

CATALOGUE NUMBER 8301.0  
EMBARGOED UNTIL 11:30 A.M. 3 OCTOBER 1995

## MANUFACTURING PRODUCTION, AUSTRALIA AUGUST 1995

### NOTES

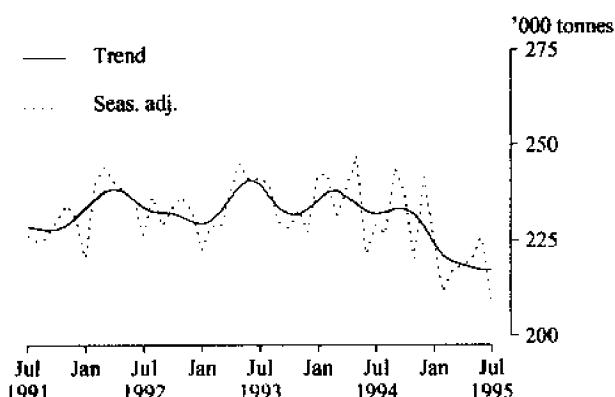
This publication presents monthly and quarterly estimates of selected major indicators of manufacturing production for Australia. There are two graphs shown below for each manufactured commodity. The left hand graph shows seasonally adjusted (where available) and trend estimates over the last four years. The right hand graph presents a short term sensitivity analysis of the trend estimates. The sensitivity analysis shows the current trend and two possible scenarios of how the trend might move if the next seasonally adjusted estimate rises or falls by the historical average monthly or quarterly movement for that series.

In this issue, the quarterly seasonally adjusted estimates have been revised due to the annual re-analysis of seasonal factors. Please refer to the Explanatory Notes at the back of this publication.

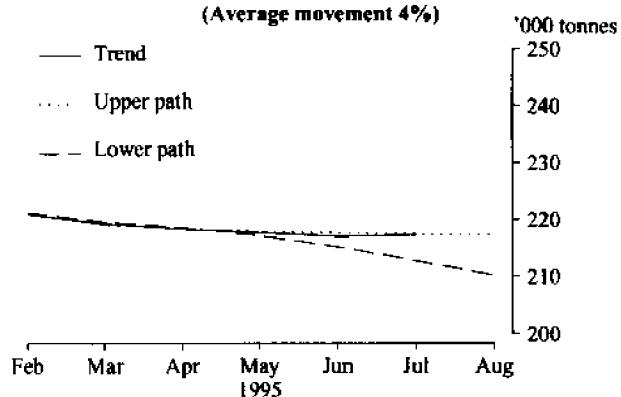
**W. McLennan**  
**Australian Statistician**

### PRODUCTION STATISTICS, AUSTRALIA : LONGER TERM TRENDS AND SHORT TERM SENSITIVITY ANALYSIS

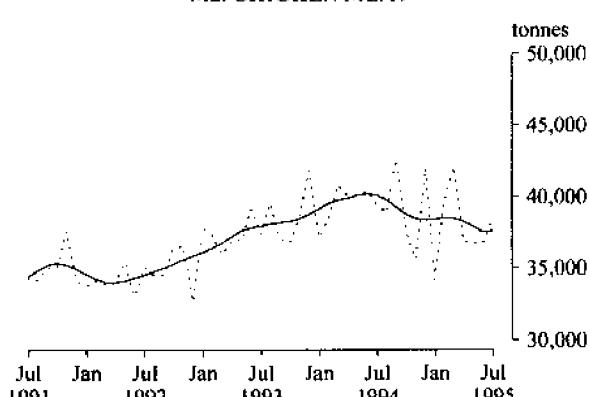
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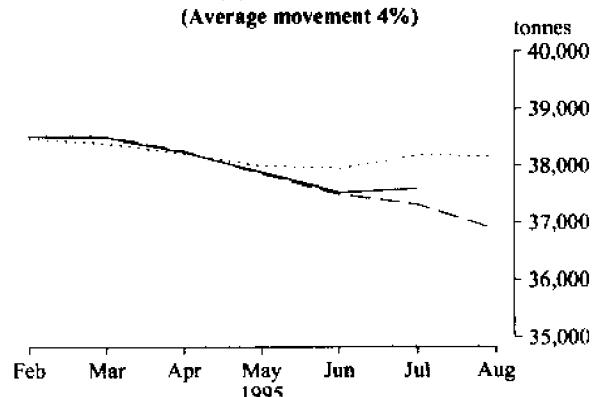
**M1. RED MEAT  
(Average movement 4%)**



**M2. CHICKEN MEAT**

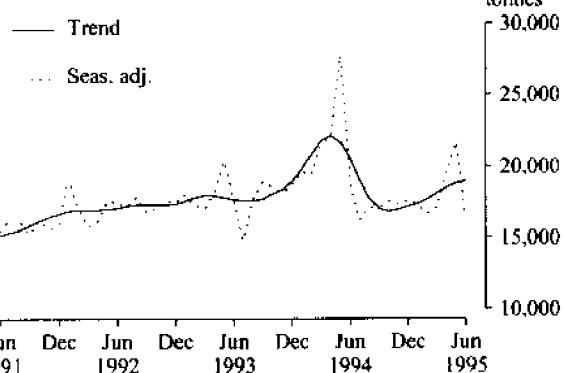
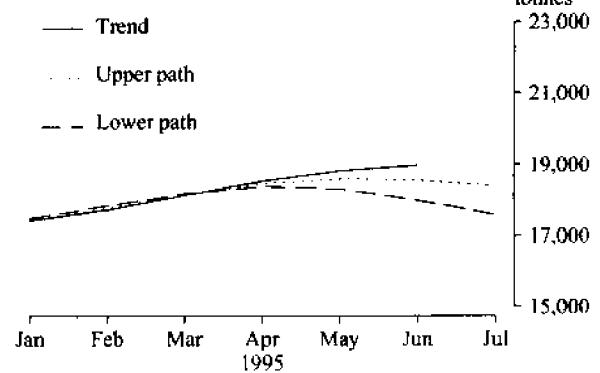
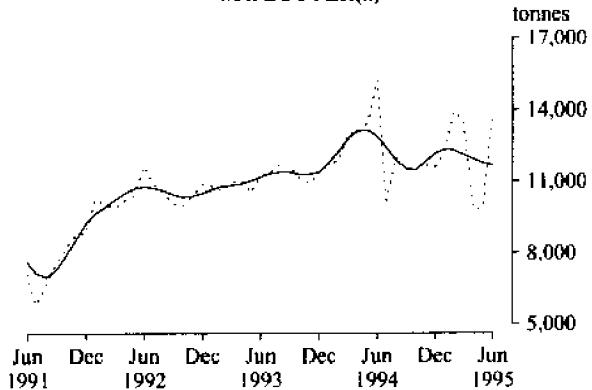
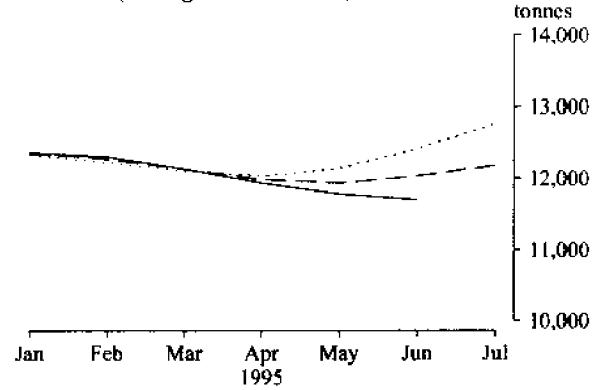
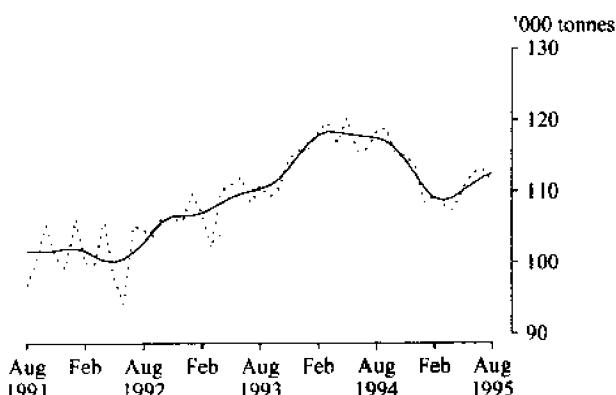
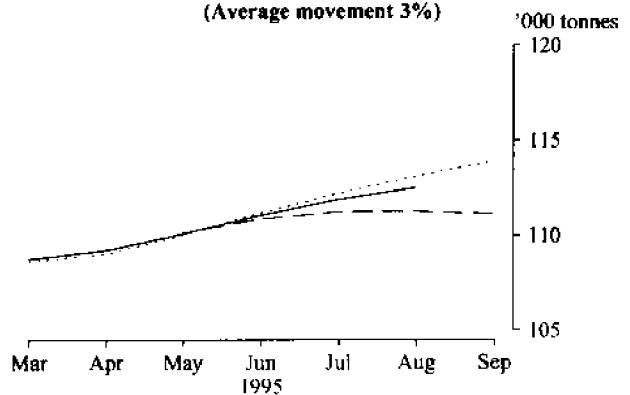
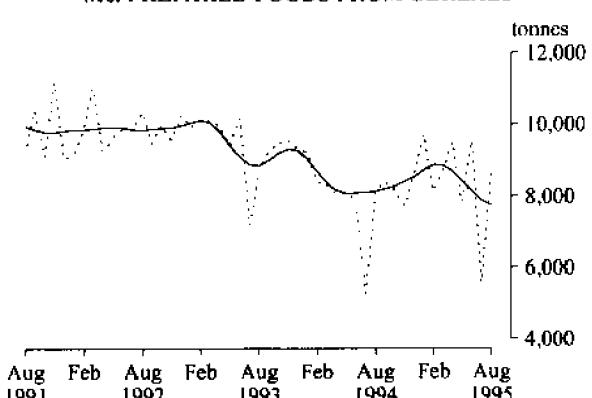
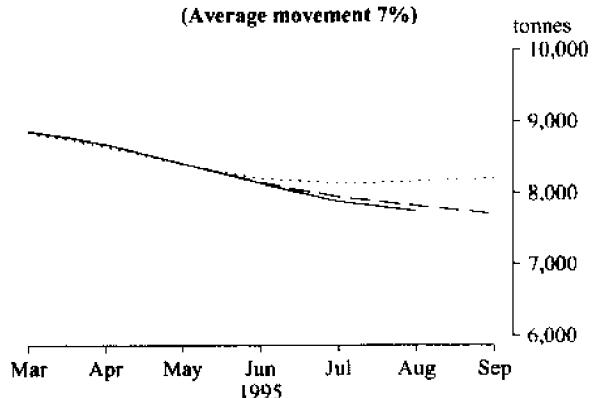


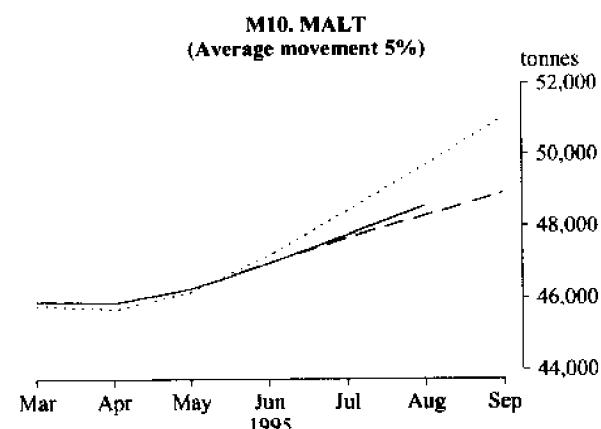
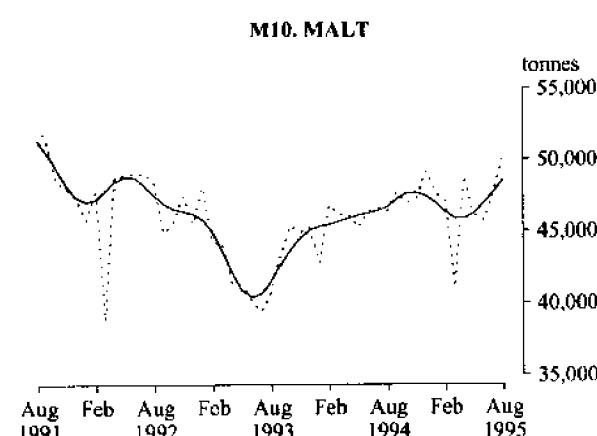
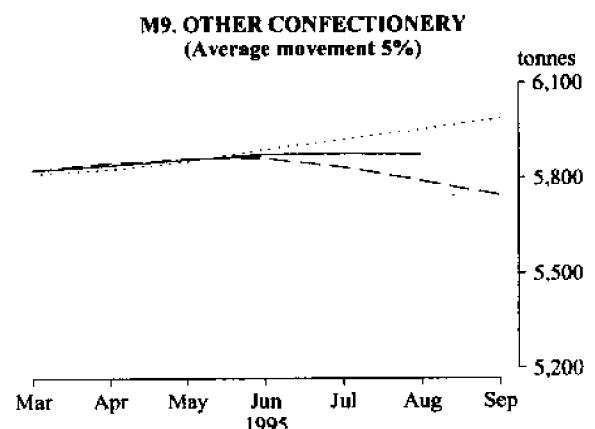
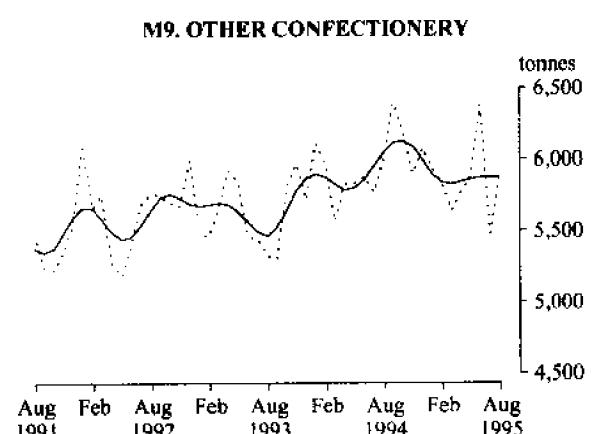
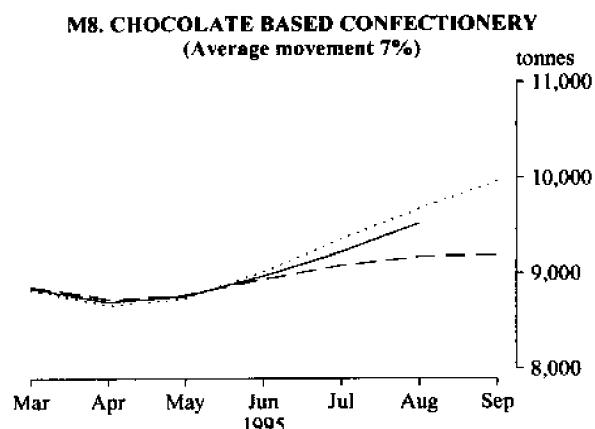
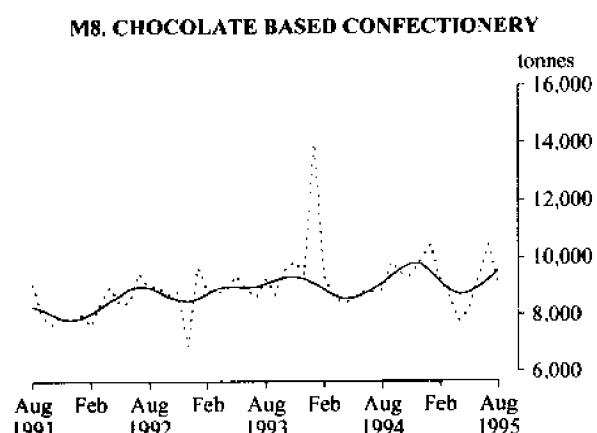
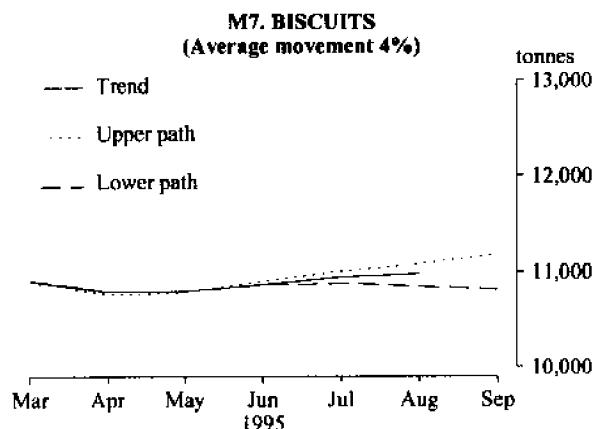
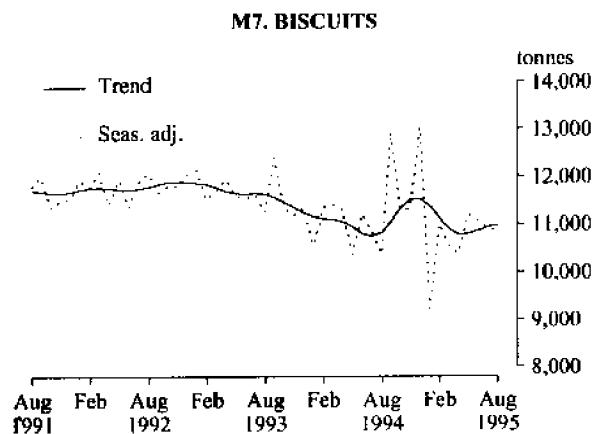
**M2. CHICKEN MEAT  
(Average movement 4%)**

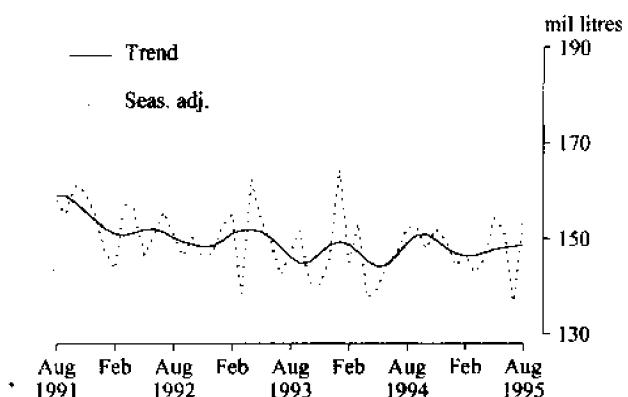
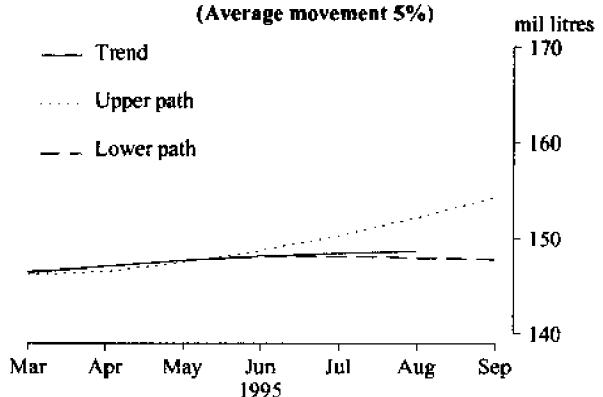
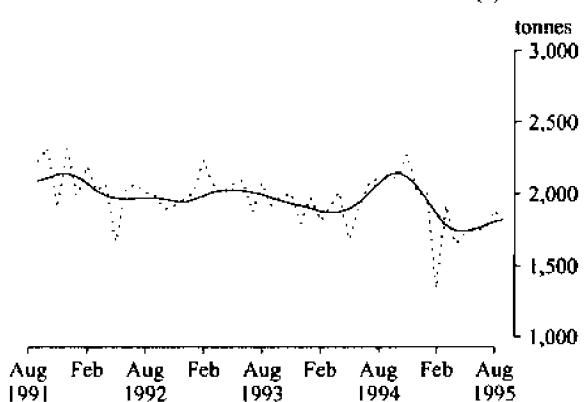
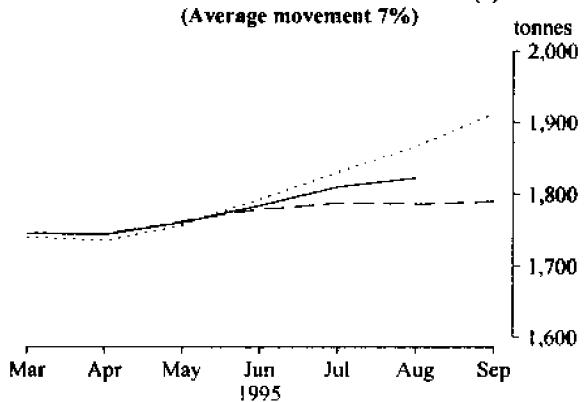
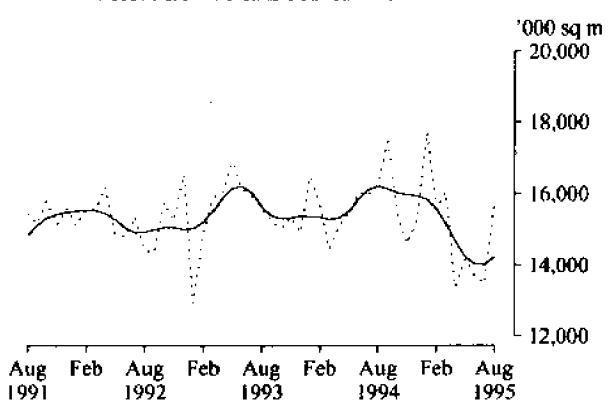
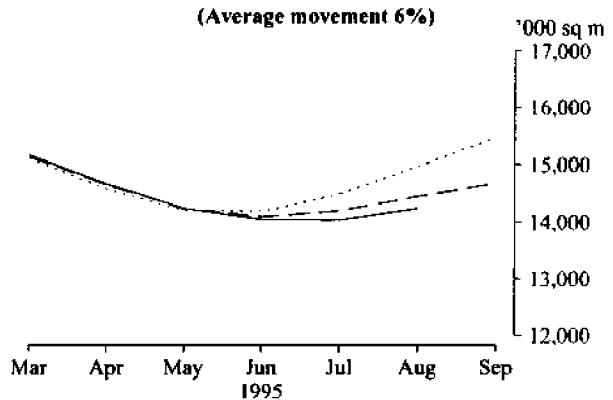
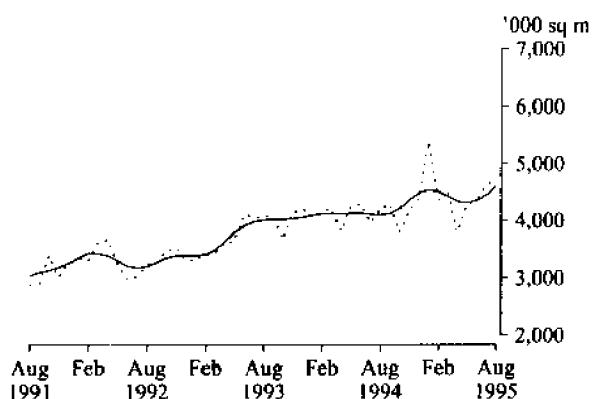
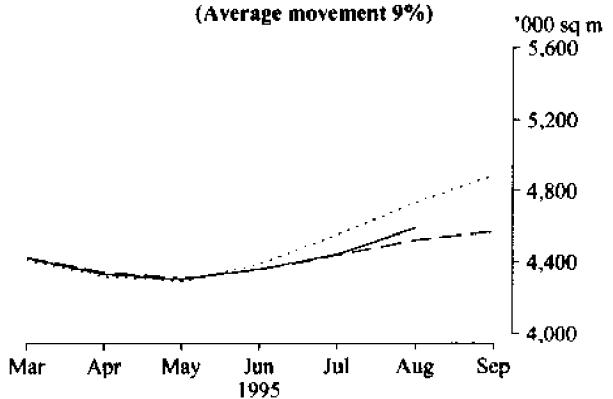


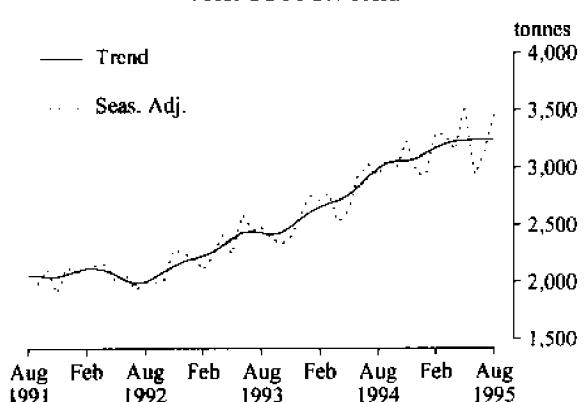
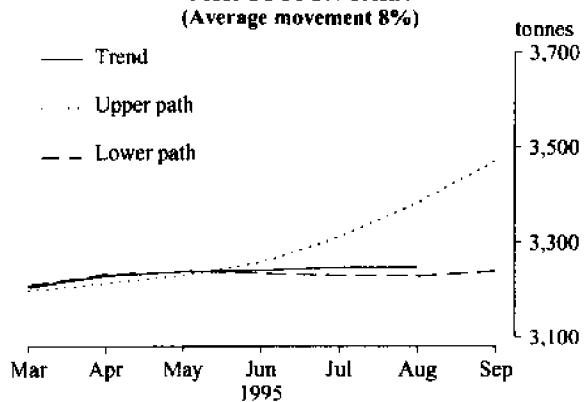
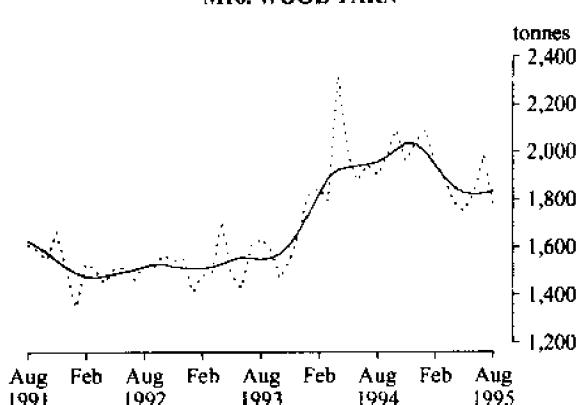
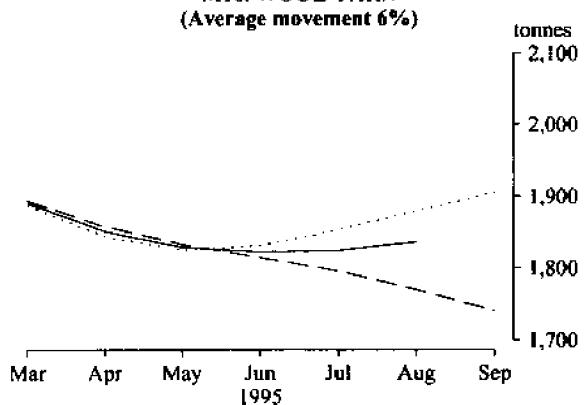
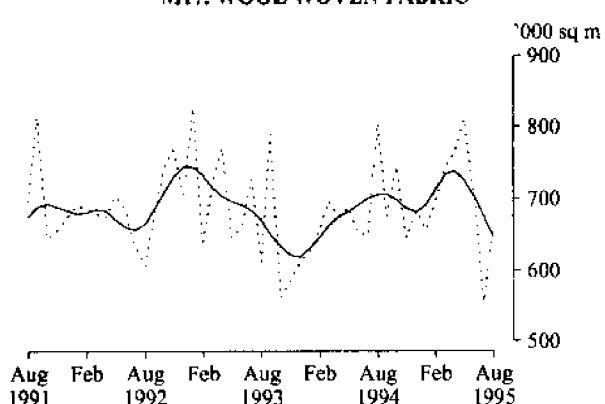
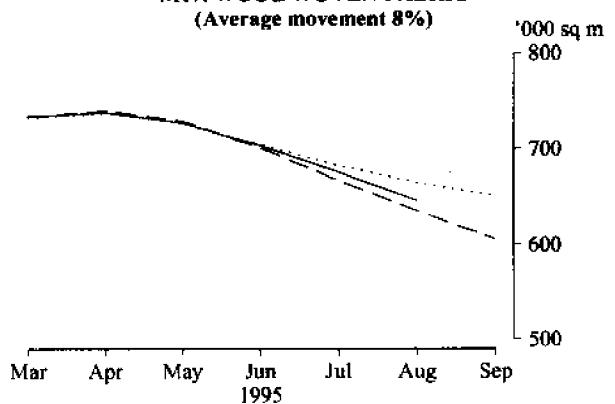
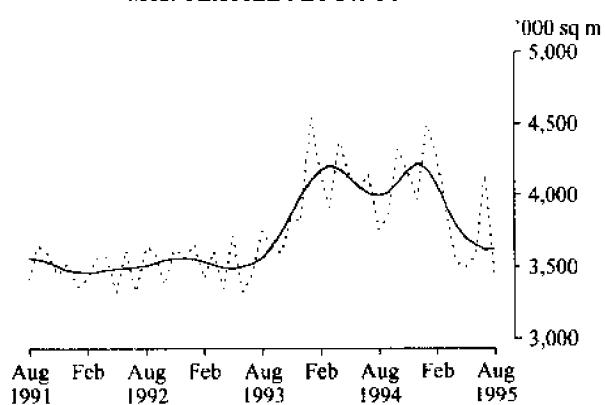
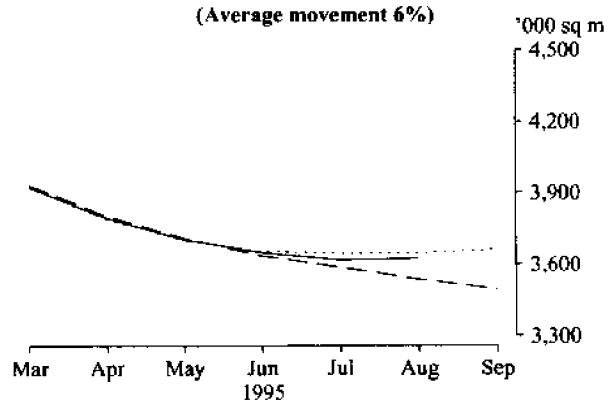
### INQUIRIES

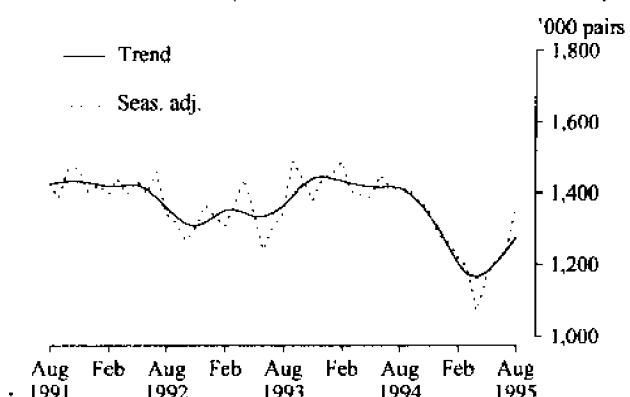
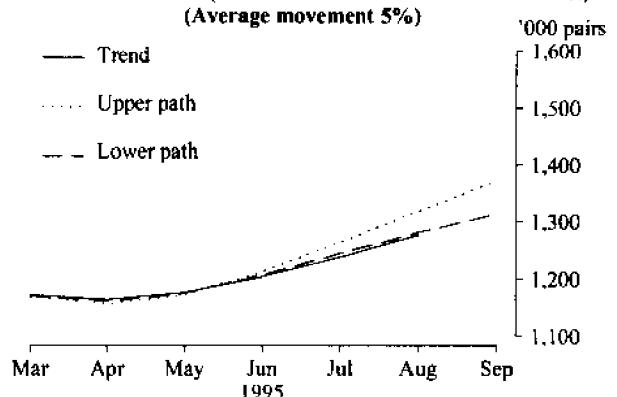
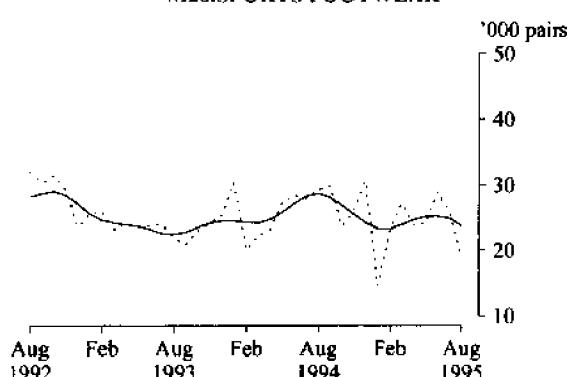
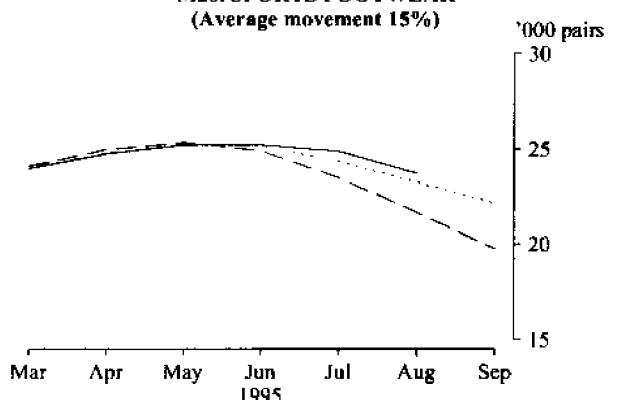
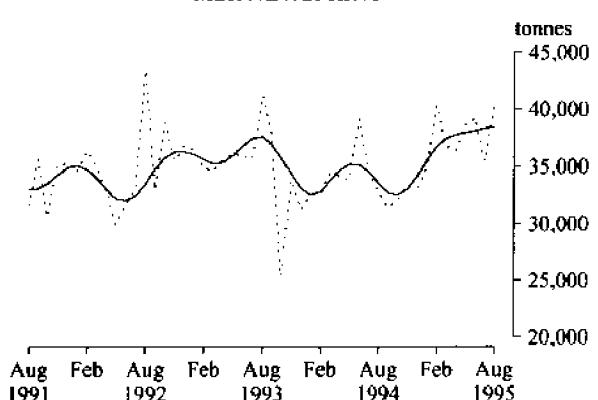
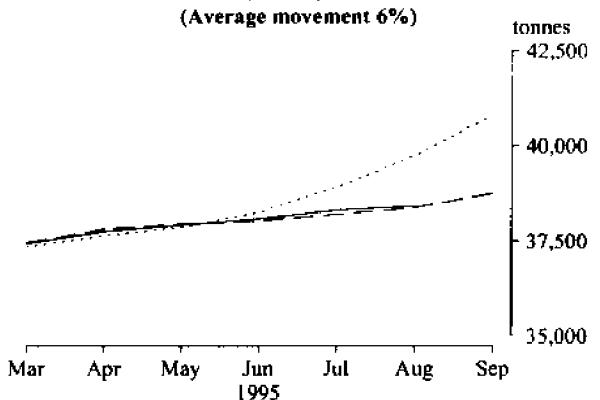
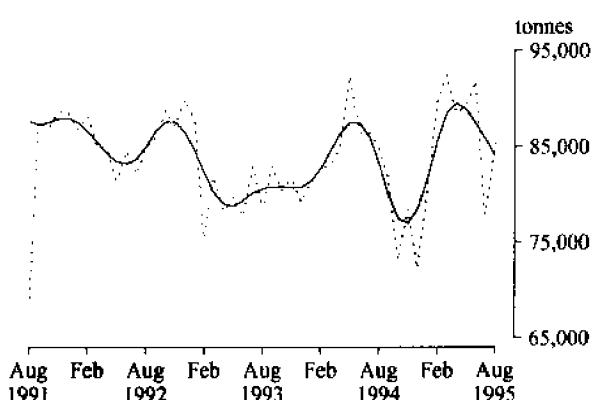
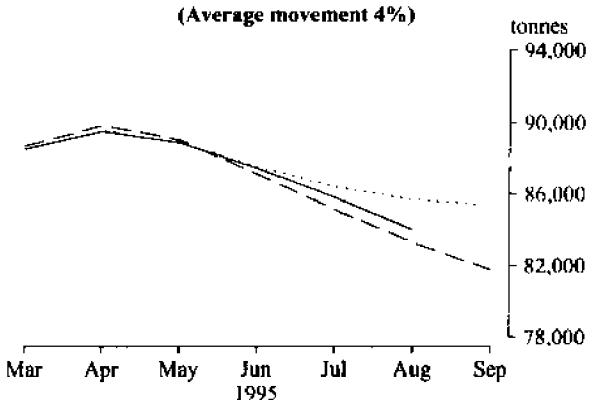
. for further information about statistics in this publication and the availability of related unpublished statistics, contact John Ridley on Sydney (02) 268 4541.  
. for information about other ABS statistics and services please refer to the back page of this publication.

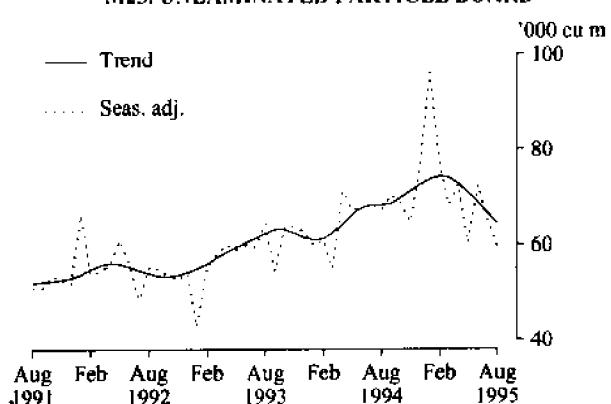
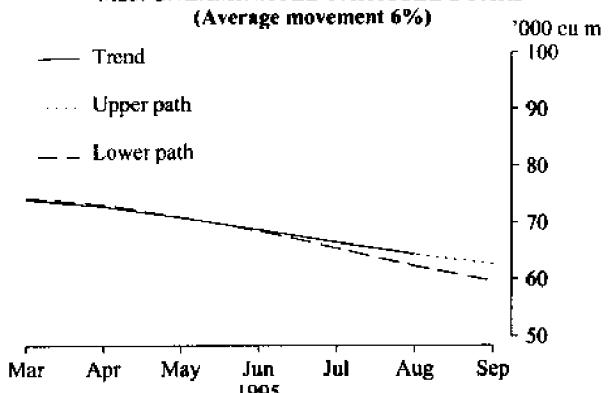
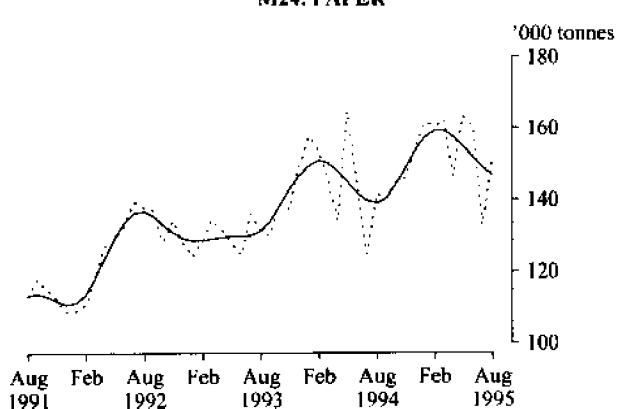
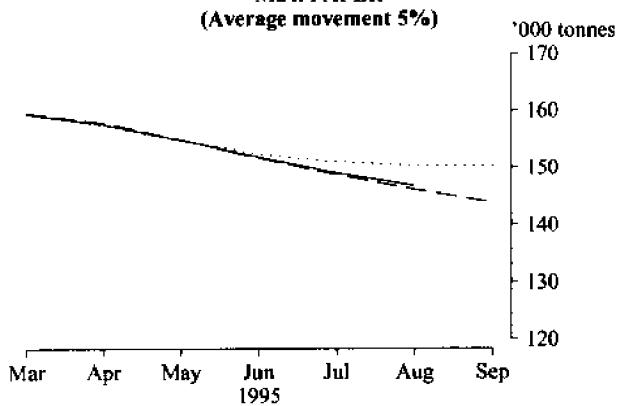
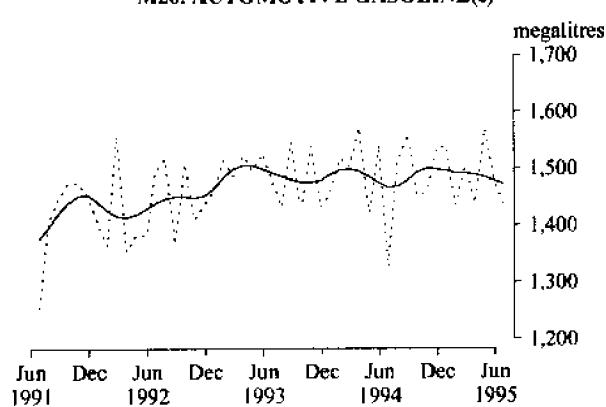
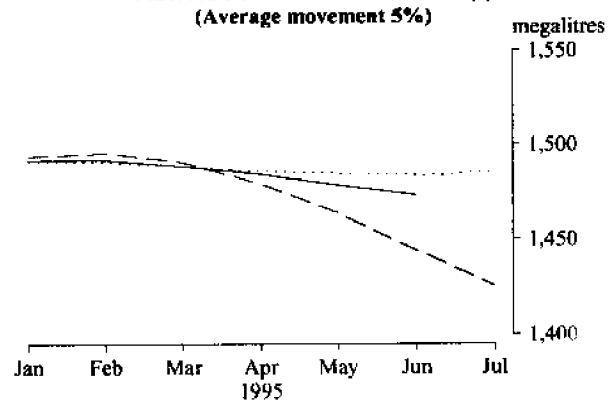
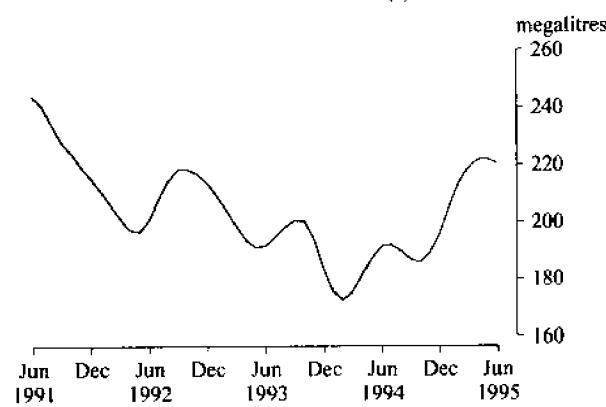
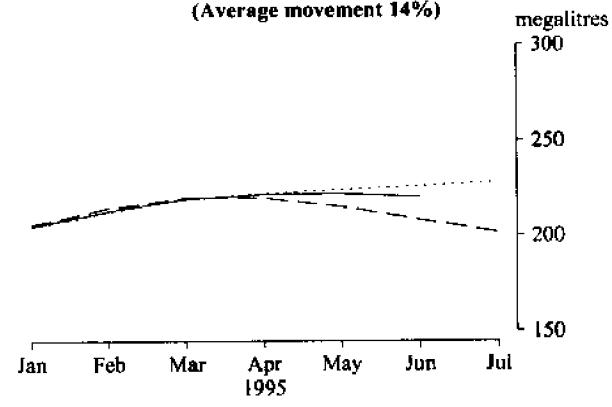
**M3. CHEESE(a)****M3. CHEESE(a)  
(Average movement 7%)****M4. BUTTER(a)****M4. BUTTER(a)  
(Average movement 8%)****M5. FLOUR OF WHEAT OR OF MESLIN****M5. FLOUR OF WHEAT OR OF MESLIN  
(Average movement 3%)****M6. PREPARED FOODS FROM CEREALS****M6. PREPARED FOODS FROM CEREALS  
(Average movement 7%)**

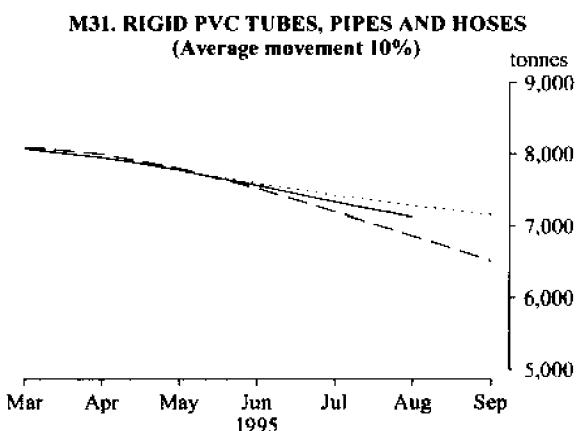
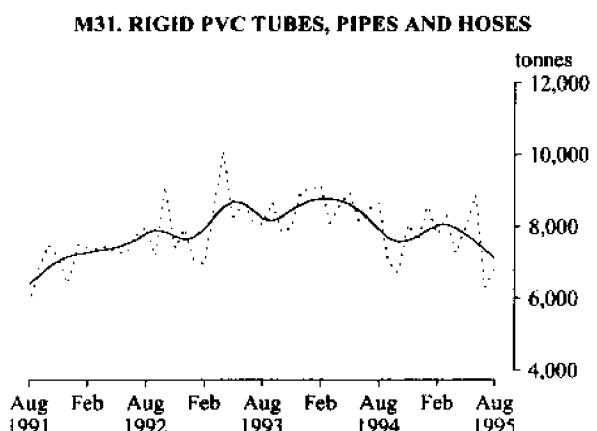
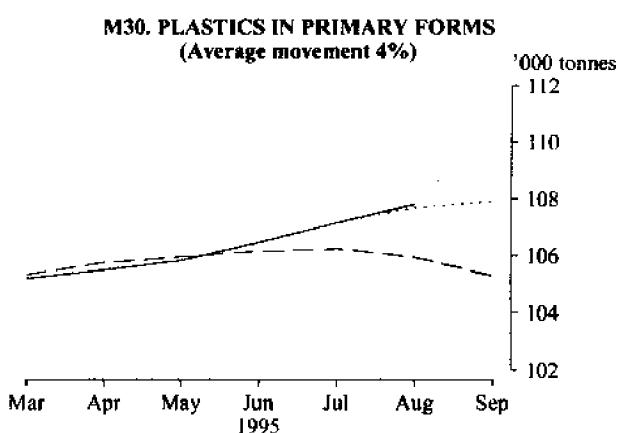
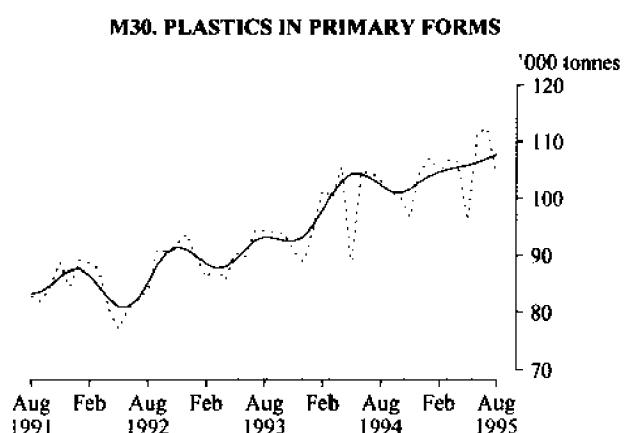
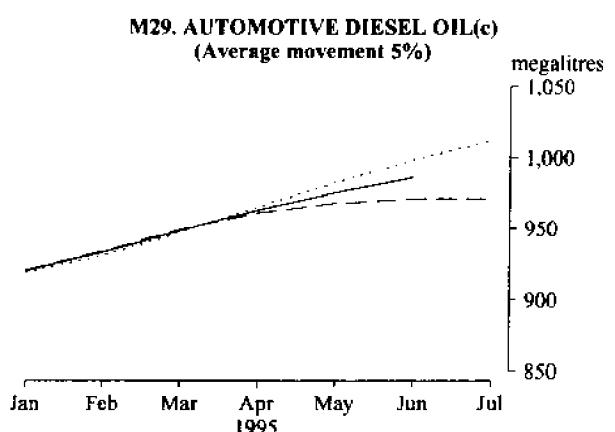
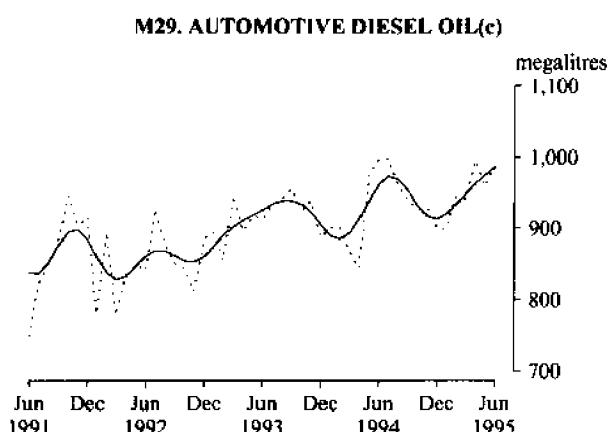
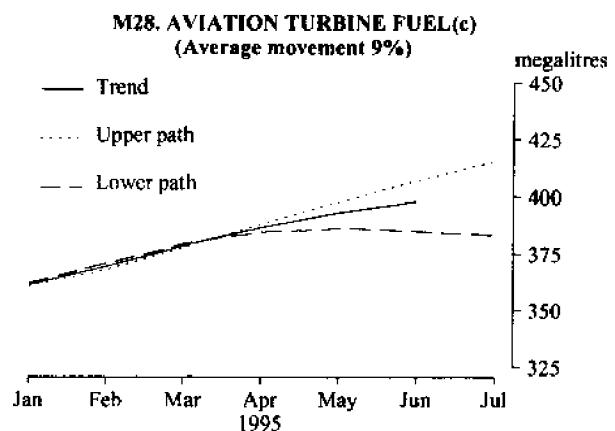
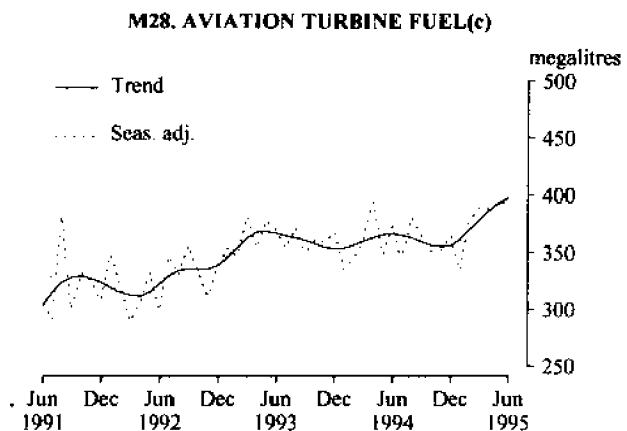


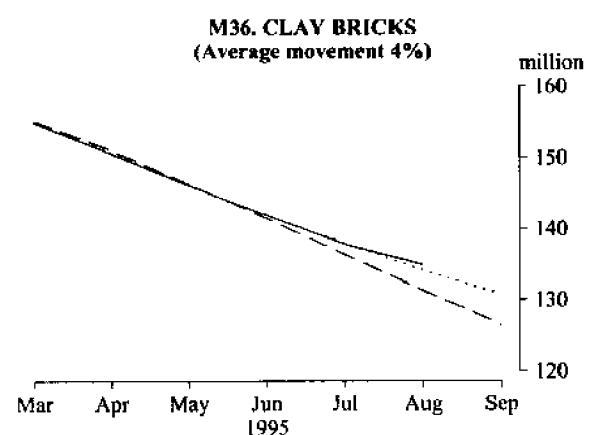
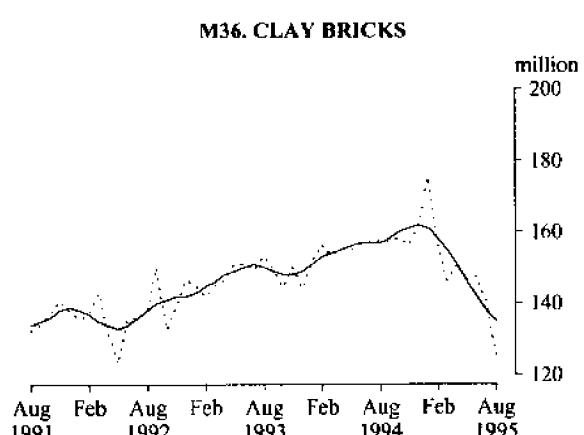
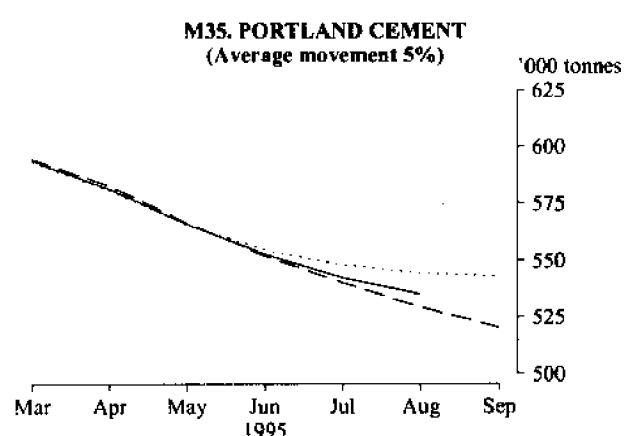
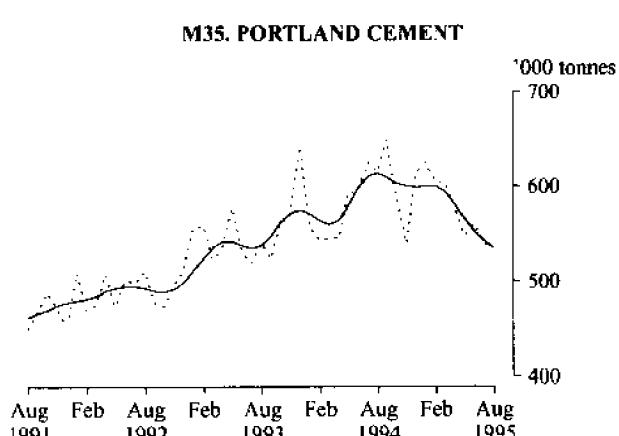
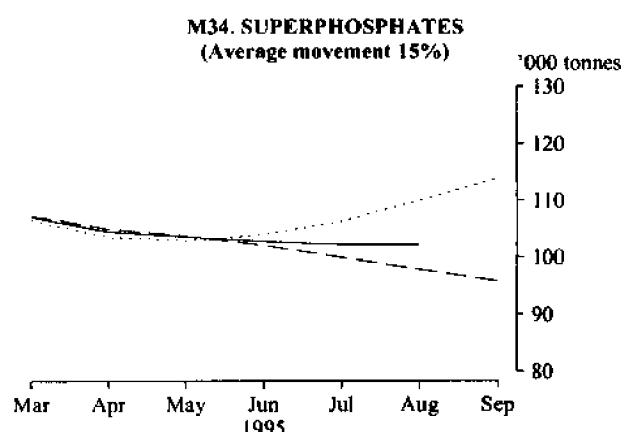
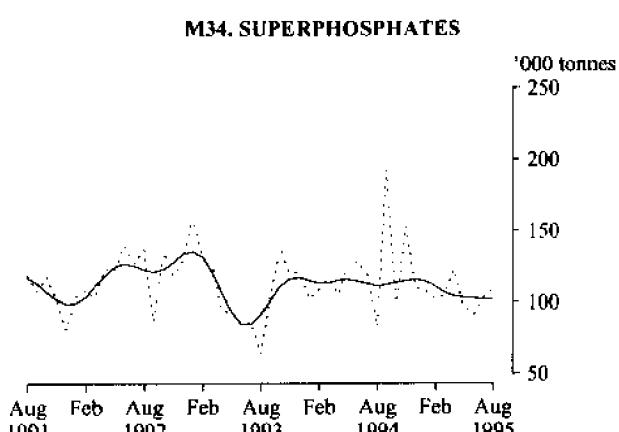
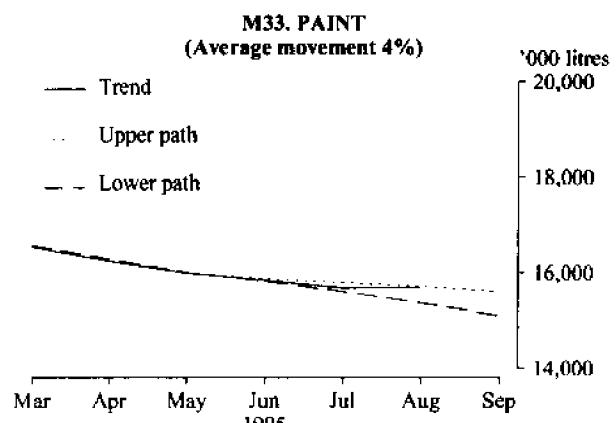
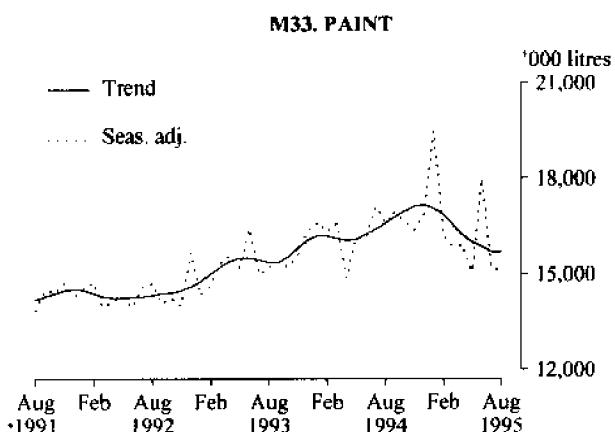
**M11. BEER****M11. BEER**  
(Average movement 5%)**M12. TOBACCO AND CIGARETTES(b)****M12. TOBACCO AND CIGARETTES(b)**  
(Average movement 7%)**M13. MAN-MADE FIBRE WOVEN FABRIC****M13. MAN-MADE FIBRE WOVEN FABRIC**  
(Average movement 6%)**M14. COTTON WOVEN FABRIC****M14. COTTON WOVEN FABRIC**  
(Average movement 9%)

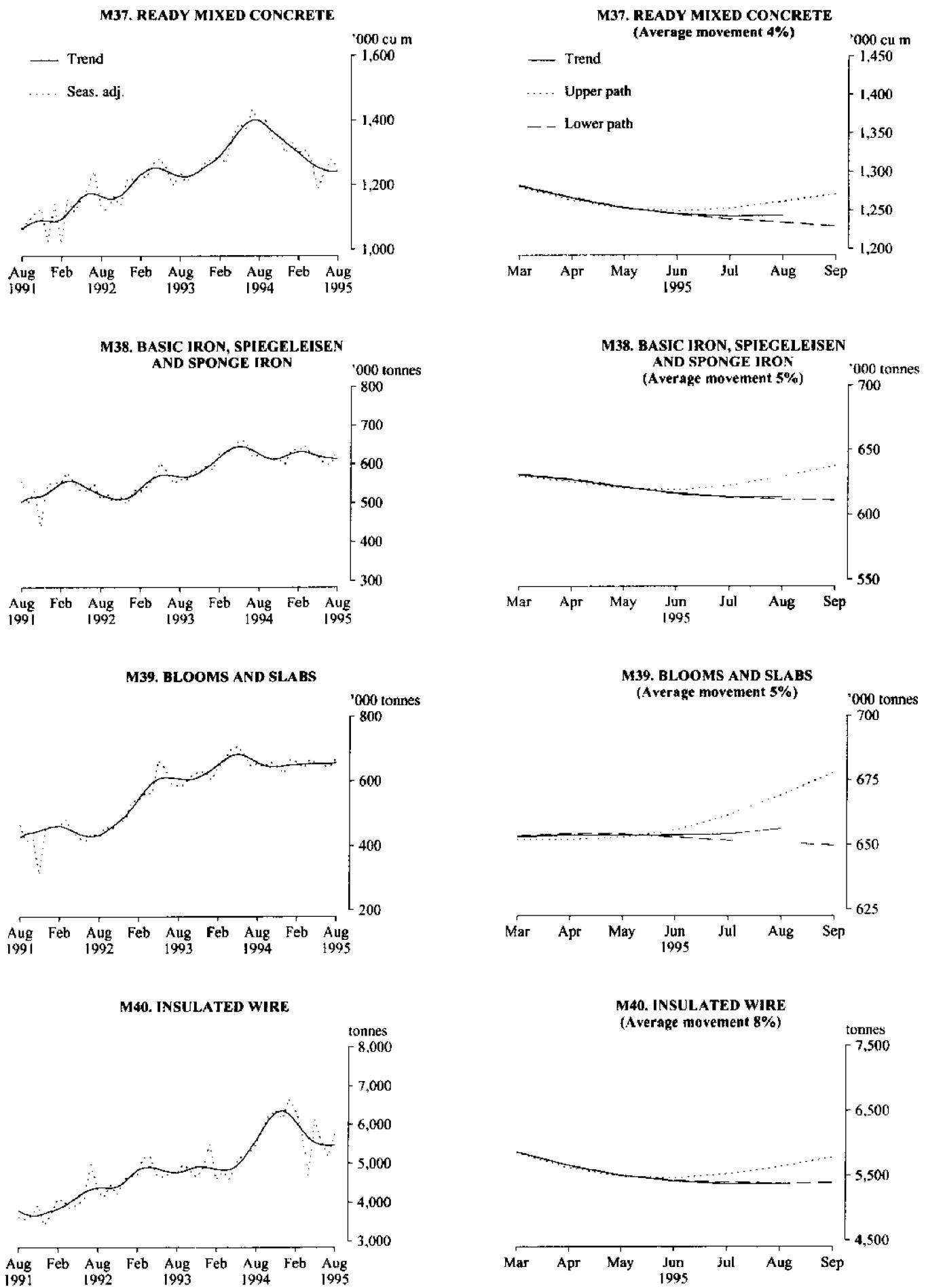
**M15. COTTON YARN****M15. COTTON YARN  
(Average movement 8%)****M16. WOOL YARN****M16. WOOL YARN  
(Average movement 6%)****M17. WOOL WOVEN FABRIC****M17. WOOL WOVEN FABRIC  
(Average movement 8%)****M18. TEXTILE FLOOR COVERINGS****M18. TEXTILE FLOOR COVERINGS  
(Average movement 6%)**

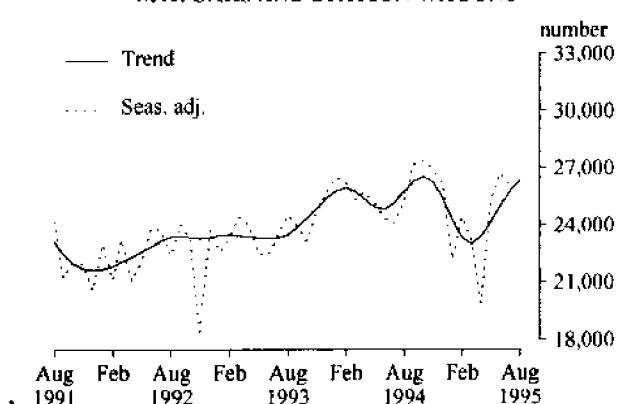
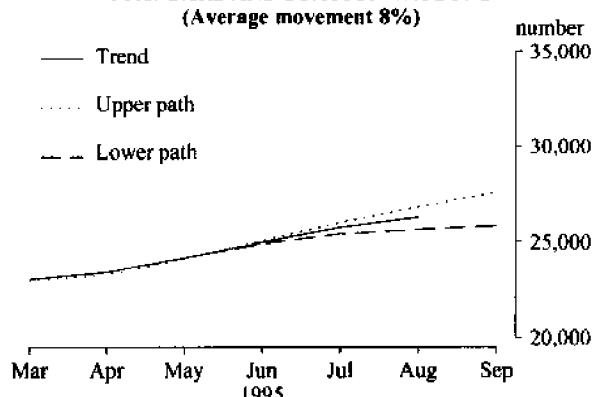
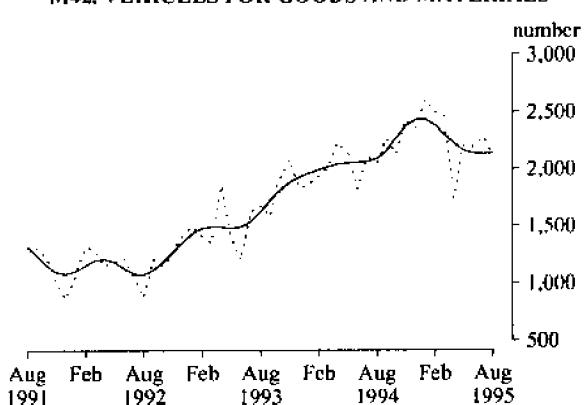
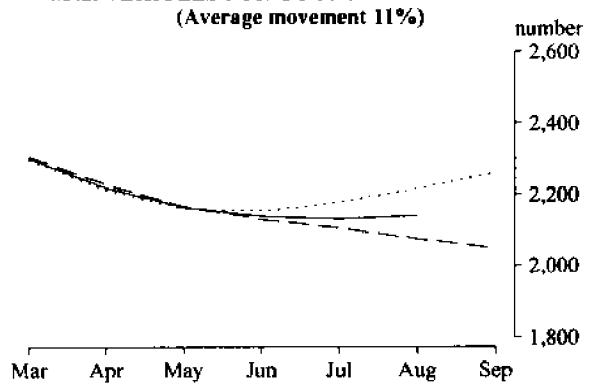
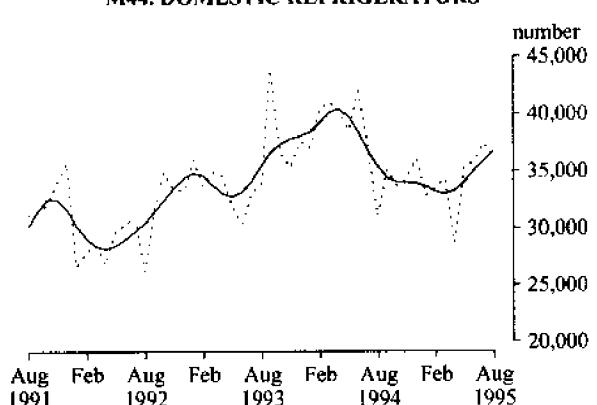
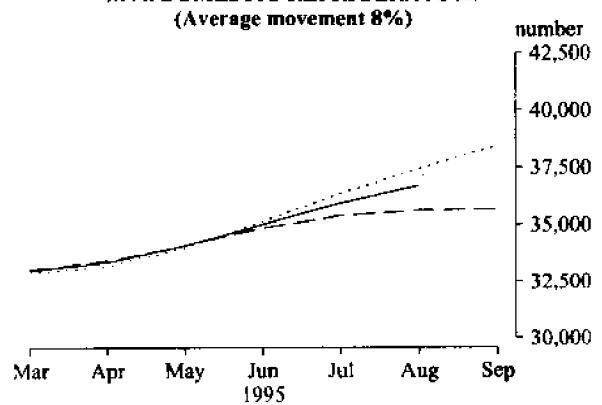
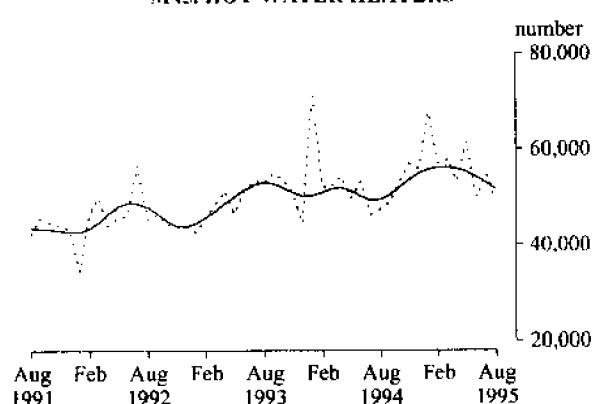
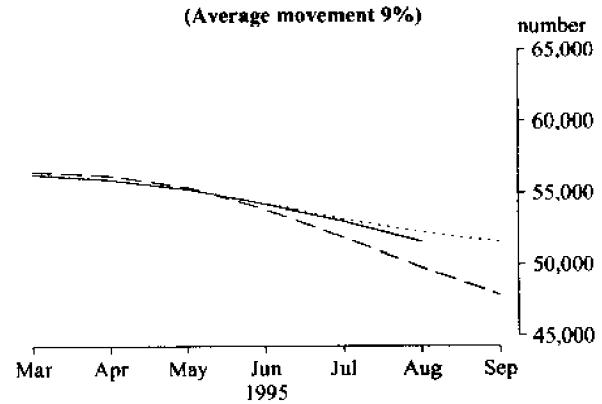
**M19. FOOTWEAR (EXCLUDING SPORTS FOOTWEAR)****M19. FOOTWEAR (EXCLUDING SPORTS FOOTWEAR)  
(Average movement 5%)****M20. SPORTS FOOTWEAR****M20. SPORTS FOOTWEAR  
(Average movement 15%)****M21. NEWSPRINT****M21. NEWSPRINT  
(Average movement 6%)****M22. WOOD PULP****M22. WOOD PULP  
(Average movement 4%)**

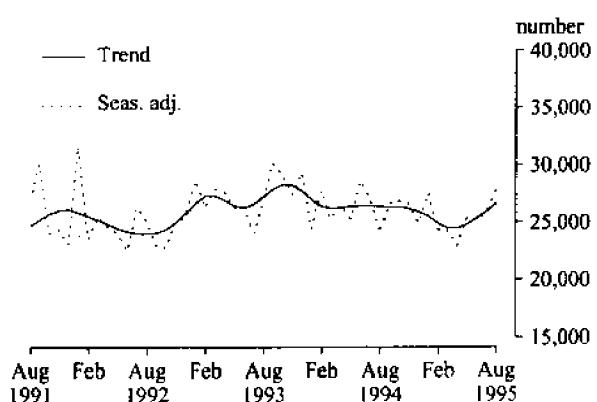
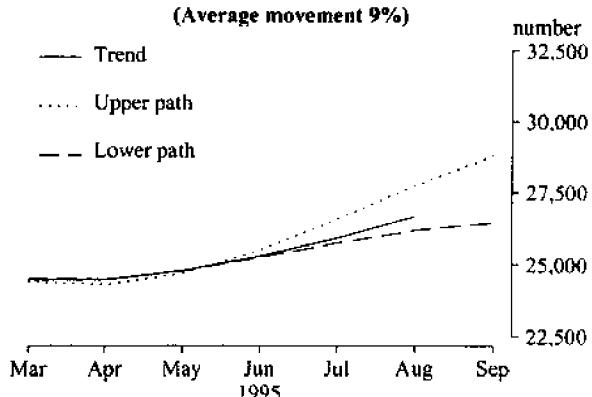
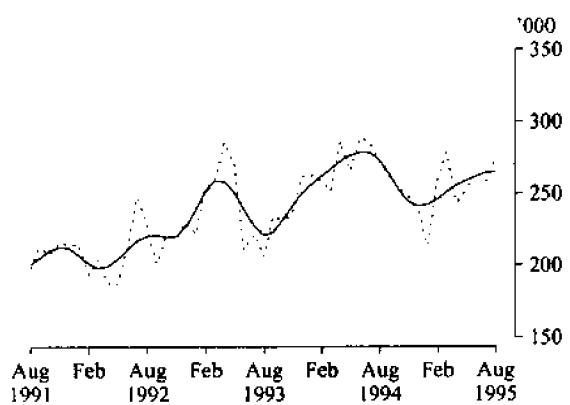
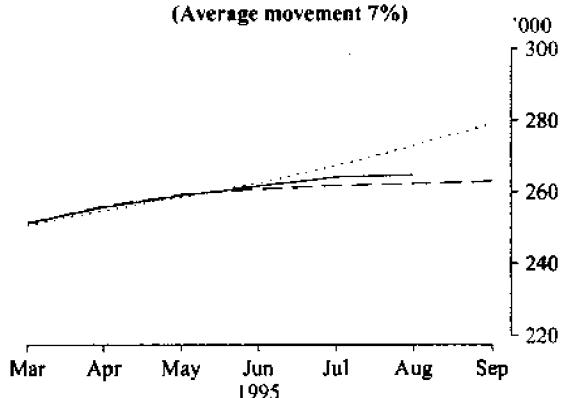
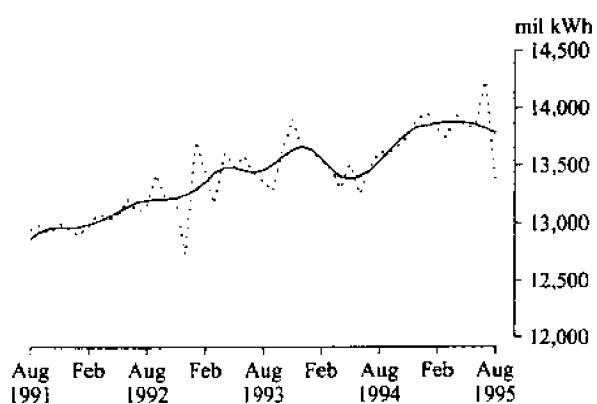
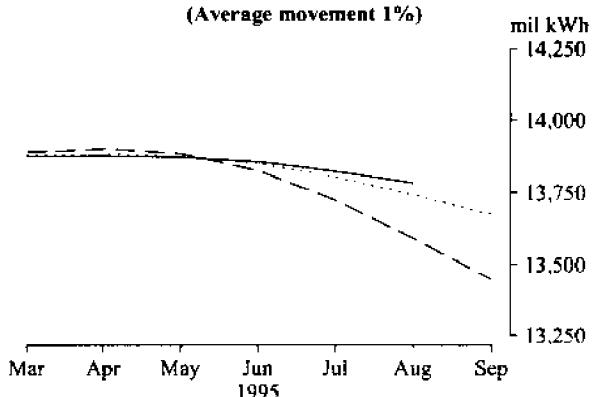
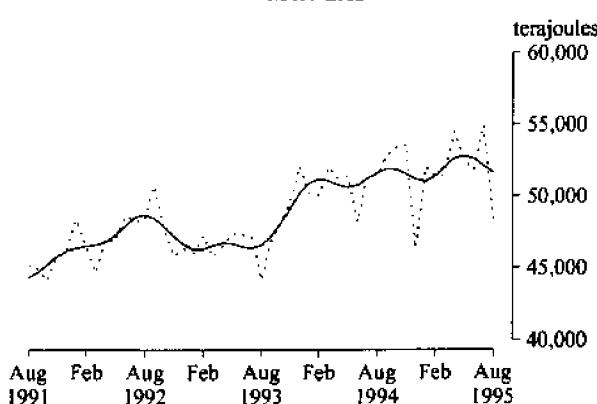
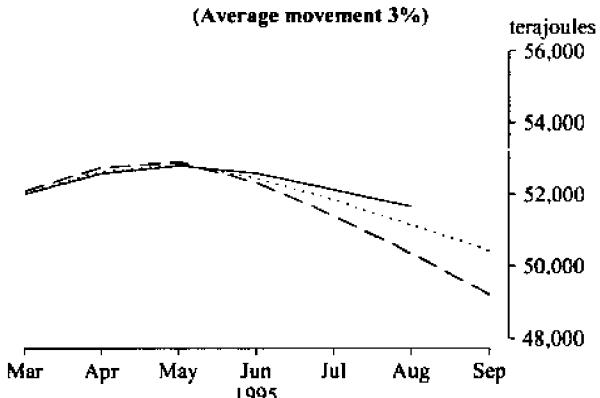
**M23. UNLAMINATED PARTICLE BOARD****M23. UNLAMINATED PARTICLE BOARD****M24. PAPER****M24. PAPER****M26. AUTOMOTIVE GASOLINE(c)****M26. AUTOMOTIVE GASOLINE(c)****M27. FUEL OIL(c)****M27. FUEL OIL(c)**

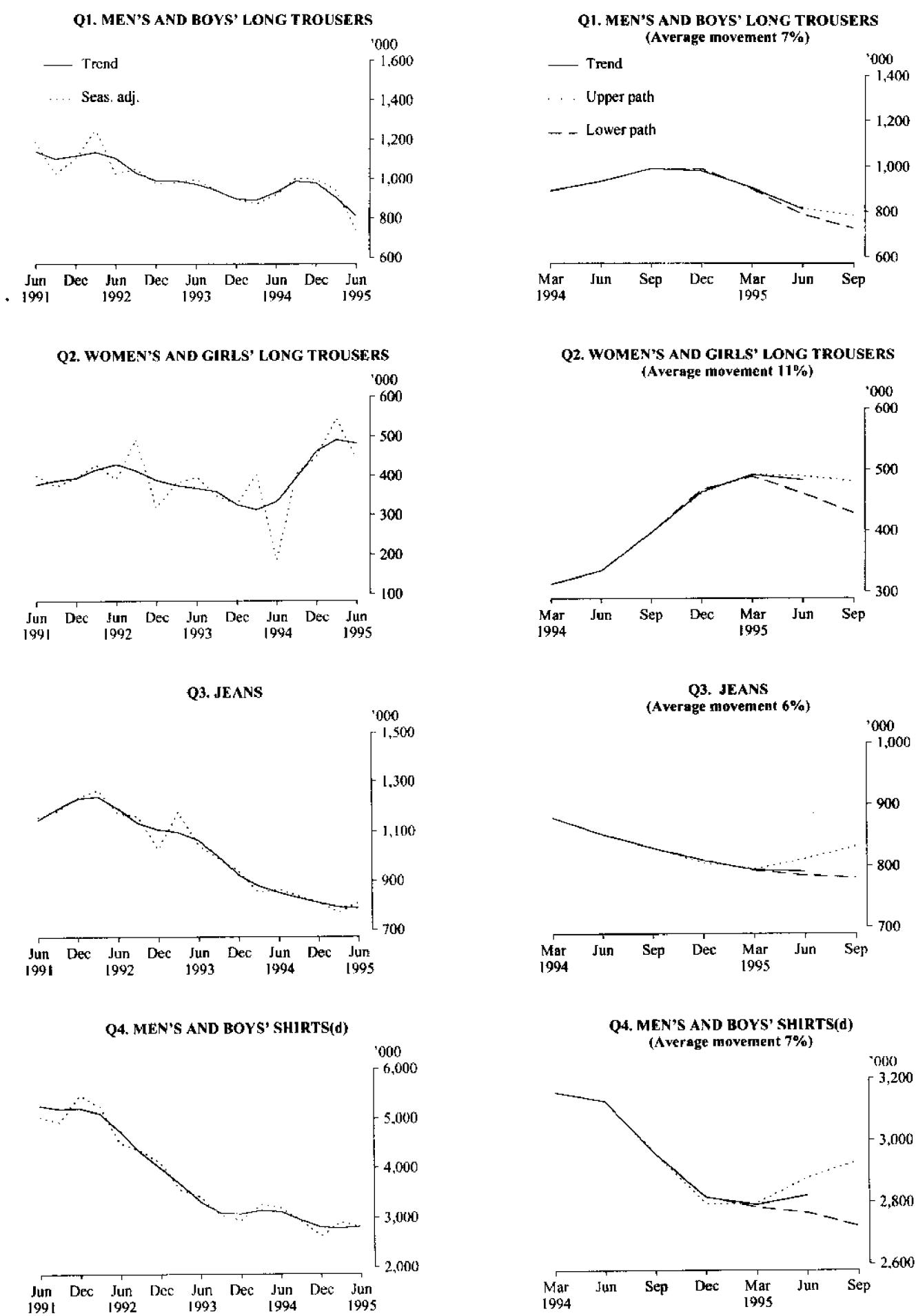


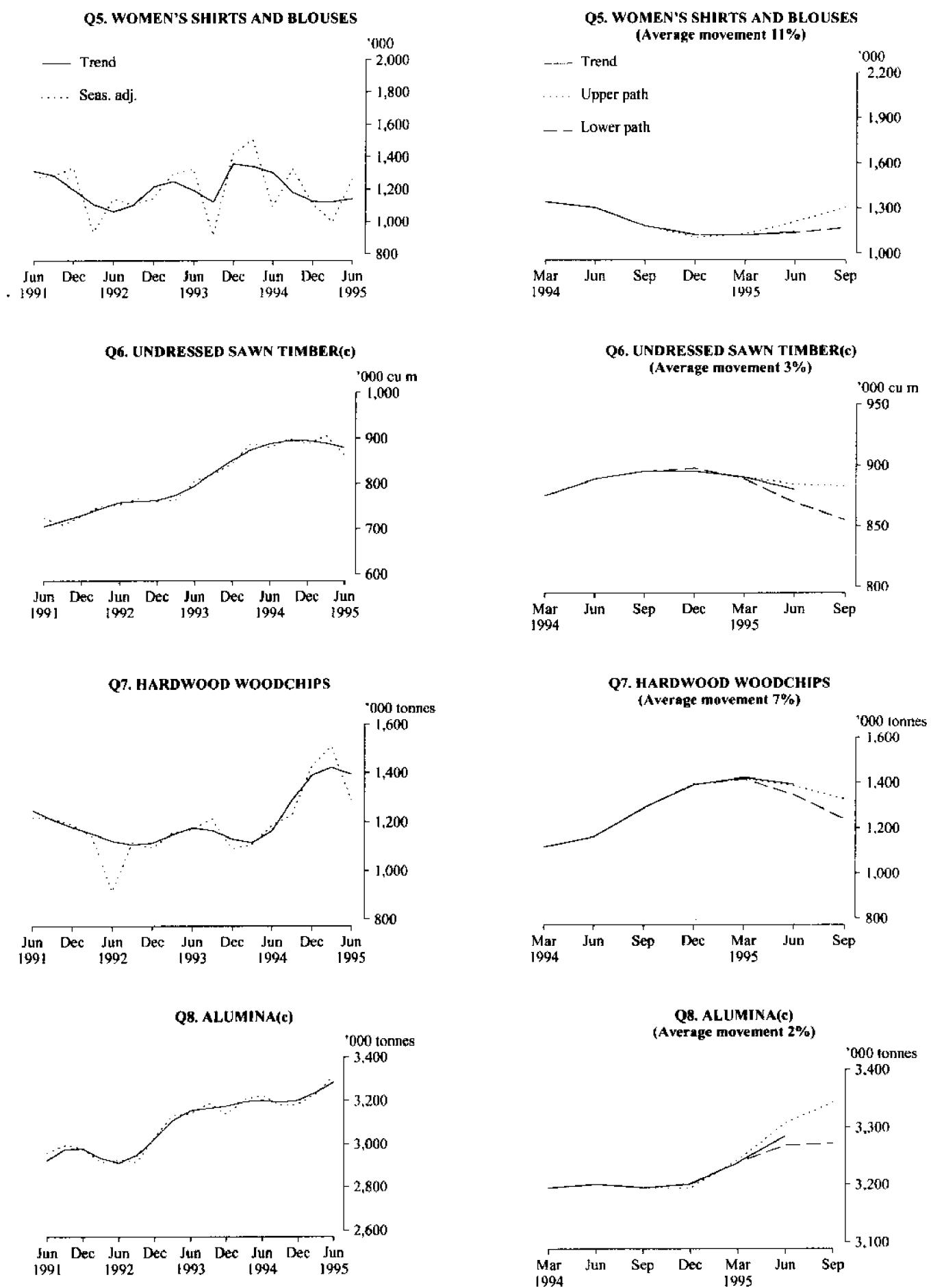


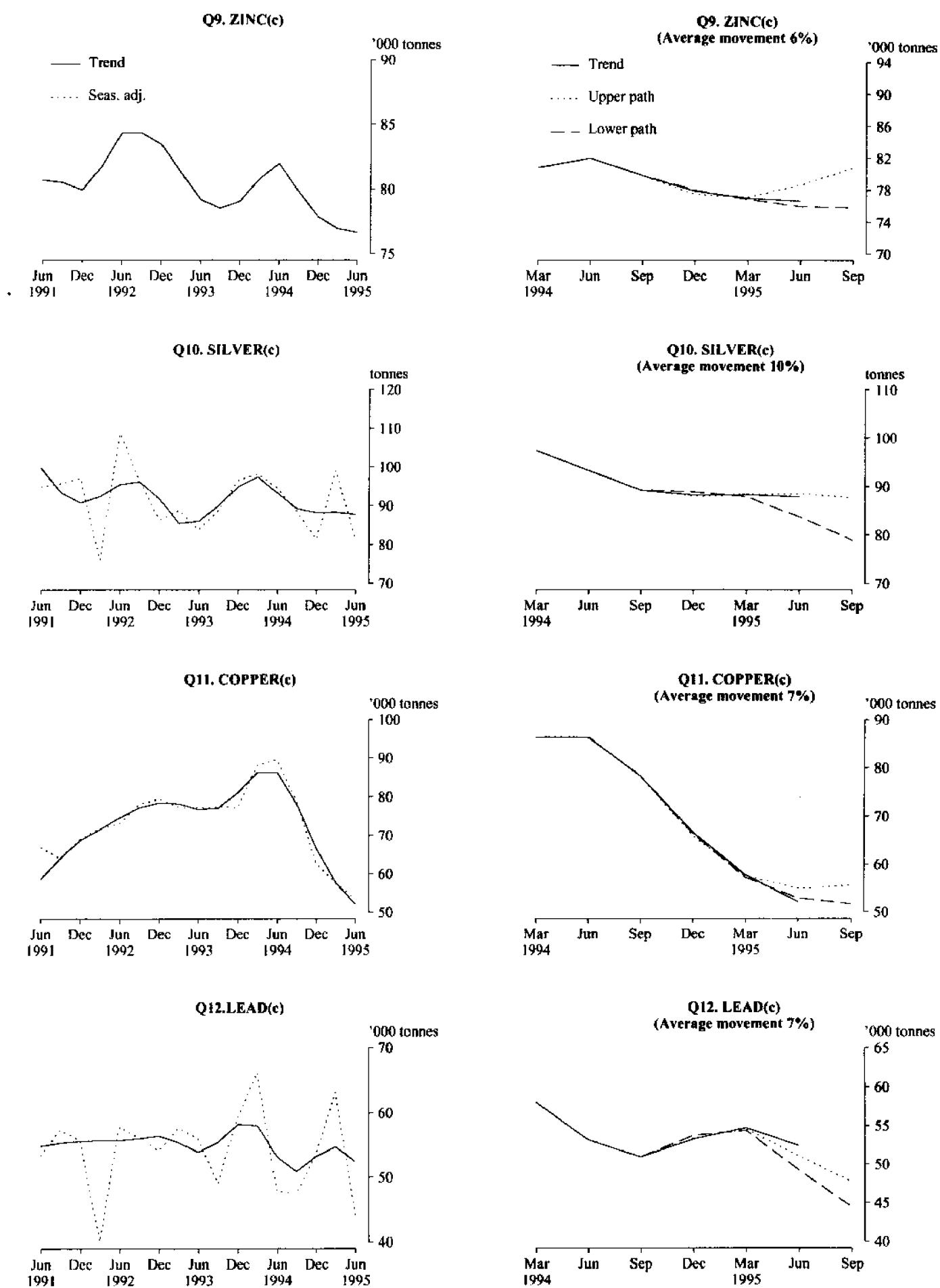


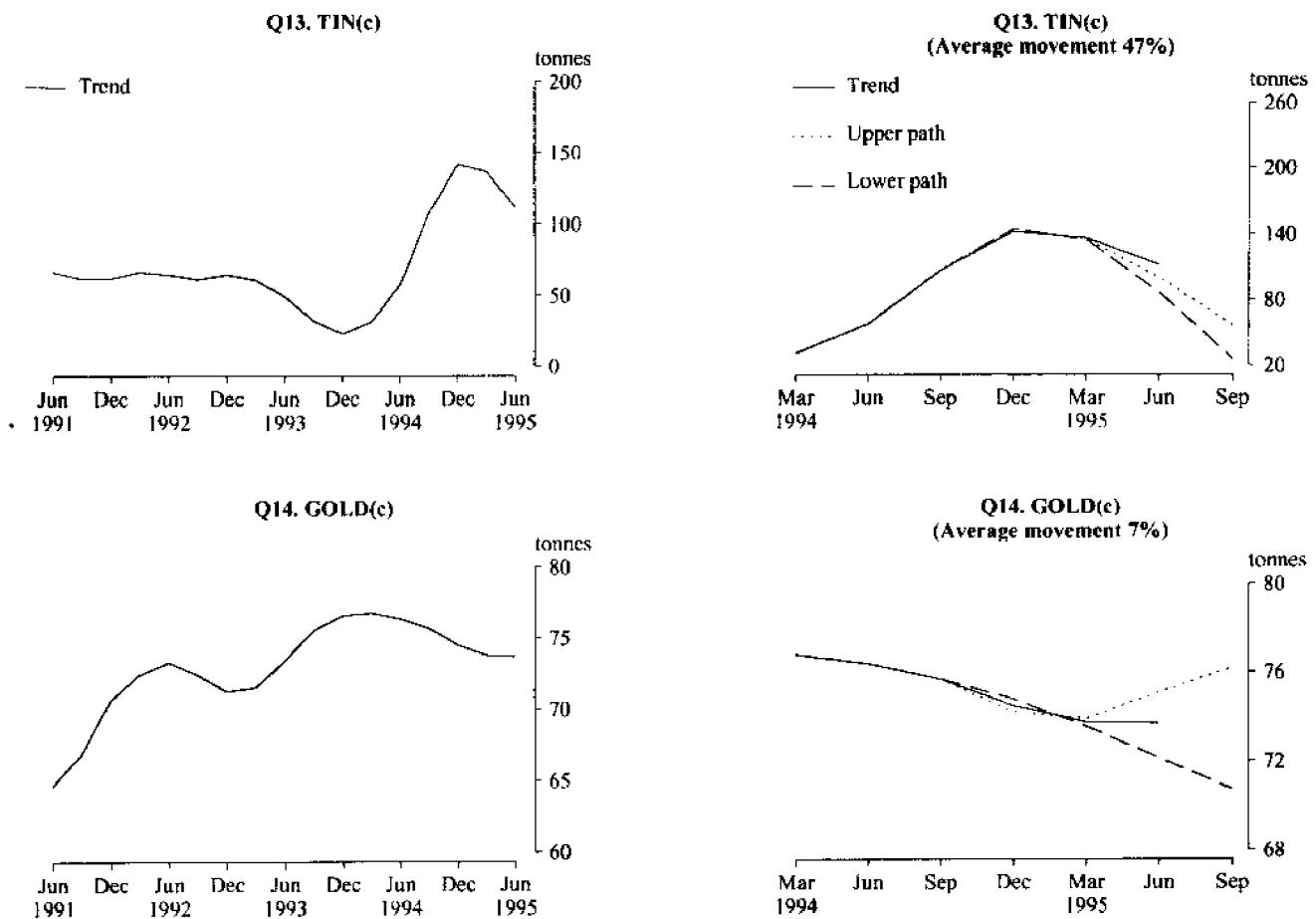
**M41. CARS AND STATION WAGONS****M41. CARS AND STATION WAGONS  
(Average movement 8%)****M42. VEHICLES FOR GOODS AND MATERIALS****M42. VEHICLES FOR GOODS AND MATERIALS  
(Average movement 11%)****M44. DOMESTIC REFRIGERATORS****M44. DOMESTIC REFRIGERATORS  
(Average movement 8%)****M45. HOT WATER HEATERS****M45. HOT WATER HEATERS  
(Average movement 9%)**

**M46. DOMESTIC CLOTHES WASHING MACHINES****M46. DOMESTIC CLOTHES WASHING MACHINES**  
(Average movement 9%)**M47. ELECTRIC MOTORS****M47. ELECTRIC MOTORS**  
(Average movement 7%)**M48. ELECTRICITY****M48. ELECTRICITY**  
(Average movement 1%)**M49. GAS****M49. GAS**  
(Average movement 3%)









## PRODUCTION STATISTICS, AUSTRALIA, AUGUST 1995

No. Item	Series	Unit	1995										Percentage changes between latest month shown and—	
			1994					1995					prev. month	same month prev. year
			Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.			
M1. Red meat	Orig.	'000 tonnes	220	188	203	240	199	243	226	195	n.y.a.	-13.7	-11.0	
	S. adj.	"	241	225	212	217	218	220	227	209	n.y.a.	-7.9	-8.7	
	Trend r	"	229	224	221	219	218	218	217	217	n.y.a.	0.0	-6.5	
M2. Chicken meat	Orig.	tonnes	41,737	35,136	37,796	42,383	37,823	36,615	r 37,575	39,959	n.y.a.	6.3	-3.1	
	S. adj.	"	41,986	34,213	39,770	42,051	36,819	36,767	r 36,681	38,520	n.y.a.	5.0	2.4	
	Trend r	"	38,386	38,444	38,509	38,492	38,247	37,894	37,543	37,604	n.y.a.	0.2	-6.4	
M3. Cheese(a)	Orig.	"	23,425	20,825	16,304	17,101	15,851	13,690	8,134	n.y.a.	n.y.a.	-40.6	-10.4	
	S. adj.	"	17,678	17,268	16,666	17,092	19,642	21,667	16,391	n.y.a.	n.y.a.	-24.4	-12.6	
	Trend	"	17,211	17,408	17,725	18,136	18,525	18,813	18,965	n.y.a.	n.y.a.	0.8	-7.4	
M4. Butter(a)	Orig.	"	18,458	15,792	13,750	12,762	6,902	5,116	6,538	n.y.a.	n.y.a.	27.8	-9.2	
	S. adj.	"	11,587	12,253	13,896	13,570	9,811	9,933	13,752	n.y.a.	n.y.a.	38.4	-9.7	
	Trend	"	12,198	12,376	12,314	12,145	11,938	11,784	11,708	n.y.a.	n.y.a.	-0.6	-9.2	
M5. Flour of wheat or of meslin	Orig.	'000 tonnes	107	96	105	116	98	116	122	108	119	10.1	-4.4	
	S. adj.	"	114	108	109	108	107	110	113	113	111	-1.5	-5.9	
	Trend r	"	112	110	109	109	109	110	111	112	113	0.5	-4.2	
M6. Prepared food from cereals	Orig.	tonnes	8,313	7,726	7,876	9,736	8,576	8,744	9,942	r 5,928	8,371	41.2	-0.3	
	S. adj.	"	8,623	9,715	8,135	8,739	9,504	7,828	9,558	r 5,578	8,672	55.5	6.4	
	Trend r	"	8,545	8,744	8,882	8,864	8,686	8,413	8,139	7,888	7,750	-1.8	-4.9	
M7. Biscuits	Orig.	"	11,140	5,898	10,690	12,102	8,787	11,625	11,931	r 11,231	12,530	11.6	8.3	
	S. adj.	"	13,033	9,213	11,008	10,533	10,376	11,200	11,075	r 10,879	10,914	0.3	5.4	
	Trend r	"	11,525	11,379	11,131	10,901	10,789	10,800	10,869	10,950	10,982	0.3	1.4	
M8. Chocolate based confectionery	Orig.	"	9,503	5,853	9,334	9,785	6,495	r 8,668	r 9,685	r 10,109	11,095	9.8	3.2	
	S. adj.	"	9,953	10,445	9,262	8,608	7,794	r 8,181	r 9,332	r 10,439	9,126	-12.6	2.9	
	Trend r	"	9,774	9,522	9,157	8,848	8,709	8,765	8,975	9,228	9,528	3.3	4.8	
M9. Other confectionery	Orig.	"	5,771	3,292	5,475	5,946	r 4,538	r 5,932	r 6,804	5,626	7,080	25.8	-3.0	
	S. adj.	"	6,075	5,938	5,832	5,640	r 5,768	r 5,873	r 6,377	5,478	5,876	7.3	-2.2	
	Trend r	"	5,996	5,899	5,837	5,825	5,842	5,861	5,874	5,877	5,874	0.0	-2.9	
M10. Malt	Orig.	"	48,245	46,155	47,882	41,548	45,213	50,270	44,980	46,118	49,902	8.2	6.9	
	S. adj.	"	49,167	47,664	47,130	41,057	48,803	46,151	45,716	47,689	50,302	5.5	8.4	
	Trend r	"	47,462	46,976	46,353	45,907	45,868	46,267	46,959	47,749	48,574	1.7	4.0	
M11. Beer	Orig.	mil litres	182	138	136	152	127	151	130	119	153	28.5	0.1	
	S. adj.	"	149	144	147	143	146	154	152	137	154	12.5	1.0	
	Trend r	"	148	147	146	147	147	148	148	149	149	0.1	-0.3	
M12. Tobacco and cigarettes (b)	Orig.	tonnes	1,836	771	2,088	1,855	1,345	2,084	1,855	2,157	2,070	-4.0	-13.6	
	S. adj.	"	2,016	1,345	1,920	1,652	1,735	1,752	1,772	1,883	1,824	-3.2	-13.6	
	Trend r	"	1,957	1,863	1,786	1,746	1,744	1,762	1,784	1,810	1,824	0.7	-14.6	
M13. Man-made fibre woven fabric	Orig.	'000 sq m	13,615	10,704	15,943	18,309	12,092	15,089	15,130	13,874	16,863	21.5	-2.9	
	S. adj.	"	15,256	17,698	15,564	16,045	13,379	14,168	13,691	13,463	15,811	17.4	-2.9	
	Trend r	"	15,945	15,854	15,586	15,166	14,667	14,243	14,052	14,035	14,248	1.5	-12.1	
M14. Cotton woven fabric	Orig.	"	3,963	2,089	4,383	5,478	3,640	4,554	5,242	4,584	5,256	14.7	15.9	
	S. adj.	"	4,386	5,391	4,355	4,528	3,790	4,277	4,386	4,631	4,728	2.1	12.2	
	Trend r	"	4,487	4,543	4,509	4,423	4,334	4,309	4,362	4,445	4,591	3.3	12.2	

For footnotes see end of tables.

## PRODUCTION STATISTICS, AUSTRALIA, AUGUST 1995

No. Item	Series	Unit	1994									1995			prev. month	same month prev. year
			Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.					
M15. Cotton yarn	Orig. r	tonnes	2,565	1,743	3,143	3,864	2,774	3,708	3,605	3,094	3,831	23.8	18.9			
	S. adj. r	"	2,946	2,943	3,309	3,276	3,143	3,540	2,936	3,132	3,463	10.5	17.9			
	Trend r	"	3,081	3,126	3,171	3,206	3,228	3,238	3,241	3,248	3,248	0.0	8.3			
M16. Wool yarn	Orig.	"	1,651	1,364	1,930	1,910	1,493	1,956	1,917	2,010	2,117	-5.3	-3.6			
	S. adj.	"	2,041	2,092	1,944	1,887	1,785	1,749	1,820	1,986	1,778	-10.4	-6.3			
	Trend r	"	2,032	1,997	1,945	1,890	1,851	1,829	1,823	1,825	1,837	0.6	-6.2			
M17. Wool woven fabric	Orig.	'000 sq m	566	410	764	875	700	930	650	521	738	41.7	-16.6			
	S. adj.	"	683	657	696	742	763	810	710	555	660	18.8	-18.0			
	Trend r	"	681	691	713	733	738	726	703	675	646	-4.3	-8.5			
M18. Textile floor coverings	Orig.	"	3,580	2,618	4,286	4,105	3,040	3,865	3,663	4,037	3,961	-1.9	-6.7			
	S. adj.	"	3,966	4,497	4,284	3,899	3,539	3,497	3,576	4,144	3,438	-17.0	-8.5			
	Trend r	"	4,225	4,186	4,074	3,924	3,794	3,702	3,650	3,621	3,625	0.1	-9.3			
M19. Footwear excluding sports footwear	Orig.	'000 pairs	1,119	677	1,257	1,416	1,047	1,289	1,214	1,212	1,493	23.2	-3.6			
	S. adj.	"	1,285	1,261	1,221	1,192	1,070	1,167	1,212	1,234	1,362	10.4	-3.4			
	Trend r	"	1,299	1,251	1,204	1,172	1,164	1,177	1,204	1,239	1,276	3.0	-9.7			
M20. Sports footwear	Orig.	"	21	6	26	34	24	27	27	25	24	4.0	-36.8			
	S. adj.	"	31	15	23	27	24	24	29	26	19	-26.4	-35.1			
	Trend r	"	24	23	23	24	25	25	25	25	24	-4.7	17.7			
M21. Newsprint	Orig.	tonnes	31,785	37,800	39,472	37,384	37,217	41,128	36,245	35,192	39,758	13.0	23.1			
	S. adj.	"	33,119	35,011	40,313	36,727	36,363	38,687	39,215	35,408	40,664	14.8	24.0			
	Trend r	"	34,176	35,595	36,728	37,435	37,769	37,937	38,106	38,320	38,427	0.3	14.6			
M22. Wood pulp	Orig.	"	75,920	81,003	84,932	96,090	85,549	86,014	95,072	77,150	85,922	11.4	1.5			
	S. adj.	"	72,277	80,837	89,795	92,527	88,503	89,405	91,848	77,892	85,410	9.7	0.7			
	Trend r	"	78,574	81,834	85,666	88,531	89,512	88,905	87,489	85,830	84,025	-2.1	1.0			
M23. Unlaminated particle board	Orig.	'000 cu m	61	53	71	81	66	69	71	62	74	19.4	-5.5			
	S. adj.	"	77	96	76	68	73	60	72	65	60	-8.5	11.8			
	Trend r	"	73	74	74	74	73	71	69	67	64	-3.2	-5.8			
M24. Paper	Orig.	'000 tonnes	145	146	145	174	146	150	169	144	148	2.7	2.7			
	S. adj.	"	155	162	161	162	147	163	160	133	151	13.6	6.6			
	Trend r	"	154	158	159	159	158	155	152	149	147	-1.6	5.4			
M25. Paperboard containers	Orig. r	tonnes	85,133	78,042	82,945	91,964	70,919	96,273	87,355	87,375	99,499	13.9	2.9			
	S. adj.	"	n.a.	n.a.	n.a.											
	Trend r	"	n.a.	n.a.	n.a.											
M26. Automotive gasoline(c)	Orig.	megalitres	1,561	1,519	1,428	1,442	1,496	1,528	1,447	n.y.a.	n.y.a.	-5.3	8.2			
	S. adj.	"	1,539	1,435	1,502	1,438	1,569	1,480	1,432	n.y.a.	n.y.a.	-3.2	8.0			
	Trend r	"	1,496	1,492	1,492	1,489	1,484	1,479	1,474	n.y.a.	n.y.a.	-0.3	0.5			
M27. Fuel oil(c)	Orig.	"	194	228	183	274	209	208	204	n.y.a.	n.y.a.	-1.9	3.0			
	S. adj.	"	n.a.	n.y.a.	n.y.a.	n.a.	n.a.									
	Trend r	"	196	205	213	219	222	222	220	n.y.a.	n.y.a.	-0.9	15.2			
M28. Aviation turbine fuel(c)	Orig.	"	383	368	359	368	366	385	355	n.y.a.	n.y.a.	7.8	3.8			
	S. adj.	"	364	334	378	390	388	394	394	n.y.a.	n.y.a.	0.0	5.4			
	Trend r	"	356	361	370	379	387	393	398	n.y.a.	n.y.a.	1.3	8.7			

For footnotes see end of tables.

## PRODUCTION STATISTICS, AUSTRALIA, AUGUST 1995

No. Item	Series	Unit	1994								1995								Percentage changes between latest month shown and—		
			Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	prev. month	same month prev. year								
M29. Automotive diesel oil(c)	Orig.	megalitres	970	940	894	924	966	979	947	n.y.a.	n.y.a.	-3.3	-0.9								
	S. adj.	"	900	899	945	942	995	958	988	n.y.a.	n.y.a.	3.1	-0.9								
	Trend r	"	913	920	933	949	963	975	986	n.y.a.	n.y.a.	1.1	2.5								
M30. Plastics in primary forms	Orig.	'000 tonnes	95	96	99	113	99	100	104	116	110	-5.6	-3.3								
	S. adj.	"	105	107	104	107	106	96	112	112	104	-7.4	1.1								
	Trend r	"	103	104	105	105	105	106	106	107	108	0.6	5.3								
M31. Rigid PVC tubes pipes and hoses	Orig.	tonnes	7,276	4,809	8,233	8,949	+5,563	9,428	9,370	+7,521	7,520	0.0	-20.0								
	S. adj.	"	7,584	8,547	7,774	8,305	+7,248	7,980	8,862	+6,301	6,868	9.0	-20.6								
	Trend r	"	7,730	7,895	8,042	8,065	7,948	7,779	7,571	7,329	7,125	-2.8	-10.0								
M32. Polyethylene bottles up to two litres	Orig.	million	122	117	108	110	96	107	93	+97	102	5.9	n.a.								
	S. adj.	"	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.a.														
	Trend r	"	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.a.														
M33. Paint	Orig.	'000 litres	17,341	14,745	15,771	17,954	14,319	15,365	+17,898	+14,768	14,345	-2.9	-13.0								
	S. adj.	"	16,898	19,470	16,175	15,852	15,917	15,046	+17,977	+15,197	15,090	-0.7	-8.9								
	Trend r	"	17,165	17,055	16,839	16,541	16,239	15,998	15,841	15,685	15,693	0.0	-5.4								
M34. Superphosphates	Orig.	'000 tonnes	140	139	140	160	147	101	69	59	66	11.0	40.6								
	S. adj.	"	110	109	102	106	123	97	92	103	109	5.8	31.6								
	Trend r	"	116	115	111	107	105	104	103	102	102	0.1	-8.4								
M35. Portland cement	Orig.	"	604	455	552	619	538	583	582	568	586	3.2	-11.3								
	S. adj.	"	615	625	604	603	579	548	560	539	537	-0.5	-12.7								
	Trend r	"	599	600	600	594	581	566	553	543	535	-1.4	-12.9								
M36. Clay bricks	Orig.	million	148	119	150	161	136	166	+155	+140	141	0.6	-20.4								
	S. adj.	"	162	175	156	146	151	147	+147	+140	125	-10.7	-20.3								
	Trend r	"	162	161	158	155	151	146	142	138	135	-2.1	-14.0								
M37. Ready mixed concrete	Orig.	'000 cu m	1,189	1,020	1,218	1,425	1,132	1,316	1,291	+1,267	1,372	8.3	-8.6								
	S. adj.	"	1,298	1,335	1,301	1,310	1,277	1,185	1,241	+1,279	1,253	-2.0	-10.0								
	Trend r	"	1,333	1,317	1,299	1,282	1,266	1,253	1,246	1,242	1,243	0.1	-11.1								
M38. Basic iron, spiegeleisen and sponge iron	Orig.	'000 tonnes	590	637	563	634	605	619	595	625	657	5.1	1.2								
	S. adj.	"	600	637	636	647	624	622	600	601	638	6.3	2.5								
	Trend r	"	619	627	631	631	627	621	617	614	613	-0.1	-1.9								
M39. Blooms and slabs	Orig.	"	626	679	601	626	638	635	629	658	693	5.3	1.9								
	S. adj.	"	624	666	658	640	666	656	647	644	670	4.2	2.4								
	Trend r	"	647	649	651	653	654	654	654	654	656	0.3	-0.1								
M40. Insulated wire	Orig.	tonnes	5,167	3,764	6,359	6,506	4,595	6,720	5,293	+5,707	5,957	4.4	4.9								
	S. adj.	"	6,142	6,658	6,379	5,810	4,664	6,136	5,562	+5,176	5,766	11.4	4.9								
	Trend r	"	6,365	6,280	6,089	5,860	5,667	5,542	5,481	5,456	5,480	0.4	-2.3								
M41. Cars and station wagons	Orig.	number	20,991	10,378	24,203	26,690	16,308	29,585	28,157	27,217	31,101	14.3	6.8								
	S. adj.	"	26,138	22,199	24,414	23,293	19,847	25,225	26,711	25,947	26,078	0.5	3.6								
	Trend r	"	25,389	24,248	23,331	23,041	23,411	24,160	24,990	25,779	26,324	2.1	2.2								
M42. Vehicles for goods and materials	Orig.	"	1,875	1,165	2,386	2,899	1,503	2,579	2,401	2,291	2,498	9.0	4.7								
	S. adj.	"	2,354	2,603	2,497	2,461	1,744	2,202	2,188	2,277	2,116	-7.1	3.1								
	Trend r	"	2,435	2,435	2,384	2,301	2,219	2,164	2,139	2,132	2,141	0.4	2.2								

For footnote see end of tables.

## PRODUCTION STATISTICS, AUSTRALIA, AUGUST 1995

No. Item	Series	Unit	1994										1995			prev. month	same month prev. year
			Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	prev. month	prev. month	prev. month	prev. month		
M43. Telephones	Orig.	'000		140	104	170	155	81	126	135	116	109	-6.3	-17.6			
	S. adj.	"		n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.		
	Trend r	"		n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.		
M44. Domestic refrigerators	Orig.	number	34,119	32,499	34,436	42,025	23,471	37,336	32,064	31,596	36,404	15.2	18.2				
	S. adj.	"	36,046	32,878	33,471	34,344	28,691	35,240	35,835	37,440	36,215	-3.3	16.9				
	Trend r	"	33,969	33,685	33,215	33,003	33,327	34,064	35,004	35,951	36,709	2.1	3.8				
M45. Hot water heaters	Orig.	"	51,114	33,371	56,041	66,448	39,302	70,875	r 55,795	r 54,551	57,447	-5.3	3.1				
	S. adj.	"	55,987	67,743	56,973	57,761	53,242	61,448	r 50,039	r 54,763	49,093	-10.4	3.2				
	Trend r	"	55,018	55,916	56,320	56,326	55,984	55,307	54,256	53,059	51,628	-2.7	4.4				
M46. Clothes washing machines domestic	Orig.	"	20,995	13,999	23,091	27,426	20,149	26,159	26,023	27,643	36,352	31.5	21.2				
	S. adj.	"	24,875	27,459	24,266	24,262	22,918	25,363	25,214	25,811	27,875	8.0	16.2				
	Trend r	"	25,892	25,465	24,885	24,473	24,458	24,774	25,308	25,913	26,678	3.0	1.3				
M47. Electric motors	Orig.	'000	207	136	264	329	206	275	278	243	284	16.9	0.4				
	S. adj.	"	237	213	259	278	243	253	264	258	275	6.8	1.3				
	Trend r	"	241	242	246	251	256	259	261	264	265	0.2	3.0				
M48. Electricity	Orig.	mil k Wh	13,590	13,487	12,776	13,812	13,032	14,268	14,473	15,359	14,457	-5.9	-2.0				
	S. adj.	"	13,916	13,944	13,816	13,743	13,942	13,837	13,843	14,232	13,353	-6.2	-1.9				
	Trend r	"	13,836	13,852	13,866	13,876	13,879	13,874	13,857	13,823	13,783	0.3	1.8				
M49. Gas	Orig.	terajoules	38,410	41,600	41,471	46,287	r 49,013	r 56,624	61,739	r 66,600	60,054	-9.8	-6.0				
	S. adj.	"	46,247	52,027	51,373	51,412	r 54,478	r 52,572	51,804	r 54,933	48,366	-12.0	-5.9				
	Trend r	"	51,164	51,016	51,367	52,008	52,598	52,803	52,590	52,113	51,647	-0.9	0.0				

For footnotes see end of tables.

## PRODUCTION STATISTICS, AUSTRALIA, JUNE QUARTER 1995

No. Item	Series	Unit	Percentage changes between latest quarter shown and—											
			1993			1994			1995			prev. quarter	same quarter prev. year	
			June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June			
Q1. Men's and boys' long trousers	Orig.	'000	1,121	968	880	753	+1,040	1,031	979	+811	835	3.1	-19.7	
	S. adj. r	"	994	941	897	873	921	1,004	997	942	739	-21.6	-19.8	
	Trend r	"	972	941	899	891	932	988	979	905	810	-10.5	-13.0	
Q2. Women's and girls' long trousers	Orig.	"	402	352	278	461	188	407	380	628	443	-29.5	135.2	
	S. adj. r	"	397	349	328	403	187	405	450	545	442	-18.8	136.0	
	Trend r	"	369	361	327	314	334	397	463	492	483	-1.9	44.3	
Q3. Jeans	Orig.	"	1,142	1,113	891	709	945	941	770	+641	887	38.4	-6.1	
	S. adj. r	"	1,044	991	938	852	864	837	810	772	811	5.1	-6.1	
	Trend r	"	1,065	999	922	879	852	830	809	794	791	-0.4	-7.2	
Q4. Men's and boys' shirts (d)	Orig.	"	3,070	3,696	3,246	2,623	2,867	3,545	2,900	2,347	2,507	6.8	-12.6	
	S. adj. r	"	3,425	3,064	2,946	3,280	3,208	2,940	2,642	2,916	2,808	-3.7	-12.4	
	Trend r	"	3,326	3,107	3,086	3,157	3,127	2,957	2,816	2,792	2,821	1.0	-9.8	
Q5. Women's shirts and blouses	Orig.	"	985	1,230	1,563	1,218	812	1,787	1,218	+806	940	16.6	15.8	
	S. adj. r	"	1,323	915	1,419	1,506	1,092	1,326	1,107	998	1,265	26.7	15.8	
	Trend r	"	1,195	1,122	1,357	1,341	1,304	1,183	1,124	1,122	1,141	1.7	-12.5	
Q6. Undressed sawn timber(c)	Orig.	'000 cu m	831	853	847	827	905	936	+887	845	889	5.2	-1.8	
	S. adj. r	"	807	821	846	889	880	899	888	907	865	-4.7	-1.7	
	Trend r	"	796	825	853	875	888	895	895	890	880	-1.1	-0.9	
Q7. Hardwood woodchips	Orig.	'000 tonnes	1,212	1,270	1,088	1,026	1,228	1,286	1,417	+1,402	1,332	-5.0	8.5	
	S. adj. r	"	1,172	1,214	1,094	1,108	1,188	1,228	1,428	1,512	1,288	-14.8	8.5	
	Trend r	"	1,178	1,166	1,132	1,118	1,164	1,289	1,391	1,423	1,394	-2.0	19.7	
Q8. Alumina(c)	Orig.	"	3,125	3,225	3,154	3,172	3,209	3,215	3,196	3,203	3,299	3.0	2.8	
	S. adj. r	"	3,142	3,189	3,139	3,205	3,225	3,181	3,185	3,231	3,314	2.6	2.8	
	Trend r	"	3,156	3,165	3,176	3,194	3,200	3,194	3,201	3,238	3,286	1.5	2.7	
Q9. Zinc(c)	Orig.	"	88	73	79	82	81	82	78	72	81	12.5	0.0	
	S. adj.	"	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
	Trend r	"	79	79	79	81	82	80	78	77	77	-0.4	-6.5	
Q10. Silver(c)	Orig.	tonnes	93	88	95	91	104	88	79	93	89	-4.3	-14.4	
	S. adj. r	"	84	89	97	98	95	88	81	99	81	-18.0	-14.0	
	Trend r	"	86	90	95	97	93	89	88	88	88	-0.6	-5.8	
Q11. Copper(c)	Orig.	'000 tonnes	75	84	79	81	87	86	64	53	52	-1.9	-40.2	
	S. adj. r	"	77	77	77	88	90	79	63	58	54	-7.1	-40.2	
	Trend r	"	77	77	81	86	86	78	67	58	52	-9.8	-39.6	
Q12. Lead(c)	Orig.	"	62	51	61	55	53	49	55	53	44	-7.5	-7.6	
	S. adj. r	"	56	49	59	66	48	48	54	63	44	-30.1	-7.6	
	Trend r	"	54	55	58	58	53	51	53	55	52	-4.2	-1.4	
Q13. Tin(c)	Orig.	tonnes	73	13	63	18	92	70	135	+175	65	-62.9	-29.3	
	S. adj.	"	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
	Trend r	"	49	32	23	31	58	107	142	136	112	-18.2	92.5	
Q14. Gold(c)	Orig.	"	73	80	74	75	79	78	71	74	74	-0.5	-6.5	
	S. adj.	"	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
	Trend r	"	73	76	77	77	76	76	75	74	74	-0.1	-3.5	

(a) Source: Australian Dairy Corporation. (b) Source: Australian Tobacco Marketing Committee until April 1995. (c) Source: ABARE. (d) This data item replaces the previous data item of 'Men's shirts'.

## GLOSSARY

M1	RED MEAT	includes veal, pork and buffalo
M2	CHICKEN MEAT	expressed in the dressed weight of whole birds pieces and giblets
M3	CHEESE	includes fresh cheeses such as ricotta, cottage, cream and quark
M4	BUTTER	includes direct butter oil
M5	FLOUR OF WHEAT OR OF MESLIN	excludes self raising flour
M6	PREPARED FOODS FROM CEREALS	prepared foods obtained by the swelling or roasting of cereals or cereal products
M7	BISCUITS	sweet biscuits and other biscuits, waffles, wafers and ginger bread: excludes dog biscuits
M8	CHOCOLATE BASE CONFECTIONERY	includes confectionery containing chocolate: excludes chocolate biscuits and chocolate intended for further manufacturing
M9	OTHER CONFECTIONERY	excludes chocolate based confectionery
M10	MALT	includes malt flour
M11	BEER	includes ale and stout: excludes low alcohol beer containing less than 1.15 per cent but more than 0.5 per cent by volume of alcohol.
M12	TOBACCO AND CIGARETTES	includes those containing tobacco substitutes
M13	MAN-MADE FIBRE WOVEN FABRIC	broadwoven fabric of, or predominantly of, synthetic staple fibres and/or filament
M14	COTTON WOVEN FABRIC	broadwoven fabric of, or predominantly of, cotton: excludes gauze
M15	COTTON YARN	of, or predominantly of cotton, classified on a single yarn basis: excludes sewing thread
M16	WOOL YARN	of, or predominantly of, wool or fine animal hair
M17	WOOL WOVEN FABRIC	broadwoven woollen and worsted fabrics of, or predominantly of, wool or fine animal hair
M18	TEXTILE FLOOR COVERINGS	consisting of carpets, carpeting (excluding underfelt), floor rugs, mats and matting of, or predominantly of textile materials
M19	FOOTWEAR	other than sports footwear: excludes thongs
M20	SPORTS FOOTWEAR	includes ski boots
M21	NEWSPRINT	excludes directory paper, mechanical and printing paper
M22	WOOD PULP	expressed as air-dried weight
M23	UNLAMINATED PARTICLE BOARD	particle or similar boards of wood or other ligneous materials whether or not for subsequent conversions to other purposes: excludes fibreboard and fibre paperboard

M24	PAPER	other than newsprint: includes paperboard, tissue and sanitary
M25	PAPERBOARD CONTAINERS	includes corrugated paperboard and solid paperboard containers
M26	AUTOMOTIVE GASOLINE	produced by Australian refineries from imported and indigenous petroleum
M27	FUEL OIL	oils derived from the distillation of petroleum which are generally used for domestic heating or fueling furnaces: produced by Australian refineries from imported and indigenous petroleum
M28	AVIATION TURBINE FUEL	produced by Australian refineries from imported and indigenous petroleum
M29	AUTOMOTIVE DIESEL OIL	produced by Australian refineries from imported and indigenous petroleum
M30	PLASTICS IN PRIMARY FORMS	includes liquid, paste, powder, granules, flakes, blocks, irregular shapes, lumps and similar forms
M31	RIGID PVC TUBES, PIPES AND HOSES	plastic tubes, pipes and hose of rigid polyvinyl chloride
M33	PAINT	includes architectural, decorative and industrial enamels and clears, heavy duty coatings and wood stains: marine coatings are included from January 1995
M34	SUPERPHOSPHATES	expressed in terms of single super phosphate (9% P equivalent)
M35	PORLAND CEMENT	excludes portland cement clinker and portland cement used to make blended portland cement in house
M36	CLAY BRICKS	saleable bricks removed from kiln: excludes firebricks and bricks for other than structural purposes
M37	READY MIX CONCRETE	excludes production used or for use within the same business
M39	BLOOMS AND SLABS	includes steel in the molten state
M40	INSULATED WIRE	includes cables and other insulated electrical conductors: excludes coaxial cables and automotive low voltage wire and ignition wiring sets
M41	CARS AND STATION WAGONS	cars and station wagons for less than 10 persons: excludes mini-buses, passenger mini-vans
M42	VEHICLES FOR GOODS AND MATERIALS	excludes off-highway trucks, fork lift trucks and semi-trailers
M44	DOMESTIC REFRIGERATORS	one and two door models, includes combination refrigerator freezers
M45	HOT WATER HEATERS	includes solar
M46	CLOTHES WASHING MACHINES, DOMESTIC	of a dry linen capacity not exceeding 10 kg
M47	ELECTRIC MOTORS	includes direct current generators: excludes motors and generators for motor vehicles and aircraft
M48	ELECTRICITY	excludes purchases or transfers in of electricity
M49	GAS	gas available for issue through mains including natural gas

Q1	MEN'S AND BOYS' TROUSERS	excludes jeans and waterproof trousers and trousers made as part of a complete suit
Q2	WOMEN'S AND GIRLS' LONG TROUSERS	excluding jeans and waterproof trousers
Q3	JEANS	includes men's, women's, boys' and girls' jeans: excludes shorts
Q4	MEN'S AND BOYS' SHIRTS	excludes sweatshirts and nightshirts
Q5	WOMEN'S SHIRTS AND BLOUSES	excludes sweatshirts and nightshirts
Q6	UNDRESSED SAWN TIMBER	expressed in terms of green off saw volumes
Q7	HARDWOOD WOODCHIPS	expressed as greenweight: excludes chips which are not sold or are used in own works
Q9	ZINC	primary origin only
Q11	COPPER	primary origin only
Q12	LEAD	includes lead content of lead from primary sources
Q13	TIN	primary origin only
Q14	GOLD	from primary and secondary sources

## SENSITIVITY ANALYSIS

Where seasonally adjusted series are known to be highly erratic, an analysis of how sensitive the current trend estimates are to additional data can be useful. Such analysis is referred to as 'sensitivity analysis'.

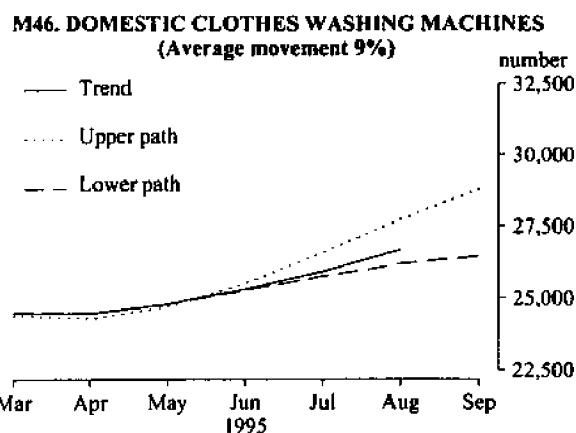
Readers should exercise care when interpreting the latest month's trend estimates because they will be revised when the next month's seasonally adjusted estimates become available. For further information, see Explanatory Notes 12 and 13.

The graph below presents the effect of two possible scenarios on the current and previous trend estimates:

**Upper path** The September seasonally adjusted estimate of the production of domestic clothes washing machines is higher than the August seasonally adjusted estimate by 9%.

**Lower path** The September seasonally adjusted estimate of the production of domestic clothes washing machines is lower than the August seasonally adjusted estimate by 9%.

The percentage change of 9% was chosen because the average monthly absolute percentage change for this series since January 1965 has been 9%.



## EXPLANATORY NOTES

### Introduction

1. This publication presents monthly and quarterly estimates of production of selected major manufacturing indicators for Australia.

### Scope and coverage

2. Data presented in this publication are collected from a number of different sources. The prime source is the ABS surveys of manufacturing production. Data are also obtained from surveys undertaken by the Australian Bureau of Agricultural and Resource Economics (ABARE), the Australian Dairy Corporation (ADC), the Australian Tobacco Marketing Committee (until April 1995) and from ABS agriculture collections. Scope and coverage varies slightly depending on the source of the information.

3. Where production statistics are collected by the ABS manufacturing production surveys, they are not collected from single establishment manufacturing businesses with less than four persons employed nor from establishments predominantly engaged in non-manufacturing activities but which may carry out in a minor way some manufacturing. However, in general, the contribution of these small producers to statistical aggregates is only marginal and data contained in this publication provide reliable information for the evaluation of movements in commodity production.

4. The statistics on meat production include data collected from abattoirs and other major slaughtering establishments and include estimates of animals slaughtered on farms and by country butchers and other small slaughtering establishments for human consumption.

5. The statistics on chicken meat have been collected from commercial poultry slaughtering establishments. Producers in the Northern Territory and the Australian Capital Territory and the very small producers are excluded from the collection.

6. Data on the production of fuels, sawn timber and quarterly estimates of base metal production are obtained from the Australian Bureau of Agricultural and Resource Economics publications *Mineral Statistics* and *Forest Products Statistics*.

7. Data on the production of cheese and butter are obtained from the Australian Dairy Corporation publication *Dairystats*. Data on tobacco and cigarettes produced were obtained from the Australian Tobacco Marketing Committee until April 1995.

#### **Comparability with other estimates**

8. The ABS publishes quarterly estimates of constant price manufacturing production in the publication *Quarterly Indexes of Industrial Production, Australia* (8125.0). These estimates are shown as index numbers and are derived mainly from estimates of manufacturers' sales and stocks.

9. The production statistics collected monthly and quarterly referred to in paragraph 1 account, in total, for less than half of the output of the manufacturing sector. For information on general trends in the manufacturing sector, refer to the publication referred to in paragraph 8.

#### **Seasonally adjusted and trend estimates**

10. Seasonally adjusted statistics are shown for most of the data items contained in this publication. In this issue, the quarterly seasonally adjusted estimates have been revised due to the annual re-analysis of seasonal factors. In the seasonal adjustment, account has been taken not only of normal seasonal factors, but also where appropriate, of 'working day' effects (arising from the varying numbers of Sundays, Mondays, Tuesdays, etc. in the month) and the influence of Easter and Australia Day which may, in successive years, affect figures for different months. Details of the methods used in seasonally adjusting these series are available on request.

11. Seasonal adjustment procedures do not aim to remove the irregular or non-seasonal influences which may be present in any particular month, such as the effect of strikes, holiday shutdowns or other factors which vary with the prevailing demand for products. Irregular influences that are highly volatile can make it difficult to interpret the movement of the series even after seasonal adjustment.

12. The smoothing of seasonally adjusted series to create trend estimates is a means of reducing the impact of the irregular component of the series. The trend estimates have been derived by applying a 13-term Henderson weighted moving average to the seasonally adjusted series.

13. While this smoothing technique enables estimates of trend to be produced for the latest month, it does result in revisions to the estimates for the most recent months as data for subsequent months become available. Generally, subsequent revisions become smaller and after 3 months have little impact on the series. There will also be revisions as a result of revisions to the original estimates and annual reviews of seasonal and 'working day' factors.

14. Users may wish to refer to the ABS Information Paper *A Guide to Interpreting Time Series - Monitoring Trends, an overview* (1348.0) for more detailed information on smoothing of seasonally adjusted time series data.

## **Related publications and services**

**15. Other ABS publications and services which may be of interest are:**

*Livestock Products, Australia (7215.0)* issued monthly

*Mining Industry, Australia (8402.0)* issued annually

*Manufacturing Production, Australia: Principal Commodities Produced, 1989-90 (8365.0)*

*Manufacturing Industry, Australia (8221.0)* issued annually

*Stocks, Selected Industry Sales and Expected Sales, Australia (5629.0)* issued quarterly

*Quarterly Indexes of Industrial Production, Australia (8125.0)*

*International Trade, Australia: FASTTRACCS Service - Hardcopy Reports (5461.0)*

Additional manufacturing production data are collected by the ABS through user funded surveys and are available to users as a special data service. These series are:

- refrigerators
- freezers
- water heaters
- clothes dryers
- cooking stoves, ovens and ranges
- colour television sets
- space heaters
- lawn mowers
- domestic air conditioners
- audio cassettes
- audio compact discs
- water meters
- brass bars, rods and sections
- Polyethylene
- rubber strip
- paint
- electricity
- semi-trailers
- mineral and aerated waters
- wheat starch and glucose
- beer
- ham and bacon and canned meat
- ready mixed concrete
- concrete blocks and bricks
- roof tiles
- clay bricks
- Portland cement
- mattresses and mattress supports
- knitted underwear
- foundation garments

A more detailed breakdown of most published series is also available as a special data service.

For further information, please call John Ridley on (02) 268 4541.

**16. 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 Publications Advice are available from any ABS office.**

## **Symbols and other usages**

n.y.a.	not yet available
r	figure or series revised since previous issue
n.a.	not available
n.p.	not publishable



## For more information ...

The ABS publishes a wide range of statistics and other information on Australia's economic and social conditions. Details of what is available in various publications and other products can be found in the *ABS Catalogue of Publications and Products* available at all ABS Offices (see below for contact details).

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