

**STOCKS, MANUFACTURERS' SALES DECEMBER QUARTER 1993  
AND EXPECTED SALES TO DECEMBER 1994, AUSTRALIA**

**MAIN FEATURES**

*Stocks*

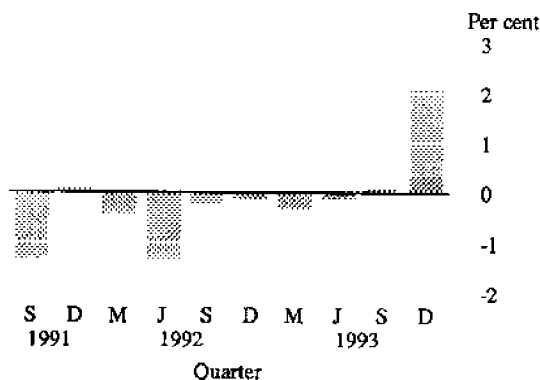
The value of stocks at 31 December 1993, seasonally adjusted and in 1989-90 price terms is estimated to be 2.1 percent above the revised September 1993 estimate. This is the largest quarterly increase since September 1989 which showed a 2.5 percent increase on June 1989.

Details of changes by major industry category are as follows:

*Percentage change in stocks, seasonally adjusted average 1989-90 prices, since:*

	30 Sep 1993 %	31 Dec 1992 %
Mining	5.5	-0.6
Manufacturing	1.3	2.2
Wholesale	1.5	2.3
Retail	2.9	1.6
Other	12.7	-4.4
<b>TOTAL</b>	<b>2.1</b>	<b>1.8</b>

**PERCENTAGE CHANGE IN STOCKS  
SEASONALLY ADJUSTED AVERAGE 1989-90 PRICES**



*Manufacturers' Sales*

In seasonally adjusted, average 1989-90 price terms, sales by manufacturers in the December quarter 1993 are estimated to be 3.1 per cent above the September quarter 1993 estimate. There were rises in 8 of the 12 industry sub-groups. The largest increases were for Other machinery and equipment (up 11%), Basic metal products (up 9%) and Textiles (up 8%). The largest falls were for Clothing and footwear (down 8%), Miscellaneous manufacturing (down 4%) and Transport equipment (down 2%).

For the year to December 1993, Food beverages and tobacco with 24 percent of total manufacturing sales, had the highest sales of any industry sub-group, followed by Basic metal products with 12 percent, and Chemicals, petroleum and coal products with 11 percent of total sales.

In terms of growth for the year to December 1993 compared with 1992, 10 sub-groups showed rises with Transport equipment at 15 percent being the strongest. The largest of the falls was for Textiles (down 13%). Total manufacturers' sales were 7 percent higher compared with 1992.

*Manufacturers' Expected Sales*

Expected sales, in current price terms, for 1993-94 are estimated to be \$157,856m which is 1 percent above the revised September survey expectation for 1993-94. If realised, this will be 9 percent above actual sales for 1992-93.

Expected sales in current price terms, for the six months to June 1994 are estimated to be \$77,211m and for the six months to December 1994 the estimate is \$83,263m. The total of \$160,474m expected for the year to December 1994 is 5 percent above actual sales for 1993.

Note that expected manufacturers' sales data should be interpreted with caution. See Paragraph 10 of the Explanatory Notes.

**INQUIRIES**

- for further information about statistics in this publication and the availability of related unpublished statistics, contact Kevin Squair on Canberra (06) 252 5610 or any ABS State Office.
- for information about other ABS statistics and services please contact Information Services on Canberra (06) 252 6627, 252 5402, 252 6007 or any ABS State Office. of this publication.

TABLE 1. BOOK VALUE OF STOCKS OWNED BY PRIVATE BUSINESSES, CURRENT PRICE SERIES (revised)  
(\$ million)

	<i>Mining (a)</i>	<i>Manu- facturing</i>	<i>Wholesale trade</i>	<i>Retail trade</i>	<i>Other</i>	<i>Total selected industries</i>
ORIGINAL						
<i>At end of—</i>						
June 1991	3,709	23,217	16,043	14,042	624	57,635
June 1992	3,384	22,595	15,429	14,403	637	56,446
June 1993	3,541	23,258	15,515	14,802	470	57,587
<i>1991-92—</i>						
September	3,743	22,644	15,995	14,472	643	57,497
December	3,535	22,337	15,849	14,774	729	57,225
March	3,525	22,684	15,970	14,712	640	57,531
June	3,384	22,595	15,429	14,403	637	56,446
<i>1992-93—</i>						
September	3,556	22,613	15,683	15,077	615	57,544
December	3,585	22,418	15,484	15,516	540	57,543
March	3,734	22,954	15,810	15,167	506	58,171
June	3,541	23,258	15,515	14,802	470	57,587
<i>1993-94—</i>						
September	3,506	23,142	16,071	15,589	469	58,777
December p	3,600	22,981	16,372	16,093	532	59,578
SEASONALLY ADJUSTED						
<i>At end of—</i>						
June 1991	3,759	23,081	16,312	14,376	645	58,173
June 1992	3,442	22,444	15,667	14,749	657	56,958
June 1993	3,609	23,118	15,747	15,163	484	58,120
<i>1991-92—</i>						
September	3,689	22,632	15,979	14,318	631	57,249
December	3,562	22,635	15,778	14,600	711	57,286
March	3,494	22,535	15,805	14,700	650	57,183
June	3,442	22,444	15,667	14,749	657	56,958
<i>1992-93—</i>						
September	3,505	22,617	15,678	14,920	602	57,321
December	3,607	22,710	15,422	15,331	528	57,598
March	3,699	22,795	15,643	15,149	515	57,800
June	3,609	23,118	15,747	15,163	484	58,120
<i>1993-94—</i>						
September	3,455	23,162	16,071	15,429	458	58,575
December p	3,619	23,266	16,311	15,900	520	59,616

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

TABLE 2. BOOK VALUE OF STOCKS OWNED BY PRIVATE MANUFACTURING BUSINESSES, CURRENT PRICE SERIES (revised)  
(\$ million)

At end of—	ORIGINAL										Total manu- facturing
	Food, beverages and tobacco	Clothing and footwear	Wood, paper, ducts and furniture	Chemicals, petroleum and coal products	Non- metallic mineral products	Basic metal products	Fabricated metal products	Transport equipment	Other machinery and equipment	Misc. manu- facturing	
June 1991	4,330	963	1,196	2,961	1,086	2,737	1,504	2,183	3,178	1,218	23,217
June 1992	4,253	1,119	1,237	3,153	1,089	2,686	1,343	1,789	2,830	1,131	22,595
June 1993	4,654	896	1,146	3,090	1,073	2,641	1,362	1,867	3,250	1,088	23,258
1991-92—											
September	3,975	836	1,207	3,009	1,063	2,775	1,488	2,098	3,078	1,209	22,644
December	4,166	824	1,233	2,939	1,057	2,838	1,359	1,895	2,960	1,175	22,337
March	4,378	919	1,317	2,985	1,022	2,823	1,403	1,895	2,875	1,155	22,684
June	4,253	1,119	1,237	3,153	1,089	2,686	1,343	1,789	2,830	1,131	22,595
1992-93—											
September	4,045	971	1,202	3,274	1,065	2,667	1,338	1,786	3,061	1,119	22,613
December	4,152	832	1,123	3,364	1,017	2,617	1,286	1,779	3,092	1,110	22,418
March	4,399	745	1,121	3,420	1,022	2,634	1,392	1,756	3,203	1,067	22,954
June	4,654	896	1,146	3,090	1,073	2,641	1,362	1,867	3,250	1,088	23,258
1993-94—											
September	4,578	802	1,133	3,153	1,107	2,648	1,352	1,814	3,193	1,145	23,142
December p	4,577	684	1,093	3,077	1,139	2,908	1,367	1,602	3,222	1,114	22,981
At end of—	SEASONALLY ADJUSTED										
June 1991	4,272	878	1,194	3,012	1,072	2,763	1,494	2,161	3,176	1,206	23,081
June 1992	4,194	1,010	1,236	3,210	1,072	2,712	1,332	1,773	2,826	1,119	22,444
June 1993	4,587	806	1,146	3,146	1,054	2,669	1,350	1,852	3,245	1,077	23,118
1991-92—											
September	4,074	826	1,209	3,008	1,055	2,811	1,451	2,066	3,068	1,196	22,632
December	4,246	876	1,245	2,947	1,074	2,812	1,389	1,962	2,980	1,174	22,635
March	4,250	972	1,303	2,929	1,030	2,785	1,419	1,877	2,869	1,181	22,535
June	4,194	1,010	1,236	3,210	1,072	2,712	1,332	1,773	2,826	1,119	22,444
1992-93—											
September	4,152	963	1,204	3,270	1,057	2,702	1,305	1,759	3,053	1,108	22,617
December	4,228	887	1,134	3,369	1,033	2,595	1,317	1,840	3,109	1,109	22,710
March	4,272	789	1,107	3,361	1,030	2,596	1,407	1,738	3,200	1,091	22,795
June	4,587	806	1,146	3,146	1,054	2,669	1,350	1,852	3,245	1,077	23,118
1993-94—											
September	4,702	797	1,136	3,148	1,100	2,684	1,320	1,788	3,186	1,134	23,162
December p	4,659	730	1,105	3,080	1,157	2,884	1,402	1,657	3,237	1,112	23,266

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

TABLE 3. BOOK VALUE OF STOCKS OWNED BY PRIVATE BUSINESSES, AT AVERAGE 1989-90 PRICES (revised)  
(\$ million)

	Mining (a)	Manu- facturing	Wholesale trade	Retail trade	Other	Total selected industries
ORIGINAL						
<i>At end of—</i>						
June 1991	3,539	22,349	15,444	13,362	580	55,274
June 1992	3,325	21,686	14,777	13,381	576	53,745
June 1993	3,374	22,003	14,198	13,426	414	53,415
<i>1991-92—</i>						
September	3,608	21,901	15,470	13,667	593	55,239
December	3,447	21,613	15,417	13,866	668	55,011
March	3,440	21,888	15,504	13,827	584	55,243
June	3,325	21,686	14,777	13,381	576	53,745
<i>1992-93—</i>						
September	3,431	21,506	14,834	13,953	554	54,278
December	3,442	21,270	14,458	14,283	483	53,936
March	3,574	21,782	14,573	13,864	447	54,240
June	3,374	22,003	14,198	13,426	414	53,415
<i>1993-94—</i>						
September	3,313	21,753	14,527	14,081	409	54,083
December p	3,424	21,762	14,785	14,509	461	54,941
SEASONALLY ADJUSTED						
<i>At end of—</i>						
June 1991	3,587	22,169	15,691	13,680	599	55,726
June 1992	3,383	21,494	15,002	13,703	594	54,176
June 1993	3,439	21,833	14,410	13,753	426	53,861
<i>1991-92—</i>						
September	3,555	21,902	15,467	13,522	582	55,028
December	3,473	21,921	15,359	13,703	651	55,107
March	3,410	21,765	15,326	13,815	593	54,909
June	3,383	21,494	15,002	13,703	594	54,176
<i>1992-93—</i>						
September	3,381	21,514	14,838	13,808	542	54,083
December	3,463	21,572	14,413	14,113	472	54,033
March	3,541	21,650	14,399	13,848	454	53,892
June	3,439	21,833	14,410	13,753	426	53,861
<i>1993-94—</i>						
September	3,265	21,768	14,532	13,936	400	53,901
December p	3,443	22,051	14,745	14,335	451	55,025

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

TABLE 4. BOOK VALUE OF STOCKS OWNED BY PRIVATE MANUFACTURING BUSINESSES, AT AVERAGE 1989-90 PRICES (revised)  
(\$ million)

	Food, beverages and tobacco	Clothing and footwear	Wood, wood products and furniture	Paper, paper products and printing and publishing	Chemicals, petroleum and coal products	Non-metallic mineral products	Basic metal products	Fabricated metal products	Transport equipment	Other machinery and equipment	Misc. manufacturing	Total manufacturing	
	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	
ORIGINAL													
At end of—													
June 1991	4,227	956	741	1,113	1,030	2,791	1,014	2,715	1,412	2,082	3,062	1,206	22,349
June 1992	4,031	1,109	767	1,147	1,100	2,973	1,015	2,733	1,284	1,671	2,724	1,132	21,686
June 1993	4,285	878	829	1,012	1,216	2,932	991	2,754	1,294	1,670	3,070	1,072	22,003
1991-92—													
September	3,869	837	751	1,146	1,063	2,871	990	2,802	1,401	1,994	2,964	1,213	21,901
December	4,028	822	758	1,179	1,043	2,785	987	2,893	1,308	1,783	2,852	1,175	21,613
March	4,193	912	760	1,233	1,054	2,870	949	2,874	1,343	1,781	2,766	1,153	21,888
June	4,031	1,109	767	1,147	1,100	2,973	1,015	2,733	1,284	1,671	2,724	1,132	21,686
1992-93—													
September	3,816	957	810	1,118	1,151	3,083	986	2,654	1,275	1,645	2,906	1,105	21,506
December	3,890	819	799	1,036	1,110	3,147	937	2,649	1,228	1,631	2,935	1,089	21,270
March	4,110	738	844	1,020	1,202	3,208	944	2,721	1,331	1,591	3,033	1,040	21,782
June	4,285	878	829	1,012	1,216	2,932	991	2,754	1,294	1,670	3,070	1,072	22,003
1993-94—													
September	4,147	774	832	977	1,231	3,002	1,032	2,762	1,276	1,607	2,996	1,117	21,753
December p	4,147	669	866	935	1,184	2,974	1,067	3,088	1,303	1,412	3,030	1,087	21,762
SEASONALLY ADJUSTED													
At end of—													
June 1991	4,171	847	731	1,113	1,031	2,815	1,001	2,742	1,403	2,061	3,060	1,194	22,169
June 1992	3,976	979	758	1,148	1,103	3,001	999	2,760	1,273	1,657	2,720	1,120	21,494
June 1993	4,223	774	821	1,013	1,221	2,960	974	2,783	1,282	1,657	3,065	1,060	21,833
1991-92—													
September	3,966	840	741	1,147	1,037	2,867	982	2,838	1,366	1,964	2,954	1,200	21,902
December	4,106	883	767	1,192	1,069	2,805	1,003	2,867	1,337	1,846	2,872	1,174	21,921
March	4,071	969	771	1,218	1,053	2,831	956	2,835	1,358	1,764	2,760	1,179	21,765
June	3,976	979	758	1,148	1,103	3,001	999	2,760	1,273	1,657	2,720	1,120	21,494
1992-93—													
September	3,917	960	798	1,119	1,121	3,073	979	2,689	1,244	1,621	2,899	1,094	21,514
December	3,962	881	810	1,050	1,139	3,169	952	2,626	1,257	1,688	2,951	1,087	21,572
March	3,992	785	855	1,005	1,199	3,167	952	2,682	1,344	1,575	3,030	1,064	21,650
June	4,223	774	821	1,013	1,221	2,960	974	2,783	1,282	1,657	3,065	1,060	21,833
1993-94—													
September	4,259	777	819	977	1,198	2,990	1,025	2,799	1,245	1,584	2,989	1,106	21,768
December p	4,221	721	878	949	1,215	2,996	1,084	3,062	1,336	1,460	3,044	1,085	22,051

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

TABLE 5. CHANGES IN STOCKS OWNED BY PRIVATE BUSINESSES, SEASONALLY ADJUSTED  
AT AVERAGE 1989-90 PRICES (revised)

<i>Quarter</i>	<i>Mining (a)</i>	<i>Manu- facturing</i>	<i>Wholesale trade</i>	<i>Retail trade</i>	<i>Other</i>	<i>Total selected industries</i>
\$ MILLION						
<i>1991-92—</i>						
September	-32	-267	-224	-158	-17	-698
December	-82	19	-108	181	69	79
March	-63	-156	-33	112	-58	-198
June	-27	-271	-324	-112	1	-733
<i>1992-93—</i>						
September	-2	20	-164	105	-52	-93
December	82	58	-425	305	-70	-50
March	78	78	-14	-265	-18	-141
June	-102	183	11	-95	-28	-31
<i>1993-94—</i>						
September	-174	-65	122	183	-26	40
December p	178	283	213	399	51	1,124
PERCENTAGE CHANGE						
<i>1991-92—</i>						
September	-0.9	-1.2	-1.4	-1.2	-2.8	-1.3
December	-2.3	0.1	-0.7	1.3	11.9	0.1
March	-1.8	-0.7	-0.2	0.8	-3.9	-0.4
June	-0.8	-1.2	-2.1	-0.8	0.2	-1.3
<i>1992-93—</i>						
September	-0.1	0.1	-1.1	0.8	-8.8	-0.2
December	2.4	0.3	-2.9	2.2	-12.9	-0.1
March	2.3	0.4	-0.1	-1.9	-3.8	-0.3
June	-2.9	0.8	0.1	-0.7	-6.2	-0.1
<i>1993-94—</i>						
September	-5.1	-0.3	0.8	1.3	-6.1	0.1
December p	5.5	1.3	1.5	2.9	12.7	2.1

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

TABLE 6. CHANGES IN MANUFACTURERS' STOCKS, SEASONALLY ADJUSTED AT AVERAGE 1989-90 PRICES (revised)

Quarter	Food, beverages and tobacco	Clothing and footwear	Wood, wood products and furniture	Paper, paper products and printing and publishing	Chemicals, petroleum and coal products	Non-metallic mineral products	Basic metal products (a)	Fabricated metal products (a)	Transport equipment (a)	Other machinery and equipment (a)	Misc. manufacturing	Total manufacturing	
\$ MILLION													
1991-92—													
September	-205	-7	10	34	6	52	19	96	-37	-97	-106	6	-267
December	140	43	26	45	32	-62	21	29	-29	-118	-82	-26	19
March	-35	86	4	26	-16	26	-47	-32	21	-82	-112	5	-156
June	-95	10	-13	-70	50	170	43	-75	-85	-107	-40	-59	-271
1992-93—													
September	-59	-19	40	-29	18	72	-20	-71	-29	-36	179	-26	20
December	45	-79	12	-69	18	96	-27	-63	13	67	52	-7	58
March	30	-96	45	-45	60	-2	0	56	87	-113	79	-23	78
June	231	-11	-34	8	22	-207	22	101	-62	82	35	-4	183
1993-94—													
September	36	3	-2	-36	-23	30	51	16	-37	-73	-76	46	-65
December p	-38	-56	59	-28	17	6	59	263	91	-124	55	-21	283
PERCENTAGE CHANGE													
1991-92—													
September	-4.9	-0.8	1.4	3.1	0.6	1.8	-1.9	3.5	-2.6	-4.7	-3.5	0.5	-1.2
December	3.5	5.1	3.5	3.9	3.1	-2.2	2.1	1.0	-2.1	-6.0	-2.8	-2.2	0.1
March	-0.9	9.7	0.5	2.2	-1.5	0.9	-4.7	-1.1	1.6	-4.4	-3.9	0.4	-0.7
June	-2.3	1.0	-1.7	-5.7	4.7	6.0	4.5	-2.6	-6.3	-6.1	-1.4	-5.0	-1.2
1992-93—													
September	-1.5	-1.9	5.3	-2.5	1.6	2.4	-2.0	-2.6	-2.3	-2.2	6.6	-2.3	0.1
December	1.1	-8.2	1.5	-6.2	1.6	3.1	-2.8	-2.3	1.0	4.1	1.8	-0.6	0.3
March	0.8	-10.9	5.6	-4.3	5.3	-0.1	0.0	2.1	6.9	-6.7	2.7	-2.1	0.4
June	5.8	-1.4	-4.0	0.8	1.8	-6.5	2.3	3.8	-4.6	5.2	1.2	-0.4	0.8
1993-94—													
September	0.9	0.4	-0.2	-3.6	-1.9	1.0	5.2	0.6	-2.9	-4.4	-2.5	4.3	-0.3
December p	-0.9	-7.2	7.2	-2.9	1.4	0.2	5.8	9.4	7.3	-7.8	1.8	-1.9	1.3

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

TABLE 7. MANUFACTURERS' ACTUAL AND EXPECTED SALES, CURRENT PRICE SERIES (revised)  
(\$ million)

Year/Quarter	SALES											Total manu- facturing
	Food, beverages and tobacco	Textiles and footwear	Clothing and furniture	Wood, paper products and publishing	Chemicals, petroleum and coal products	Non- metallic mineral products	Basic metal products	Fabricated metal products	Transport equipment	Other machinery and equipment	Misc. manu- facturing	
1991-92—	32,592	4,083	4,367	10,604	15,373	7,167	15,027	10,978	10,071	13,142	7,742	138,398
1992-93—	35,178	4,095	4,592	10,670	16,243	7,960	15,203	10,389	10,275	15,152	7,779	144,763
1991-92—												
September	8,145	1,036	1,135	2,781	3,811	1,885	3,840	2,846	2,663	3,445	2,021	35,470
December	8,514	1,045	1,088	2,825	3,840	1,831	3,624	2,969	2,630	3,453	2,166	35,947
March	7,775	934	1,057	2,507	3,765	1,652	3,631	2,615	2,206	2,954	1,790	32,590
June	8,158	1,069	1,088	2,491	3,956	1,800	3,932	2,548	2,572	3,290	1,765	34,392
1992-93—												
September	8,496	1,112	1,143	2,750	4,016	1,935	3,842	2,576	2,530	3,599	2,000	35,827
December	9,446	1,196	1,143	2,825	3,984	1,966	3,775	2,692	2,469	4,025	1,982	37,436
March	8,170	861	1,123	2,498	4,019	1,942	3,585	2,483	2,458	3,623	1,803	34,214
June	9,066	927	1,183	2,596	4,224	2,117	4,001	2,637	2,818	3,905	1,994	37,285
1993-94—												
September	9,601	935	1,352	2,815	4,238	2,147	4,121	2,878	3,210	3,826	2,164	39,211
December p	10,348	1,048	1,185	3,151	4,356	2,243	4,383	3,021	3,175	4,346	2,228	41,434
1993-94—												
6 Months to June 94	18,012	1,847	2,357	5,562	9,033	4,216	8,475	5,524	6,490	7,868	4,210	77,211
1993-1994(b)	37,961	3,830	4,894	11,529	17,627	8,605	16,979	11,423	12,875	16,039	8,602	157,856
6 Months to Dec 94	20,032	2,042	2,566	6,229	9,251	4,394	8,592	5,808	7,122	8,627	4,643	83,263

(a) For details on 'Manufacturers' Sales - Reporting Cycle', refer to page 11. (b) Derived by adding Actual sales for September and December quarter 1993 and Expected sales for the period to June 1994.



TABLE 8. MANUFACTURERS' SALES, AT AVERAGE 1989-90 PRICES (revised)  
(\$ million)

Year/Quarter	Food, beverages and tobacco		Clothing and footwear		Wood, wood products and furniture		Paper, paper products and printing and publishing		Chemicals, petroleum and coal products		Non-metallic mineral products		Basic metal products		Fabricated metal products		Transport equipment		Other machinery and equipment		Misc. manufacturing		Total manufacturing	
	Textiles	Footwear	Furniture	Printing and publishing	Petroleum and coal products	Chemicals	Non-metallic mineral products	Basic metal products	Fabricated metal products	Transport equipment	Other machinery and equipment	Misc. manufacturing	Total manufacturing											
ORIGINAL																								
1991-92—	4,087	4,056	6,870	9,580	14,452	6,526	15,688	10,411	9,429	12,822	7,479	132,416												
1992-93—	4,077	4,215	6,716	9,519	14,966	7,174	15,871	9,891	9,391	14,509	7,386	136,093												
1991-92—																								
September	1,035	1,059	1,766	2,534	3,575	1,723	3,954	2,682	2,498	3,363	1,964	34,018												
December	1,052	1,010	1,874	2,550	3,599	1,666	3,817	2,825	2,463	3,366	2,095	34,453												
March	931	979	1,612	2,262	3,562	1,502	3,806	2,493	2,066	2,883	1,723	31,165												
June	1,069	1,008	1,618	2,234	3,716	1,635	4,111	2,411	2,402	3,210	1,697	32,780												
1992-93—																								
September	1,111	1,052	1,716	2,460	3,696	1,750	3,945	2,442	2,340	3,475	1,914	33,829												
December	1,192	1,051	1,817	2,518	3,668	1,774	3,936	2,566	2,272	3,862	1,882	35,254												
March	852	1,029	1,527	2,226	3,696	1,750	3,741	2,367	2,238	3,446	1,704	32,045												
June	922	1,083	1,656	2,315	3,906	1,900	4,249	2,516	2,541	3,726	1,886	34,965												
1993-94—																								
September	924	1,231	1,711	2,516	3,989	1,926	4,319	2,736	2,876	3,642	2,026	36,445												
December p	1,038	1,077	1,713	2,799	4,115	2,006	4,688	2,891	2,826	4,130	2,069	38,567												
SEASONALLY ADJUSTED																								
1991-92—	4,105	4,063	6,874	9,571	14,444	6,527	15,689	10,404	9,438	12,758	7,470	132,331												
1992-93—	4,060	4,229	6,718	9,516	14,954	7,189	15,864	9,896	9,436	14,531	7,404	136,111												
1991-92—																								
September	1,011	978	1,690	2,483	3,599	1,656	3,889	2,646	2,390	3,296	1,908	33,374												
December	996	982	1,758	2,382	3,599	1,594	3,780	2,689	2,350	3,191	1,923	32,871												
March	1,055	1,068	1,779	2,388	3,610	1,583	4,009	2,652	2,404	3,066	1,877	33,134												
June	1,043	1,035	1,647	2,318	3,636	1,694	4,011	2,417	2,294	3,205	1,762	32,952												
1992-93—																								
September	1,062	974	1,642	2,376	3,691	1,680	3,884	2,416	2,239	3,415	1,860	33,031												
December	1,132	1,023	1,706	2,382	3,656	1,698	3,896	2,440	2,170	3,681	1,727	33,700												
March	963	1,118	1,680	2,351	3,782	1,846	3,945	2,514	2,595	3,713	1,853	34,191												
June	903	1,114	1,690	2,407	3,825	1,965	4,139	2,526	2,432	3,722	1,964	35,189												
1993-94—																								
September	900	1,141	1,636	2,459	4,012	1,848	4,257	2,711	2,751	3,571	1,970	35,760												
December p	970	1,049	1,609	2,633	4,080	1,921	4,640	2,748	2,702	3,976	1,898	36,863												

TABLE 9. MANUFACTURING BUSINESSES' STOCKS/SALES RATIOS, SEASONALLY ADJUSTED CURRENT PRICE SERIES (revised)

	Food, beverages and tobacco	Textiles and footwear	Clothing and footwear	Wood products and furniture	Paper, printing and publishing	Chemicals, petroleum and coal products	Non-metallic mineral products	Basic metal products (a)	Fabricated metal products (a)	Transport equipment (a)	Other machinery and equipment (a)	Misc. manufacturing (a)	Total manufacturing
At end of—													
June 1991	0.53	0.96	0.77	0.70	0.41	0.84	0.59	0.73	0.51	0.87	0.93	0.64	0.67
June 1992	0.50	0.97	0.73	0.71	0.44	0.83	0.57	0.71	0.52	0.72	0.86	0.61	0.65
June 1993	0.49	0.89	0.75	0.62	0.47	0.76	0.48	0.69	0.51	0.69	0.83	0.52	0.62
1992-93—													
December	0.48	0.78	0.79	0.63	0.45	0.85	0.55	0.69	0.51	0.78	0.81	0.61	0.63
March	0.50	0.81	0.77	0.61	0.48	0.82	0.50	0.68	0.53	0.61	0.82	0.56	0.62
June	0.49	0.89	0.75	0.62	0.47	0.76	0.48	0.69	0.51	0.69	0.83	0.52	0.62
1993-94—													
September	0.49	0.87	0.73	0.62	0.46	0.74	0.53	0.67	0.46	0.58	0.85	0.54	0.60
December p	0.48	0.75	0.84	0.60	0.43	0.71	0.54	0.66	0.49	0.55	0.77	0.54	0.59

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

TABLE 10. APPROXIMATE RELATIVE STANDARD ERRORS (a) FOR ESTIMATES OF STOCKS OWNED BY PRIVATE BUSINESSES (b) (percentage)

	Mining	Manufacturing	Wholesale trade	Retail trade	Other	Total selected industries
Total stocks	3.3	1.0	2.9	3.1	9.2	1.2
Quarter to quarter movement (b)	0.9	0.2	0.6	0.6	4.4	0.3

(a) See paragraphs 24 to 28 of the explanatory notes. (b) Expressed as a percentage of total stocks.

TABLE 11. APPROXIMATE RELATIVE STANDARD ERRORS (a) FOR ESTIMATES OF PRIVATE MANUFACTURING BUSINESSES' STOCKS AND SALES (percentage)

	Food, beverages and tobacco	Textiles and footwear	Clothing and footwear	Wood products and furniture	Paper, printing and publishing	Chemicals, petroleum and coal products	Non-metallic mineral products	Basic metal products	Fabricated metal products	Transport equipment	Other machinery and equipment	Misc. manufacturing	Total manufacturing
Total stocks—													
Level	2.6	4.3	5.0	4.3	5.0	2.1	4.2	1.4	2.9	3.5	3.5	4.4	1.0
Movement	0.6	0.8	1.0	0.9	1.0	0.5	0.4	0.2	1.0	0.4	0.7	0.6	0.2
Sales—													
Level	1.3	3.1	3.7	2.9	2.1	1.7	2.7	1.0	1.4	2.8	3.0	2.6	0.6
Movement	0.5	1.6	1.9	1.5	1.4	0.4	0.8	0.3	1.2	0.9	2.0	1.5	0.3

(a) See paragraphs 24 to 28 of the explanatory notes.

## EXPLANATORY NOTES

## Introduction

This publication contains estimates of the book value of stocks owned by private business units and estimates of sales and expected sales of goods manufactured 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 Manufacturers' Sales.

2. In this issue, preliminary estimates of stocks and sales are shown for the December quarter 1993 together with final estimates for previous quarters from September quarter 1991. Preliminary estimates of expected sales are shown for the six months ending 30 June 1994 and the six months ending 31 December 1994. The expectations of sales by businesses may not necessarily correspond to sales which eventually occur because of unexpected changes in market conditions and other unforeseeable influences.

## Scope of the survey

3. The survey aims to measure the value of stocks owned by private sector businesses in Australia. It also aims to measure the value of sales and expected sales of goods manufactured or assembled by private businesses classified to the manufacturing industry.

4. The statistics in this publication exclude estimates relating to agriculture, construction, water, sewerage and drainage, transport and storage, communications, finance, property and business services, entertainment and recreational services, personal services and community services industries.

5. Public sector business units (i.e. all departments, authorities and other organisations owned and/or controlled by Commonwealth, State and Local Governments) are outside the scope of the survey. Primary producer marketing boards are classified as public sector and are excluded.

## Survey methodology

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 140 employees, and other statistically significant units such as many joint venture partners, are included. The figures obtained from these businesses are also supplemented by allowances for new businesses not yet included in the sample framework.

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.

## Industries covered

8. The industries (as defined in the Australian Standard Industrial Classification (ASIC) 1983 edition) for which estimates are presented in this publication are:

<i>Publication Industry</i>	<i>ASIC</i>
MINING	DIVISION B
MANUFACTURING	DIVISION C
Food, Beverages and Tobacco	Sub-division 21
Textiles	Sub-division 23
Clothing and Footwear	Sub-division 24
Wood, Wood Products and Furniture	Sub-division 25
Paper and Printing	Sub-division 26
Chemicals, Petroleum and Coal Products	Sub-division 27
Non-metallic Mineral Products	Sub-division 28
Basic Metal Product	Sub-division 29
Fabricated Metal Products	Sub-division 31
Transport Equipment	Sub-division 32
Other Machinery and Equipment	Sub-division 33
Miscellaneous Manufacturing	Sub-division 34
WHOLESALE TRADE	SUB-DIVISION 47
RETAIL TRADE	SUB-DIVISION 48
OTHER SELECTED INDUSTRIES	
Electricity and Gas	Sub-division 36
Hotels, Restaurants and Clubs	Sub-division 92
<b>TOTAL SELECTED INDUSTRIES</b>	<b>SUB-DIVISION</b>
	11-36,47,48,92

## Timing and construction of survey cycle

9. 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 were completed during January and February). Full details of the reporting cycle are provided in the table on page 12.

10. In addition to data on stocks, manufacturers are requested to provide 3 basic figures for sales each survey:

- Actual sales made during the reference quarter;
- A short term expectation (E1); and
- A longer term expectation (E2).

This survey cycle facilitates the formation of sales estimates for the next 9 or 12 months. As the series builds up over time, realisation ratios (actual sales divided by expected sales) will be calculated and published if necessary as an aid in interpreting the statistics. Since this series has been published for only a short time no realisation ratios have been provided. Consequently, caution should be used when interpreting the data on expected sales.

### Sample revision

11. Each year, the survey's population framework and the sample are revised prior to the June quarter survey to ensure that they remain representative of the survey population. In the course of 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.

12. 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.

### Statistical unit

13. From the beginning of 1989, the ABS introduced a new statistical unit known as the management unit. The management unit is the highest-level accounting unit within a business, having regard for industry homogeneity, for which accounts are maintained. In nearly all cases it coincides with the legal entity owning the business (ie. 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.

14. The management unit is being implemented on the ABS central register of economic units and included in this survey as reporting arrangements with the larger enterprises are finalised. Where the management unit has not been implemented the statistical unit is still the enterprise as presently recorded on the ABS central register of economic units with the following exceptions:

- (a) where an enterprise has significant activities in more than one industry, a statistical unit has been created for each significant activity;
- (b) where data are only available for a group of enterprises, a statistical unit has been created for each operating division of the enterprise group where possible.

These exceptions will cease once the management unit is fully phased in.

### Classification by industry

15. In order to classify stocks and sales data by industry in these series, each statistical unit (as defined above) selected in the survey is classified to the ASIC industry in which it *mainly* operates.

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

### Description of terms

17. *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.

### Manufacturers' Sales — Reporting Cycle

Survey Quarter	Period to which reported data relates									
	Jun 93	1993-94				1994-95				
		Sep 93	Dec 93	Mar 94	Jun 94	Sep 94	Dec 94	Mar 95	Jun 95	
Jun 93	Actual	E 1			E 2					
Sep 93		Actual	E 1		E 2					
Dec 93			Actual	E 1		E 2				
Mar 94				Actual	E 1	E 2				
Jun 94					Actual	E 1		E 2		

**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

18. The level and changes in the level of stocks and manufacturers' 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.

#### Seasonal adjustment

19. 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.

20. Seasonal adjustment may be carried out by various methods and the results may vary slightly according to the procedure adopted. Accordingly, seasonally adjusted statistics are in fact only estimates and should not be regarded as in any way definitive. In interpreting particular seasonally adjusted statistics it is important, therefore, to bear in mind the methods by which they have been derived and the limitations to which the methods used are subject. Particular care should be taken in interpreting quarter to quarter movements in the adjusted figures in this publication, especially for detailed industry estimates.

21. At least once each year the seasonally adjusted series are re-analysed to take into account the latest available data. The most recent re-analysis takes into account data collected up to and including the June quarter 1993 survey. Data for periods after June 1993 are seasonally adjusted on the basis of extrapolation of historical 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.

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

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

#### Reliability of the estimates

24. Since estimates are based on information obtained from a sample drawn from units in the surveyed population, the estimates and the movements derived from them are subject to sampling variability; that is, they may differ from the figures that would have been produced if all units had been included in the survey. One measure of the likely difference is given by the *standard error*, which indicates the extent to which an estimate might have varied by chance because only a sample of units was included. 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 units had been included, and about nineteen chances in twenty that the difference will be less than two standard errors. Another measure of sampling variability is the *relative standard error* which is obtained by expressing the standard error as a percentage of the estimate to which it refers. The relative standard error is a useful measure in that it provides an immediate indication of the percentage errors likely to have occurred due to sampling, and thus avoids the need to refer also to the size of the estimate.

25. The sample estimates of the quarter to quarter movement are also subject to sampling variability. The standard error of the estimate of movement is expressed as a percentage of the quarterly estimate of level.

26. Tables 10 and 11 present a summary of percentage standard errors for estimates of level and of movement.

27. The preliminary estimates contained in this publication are based on the first 75-80 per cent of returns received. The standard errors for these estimates have not been calculated but in general these can be taken to be about 25 per cent larger than the standard errors quoted above for the estimates obtained from the complete sample.

28. The imprecision due to sampling, which is measured by the standard error, is not of course the only type of inaccuracy to which the estimates are subject. Other inaccuracies, referred to collectively as non-sampling error, may occur for a number of reasons. The major ones of concern and which may affect the data are:-

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

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

### Comparison with other ABS statistics

29. The data collected in the stocks survey are used in the compilation of 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. (See *Australian National Accounts: Concepts, Sources and Methods* (5216.0)).

30. 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:

- (a) The national accounts estimates incorporate data from other sources (including from the ABS's economic censuses) as well as information from the Stocks survey;
- (b) The national accounts estimates include estimates for the construction and transport industries.

### Related publications

31. Users may also wish to refer to the following publications which are available, at a cost, on request:

*Private New Capital Expenditure, Australia, Actual and Expected Expenditure, Preliminary* (5625.0)—issued quarterly

*Private New Capital Expenditure, Australia, Actual and Expected Expenditure* (5626.0)—issued quarterly

*Company Profits, Australia* (5651.0)—issued quarterly

*Australian National Accounts: National Income, Expenditure and Product* (5206.0)—issued quarterly

*Australian National Accounts: Concepts, Sources and Methods* (5216.0)

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

### Unpublished data

33. In addition to the data contained in this publication, more detailed industry information may be made available on request. Data are available at the ASIC Group (3 digit) level for stocks and manufacturers' sales.

34. Prospective users of the information outlined above are advised that, in line with ABS policy, there will be a charge for the supply of data.

35. For more information please contact the officer named in the Phone Inquiries Section at the front of this publication or write to The Director, Business Surveys Section, Australian Bureau of Statistics, P.O. Box 10, Belconnen ACT 2616.

### Symbols and other usages

- nil or rounded to zero
- r revised
- p figure or series subject to revision
- ASIC Australian Standard Industrial Classification 1983 edition

IAN CASTLES  
Australian Statistician



Printed by Alan Law, Commonwealth Government Printer, Canberra  
© Commonwealth of Australia 1994

**Recommended retail price: \$11.00**



2562900012937  
ISSN 1033-551X