

INQUIRTES

 For further information about these and related statistics, contact Kevin Squair on 06 252 5623, or any ABS Office.

STOCKS, SELECTED INDUSTRY SALES AND EXPECTED SALES TO DECEMBER 1995 AUSTRALIA

EMBARGOED UNTIL 11:30AM THURS 25 MAY 1995

MARCH QTR KEY FIGURES

TREND ESTIMATES*

	Mar 94	Dec 94	Mar 95	% change Dec 94 to	% change Mar 94 to
	\$ <i>m</i>	\$ m	\$ <i>m</i>	Mar 95	Mar 95
Stocks held by					
Private businesses	55 309	58 240	59 304	1.8	7.2
Sales by					
Manufacturers	37 146	39 380	39 901	1.3	7.4
Wholesalers	35 189	39 573	40 621	2.6	15.4

SEASONALLY ADJUSTED*

	Mar 94	Dec 94 Mar 95		% change Dec 94 to	% change Mar 94 to	
	\$ m	\$ <i>m</i>	\$ m	Mar 95	Mar 95	
Stocks held by						
Private businesses	55 511	58 550	59 041	8.0	6.4	
Sales by						
Manufacturers	37 225	39 267	39 882	1.6	7.1	
Wholesalers	35 008	39 367	40 636	3.2	16.1	

^{*} At average 1989-90 prices.

MARCH QTR KEY POINTS

TREND ESTIMATES

- The trend estimate for stocks held by private businesses is showing an increase of 1.8% over the revised December quarter, the fourth quarter of strong stocks growth. This has been particularly marked in the wholesale and retail industries.
- Manufacturers' and Wholesalers' sales have continued to rise in the March quarter with increases of 1.3% and 2.6% respectively. The rates of increase in Manufacturers' and Wholesalers' sales have been slowing over the past year.

EXPECTED SALES

 The latest estimate for manufacturers' sales for 1994-95 is \$175,036m. If realised, this estimate will represent an increase of 10.2% over 1993-94.

STOCKS & SELECTED INDUSTRY SALES NOTES

FORTHCOMING ISSUES

ISSUE (Quarter) RELEASE DATE

 June 1995
 23 August 1995

 September 1995
 24 November 1995

December 1995 1 March 1996

CHANGES IN THIS ISSUE

The seasonally adjusted series in this publication have been revised following a re-analysis to take into account data up to and including December quarter 1994. Trend series which are derived from the seasonally adjusted series are also subject to revision in this issue.

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 and movements derived from them are subject to sampling variability. Relative standard errors give a measure of this variability and therefore indicate the degree of confidence that can be attached to the data. They are more fully discussed and presented on pages 24 and 25.

Relative standard errors for some major March quarter data items are given below. There is 67% confidence that the actual value would be within one standard error of the sample estimate, and 95% confidence that it lies within two standard errors.

RELATIVE STANDARD ERRORS

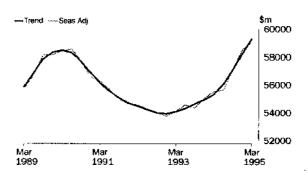
		quarter to quarter
	level	movement
Total Stocks, total selected industries	1.9%	0.4%
Total Stocks, manufacturing	1.1%	0.2%
Total Sales, manufacturing	0.9%	0.3%

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 on page 22.

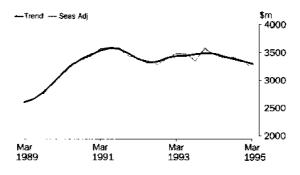
W. MCLENNAN Australian Statistician STOCKS ALL INDUSTRIES

The trend estimates for all industry stocks have been increasing since December 1992, with strongest growth in the last four quarters.



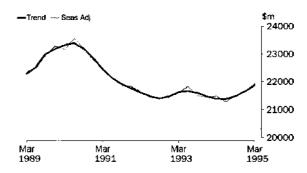
MINING

During March quarter 1995 the trend estimate for mining stocks continued the slight decline that commenced in the December quarter.



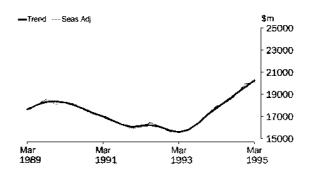
MANUFACTURING

The trend estimates for manufacturing stocks fell between June 1990 and September 1992, but have been rising gradually in recent quarters.



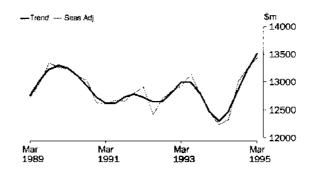
WHOLESALE TRADE

The trend estimates for wholesale stocks have been rising strongly since June 1993.

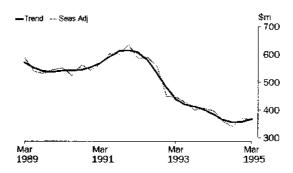


RETAIL TRADE

The trend estimates have been rising since March 1994.

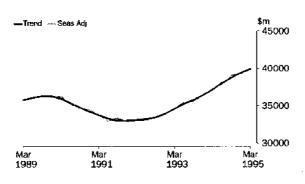


OTHER INDUSTRIES (Electricity and gas supply; accommodation, cafe's and restaurants) The trend break that was shown in previous issues has been removed following a re-analysis of the series and the application of revised seasonal factors to the seasonally adjusted series.



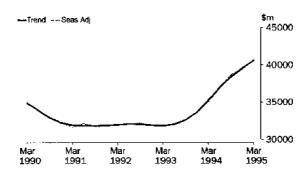
MANUFACTURERS' SALES

The manufacturers' sales trend estimates have continued to rise since December 1991 but with a slowing in the growth rate over the past year.



WHOLESALERS' SALES

The trend estimates for wholesale sales have been rising since March 1993. A slower rate of growth is evident over the past year. (Data are not available proir to June 1989)

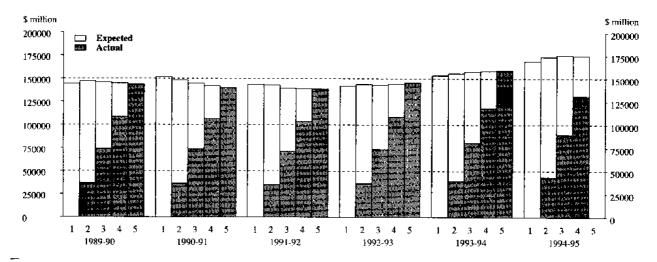


MANUFACTURERS' ACTUAL AND EXPECTED SALES

FINANCIAL YEARS AT CURRENT PRICES

SALES

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



EXPLANATION OF TIMING OF ESTIMATES used in construction of graph above

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



BOOK VALUE OF STOCKS OWNED, By Private Business—Current prices

			Wholesale		_	Total selected
	Mining ¹	Manufacturing	trade	Retail trade	Other ²	Industries ²
At end of	\$m	\$m	\$m	\$ m	\$m	\$m
· · ·	****		ORIGIN		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	****
			OMdiv	nL		
June 1992	3 370	22 215	16 893	13 086	630	56 194
June 1993	3 594	23 027	16 669	14 313	471	58 074
June 1994 r	3 464	22 624	19 567	13 629	409	59 693
1992-93						
March	3 731	22 893	17 184	14 289	500	58 597
June	3 594	23 027	16 669	14 313	471	58 074
993–94						
September	3 613	22 796	17 871	14 469	446	59 195
December	3 719	22 458	18 969	14 234	497	59 877
March	3 653	22 887	19 848	13 739	453	60 580
					409	
June r	3 464	22 624	19 567	13 629	409	59 693
994-95	2.024	22.046	20.270	14.044	290	60 000
September r	3 634	23 016	20 379	14 944	389	62 362
December r	3 52 8	23 318	21 432	15 401	465	64 144
March	3 480	24 485	22 049	15 408	433	65 856
**************************************					· · · · · · › › › › · · · · · · · ·	
			SEASONALLY A	יייסונטונטי		
June 1992	3 463	22 213	17 238	13 400	651	56 9 6 5
June 1993	3 697	23 017	17 022	14 669	484	58 890
					419	60 552
June 1994	3 563	22 606	19 990	13 975	419	60 552
.992–93						
March	3 677	22 661	16 905	14 321	504	58 068
June	3 697	23 017	17 022	14 669	484	58 89 0
993-94						
September	3 551	22 844	17 926	14 320	457	59 099
December	3 737	22 651	18 834	13 999	469	59 689
March	3 598	22 659	19 519	13 775	458	60 009
June	3 563	22 606	19 990	13 975	419	60 552
.994-95	3 303	22 000	20 000	10 310	120	
September	3 572	23 075	20 431	14 794	399	62 272
December	3 546	23 514	21 291	15 131	438	63 920
March	3 427	24 250	21 680	15 451	439	65 247
MIGICAL	3 421	24 230	21 000	13 401		
		, . ,	TREND ESTI	MATES ³	,	
		00.077	40.050	42.620	644	EG OGE
June 1992	3 462	22 277	16 956	13 629	641	56 965
June 1993	3 66 2	22 867	17 196	14 494	476	58 695
June 1994	3 594	22 705	20 012	14 119	425	60 855
L992-93						
March	3 647	22 738	16 833	14 382	495	58 094
June	3 662	22 867	17 196	14 494	476	58 695
.993-94	-					
September	3 656	22 851	17 908	14 333	471	59 219
December	3 642	22 703	18 750	14 000	462	59 557
	3 621	22 605	19 459	13 859	446	59 990
March				14 119	425	60 855
June L 99495	3 594	22 705	20 012	T4 TTA	423	00 833
September	3 555	23 070	20 559	14 624	417	62 225
				15 112	425	63 778
December	3 519	23 575	21 148		425 439	65 305
March	3 463	24 130	21 738	15 535		

¹ In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattern.

² See paragraph 2, page 17.

³ Revised.



BOOK VALUE OF STOCKS OWNED, By Private Business—Constant prices¹

			Wholesale	.	.	Total selected
	Mining ²	Manufacturing	trade	Retail trade	Other ³	Industries ³
At end of	\$m	\$m	\$m	\$m	\$m	\$m
* * * * * * * * * * * * * * * * * * * *			ORIGI	. x		
June 1992	3 256	21 436	16 14 0	12 124	570	53 526
June 1993	3 378	21 832	15 378	12 824	416	53 828
June 1994 r	3 307	21 284	17 86 5	12 023	352	54 831
1992-93						
March	3 533	21 820	15 901	12 897	443	54 594
June	3 378	21 832	15 378	12 824	416	53 828
1993-94						
September	3 415	21 455	16 255	12 923	390	54 438
December	3 558	21 263	17 273	12 680	431	55 205
March	3 518	21 697	18 234	12 204	391	56 044
June r	3 307	21 284	17 865	12 023	352	54 831
1994-95						
September r	3 472	21 440	18 816	13 142	332	57 202
December r	3 338	21 476	20 060	13 483	393	58 750
March	3 247	22 138	20 459	13 393	363	59 600
MUIVII	O £TÍ	22 130	エい マンフ	10 030	303	55 600
	*****			,:,;;;***	**	:
			SEASONALLY	ADJUSTED*		
June 1992	3 345	21 437	16 470	12 415	589	54 256
June 1993	3 475	21 827	15 704	13 143	428	54 576
June 1994	3 402	21 273	18 251	·	361	
JUII6 1994	3 402	21 213	18 231	12 328	201	55 615
1992-93						
March	3 482	21 599	15 643	12 925	447	54 0 96
June	3 475	21 827	15 704	13 143	428	54 576
1993-94						
September	3 357	21 49 9	16 305	12 790	399	54 350
December	3 575	21 440	17 150	12 470	407	55 042
March	3 465	21 483	17 932	12 236	39 5	55 511
June	3 402	21 273	18 251	12 328	361	55 615
19 9 4~95						
September	3 412	21 492	18 864	13 010	341	57 119
December	3 355	21 650	19 928	13 247	370	58 550
March	3 198	21 928	20 117	13 430	368	59 041
					privative and the second	
			TREND EST	IMATES ⁴		
June 1992	3 313	21 472	16 214	12 646	581	54 226
June 1993	3 439	21 663	15 790	12 997	419	54 308
June 1994	3 431	21 379	18 376	12 472	366	56 024
4000 CC						
1992-93 March	2 427	21 617	15 506	10.000	420	E A 0.70
June	3 437	21 617	15 586 45 700	12 998	439	54 078
June 1993–94	3 439	21 663	15 7 9 0	12 997	419	54 308
	2.460	21 600	46.350	10.000	440	E 4 620
September	3 468	21 600	16 359	12 800	412	54 638
December	3 485	21 470	17 099	12 468	401	54 924
March	3 478	21 380	17 769	12 297	385	55 309
June	3 431	21 379	18 376	12 472	366	56 024
1 9 94-95						
September	3 384	21 481	19 003	12 85 5	356	57 07 9
December	3 341	21 666	19 656	13 218	359	58 240
March	3 291	21 873	20 263	13 509	368	59 304

¹ At average 1989–90 prices.

³ See paragraph 2, page 17.

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

⁴ Revised.



PERCENTAGE CHANGES IN STOCKS OWNED, By Private Business—Constant prices¹

	Mining ²	Manufacturing	Wholesale trade	Retail trade	Other ³	Total selected industries ³
Year to/Quarter to	%	%	%	%	%	%
	. * * * * * * * * * * * * * * * * * * *	************		* * * * * * * * * * * * * * * * *		
			ORIGINA	NL		
June 1992	-8.4	-3.1	-1.4	-2.0	- 1.6	-2.7
June 1993	3.7	1.8	-4.7	5.8	-27.0	0.6
June 1994	-2.1	-2 .5	16.2	-6.2	-15.4	1.9
1992-93						
March	4.7	2.7	1.0	-1.0	-6.7	1.4
June	-4.4	0.1	-3.3	-0.6	-6.1	-1.4
1993-94						
September	1,1	-1 .7	5.7	0.8	-6.3	1.1
December	4.2	-0.9	6.3	-1.9	10.5	1.4
March	-1.1	2.0	5.6	-3.8	-9.3	15
June	-6.0	-1 .9	-2.0	-1.5	-10.0	-2.2
1994-95						
September	5.0	0.7	5.3	9.3	-5.7	4.3
December	-3.9	0.2	6.6	2.6	18.4	2.7
March	-2.7	3.1	2.0	-0.7	-7,6	1.4
**********		* * * * * * * * * * * * * * * * * * * *	* *	******	, , , , , , , , , , , , , , , , , , , 	********
-			SEASONALLY A	DJUSTED		
lune 1000	-6.6	-3.1	-1.3	-2.0	-2.3	-2.5
June 1992			-4.6	5.9	-27. 4	0.6
June 1993	3.9	1.8				1.9
June 1994	-2.1	-2.5	16.2	-6.2	-15.7	1.9
1992-93						
March	2.8	0.8	0.1	0.7	-0 .5	0.7
June	-0.2	1.1	0.4	1.7	-4.2	0.9
1993-94						
September	-3.4	-1. 5	3.8	-2.7	-6 .7	-0.4
December	6.5	-0.3	5.2	-2.5	1.8	1.3
March	-3.1	0.2	4.6	-1.9	-2. 7	0.9
Jun e	-1.8	-1.0	1.8	0.8	-8.8	0.2
1994-95						
September	0.3	1.0	3.4	5.5	-5.6	2.7
December	-1.7	0.7	5.6	1.8	8.7	2.5
March	-4.7	1.3	0.9	1.4	-0 .7	0.8
6 V 1	• • 4 8 9 9 9 • • •		·	******		* * * *
			TREND ESTI	MATES		
June 1992	-7.3	-3.0	-2.6	0.2	-2.1	-2.4
June 1993	3.8	0.9	-2.6	2.8	-27.8	0.2
June 1994	-0.2	-1.3	16.4	-4.0	-12.8	3.2
1992-93						
March	1.2	0.7	-1.1	1.4	-8.8	0.3
June	0.0	0.2	1.3	0.0	-4.6	0.4
1993-94	0.0	0.2	1.0	V.U	719	
September	0.9	-0.3	3.6	-1.5	-1.8	0.6
December	0.5	-0.5 -0.6	4.5	-2.6	-2.5	0.5
	-0.2	-0.6 -0.4	3.9	-2.6 -1.4	-2.3 -4.0	0.7
March				-1.4 1.4	-5.1	1.3
June	-1.3	0.0	3.4	7.4	-5.1	2.3
1994-95	4.4	0.5	3 /	3.1	-2.7	1.9
September	-1.4	0.5	3.4		0.9	2.0
December March	-1.3	0.9	3.4 3.1	2.8 2.2	2.4	1.8
	-1.5	1.0	5.7	17	2.4	T-0

¹ At average 1989–90 prices.

³ See paragraph 2, page 17.

² In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattern.



BOOK VALUE OF STOCKS OWNED, By Private Manufacturing Businesses—Current prices

	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 ¹	Machinery and equipment ¹	Other manu- facturing	Total manu- facturing
At end of	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
4							*****			* * * * * * *
					ORIGINAL					
June 1992	4 279	1 588	1 438	676	3 987	1 089	3 970	4 605	583	22 215
June 1993	4 655	1 6 57	1 395	723	3 927	1 076	3 932	5 15 9	503	23 027
June 1994 r	4 828	1 554	1 412	697	3 793	1 119	3 619	4 991	610	22 624
1992-93										
March	4 434	1 568	1 389	765	4 226	1 024	3 973	4 965	549	22 893
June	4 655	1 657	1 395	723	3 927	1 076	3 932	5 159	503	23 027
1993- 9 4									000	20 02.
September	4 553	1 582	1 423	725	3 998	1 111	3 851	5 021	532	22 7 96
December	4 528	1 511	1 380	747	3 906	1 124	3 794	4 883	585	22 458
March	4 674	1 491	1 447	79 7	3 916	1 125	3 694	5 087	656	22 887
June r	4 828	1 554	1 412	697	3 793	1 119	3 619	4 991	610	22 624
1994-95							+-	. 001	010	22 42-1
September r	4 897	1 599	1 361	724	4 027	1 136	3 684	5 017	572	23 016
December r	4 877	1 585	1 376	734	4 011	1 184	3 8 7 0	5 127	555	23 318
March	5 074	1 653	1 478	731	4 236	1 302	4 022	5 401	589	24 485
* * * * *		,		: 64				****		
				SEASO	NALLY ADJU	JSTED ²				
June 1992	4 209	1 600	1 431	684	4 011	1 077	4 012	4 602	587	22 213
June 1993	4 573	1 667	1 390	733	3 958	1 064	3 963	5 159	508	23 017
June 1994	4 740	1 563	1 408	708	3 827	1 107	3 644	4 991	617	22 606
1992-93										
March	4 341	1 555	1 367	750	4.040	1.024	2.000	4.000	505	
June	4 541	1 667	1 390	758 733	4 212	1 034	3 929	4 929	536	22 661
1993-94	4 313	1 007	1 390	733	3 958	1 064	3 9 63	5 159	508	23 017
September	4 648	1 578	1 418	716	3 973	1 105	3 865	5 006	E24	22.644
December	4 612	1 516	1 414	753	3 912	1 130	3 792	4 932	534	22 844
March	4 582	1 481	1 414	753 789	3 903	1 130			591	22 651
June	4 740	1 563	1 408	708			3 656	5 051	639	22 659
1994-95	4 140	1 303	1 400	108	3 827	1 107	3 644	4 991	617	22 606
September	4 999	1 596	1 357	716	3 999	1 131	3 699	5 004	E7E	22.075
December	4 966	1 589	1 410	739	4 018	1 189	3 866	5 004 5 176	575 5 6 0	23 075
March	4 977	1 642	1 450							23 514
(WBICI)	7511	1 042	1 430	723	4 222	1 317	3 982	5 36 5	573	24 250
		* * * * * * * * * * * *	11							
				TRE	ND ESTIMAT	ES ²				
June 1992	4 234	1 618	1 442	676	3 985	1 058	3 996	4 690	5/9	22 2 77
June 1993	4 535	1 609	1 390	734	4 043	1 065	3 926	5 046	520	22 867
June 1994	4 767	1 542	1 394	737	3 884	1 117	3 653	4 997	614	22 705
4000 00										
1992-93	4 200	1 606	1 272	7.44	4 4 4 2	4.027	0.045	E 040	507	
March	4 386	1 606	1 373	741	4 143	1 037	3 915	5 010	527	22 738
June 1993–94	4 535	1 609	1 390	734	4 043	1 065	3 926	5 046	520	22 867
	4 614	4 570	1 400	720	2.050	4.400	2 072			
September	4 611	1 579	1 409	739	3 956	1 103	3 878	5 033	544	22 851
December	4 612	1 529	1 422	751	3 902	1 125	3 772	5 001	589	22 703
March	4 643	1 511	1 414	752	3 883	1 125	3 677	4 9 7 9	621	22 605
June	4 767	1 542	1 394	737	3 884	1 117	3 6 53	4 997	614	22 705
1994-95	_	_								
September	4 903	1 581	1 390	723	3 956	1 144	3 727	5 059	587	23 070
December	4 983	1 610	1 405	723	4 063	1 205	3 846	5 173	568	23 575
March	5 014	1 630	1 433	731	4 186	1 284	3 970	5 321	561	24 130

¹ In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattern.

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² Revised.



	and tobacco	clothing, footwear and leather	Wood and paper products	publishing and recorded media	coal, chemical and assoc. products	Non- metallic mineral product	Metal product ²	Machinery and equipment ²	Other manu- facturing	Total manu- facturing
At end of	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
*********		******			ORIGINAL	* * 1	170000	• • s s s s s s s s s		8 # : : * • • • •
										04 400
June 199 2	4 071	1 534	1 376	638	3 854	1 015	4 002	4 391	555	21 436
June 1993	4 313	1 568	1 295	676	3 777	994	3 968	4 759	482	21 832
June 1994 r	4 340	1 448	1 290	660	3 665	1 042	3 653	4 617	569	21 284
1992-93										
March	4 163	1 486	1 305	711	4 028	950	4 034	4 626	517	21 820
June	4 313	1 568	1 295	676	3 777	994	3 968	4 759	482	21 832
1993-94										
September	4 146	1 477	1 305	670	3 845	1 035	3 877	4 588	512	21 455
December	4 131	1 422	1 260	690	3 797	1 054	3 869	4 478	562	21 263
March	4 265	1 407	1 321	740	3 809	1 055	3 800	4 689	611	21 697
June r	4 340	1 448	1 290	660	3 665	1 042	3 653	4 617	569	21 284
1994-95	= ==	· · =				*				
September r	4 355	1 471	1 226	678	3 849	1 051	3 664	4 609	537	21 440
December_r	4 223	1 459	1 228	681	3 773	1 090	3 800	4 705	517	21 476
March	4 353	1 493	1 292	659	3 875	1 189	3 842	4 896	539	22 138
****		· · · · · · · · · · · · · · · · · · ·		6 × 6 0 / 1 . t f			* * * * * 1 2 5 5 7	~ * * > × × × * * *	******	*******
				SEASON	ALLY ADJUS	TED3				
June 1992	4 004	1 545	1 369	646	3 877	1 004	4 044	4 388	559	21 437
June 1993	4 237	1 578	1 291	686	3 807	983	4 000	4 759	487	21 827
June 1993	4 261	1 456	1 286	670	3 697	1 031	3 679	4 617	576	21 273
1992-93	4 076	1 474	1 284	705	4 015	959	3 989	4 592	505	21 599
March			1 291	686	3 807	983	4 000	4 759	487	21 827
June 4.000 o.4	4 237	1 578	1 291	000	3 607	903	4 000	4135	401	21 021
1993-94	4.000	4 474	4 204	C C1	3 821	1 030	3 891	4 574	514	21 499
September	4 233	1 474	1 301	661			3 867	4 523	568	21 440
December	4 207	1 427	1 291	695	3 803	1 060				
March	4 181	1 397	1 2 9 7	733	3 796	1 066	3 761	4 656	595	21 483
June	4 261	1 456	1 286	670	3 697	1 031	3 679	4 617	57 6	21 273
1994-95								4 507	F 40	04 400
September	4 446	1 468	1 223	670	3 822	1 046	3 680	4 597	540	21 492
December	4 301	1 463	1 258	685	3 779	1 095	3 796	4 750	522	21 650
March	4 270	1 484	1 268	652	3 862	1 202	3 804	4 863	524	21 928
	* * : :							* * * * * * * * * *		\$ 25 -> \$ > > 4 × 1
				IREN	D ESTIMATE	.5°				
June 1992	4 034	1 557	1 381	637	3 861	984	4 008	4 457	552	21 472
June 1993	4 194	1 517	1 289	682	3 875	987	3 968	4 653	498	21 663
June 1994	4 292	1 438	1 270	692	3 757	1 041	3 701	4 613	574	21 379
1992-93 March	4 103	1 520	1 288	691	3 954	959	3 948	4 656	499	21 617
June	4 103 4 194	1 517	1 289	682	3 875	987	3 968	4 653	498	21 663
1993-94	7 134	1 311	1 200	W.E	- 0.0	551		+ = -		
September	4 226	1 484	1 295	684	3 818	1 028	3 928	4 615	522	21 600
•		1 437	1 300	695	3 787	1 053	3 843	4 588	561	21 470
December	4 206				3 772	1 053	3 754	4 586	584	21 380
March	4 220	1 417	1 291	701				4 613	574	21 379
June	4 292	1 438	1 270	692	3 757	1 041	3 701	4 013	974	21313
1994-95	40.5	4 404	4.054	677	0.774	4.050	2 74 4	4 656	548	21 481
September	4 342	1 461	1 254	677	3 774	1 059	3 711			21 461
December	4 338	1 473	1 250	668	3 809	1 108	3 758	4 733	528 546	
March	4 298	1 479	1 257	665	3 849	1 171	3 806	4 832	5 16	21 873

¹ At average 1989–90 prices.

³ Revised.

 $^{^{2}\,}$ 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' STOCKS—Constant prices1

	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 ²	Machinery and equipment ³	Other manu- facturing	Total manu- facturing
Year to/Quarter to	%	%	%	%	%	%	%	%	%	%
, , , , , , , , , , , , , , , , , , ,					e de la capación de la	rann von	2	· * * * * * * * * * * * * * * * * * * *	*****	
					ORIGINAL					
June 1992	-5.2	9.6	3.5	7.0	2.3	~0.1	-1.6	-14.9	11.0	-3.1
June 1993	5.9	2.2	-5.9	6.0	-2.0	-2. 1 .	-0.8	8.4	-13.2	1.8
June 1994	0.6	-7.7	-0.4	-2.4	-3.0	4.8	-7.9	-3.0	18.0	-2.5
1992-93										
March	5.7	-1.6	3.1	6.1	0.9	1.4	4.5	1.6	1.0	2.7
June	3.6	5.5	-0.8	-4.9	-6.2	4.6	-1.6	2.9	-6.8	0.1
1993-94									0.0	
September	-3.9	-5.8	0.8	-0.9	1.8	4.1	-2.3	-3.6	6.2	-1.7
December	-0.4	-3.7	-3.4	3.0	-1.2	1.8	-0.2	-2.4	9.8	-0.9
March	3.2	-1.1	4.8	7.2	0.3	0.1	-1.8	4.7	8.7	2.0
June	1.8	2.9	-2.3	-10.8	-3,8	-1.2	-3.9	-1.5	-6.9	-1.9
1994-95										
September	0.3	1.6	-5.0	2.7	5.0	0.9	0.3	-0.2	-5.6	0.7
December	-3.0	-0.8	0.2	0.4	-2.0	3.7	3.7	2.1	-3.7	0.2
March	3.1	2.3	5.2	-3.2	2.7	9.1	1.1	4.1	4.3	3.1

					NALLY ADJU					
June 1992	-5.3	9.6	3.8	7.4	2.5	-0.2	-1.9	- 1 4.9	11.7	-3.1
June 1993	-5.8	2.1	-5.7	6.2	-1.8	-2.1	-1.1	-14.5 8.4	-12.8	1.8
June 1994	0.6	~7.7	-0.3	-2.3	-2.9	4.8	-8.0	-3.0	18.3	-2.5
4002 02										
1992-93 March	1.6	-2.9	-0.9	4.1	0.4	1.6	3.4	-0.3	-2.4	0.0
June	4,0	-2.9 7. 1	-0.9 0.5	-2.7	-5.2	2.5	0.3	⊸s 3.6	-2.4 -3.5	0.8
1993–94	4.0	1.1	0.5	-2.1	-5.2	2.3	0.3	3.0	-3.5	1.1
September	-0.1	-6.6	0.8	-3.5	0.4	4.7	-2.7	-3.9	5. 6	-1.5
December	-0.6	-3.2	-0.7	5.1	-0.5	2.9	-0.6	-3.s -1.1	10.4	-0.3
March	-0.6	-2.1	0.5	5.4	-0.2	0.6	-2.7	3.0	4.8	0.2
June	1.9	4.2	-0.8	-8.5	-2.6	-3.4	-2.1 -2.2	-0.8	-3.1	-1.0
1994-95	1.3	4.2	-0.0	-6.5	-2.0	-3.4	-2.2	-0.0	-3,1	-1.0
September	4.3	0.8	-5.0	0.0	3.4	1.5	0.0	-0.4	-6.3	1.0
December	-3.3	~0.3	2.9	2.3	-1.1	4.7	3.2	3.3	-3.3	0.7
March	-0.7	1,4	0.7	-4.9	2.2	9.8	0.2	2.4	0.3	1.3
										: # \$ \$ > > > 0 # X ->
					ND ESTIMAT					
June 1992	-3.5	8.6	4.2	3.2	2.1	-1.8	-3.6	-12.9	7.2	-3.0
June 1993	4.0	-2.6	-6.7	7.0	0.4	0.3	-1.0	4.4	-9.8	0.9
June 1994	2.3	-5.2	-1.5	1.5	-3.1	5.5	-6.7	-0.9	15.4	-1.3
1992–93 March	2.5	0.1	. 0. 0	0.2	-1.0	-0.1	n ø	1.7	20	0.7
June	2.5	0.1	-0.9 0.1		-1.0 -2.0		0.8	1.7	-3.8 -0.3	0.7
1993-94	2.2	0.2	0.1	-1.3	-2.0	3.0	0.5	-0.1	-0.3	0.2
September	0.8	-2.1	0.4	0.3	-1 .5	4.1	-1.0	-0.8	5.0	-0.3
December	-0.5	-2.1 -3.2	0.4	1.7	-1.5 -0.8	2.5	-1.0 -2.2	-0.8 -0.6	5.0 7.4	-u.s -0.6
March	–0.5 0.4	-3.2 -1.4	-0.7	0.8	-0.8 -0.4	2.5 0.0	-2.2 -2.3	-0.6 -0,1	4.1	–0.6 –0.4
June	1.7	-1.4 1.5	-0.7 -1.6	-1.2	-0.4 -0.4	-1.2	−2.3 − 1 .4	-0.1 0.6	4.1 -1.7	→0.4 0.0
1994–95	Δ. f	1.5	-1.0	-1.2	-0.4	-1.2	-1.4	0.0	- 1.7	0.0
September	1,2	1.5	-1.3	-2.2	0.5	1.7	0.3	0.9	-4.6	0.5
December	-0.1	0.9	-1.3 -0.3	-2.2 -1.3	0.9	4.7	1.3	1.6	-4.6 - 3 .7	0.9
March	-0.1 0.9	0.9	-0.5	-1.5 -0.5	1.0	5.7	1.3	2.1	-3.7 -2.2	1.0
Materi	~U.J	0.4	0.0	-0.5	1.0	5.7	1.0	2.1	-2.2	1.0

¹ At average 1989-90 prices.

 $^{^{2}}$ In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattem.

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	MANUFA	CTURING			••••	······			· · · · · · · · · · · · · · · · · · ·	••••	WHOLESAL" TRADE
	Food, beverage and tobacco	Textiles, clothing, footwear and leathe	Wood and paper products	Printing, publishing and recorded media	Petroleum, coal, chemical and assoc. products	Non- metallic mineral product	Metai product	Machinery and equipment	Other manu- facturing	Total manu- facturing	Total
Period	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
	• 1.					*****	. * * * * *				
Year to					ORIGINAL						
June 1992	32 819	8 373	9 550	6 911	21 477	7 169	25 550	23 303	3 438	138 591	133 492
June 1993	35 393	8 693	9 536	7 577	22 202	7 98 5	25 254	25 514	3 684	145 837	138 083
June 1994	38 770	8 433	10 073	8 410	23 631	9 162	26 692	29 524	4 172	158 866	149 698
1992-93											
March	8 274	1 999	2 242	1 834	5 419	1 948	5 990	6 098	835	34 638	32 817
June	9 067	2 202	2 311	1 884	5 724	2 134	6 526	6 811	875	37 534	34 356
1993-94											
September	9 634	2 297	2 554	1 967	5 809	2 1 9 8	6 76 3	7 12 7	931	39 280	36 101
December	10 256	2 100	2 638	2 259	6 078	2 352	6 896	7 611	1 077	41 268	38 419
March	9 169	2 001	2 332	2 016	5 658	2 199	6 316	6 920	1 030	37 640	36 009
June	9 712	2 036	2 549	2 167	6 085	2 413	6 717	7 86 6	1 134	40 678	39 170
1994–95	10 110	0.407	2.024	2 224	6.004	2.702	7 221	8 214	1 259	43 529	42 005
September December	10 410	2 107	2 821 2 889	2 331 2 501	6 294 6 554	2 763 2 903	7 331 7 40 9	8 593	1 370	45 640	44 522
March	11 357 9 8 73	2 065 2 030	2 676	2 101	6 146	2 661	7 127	7 773	1 133	41 521	41 320
Maici	3013	2 030	2010	2 101	0 140	2 001	1 121	1173	1 100	71 521	41 020
***				, , * , * , * ,	EASONALL		s a constant. T FD		******		********
Year to				·	EMOONME	., ,,,,,,,,,,					
June 1992	32 834	8 357	9 547	6 911	21 456	7 144	25 423	23 191	3 426	138 289	133 131
June 1993	35 421	8 711	9 544	7 572	22 179	7 977	25 325	25 618	3 687	146 035	138 306
June 1994	38 685	8 406	10 102	8 446	23 714	9 202	26 693	29 638	4 208	159 095	149 767
1992-93		_									24.000
March	8 880	2 166	2 396	1 919	5 585	2 052	6 362	6 703	920	36 983	34 392
June	9 304	2 241	2 391	1 979	5 723	2 185	6 437	6 713	914	37 886	34 923
1993–94	0.447	2 165	2 455	1 973	5 819	2 148	6 606	6 944	903	38 460	35 822
September December	9 447 9 583	2 059	2 499	2 055	5 874	2 239	6 745	7 323	990	39 368	36 494
March	9 701	2 108	2 508	2 145	5 930	2 349	6 712	7 609	1 134	40 195	37 628
June	9 954	2 073	2 640	2 272	6 092	2 466	6 630	7 763	1 182	41 072	39 822
1994-95	5 55 1	20.0									
September	10 372	2 035	2 696	2 304	6 195	2 666	7 153	7 991	1 222	42 634	41 802
December	10 548	2 002	2 690	2 2 7 2	6 356	2 778	7 285	8 098	1 229	43 259	42 247
March	10 512	2 161	2 928	2 238	6 419	2 831	7 530	8 726	1 278	44 624	43 235
× ,	(× × • • • • \$ \$ \$ 1	* \$ < < <		• * * * × · · · ·	TREND E			********	× « » » » » «	********	· · · · × × × * • • • •
Year to							-				
June 1992	32 788	8 316	9 558	6 889	21 410	7 116	25 382	23 149	3 405	138 013	133 384
June 1993	35 446	8 702	9 546	7 555	22 138	7 958	25 39 9	25 603	3 671	146 018	138 333
June 1994	38 767	8 405	10 081	8 463	23 715	9 263	26 777	29 636	4 219	159 326	149 872
1992-93											
March	8 963	2 204	2 395	1 919	5 580	2 040	6 338	6 557	914	36 910	34 569
June	9 231	2 199	2 413	1 958	5 704	2 132	6 467	6 776	903	37 783	34 966
1993-94		0.450	0.444	4 005	E 000	0.400	e con	7 000	മാര	30 660	35 620
September	9 438	2 156	2 441	1 995	5 808 5 876	2 188	6 608	7 006	929 1 004	38 568 39 305	35 520 36 545
December	9 578	2 111	2 485	2 059	5 876 5 057	2 240 2 342	6 668 6 700	7 283 7 577	1 104	39 305 40 207	3 0 545 37 986
March	9 739	2 081	2 548	2 158 2 251	5 957 6 074	2 342 2 493	6 801	7 770	1 182	41 247	39 740
June 1994–95	10 013	2 056	2 606	2 201	0014	2 493	0.001	, , , , ,	1 102	7± 6/71	301.40
September	10 288	2 044	2 678	2 284	6 208	2 638	7 032	7 970	1.217	42 359	41 307
December	10 488	2 056	2 765	2 278	6 330	2 761	7 300	8 246	1 242	43 466	42 456
March	10 403	2 098	2 859	2 251	6 432	2 859	7 551	8 568	1 270	44 499	43 337
# - 1 mm / m / r	10 711			. –	_						

t At average 1989-90 prices.



MANUFACTURERS' ACTUAL AND EXPECTED SALES WITH HISTORICAL REALISATION RATIOS¹

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 manu- facturing	Total manu- facturing
·: · · · · · · · · · · · · · · · · · ·	* « 3 » ›	. : : : : : : : : : : : : : :		ACTUAL	SALES (\$ mi	Wign\2	* * * * * · * * *	,	* * * * * * * * *	*****
				ACTUAL	SALES (\$ IIII	imon)-				
1991-92	32 819	8 373	9 550	6 911	21 477	7 169	25 550 25 254	23 303 25 514	3 438 3 684	138 591 145 837
1992-93 1993-94	35 393 38 770	8 693 8 433	9 536 10 073	7 577 8 410	22 202 23 631	7 985 9 162	26 692	29 524	4 172	158 866
1992-93	8 274	1 999	2 242	1 834	5 419	1 948	5 990	6 098	835	34 638
March June	9 067	2 202	2 311	1 884	5 724	2 134	6 526	6811	875	37 534
1993-94	3 001	2 202	2 011	2 00-	3 12 1				*	
Soptember	9 634	2 297	2 554	1 967	5 809	2 198	6 763	7 127	931	39 280
December	10 256	2 100	2 638	2 259	6 078	2 352	6 896	7 611	1 077	41 268
March	9 169	2 001	2 332	2 016	5 658	2 199	6 316	6 920	1 030	37 640
June	9 712	2 036	2 549	2 167	6 085	2 413	6 717	7 866	1 134	40 678
1994-95	40.410	0.467	0.004	0.004	6.004	2 262	7 331	0.044	1 259	43 529
September	10 410	2 107	2 821	2 331	6 294 6 554	2 763 2 903	7 331 7 409	8 214 8 593	1 259	45 529 45 640
December	11 357	2 065 2 030	2 889 2 67 6	2 50 1 2 101	6 146	2 903 2 661	7 127	7 773	1 133	41 521
March	9 8 73	2 030	2010	2 101	0 146	2 001	1 14.	, ,,,	1 133	JEI
/ / · · · · · · · · · · · · · · · · · · ·	* & * < ?	* : • * * * * * * * *	******	EXPECTE	D SALES (\$	cceeen	* 2 * 3 * 7 7 7 4 8	. , , , , , , , , , , , , ,		
1994-95				EXT EGYE	0,.000					
3 mths to Jun	10 281	2 159	2 840	2 281	6 638	2 873	7 374	8 633	1 266	44 345
Total 1994-95 ³	41 921	8 361	11 226	9 213	25 632	11 200	29 241	33 213	5 029	175 036
1995-96 6 mths to Dec	22 206	4 296	5 858	4 784	13 615	5 850	14 700	17 071	2 667	91 047
	4 * * * * * * * *			N RATIOS: 3				:	. U . + 4 K B D +	• • • • • • • • •
1990	0.98	1.00	0.93	0.98	0.94	0.92	1.00	0.95	1.09	0.97
1991	0.97	0.92	1.01	0.95	0.93	0.91	0.98	0.96	0.88	0.96
1992	0.99	0.99	0.94	1.06	0.96	1.00	1.03	0.98	1.11	0.99
1993	1.06	1.06	1.00	1.18	0.99	1.05	1.03	1.04	0.96	1.04
1994	1.04	1.07	1.00	1.07	1.03	1.06	1.00	0.98	1.04	1.02
5 year average	1.01	1 .01	0.98	1.05	0.97	0.99	1.01	0.98	1.02	1.00
****			* × * * * * * *	* * * * * * * * * * * *			* * * * * * * * * *	8 8 8 % %	,	,
		REA	LISATION F	ATIOS: 6 MC	NTHS TO DE	CEMBER (A	\ctual/Mar E	2)		
1990	0.99	0.94	0.91	1.03	0.94	0.93	0.95	0.83	1.08	0.94
1991	0.94	1.01	1.05	1.04	0.99	0.94	0.96	0.91	0.99	0.96
1992	1.04	1.03	0.98	1.14	0.97	1.07	1.01	1.02	1. 16	1.02
1993	1.09	0.99	1.04	1.17	1.03	1.09	1.07	1.08	1.05	1.07
1994	1.07	0.96	1.09	1.13	1.07	1.22	1.10	1.03	1.11	1.07
5 year average	1.02	0.99	1.01	1.10	1.00	1.05	1.02	0.98	1.08	1.01
n • · • · · · · · · · · · · · · · · · ·								r actual, Mar		e e e a a a a a a a a
									1,02	0.99
1990	1.00	1.00	0.98	0.99	0.98	0.98 0.98	1.00 0.99	0.99 0.99	0.97	0.99
1991	0.99	0.98	1.00	0.99 1.01	0.98 0.99	1.00	1.01	1.00	1.03	1.00
1992	1.00	1.00 1.02	0.99 1.00	1.01	1.00	1.01	1.01	1.01	0.99	1.01
1993 1994	1.01 1.01	1.02	1.00	1.04	1.01	1.01	1.00	0.99	1.01	1.01
±004	1.01	1.02	1.00	2.02	2.02	1.02	4.00			
5 year average	1.00	1.00	0.99	1.01	0.99	1.00	1.00	1.00	1.00	1.00

¹ See paragraphs 25 to 28 of the Explanatory Notes

² Revised.

 $^{^{3}\,}$ Derived by adding actual sales for 9 months ending March 1995 and expected sales for 3 months ending June 1995.



MANUFACTURING AND WHOLESALE TRADE STOCKS/SALES RATIO—Current prices1

	MANUFACTURING										WHOLESA TRADE	
ear 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	
99425 84 0292	***********	· · · · · · · · · · · · · · · · · · ·		* * * * * * * * *	*********		• • * * * * * * * *	9 ~ 4 > 4 × 4 * *	******	, , , , , , , , , ,	2 4 5 0 9 7 1 1 1	
June 1992	0.50	0.76	0.62	0.39	0.76	0.58	0.63	0.80	0.64	0.64	0.51	
June 1993	0.49	0.74	0.58	0.37	0.69	0.49	0.62	0.77	0.56	0.61	0.49	
June 1994	0.48	0.75	0.53	0.31	0.63	0.45	0,55	0.64	0.52	0.55	0.50	
992-93												
March	0.49	0.72	0.57	0.40	0.75	0.50	0.62	0.74	0.58	0.61	0.49	
June	0.49	0.74	0.58	0.37	0.69	0.49	0.62	0.77	0.56	0.61	0.49	
993-94												
September	0.49	0.73	0.58	0.36	0.68	0.51	0.59	0.72	0.59	0.59	0.50	
December	0.48	0.74	0.57	0.37	0.67	0.50	0,56	0.67	0.60	0.58	0.52	
March	0.47	0.70	0.57	0.37	0.66	0.48	0.54	0.66	0.56	0.56	0.52	
June	0.48	0.75	0.53	0.31	0.63	0.45	0.55	0.64	0.52	0.55	0.50	
994–95												
September	0.48	0.78	0.50	0.31	0.65	0.42	0.52	0.63	0.47	0.54	0.49	
December	0.47	0.79	0.52	0.33	0.63	0.43	0.53	0.64	0.46	0.54	0.50	
March	0.47	0.76	0.50	0.32	0.66	0.47	0.53	0.61	0.45	0.54	0,50	

Seasonally adjusted series.

INTRODUCTION

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

SCOPE AND COVERAGE

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

Mining (Division B) Manufacturing (Division C) food, beverages and tobacco (21) textiles, clothing, footwear and leather (22) wood and paper products (23) printing, publishing and recorded media (24) petroleum, coal, chemical and associated products (25) non-metallic mineral products (26) metal products (27) machinery and equipment (28) other (29) Wholesale Trade basic materials (45) machinery and motor vehicles (46) personal and household goods (47) Retail Trade food (51) personal and household goods (52) motor vehicle retailing and services (53)

electricity and gas supply (36)

Other Selected Industries

accommodation, cafes and restaurants (57)

Total Selected Industries (11-15, 21-29, 36, 45-47, 51-53, 57)

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.

SURVEY METHODOLOGY

- 3 The survey is conducted by mail on a quarterly basis. It is based on a stratified random sample of approximately 8,000 private businesses selected from the ABS central register of economic units. 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. Aggregates are calculated from original data using the 'number raised' estimation technique. Data are edited at both individual unit level and at aggregate level.

TIMING AND CONSTRUCTION OF SURVEY CYCLE

- **5** 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.
- **6** In addition to data on stocks, manufacturers and wholesalers are requested to provide sales figures for actual sales made during the reference quarter. Manufacturers are also requested to provide expected sales for future periods:
- a short term expectation (E1); and
- a longer term expectation (E2).
- 7 Full details of the reporting cycle are shown in the table below.

Period to which reported data relates Jun 94 Sep 94 Dec 94 Mar 95 Jun 95 Sep 95 Dec 95 Mar 96 Jun 96 Survey quarter E2 Actual **E1** June 1994 Actual E1 E2 September 1994 E2 Actual E1 December 1994 Actual E1 **E2** March 1995 Actual E1 F2 June 1995

- 8 This survey cycle facilitates the formation of sales estimates for the next 9 or 12 months. Realisation ratios (actual sales divided by expected sales) are published in this issue as an aid in interpreting expectation statistics. Since realisation ratios tend to vary according to economic cycles and other factors, caution should be used when interpreting the data on expected sales and realisation ratios.
- **9** Each year prior to the June quarter survey, the survey's population framework and the sample are revised to ensure that they remain representative of the survey population. With this revision some of the business units from the sampled strata are rotated out of the sample and replaced by others to spread the reporting workloads equitably. As a check on comparability, information is collected from both the old and revised samples for the June quarter. In this publication, estimates for each June are based on the new sample.

SAMPLE REVISION

SAMPLE REVISION (continued)

- **10** The 1994 sample revision was undertaken using new stratification variables of industry (based on ANZSIC instead of ASIC) and employment size. Also, the completely enumerated cut–off, above which all units are included in the survey, was raised from employment of 140 to 250. These factors, together with changes to the overlap control specifications, have resulted in a lower than normal proportion of units common to both the old and new samples.
- **11** Estimates of level derived from the new sample may differ from estimates derived from the old sample. These differences are due to several factors including changes in the composition of the population and sample, reclassification of some statistical units to different industries and inadequate provisions in the old sample estimate for new businesses commencing during the year. Differences are usually apportioned back over the preceding three quarters each year to provide a consistent series over time.
- **12** To minimise the size of these adjustments the ABS produced an estimate of the contribution expected from new businesses each quarter, taking into account the number of businesses in the survey sample which ceased trading during the quarter.
- 13 In the 12 month period between successive frames and survey samples there are many businesses which cease operating and many which are newly established. Such changes in the business population need to be reflected in the survey to ensure that the estimates produced are representative of the changing nature of the business population over the course of the year.
- **14** Improvements have been introduced to the methodology for updating the annual survey frame population using direct counts each quarter of new businesses added, or in the process of being added, to the ABS business register. Estimates of the book value of stocks for the growth in the business population are made each quarter. Preliminary estimates for the March quarter 1995 include an additional \$286m for this growth since December quarter.
- 15 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. Prior to 1989, the survey was on a different business unit basis. Further details are available on request.

16 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) which have been in use for many years. Both have been widely accepted as statistical standards in their own right.

STATISTICAL UNIT

CLASSIFICATION BY INDUSTRY

CLASSIFICATION BY INDUSTRY (continued)

- 17 There has been extensive consultation with external users to ensure that the ANZSIC reflects the structure of Australian and New Zealand industry and user requirements for statistics. The Australian Bureau of Statistics and the New Zealand Department of Statistics encourage other organisations to use the classification in their own work in order to improve the comparability and usefulness of the statistics.
- **18** In the development of the ANZSIC greater emphasis has been placed on alignment with the international standards than has been the case in the past. The International Standards Industrial Classification of All Economic Activities (ISIC), Revision 3, has been used as the international standard for reference purposes. This will lead to significant improvements in the comparability of industry statistics internationally.
- **19** Because of the introduction of ANZSIC and its use in this publication, changes occur in classification categories when compared to previous releases of this publication. As an example, categories listed in Table 4 and under "Manufacturing" differ from previously. The old (ASIC) classification: "Textiles, Clothing & Footwear" becomes (in part) the new ANZSIC classification: "Textiles, Clothing, Footwear & Leather". The correspondence between these categories is not strictly one-to-one. Accordingly, care should be taken when making comparisons between years where different classifications have been used.
- **20** Users are referred to a detailed analysis of ANZSIC/ASIC and ASIC/ANZSIC concordances contained in the joint ABS, New Zealand publication: *Australian & New Zealand Standard Industrial Classification*, *1993*, *ANZSIC*, ABS Cat. No. 1292.0 and New Zealand Cat. No. 19.005.0092.
- **21** In order to classify stocks and sales data by industry, each statistical unit (as defined above) is classified to the Australian and New Zealand Standard Industrial Classification (ANZSIC) industry in which it *mainly* operates.
- **22** All of the stocks, sales and expected sales of each statistical unit are classified to that unit's industry even though it may have activities in other industries.

DESCRIPTION OF TERMS:

23 A description of the terms used in this publication are given below:

Manufacturers' Sales

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

Wholesale Trade Sales

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

Stocks

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

ESTIMATES AT AVERAGE 1989-90 PRICES 24 The level and changes in the level of stocks and sales valued at 1989–90 prices are obtained by dividing the current price values (in the case of stocks these are book values), at the most detailed industry level possible, by fixed weighted price indexes. These price indexes are compiled by combining, in fixed proportions, a wide range of price data. The composition and weighting of the indexes have been determined by estimates of the commodity composition of the value of sales or stocks owned by firms in those industries in 1989–90. A measure of the change in stocks at average 1989–90 prices is calculated by taking the difference between opening and closing stocks at constant prices.

DERIVATION AND USEFULNESS OF REALISATION RATIOS

25 Once the actual level of manufacturers' sales is known, it is useful to investigate the relationship between it and each of the previous expected estimates. The resultant realisation ratios (subsequent actual sales divided by expected sales) then indicate how much expenditure was actually received compared with the amount expected to be received at the various times of reporting.

Realisation ratios can also be formed separately for 3 or 6 month expectations as well as the 12 month estimates or combinations of estimates containing at least some expectation components (e.g. 6 months actual and 6 months expected sales).

- **26** Realisation ratios provide an important tool in understanding and interpreting expectations statistics for future periods. The application of realisation ratios enables the adjustment of expectations data for known under (or over) realisation patterns in the past and hence provides a valid basis for comparison with other expectations data and actual sales estimates. For example, if one wished to predict actual sales for 1993-94 based on the June 1993 survey results and compare this with 1992-93 expenditure, it is necessary to apply relevant realisation factors to the expectation to put both estimates on the same basis. Once this has been done the predictions can be validly compared with each other and with previously derived estimates of actual sales for earlier years.
- **27** There are many ways in which realisation ratios can be applied to make predictions of actual sales for a future period. For instance, the adjusted estimates could be derived using realisation ratios which are the average of the latest available five observations or any of the five could be used. Realisation ratios are provided in Table 9 on page 15.
- **28** In using realisation ratios to adjust expectations data, attention should be paid to the range of values that has occurred in the past. A wide range of values is indicative of volatility in the realisation patterns and hence greater caution should be exercised in the application of realisation ratios. This is particularly the case with the twelve month expectations collected in the December and June surveys.

RELIABILITY OF THE ESTIMATES

29 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 24 and 25.

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

- **30** Many 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.
- **31.** Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences can be more clearly recognised.
- **32** 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 (continued)

- **33** Seasonal adjustment does not remove from the series the effect of irregular or non–seasonal influences (e.g. a change in interest rates). Particular care should be taken in interpreting quarter to quarter movements in the adjusted figures in this publication, especially for detailed industry estimates.
- **34** Seasonal factors are reviewed and revised annually to take account of each additional year's original data. The most recent seasonal re–analysis takes into account data up to December quarter 1994. Data for periods after that are seasonally adjusted by extrapolating historical seasonal patterns.

The nature of the seasonal adjustment process is such that the magnitude of some revisions resulting from the re-analysis may be quite significant, especially for data for more recent quarters. For this reason, additional care should be exercised when interpreting movements in seasonally adjusted data for recent quarters.

- **35** The seasonally adjusted figures necessarily reflect the sampling and other errors to which the original figures are subject.
- **36** Details of the seasonal adjustment methods used for stocks and sales, together with selected measures of variability for these series are available on request.
- **37** 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 Λ *Guide to Interpreting Time Series* — *Monitoring 'Trend' An Overview* (13/48.0) or contact the Supervisor, Time Series Analysis.

COMPARISON WITH OTHER ABS

TREND ESTIMATES

- **38** The data collected in the stocks survey are used to compile estimates of the increase in book value of non-farm stocks in the quarterly and annual national accounts. Stocks survey data are used to extrapolate annual national accounts benchmark information, obtained from the ABS's economic censuses and from income tax tabulations, for years in which the latter data are not available (e.g. for the most recent years) and to obtain quarterly national accounts dissections. For further details see *Australian National Accounts: Concepts, Sources and Methods* (5216.0).
- **39** The statistics shown for the movement in the book value of stocks in this publication, will differ from corresponding data for private non-farm stocks shown in the national accounts publications for the following reasons:
- the national accounts estimates incorporate data from other sources (including the ABS's economic censuses) as well as information from the Stocks survey; and
- the national accounts estimates include estimates for the construction and transport industries.

RELATED PUBLICATIONS

- **40** Users may also wish to refer to the following publications:
- Private New Capital Expenditure and Expected Expenditure, Australia (5625.0)—issued quarterly
- Private New Capital Expenditure, Australia, Actual and Expected Expenditure (5626.0)—last issued March 1994. Discontinued
- Company Profits, Australia (5651.0)—issued quarterly
- Australian Business Expectations (5250.0)—issued quarterly
- Australian National Accounts: National Income, Expenditure and Product (5206.0)—issued quarterly
- Australian National Accounts: Concepts, Sources and Methods (5216.0)
- Manufacturing Production, Australia (8301.0) —issued monthly
- **41.** Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia* (1101.0). The ABS also issues on Tuesdays and Fridays a *Release Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Release Advice are available from any ABS office.

UNPUBLISHED DATA

42 In addition to the data contained in this and related publications, more detailed industry information may be made available on request. Data are available at the ANZSIC Group (i.e. 3 digit) level for stocks and manufacturers' sales. It is ABS policy that there will be a charge for such data.

SYMBOLS AND OTHER USAGES

n.p. not available for publication

r revised

p preliminary figure or series subject to revision

ANZSIC Australian and New Zealand Standard Industrial Classification (1292.0)

1993 edition

not applicable

n.y.a. not yet available

STANDARD ERRORS

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

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

LEVEL ESTIMATES

To illustrate, let us say the published level estimate for manufacturers' stocks is \$21,000m. The relative standard error for this case, obtained from the table on the next page, is 1.1%. This relative standard error is then used to interpret the level estimate of \$21,000m. For instance, the relative standard error of 1.1% indicates that:

- * There are approximately two chances in three that the real value falls within the range \$20,769m to \$21,231m (\$21,000m \pm 1.1% x \$21,000m)
- * There are approximately nineteen chances in twenty that the real value falls within the range \$20,538m to \$21,462m (\$21,000m \pm 2 x 1.1% x \$21,000m)

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

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

MOVEMENT ESTIMATES

The following example illustrates how to use the standard error to interpret a movement estimate. Suppose that for one quarter the published level estimate for manufacturers' stocks in Australia is \$22,100m; the next quarter the published level estimate is \$22,400m. The relative standard error for the movement estimates, obtained from the next page, is 0.2%. This relative standard error is then used to interpret the published movement estimate of +\$300m. For instance the relative standard error of 0.2% indicates that:

- There are approximately two chances in three that the real movement over the two quarters falls within the range \$256m to \$344m (\$300m ± 0.2% x \$22,100m)
- * There are approximately nineteen chances in twenty that the real value falls within the range \$212m to \$388m (\$300m \pm 2 x 0.2% x \$22,100m).

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

STANDARD ERRORS (continued)

APPROXIMATE RELATIVE STANDARD ERRORS

STOCKS OWNED BY PRIVATE BUSINESSES1.....

	Mining	Manu- facturing	Whole- sale trade	Retail trade	Other	Total selected Industries
Estimates of	%	%	%	%	%	%
Total stocks Quarter to Quarter movement ¹	5.3 1.1	1.1 0.2	7.0 1.5	8.9 1.8	4.8 2.3	1.9 0.4

STOCKS AND SALES, PRIVATE MANUFACTURING AND WHOLESALE TRADE BUSINESSES

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
Estimates of	%	%	%	%	%	%	%	%	%	%	%
< < × × · · · * * * * * * • • •			******			* * * * : > >	* • « × :• • • •	* • • • • • •			
Total stocks-											
Level	3.1	7.1	2.7	4.0	2.4	2.5	1.0	2.7	5.8	1.1	7.0
Movement	0.8	0.9	0.6	0.9	0.4	0.4	0.3	0.7	1.6	0.2	1.5
Total sales-											
Level	1.9	5.9	2.7	3.8	2.1	2.8	1.3	2.2	4.6	0.9	n.y.a.
Movement	0.7	2.0	0.7	1.1	0.5	0.6	0.4	0.9	2.1	0.3	n.y.a.

Expressed as a percentage of total.

WHAT IF...? REVISIONS TO TREND ESTIMATES

EFFECT OF NEW SEASONALLY ADJUSTED ESTIMATES ON TREND ESTIMATES

Each time new seasonally adjusted estimates become available, trend estimates are revised (see paragraph 37 of Explanatory Notes).

TREND REVISIONS

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

- **1** The June seasonally adjusted estimate is higher than the March estimate by the percentage shown.
- **2** The June seasonally adjusted estimate is lower than the March estimate by the percentage shown.

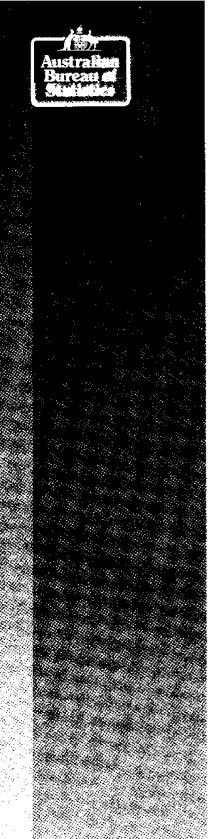
The percentages chosen are approximately the long term average movements, without regard to sign, in the seasonally adjusted series.

STOCKS OWNED BY WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE: **PUBLISHED** PRIVATE BUSINESSES 2 62000 rises by 1.0 on Mar 1995 falls by 1.0 on Mar 1995 % change % change \$m % change \$m \$m Published trend 60000 1994 56 024 1.3 56 038 1.3 56 038 1.3 June 58000 September 57 079 1.9 57 091 1.9 57 160 2.0 58 192 1.8 December 58 240 2.0 58 216 2.0 56000 1995 March 59 304 1.8 59 103 1.5 58 769 1.0 54000 58 936 0.3 59 727 1.1 June , 1994 **1993** 1995

MANUFACTURERS' SAI	.ES	TREND AS PUBLISHED	ì	WHAT IF NE	EXT QUARTER'S S	EASONALLY AL	DJUSTED ESTIMATE:
1 \$m	000			1 rises by 1.4	4 on Mar 1995	2 falls by 1.4	on Mar 1995
Published trend		\$m	% change	\$m	% change	\$m	% change
40	000 1994						
	June	38 015	2.3	38 015	2.3	38 015	2.3
- 38	September	38 754	1.9	38 767	2.0	3 8 83 3	2.2
36	December 1995	39 380	1.6	39 374	1.6	39 352	1.3
34	ooo March	39 901	1.3	39 902	1.3	39 587	0.6
1993 1994 1995	June	_	_	40 377	1.2	39 613	0.1

WHOLESALE TRADE	SALES		TREND AS PUBLISHED		WHAT IF NE	XT QUARTER'S SI	EASONALLY AD	JUSTED ESTIMATE:
***************************************	\$m _44000				1 rises by 1.7	on Mar 1995	2 falls by 1.7	on Mar 1995
 Published trend 			\$m	% change	\$ <i>m</i>	% change	\$ <i>m</i>	% change
2	41000	1994						
		June	36 891	4.8	36 891	4.8	36 891	4.8
	38000	September	38 367	4.0	38 425	4.2	38 506	4.4
	35000	December 1995	39 573	3.1	39 562	3.0	39 534	2.7
	32000	March	40 621	2.6	40 505	2.4	40 115	1.5
J D) D J 1993 1994 1	995 995	June	_	_	41 343	2.1	40 417	0.8







2562900003959 ISSN 1323-2614

RRP \$13.00

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