventories data are not collected from businesses with less than 20 employees, as smaller businesses have difficulty in providing accurate quarterly information on the level of their inventories. Estimates for these businesses are derived by applying sales information to an estimated sales to inventory ratio. The sales to inventories ratio is based on data from the current quarter for medium sized businesses, and benchmarked to data from the annual Economic Activity Survey for small businesses. Investigations indicate that this technique produces estimates of inventories of sufficient quality.

CHANGES TO ABS BUSINESS REGISTER

- **8** The introduction of The New Tax System has a number of significant implications for ABS business statistics, and these are discussed in the information paper *ABS Statistics And The New Tax System* (ABS Cat. no. 1358.0). The replacement of the GE registration process by PAYGW registration resulted in a number of changes to most business survey frames. However, an adjustment has been made to the Inventories and Sales series so that these changes will not affect broader level estimates of level and movement.
- **9** From the September quarter 2002, the ABS will make further changes including adopting a new units model and expanding its Register to include all units on the Australian Business Register, including non-employers. Further information on the impact of these changes will be provided before they are implemented.
- **10** The survey is conducted by mail on a quarterly basis. It is based on a random sample of approximately 16,000 units which is stratified by industry, state/territory and number of employees. All private sector units with over 250 employees, and other statistically significant units, such as joint venture partners, are included in the sample.
- **11** Respondents are asked to provide data on the same basis as their own management accounts. Where a selected unit does not respond in a given survey period, a value is estimated. If data are subsequently provided, the estimated value is replaced with the reported data. Aggregates are calculated from all data using the 'number raised' estimation technique. Data are edited at both individual unit level and at aggregate level.

SURVEY METHODOLOGY

TIMING OF SURVEY CYCLE

12 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

- **13** The survey frames and samples are revised each quarter to ensure that they remain representative of the survey population. The timing for creating each quarter's survey frame is consistent with that of other ABS business surveys. This provides for greater consistency when comparing data across surveys.
- **14** Additionally, with these revisions to the sample, some of the units from the sampled sector are rotated out of the survey and are replaced by others, to spread the reporting workload equitably.
- **15** Adjustments are included in the estimates to allow for lags in processing new businesses to the ABS Business Register. The adjustments contributed 2.3% to the current quarter's estimate of reported inventories, 1.5% to reported Manufacturing sales, and 2.7% to reported Wholesale trade sales.

STATISTICAL UNIT

16 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 recognised where separate and comprehensive accounts are compiled for it.

CLASSIFICATION BY INDUSTRY

- **17** The Australian and New Zealand Standard Industrial Classification has been developed for use in both countries for the production and analysis of industry statistics. For more information, users are referred to *Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993* (Cat. no. 1292.0).
- **18** In order to classify inventories and income from sales of goods and services data by industry, each statistical unit (as defined above) is classified to the Australian and New Zealand Standard Industrial Classification industry in which it *mainly* operates.

DESCRIPTION OF TERMS

- **19** *Income from the sales of goods and services.* This includes income from sales of goods by the business and income from services provided such as commission income, repair and service income and fees, management fees, rent leasing and hiring income, delivery and installation charges, income from consulting services, sponsorship income, membership/subscription fees and royalties income.
- **20** *Manufacturing Sales.* Income from sales of goods and services (as defined above) by businesses classified to the Manufacturing industry. From the March quarter 2001 issue of this publication this series replaced the Manufacturers' sales series which was more narrowly defined. A consistent time series on the new basis has been compiled back to the June quarter 1984.
- **21** Wholesale Trade Sales. From September quarter 1999, the Wholesale Trade Sales comprises all income from sales of goods and services (as defined above) by businesses classified to the Wholesale Trade industry. Prior to September quarter 1999, only the sales of goods by wholesalers was collected. No break in series was identified with this change.
- **22** *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.

INCOME FROM SALES OF GOODS AND SERVICES

- **23** As part of a strategy to increase the range of information available relating to service industries, the ABS introduced quarterly experimental estimates relating to income from sales of goods and services for most service industries in the June quarter 2000 issue of this publication. This information was first collected in the March quarter 1999. Previously, quarterly data relating to sales had only been released in respect of the Manufacturing and Wholesale trade industries.
- **24** Income from sales of goods and services is the most readily available measure of output across different industries. This measure is consistent with that used in the Manufacturing and Wholesale trade sales series currently released in this publication. Table 11 presents experimental estimates of income from sales of goods and services for private sector businesses in the newly-measured service industries, as well as comparable data for the Manufacturing and Wholesale trade industries.
- **25** Users should treat the estimates in table 11 with caution. They are experimental at this stage and further analysis is required to ensure that they are robust and reliable indicators for measuring income in the selected service industries over time.
- **26** In addition to the current price data, the ABS has recently produced chain volume estimates of income from sales of goods and services for service industries. These are also experimental, and require further analysis to ensure they are of sufficient quality for publication. However, if users are interested in accessing the chain volume data, they should contact Mark Wise on Sydney 02 9268 4241.

CHAIN VOLUME MEASURES

- 27 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 1999–2000). The current price values may be thought of as being the product of a price and quantity. The value in chain volume terms can be derived by linking together movements in volumes, calculated using the average prices of the previous financial year and applying compound movements to the current price estimates of the reference year. Each year's quarter-to-quarter growth rates in the chain volume series are based on the prices of the previous financial year, except for those quarters of the latest incomplete year which are based upon the second most recent financial year. Quarterly chain volume estimates are benchmarked to annual chain volume estimates, so that the quarterly estimates for a financial year sum to the corresponding annual estimate.
- 28 With each release of the June quarter estimates, 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 2002 estimates, the chain volume measures for 2001–2002 will have 2000–2001 (the previous financial year) as their base year rather than 1999–2000, and the reference year will be 2000–2001. A change in the reference year changes levels but not growth rates for all periods. A change in the base year can result in revisions, small in most cases, to growth rates for the last few years.
- **29** 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 data, this means that the original chain volume estimates for industry groups will not add to total inventories and sales for Australia. In order to minimise the impact of this, the ABS uses the latest base year as the reference year. By adopting this approach, addivity does exist for the quarters following the reference year and non-additivity 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

- **30** Estimates provided in this publication are subject to non-sampling and sampling error. The most common way of quantifying sampling error is to calculate the standard error for the published estimate. In calculating the standard error, the common practice for the statistics in this publication has been to examine the most recent two years of the quarterly series, and to produce a smoothed standard error for that period for the major published aggregates. This approach takes account of the variability in standard error estimates for quarterly statistics. This estimated standard error is then used as an indication of the sampling error for the current published series. The data in the current publication has been sourced from the new Quarterly Economic Activity Survey, which has been conducted since March quarter 2001, and this does not allow for a smoothed estimate of the standard error to be calculated. Therefore standard errors are based upon the data in the currently published quarter. Details of standard errors are on pages 24 and 25 of this publication.
- **31** Non-sampling errors may arise as a result of errors in the reporting, recording or processing of the data and can occur even if there is a complete enumeration of the population. These errors can be introduced through inadequacies in the questionnaire, treatment of non-response, inaccurate reporting by respondents, errors in the application of survey procedures, incorrect recording of answers, and errors in data entry and processing.
- **32** It is difficult to measure the size of non-sampling errors. However, every effort is made in the design of the survey and development of survey procedures to minimise their effects.
- **33** 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.
- **34** Seasonal adjustment is a means of removing the estimated effects of normal seasonal variations for the series so that the effects of other influences can be more clearly recognised.
- **35** In the seasonal adjustment of the series, account has been taken of both normal seasonal factors (e.g. increase in retail inventories due to Christmas period) and, in the case of sales, also trading day effects (arising from the varying lengths of the quarters and the varying numbers of Sundays, Mondays, Tuesdays etc. in each quarter). Seasonal adjustment does not remove from the series the effect of irregular or non-seasonal influences (e.g. change in interest rates), and reflects the sampling and other errors to which the original figures are subject. Particular care should be taken in interpreting quarterly movements in the adjusted figures in this publication, especially for detailed industry estimates.
- **36** 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 the data collected up to and including the June quarter 2001. Data for periods after June 2001 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 the reanalysis may be quite significant especially for data for more recent quarters.
- **37** Seasonally adjusted data are not available for income from sales of goods and services in table 11 as at least three years of data are required to discern a seasonal pattern.

SEASONAL ADJUSTMENT

TREND ESTIMATES

38 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 *Information Paper: A Guide to Interpreting Time Series* — *Monitoring Trend, An Overview* (Cat. no. 1348.0) or contact the Assistant Director, Time Series Analysis on Canberra 02 6252 6345.

PRIVITISATION OF
PUBLIC SECTOR UNITS

- **39** Three significant privatised marketing authorities came into scope of the Survey of Inventories, Sales and Services from the September quarter 1999. The introduction of these units resulted in a break in series between the June and September quarters 1999 and comparison of the series over time should be undertaken with care.
- **40** The methodology used by the ABS has ensured that the trend series has not been distorted by the introduction of these units, although the shift in level is still evident between the June and September quarters 1999. For this reason, the trend estimates of movement have not been published for the Wholesale trade inventories, Total inventories and Wholesale trade sales series in respect of the September quarter 1999.

COMPARABILITY WITH NATIONAL ACCOUNTS ESTIMATES

- **41** The data collected in the Quarterly Economic Activity Survey are used to compile estimates of the increase in book value of non-farm inventories in the quarterly and annual national accounts. Income from the sales of goods and services for the Manufacturing and Wholesale trade industries are used to help derive quarterly chain volume measures of gross value added for these industries. For further details see *Australian National Accounts: Concepts, Sources and Methods* (Cat. no. 5216.0).
- **42** 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 are benchmarked to the annual supply and use tables and include estimates for the construction and transport industries.
- **43** Income from the sales of goods and services now collected from the service industries is eventually expected to lead to an improvement in the quality of the quarterly national accounts chain volume estimates of gross value added for the service industries involved, after the series have been subject to further analysis.

RELATED PUBLICATIONS

- **44** 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)
- Experimental Estimates: Australian Industry, a State Perspective, Australia 1998–99 (Cat. no. 8156.0)
- Information Paper: Introduction of Chain Volume Measures in the Australian National Accounts (Cat. no. 5248.0)
- Improvements to ABS Quarterly Business Indicators (Cat. no. 5677.0)
- Manufacturing Production, Australia (Cat. no. 8301.0)
- Private New Capital Expenditure and Expected Expenditure, Australia (Cat. no. 5625.0)
- Retail Trade, Australia (Cat. no. 8501.0)
- State Estimates of Private New Capital Expenditure (Cat. no. 5646.0)

45 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.

ABS DATA AVAILABLE ON REQUEST

46 As well as the statistics included in this and related publications, the ABS may have other relevant data available on request. Inquiries should be made to the National Information Service on 1300 135 070.

SYMBOLS AND OTHER USAGES

n.p. not available for publication

n.a. not applicable

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 ($$77,000m \pm $965m$).
- There are approximately nineteen chances in twenty that the real value falls within the ranges \$75,070m and \$78,930m (\$77,000m \pm \$1,930m).

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

The following tables show the standard errors for national quarterly level estimates based upon the data in the current quarter.

	Inventories	
	\$m	
Mining	72	
Manufacturing	414	
Wholesale trade	897	
Retail trade	737	
Other	64	
Total selected industries	1 237	

Income from sales of goods and services

\$m

Manufacturing	818
Wholesale trade	2 036
Motor vehicle retailing services	740
Accommodation	195
Transport and storage	545
Communication services	158
Property and business services	1 051
Cultural and recreation services	259
Personal services	208
Total selected industries	2 633

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 ± 754 m).
- 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 tables shows the standard errors for national quarterly movement estimates based upon the data in the current quarter.

• • • • • • • • • • • • • • • • • • • •	Inventories					
	\$m					
Mining	105					
Manufacturing	367					
Wholesale trade	695					
Retail trade	389					
Other	61					
Total selected industries	878					

Income from sales of goods and services

\$m Manufacturing 681 1 361 Wholesale trade Motor vehicle retailing services 431 Accommodation 152 Transport and storage 302 Communication services 142 Property and business services 773 Cultural and recreation services 426 Personal services 119 Total selected industries 1 835

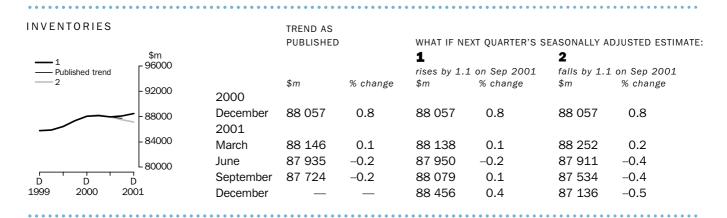
EFFECT OF NEW SEASONALLY ADJUSTED ESTIMATES ON TREND ESTIMATES

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 Manufacturing and Wholesale trade sales.

- **1** The December quarter seasonally adjusted estimate of chain volume measures is higher than the September quarter estimate by the percentage shown.
- **2** The December quarter seasonally adjusted estimate of chain volume measures is lower than the September quarter estimate by the percentage shown.

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



MANUFACTURING	SALES		TREND AS PUBLISHED		WHAT IF NE	XT QUARTER'S S	EASONALLY AD	JUSTED ESTIMATE:
— 1 — Published trend	\$m Г ⁶⁶⁰⁰⁰				1 rises by 1.2	on Sep 2001	2 falls by 1.2	on Sep 2001
2	- 64000	2000	\$m	% change	\$ <i>m</i>	% change	\$ <i>m</i>	% change
~/	- 62000	December 2001	60 412	-0.7	60 412	-0.7	60 412	-0.7
	- 60000	March	60 550	0.2	60 479	0.1	60 566	0.3
	58000	June	61 090	0.9	61 108	1.0	61 078	8.0
D D [September	61 801	1.2	61 901	1.3	61 482	0.7
1999 2000 200	01	December	_	_	62 648	1.2	61 652	0.3

WHOLESALE TRADE	SALES	TREND AS PUBLISHED		WHAT IF NE	XT QUARTER'S S	EASONALLY A	DJUSTED ESTIMATE:
	m 3000			1 rises by 2.3	3. on Sep 2001	2 falls by 2.3	on Sep 2001
— 2 - 59	2000	\$m	% change	\$m	% change	\$m	% change
-55	5000 December 2001	53 609	-1.3	53 609	-1.3	53 609	-1.3
- 53	March	53 757	0.3	53 620	0.0	53 770	0.3
L ₄ -	₇₀₀₀ June	54 563	1.5	54 596	1.8	54 544	1.4
D D D	September	55 616	1.9	55 819	2.2	55 093	1.0
1999 2000 2001	December	_	_	56 961	2.0	55 239	0.3

FOR MORE INFORMATION...

INTERNET www.abs.gov.au the ABS web site is the best place to

start for access to summary data from our latest publications, information about the ABS, advice about upcoming releases, our catalogue, and Australia Now—a

statistical profile.

LIBRARY A range of ABS publications is available from public and

tertiary libraries Australia-wide. Contact your nearest library to determine whether it has the ABS statistics you require, or visit our web site for a list of libraries.

CPI INFOLINE For current and historical Consumer Price Index data,

call 1902 981 074 (call cost 77c per minute).

DIAL-A-STATISTIC For the latest figures for National Accounts, Balance of

Payments, Labour Force, Average Weekly Earnings, Estimated Resident Population and the Consumer Price Index call 1900 986 400 (call cost 77c per minute).

INFORMATION SERVICE

Data which have been published and can be provided within five minutes are free of charge. Our information consultants can also help you to access the full range of ABS information—ABS user-pays services can be tailored to your needs, time frame and budget. Publications may be purchased. Specialists are on hand to help you with analytical or methodological advice.

PHONE **1300 135 070**

EMAIL client.services@abs.gov.au

FAX 1300 135 211

POST Client Services, ABS, GPO Box 796, Sydney 1041

WHY NOT SUBSCRIBE?

ABS subscription services provide regular, convenient and prompt deliveries of ABS publications and products as they are released. Email delivery of monthly and quarterly publications is available.

......

PHONE 1300 366 323

EMAIL subscriptions@abs.gov.au

FAX 03 9615 7848

POST Subscription Services, ABS, GPO Box 2796Y, Melbourne 3001

© Commonwealth of Australia 2001



RRP \$18.50