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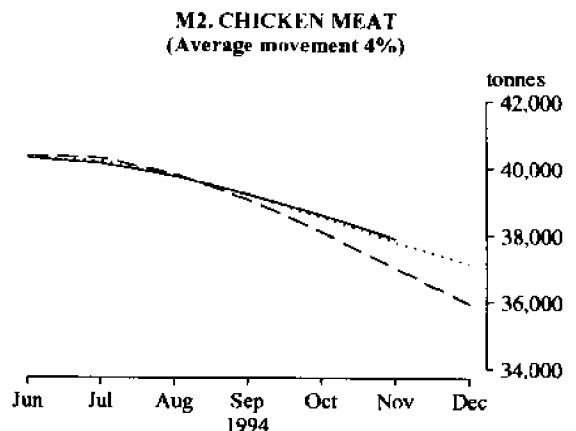
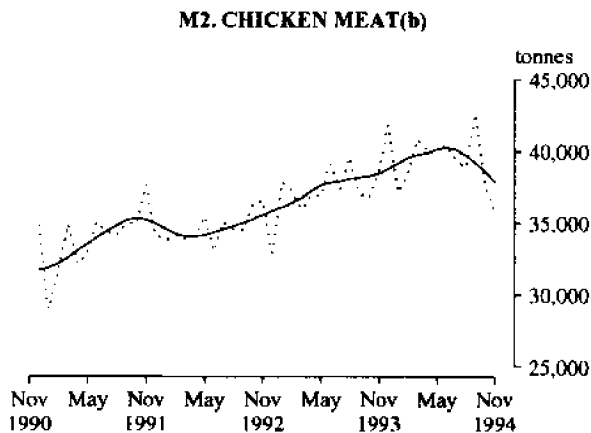
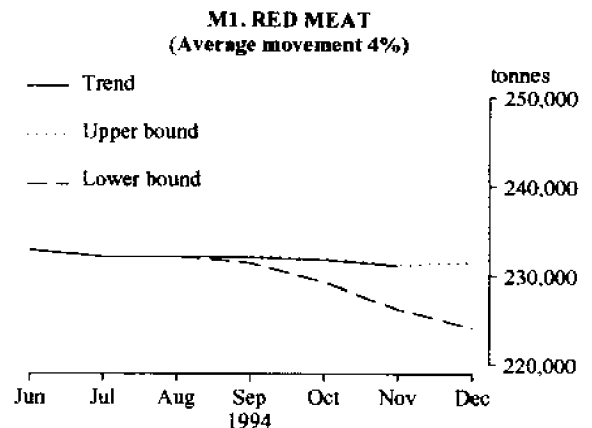
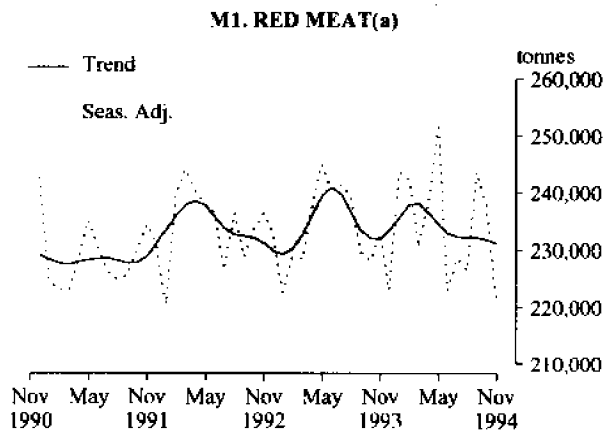
**MANUFACTURING PRODUCTION, AUSTRALIA
DECEMBER 1994**

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. Please refer to the notes on page 14.

RICHARD MADDEN
Acting Australian Statistician

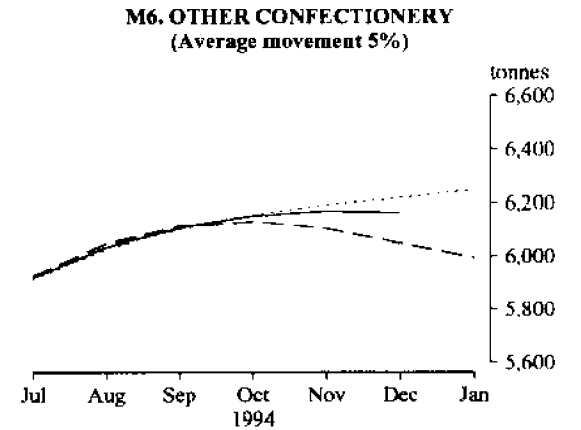
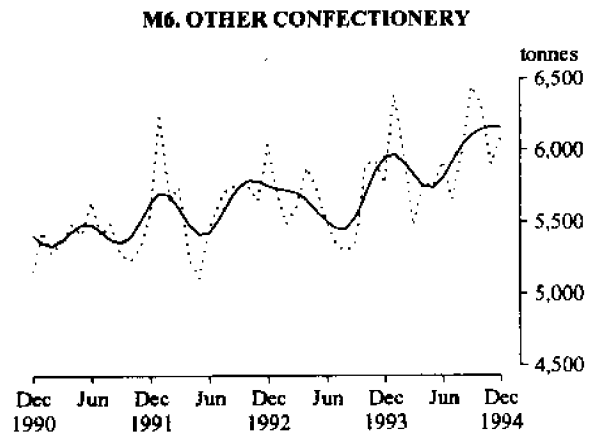
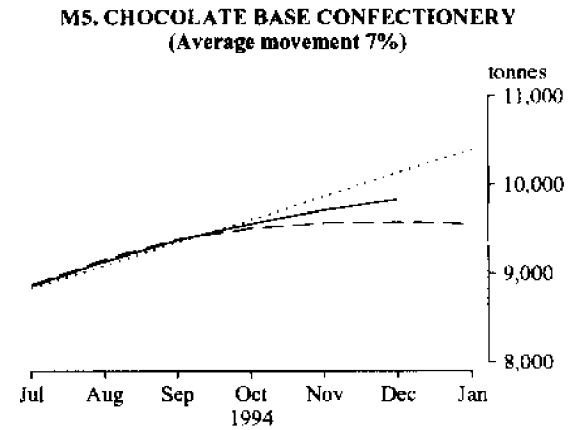
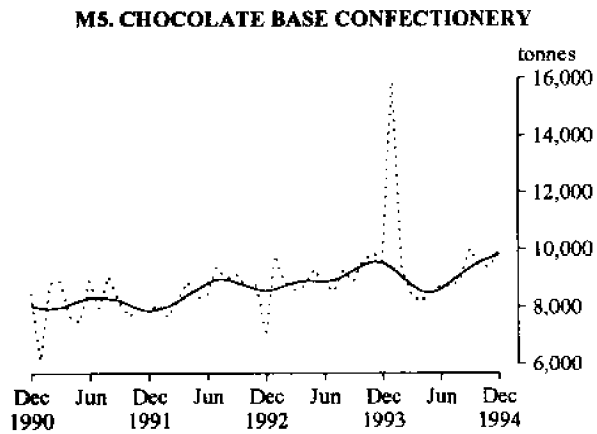
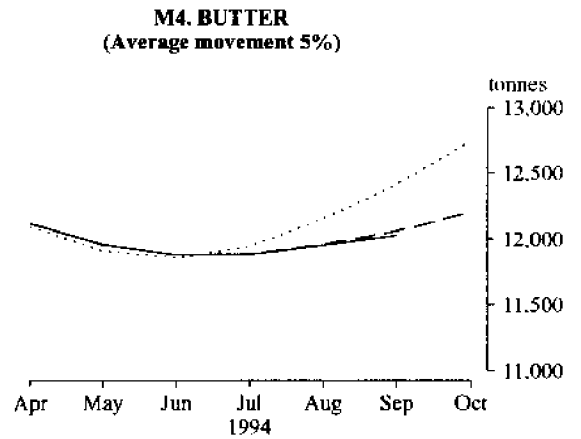
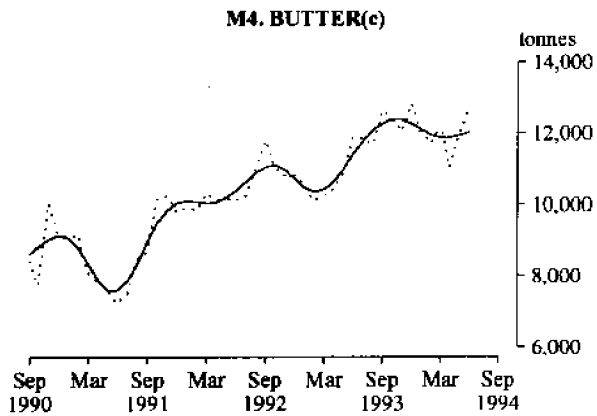
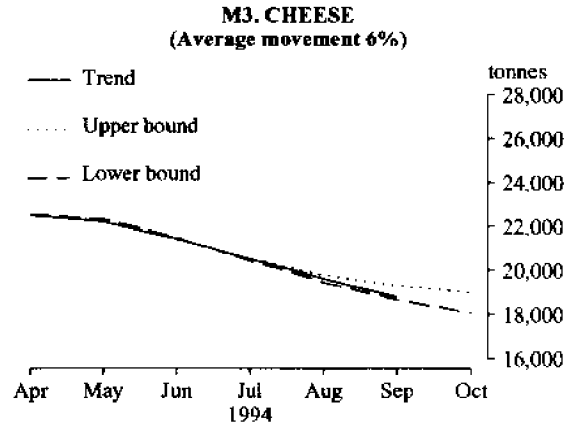
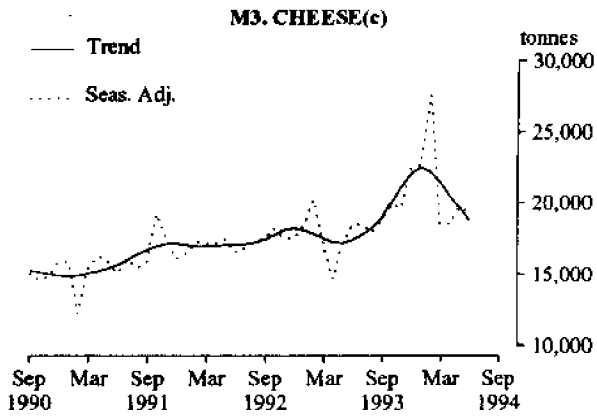
PRODUCTION STATISTICS, AUSTRALIA : LONGER TERM TRENDS AND SHORT TERM SENSITIVITY ANALYSIS



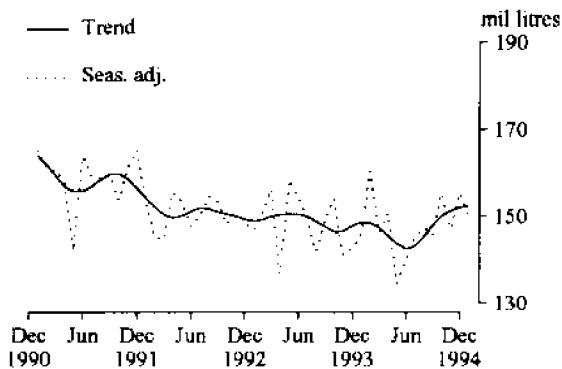
For footnotes see end of tables.

INQUIRIES

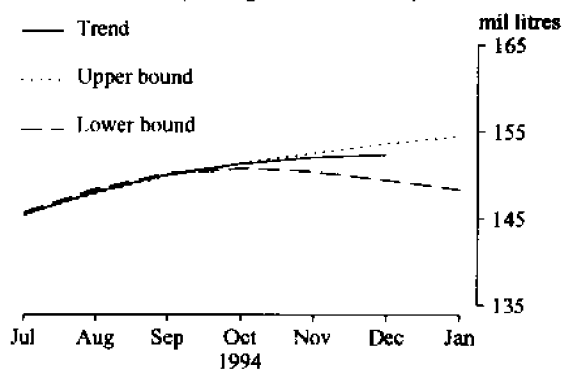
. for further information about statistics in this publication and the availability of related unpublished statistics, contact Rod Smith on Melbourne (03) 615 7635 or any ABS office.
. for information about other ABS statistics and services please refer to the back page of this publication.



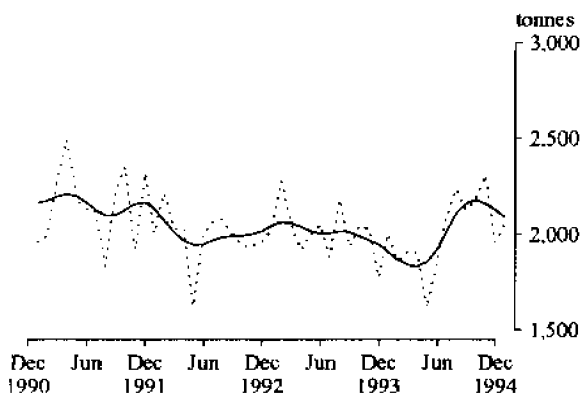
M7. BEER(d)



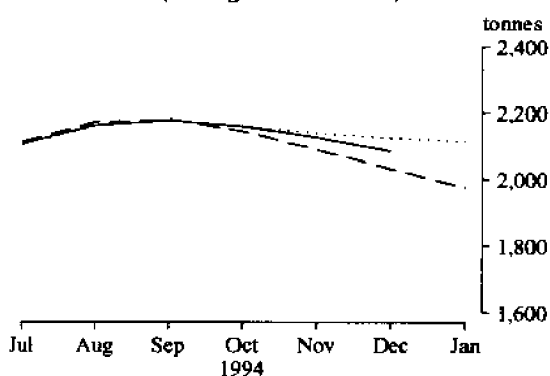
M7. BEER
(Average movement 5%)



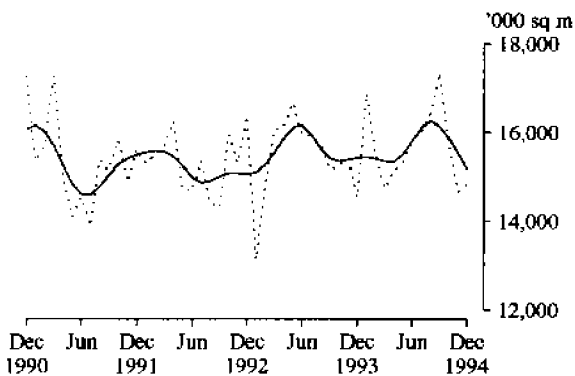
M8. TOBACCO AND CIGARETTES(e)



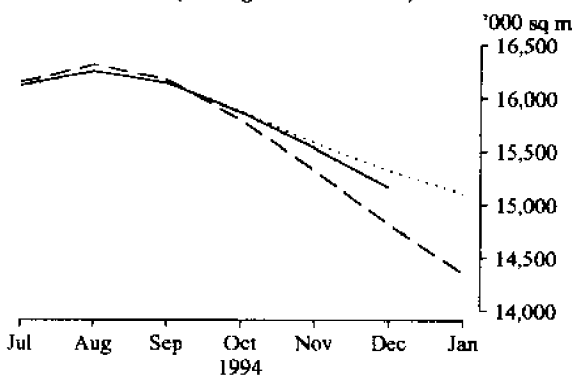
M8. TOBACCO AND CIGARETTES
(Average movement 8%)



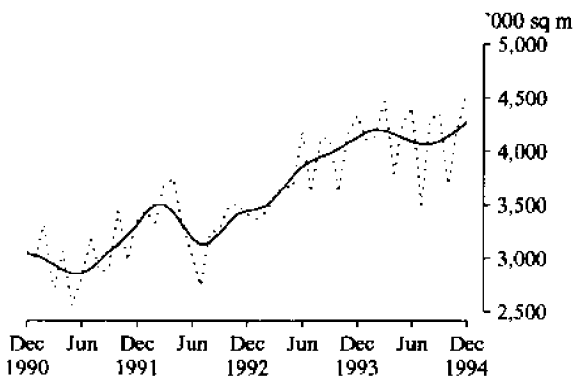
M9. MAN-MADE FIBRE WOVEN FABRIC



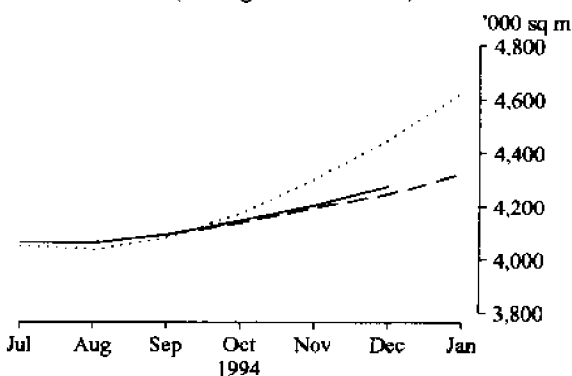
M9. MAN-MADE FIBRE WOVEN FABRIC
(Average movement 6%)



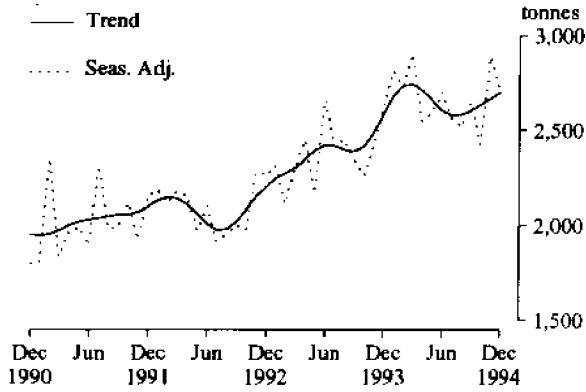
M10. COTTON WOVEN FABRIC(f)



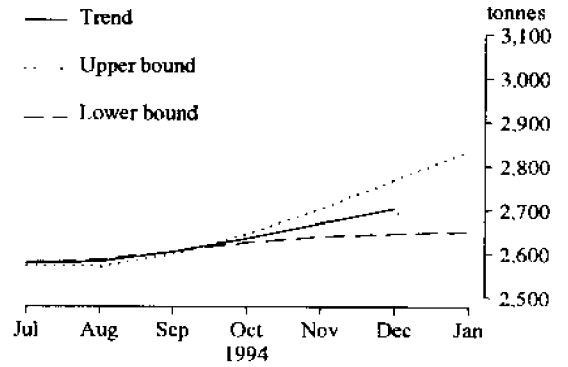
M10. COTTON WOVEN FABRIC
(Average movement 8%)



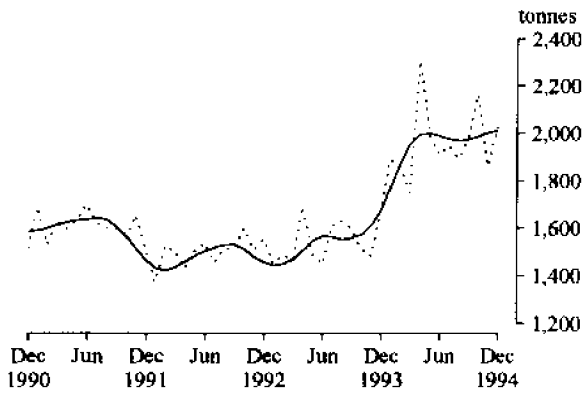
M11. COTTON YARN(f)



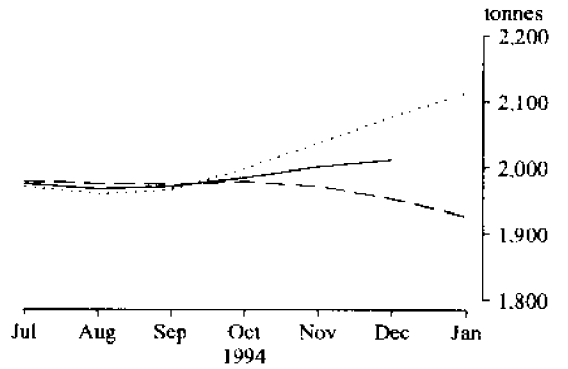
**M11. COTTON YARN
(Average movement 8%)**



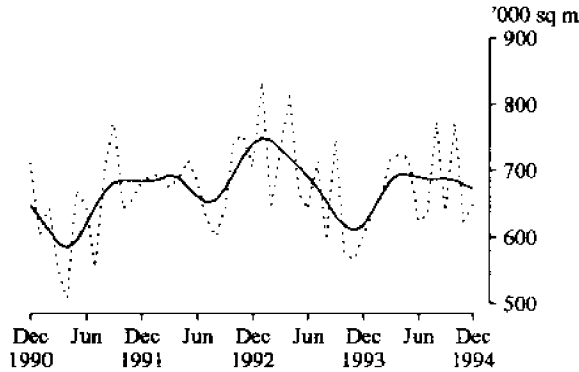
M12. WOOL YARN(f)



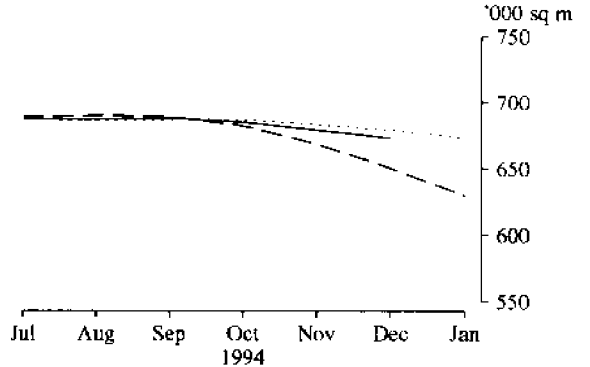
**M12. WOOL YARN
(Average movement 6%)**



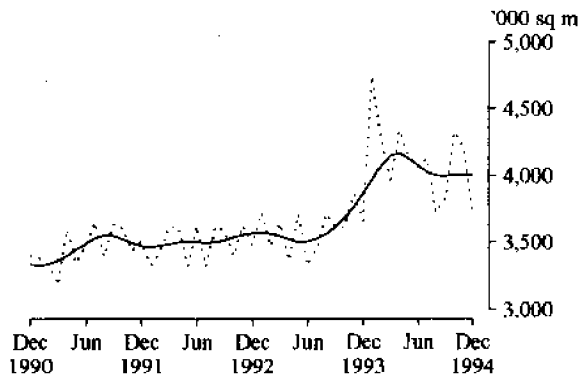
M13. WOOL WOVEN FABRIC(f)



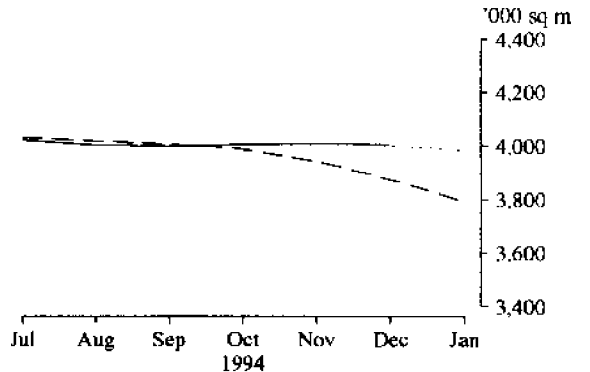
**M13. WOOL WOVEN FABRIC
(Average movement 8%)**

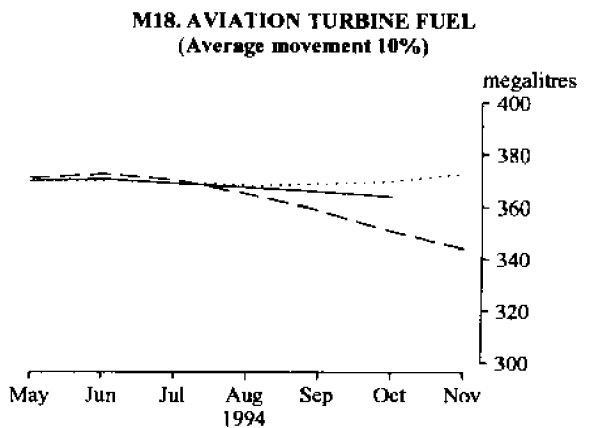
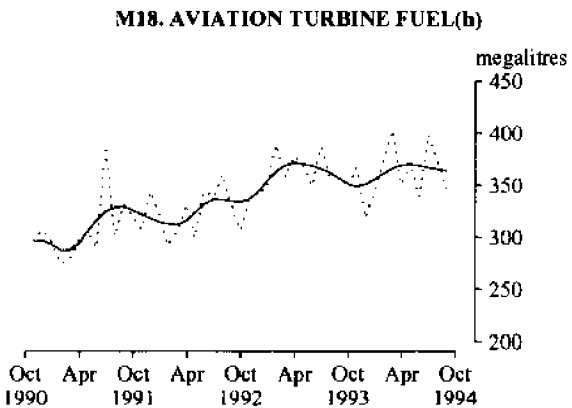
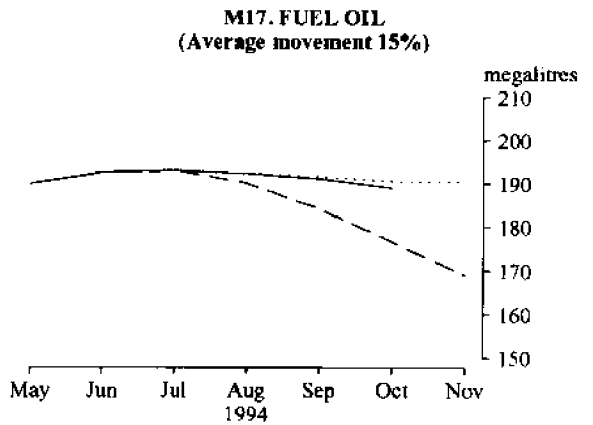
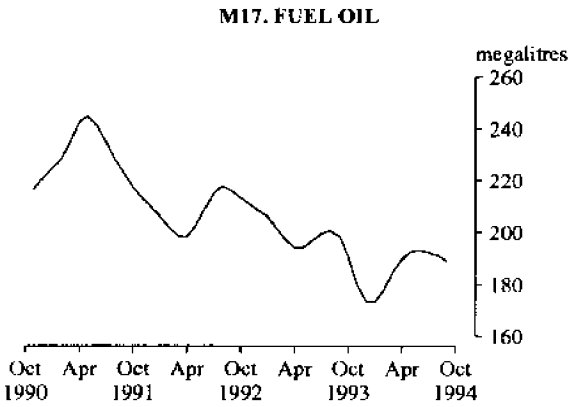
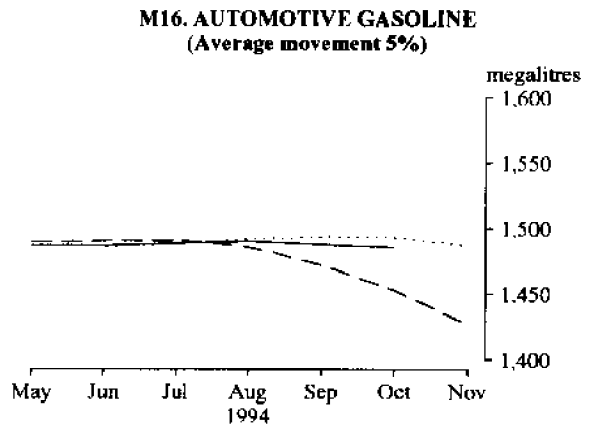
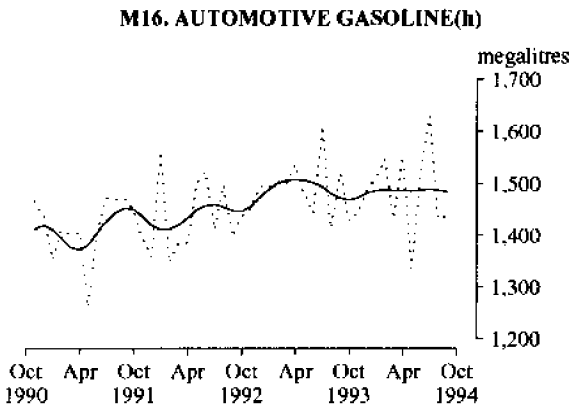
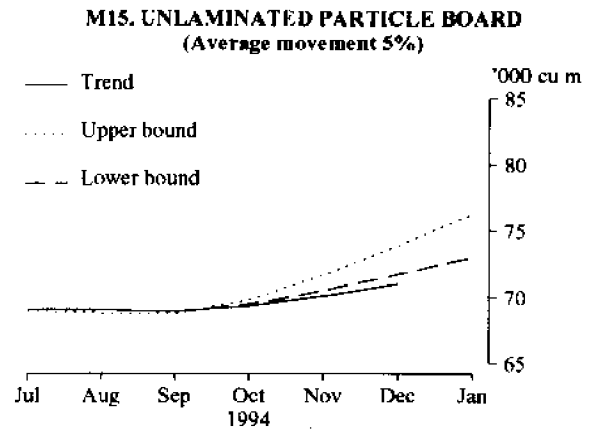
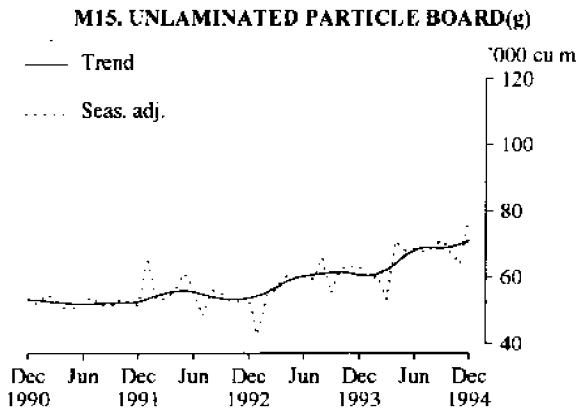


M14. TEXTILE FLOOR COVERINGS

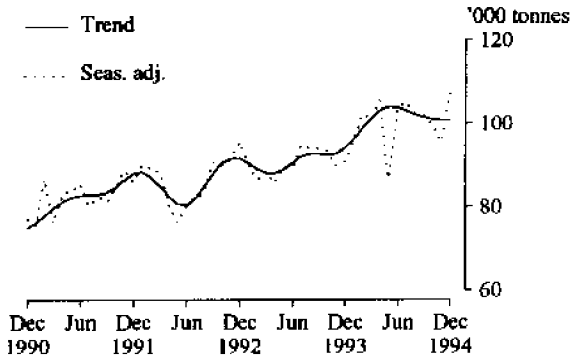


**M14. TEXTILE FLOOR COVERINGS
(Average movement 6%)**

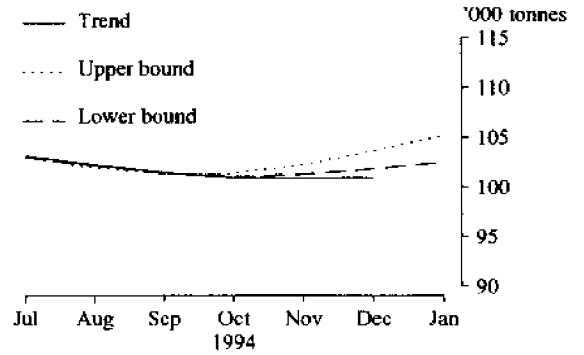




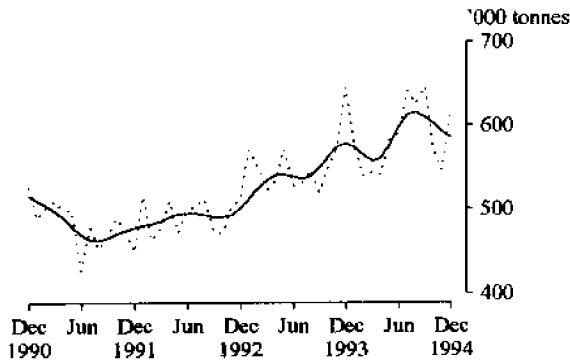
M19. PLASTICS IN PRIMARY FORMS(I)



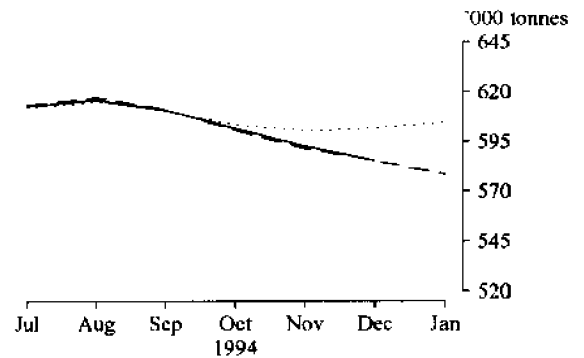
**M19. PLASTICS IN PRIMARY FORMS
(Average movement 3%)**



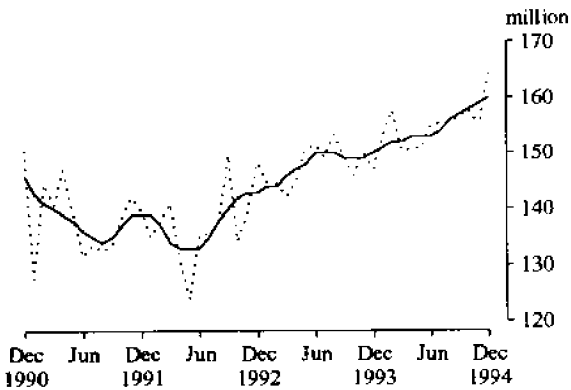
M20. PORTLAND CEMENT



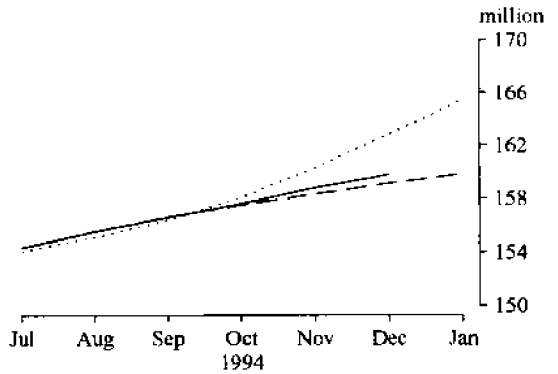
**M20. PORTLAND CEMENT
(Average movement 5%)**



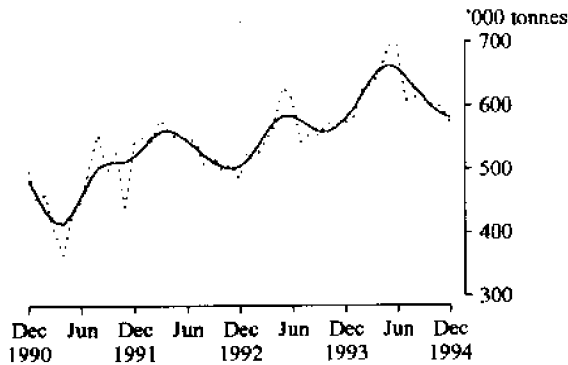
M21. CLAY BRICKS



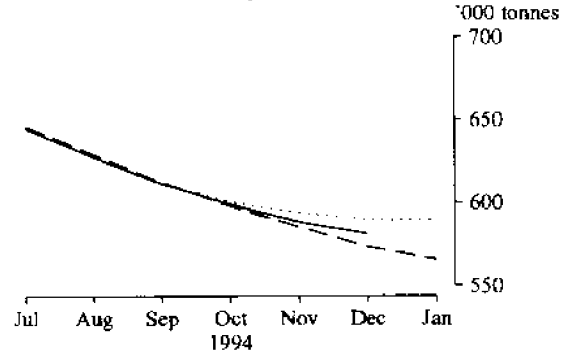
**M21. CLAY BRICKS
(Average movement 4%)**



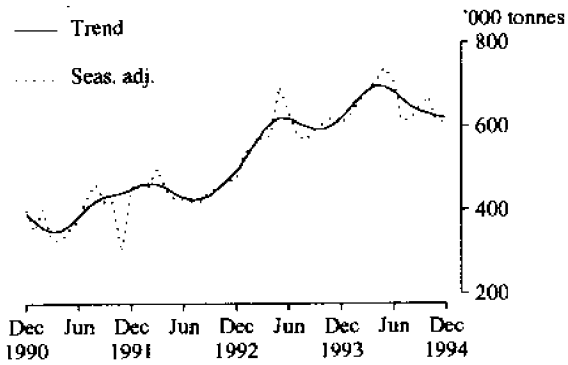
**M22. BASIC IRON, SPIEGELEISEN
AND SPONGE IRON**



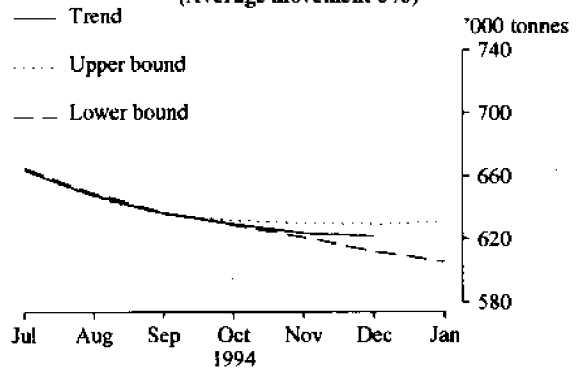
**M22. BASIC IRON, SPIEGELEISEN
AND SPONGE IRON
(Average movement 5%)**



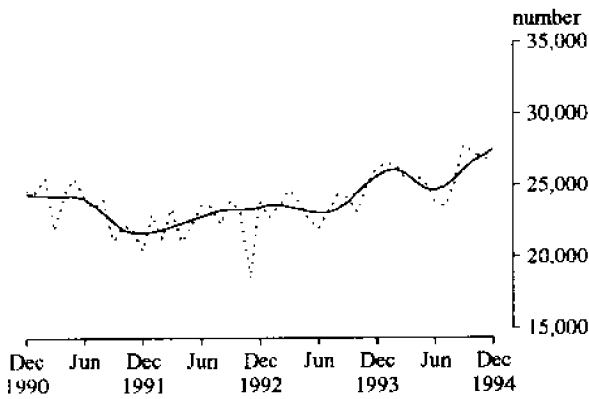
M23. BLOOMS AND SLABS(j)



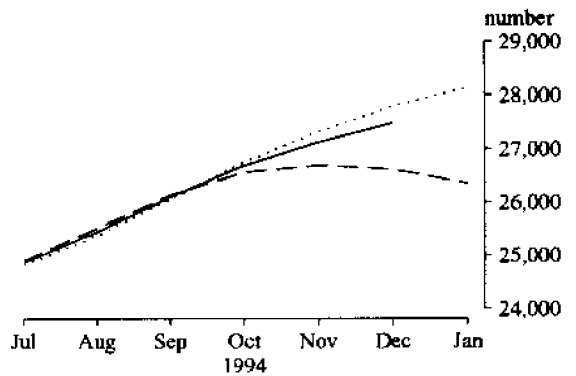
**M23. BLOOMS AND SLABS
(Average movement 5%)**



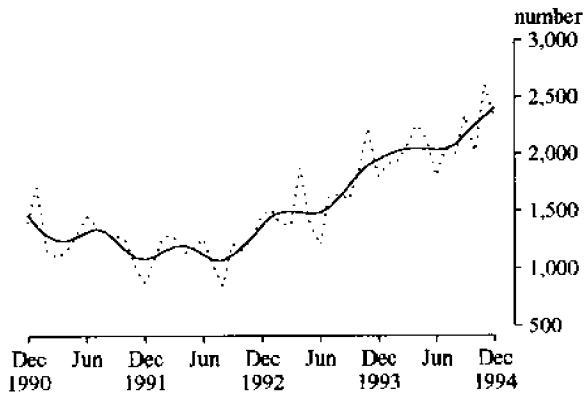
M24. CARS AND STATION WAGONS



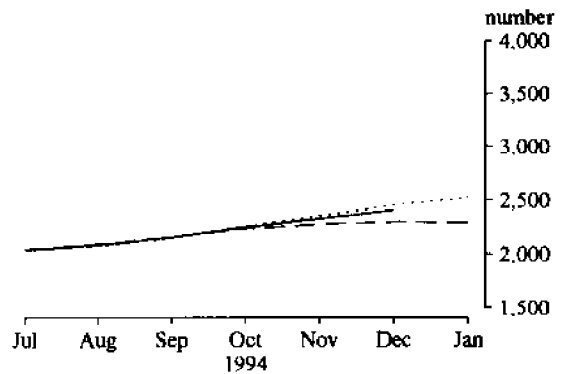
**M24. CARS AND STATION WAGONS
(Average movement 8%)**



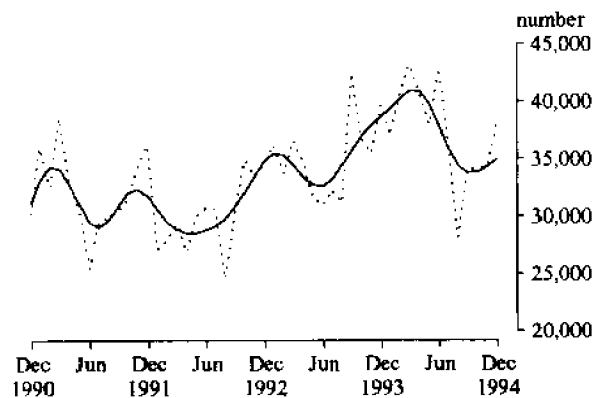
M25. VEHICLES FOR GOODS AND MATERIALS(k)



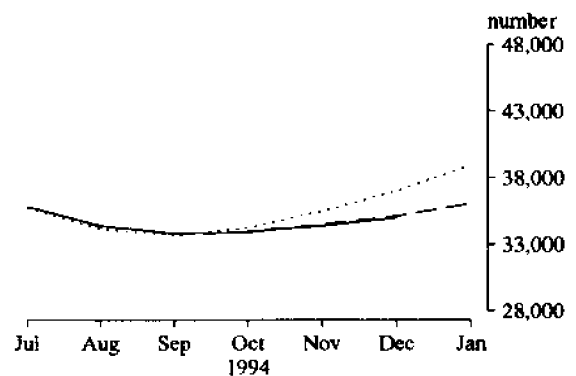
**M25. VEHICLES FOR GOODS AND MATERIALS
(Average movement 12%)**



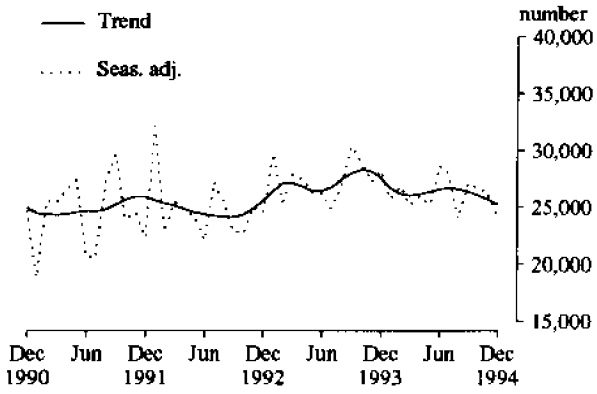
M26. REFRIGERATORS, DOMESTIC



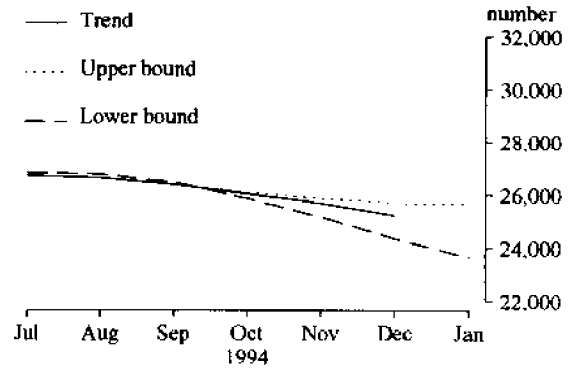
**M26. REFRIGERATORS, DOMESTIC
(Average movement 9%)**



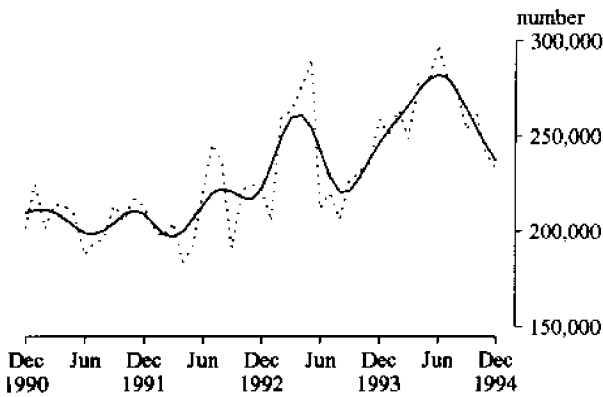
M27. CLOTHES WASHING MACHINES, DOMESTIC



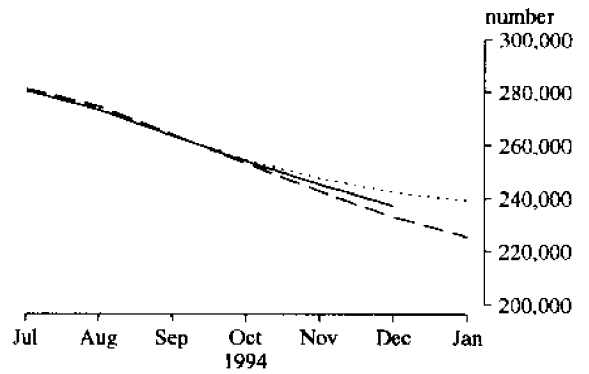
M27. CLOTHES WASHING MACHINES, DOMESTIC
(Average movement 10%)



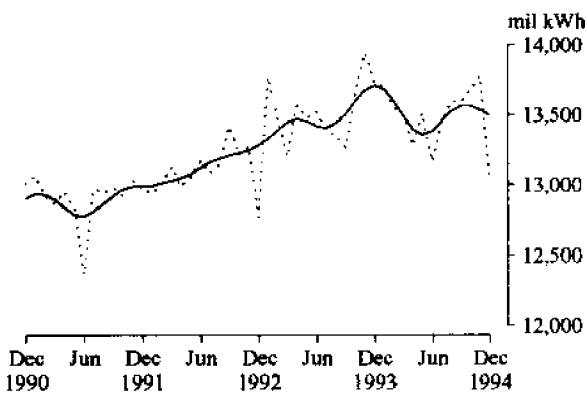
M28. ELECTRIC MOTORS



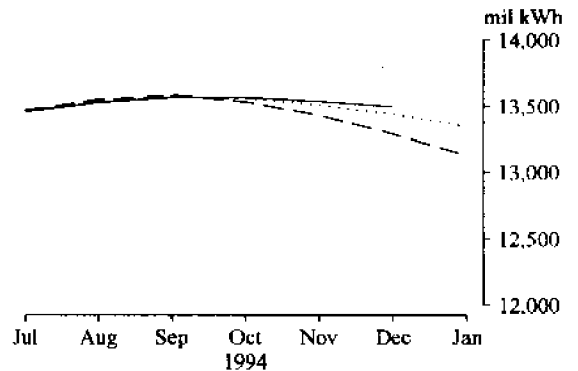
M28. ELECTRIC MOTORS
(Average movement 7%)



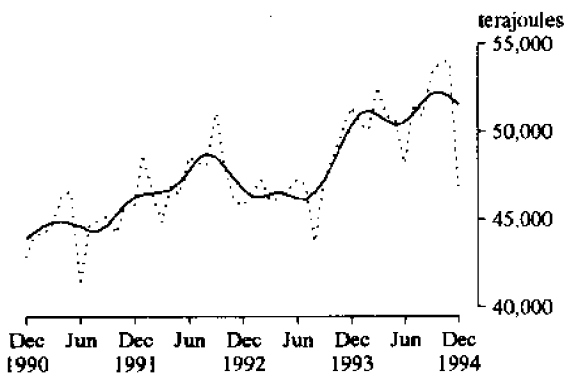
M29. ELECTRICITY



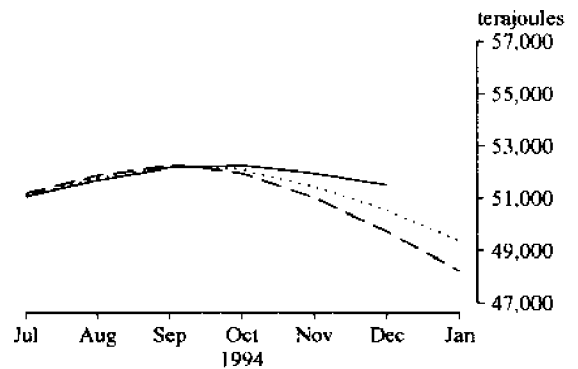
M29. ELECTRICITY
(Average movement 1%)

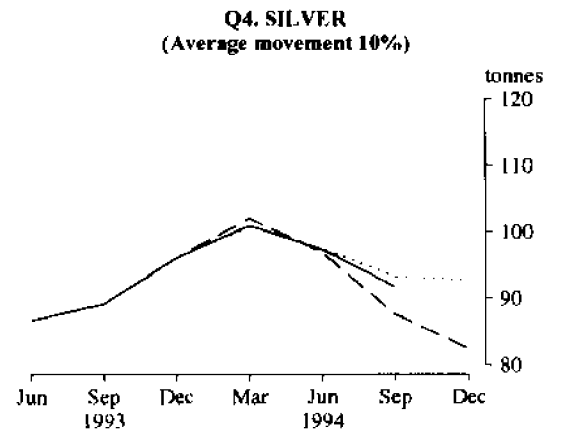
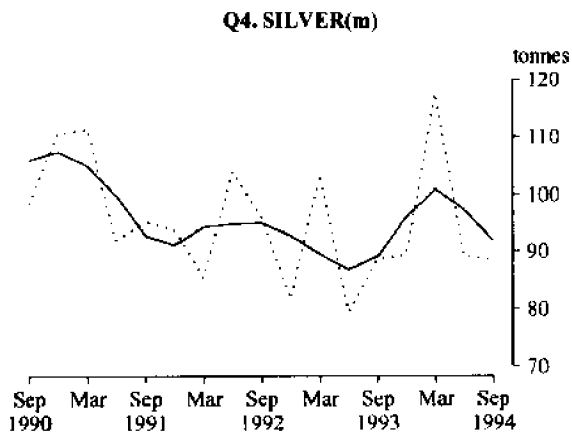
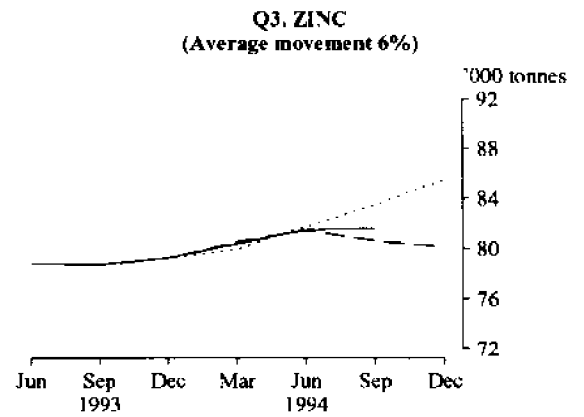
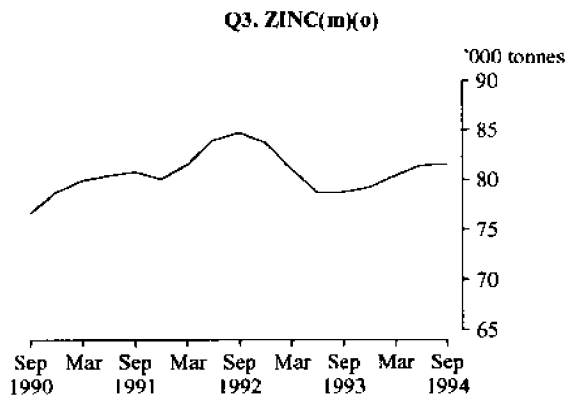
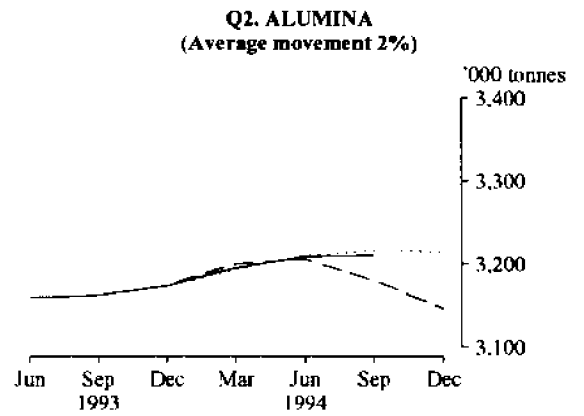
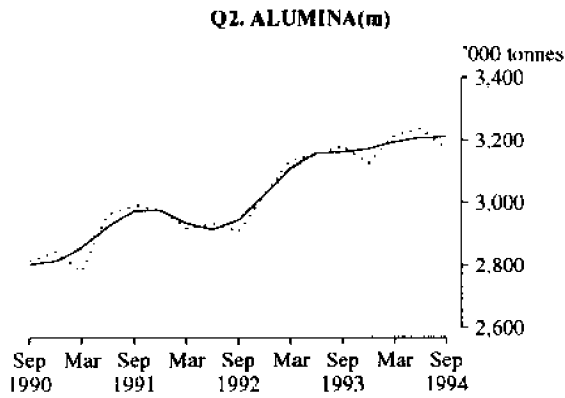
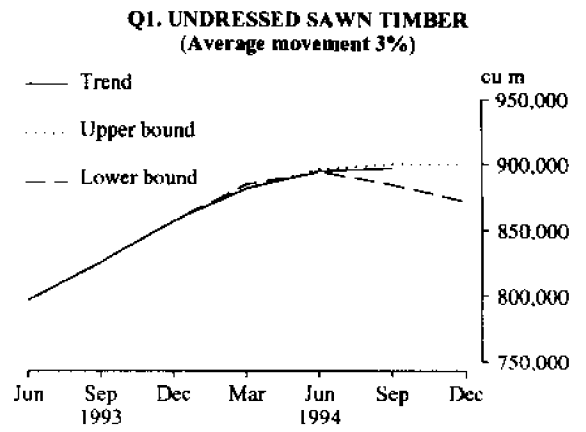
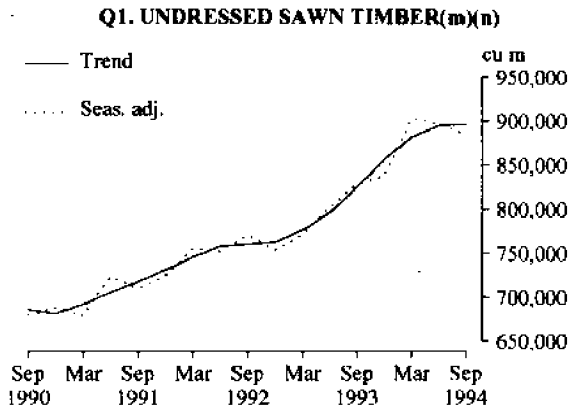


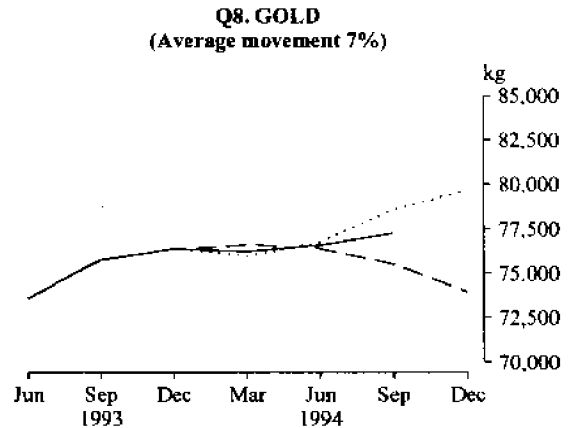
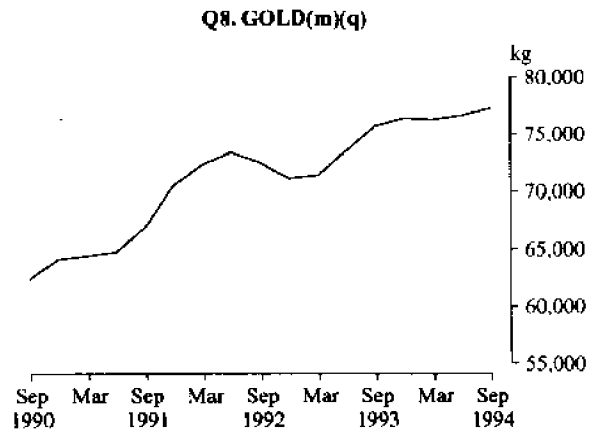
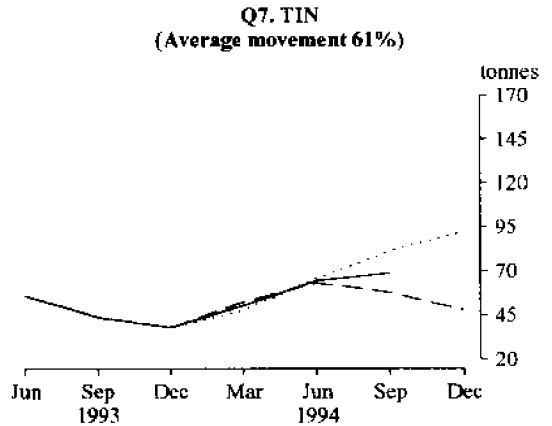
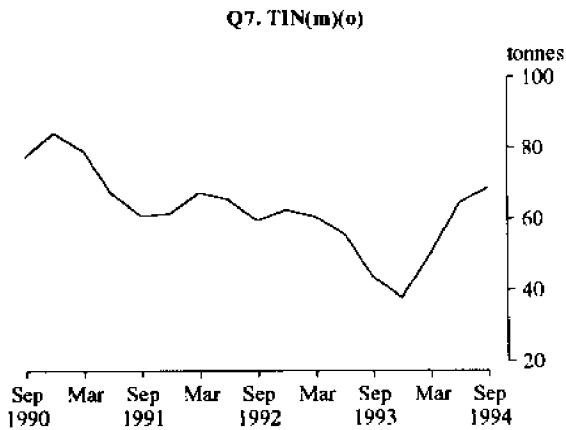
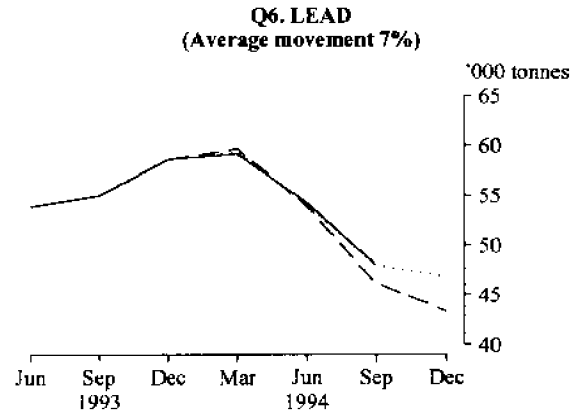
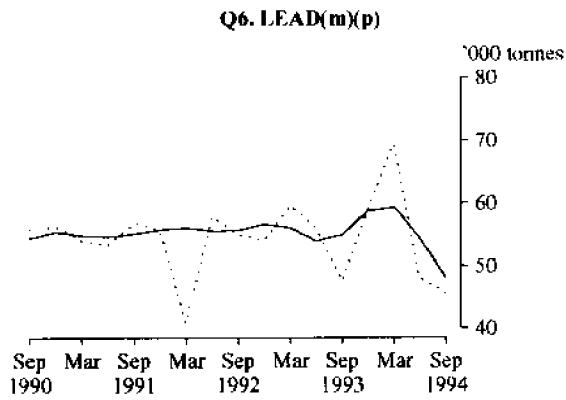
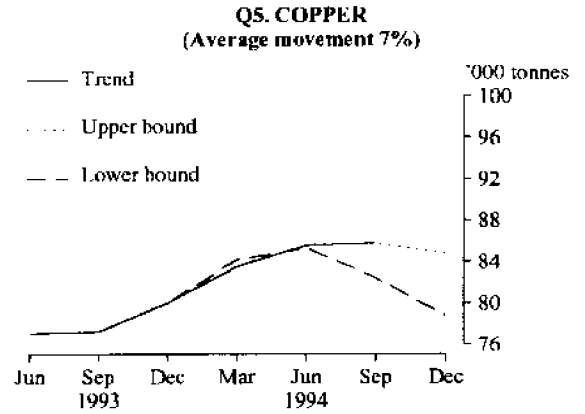
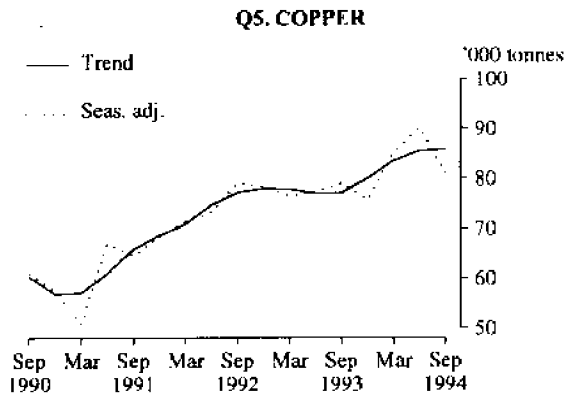
M30. GAS(I)



M30. GAS
(Average movement 3%)







PRODUCTION STATISTICS, AUSTRALIA, DECEMBER 1994, PRELIMINARY

No. Item	Series	Unit	1994									Percentage changes between latest month shown and-	
			Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	prev. month	same month prev. year
M1. Red meat(a)	Orig.	tonnes	226,398	254,836	223,595	218,342	235,220	255,116	240,322	251,136	n.y.a.	4.5	-0.6
	S. adj.	"	238,612	252,291	222,876	228,632	226,414	243,862	237,854	221,682	n.y.a.	-6.8	4.9
	Trend r	"	236,573	234,525	232,891	232,170	232,121	232,084	231,769	231,137	n.y.a.	-0.3	0.3
M2. Chicken meat(b)	Orig.	"	41,301	39,063	42,313	41,225	36,353	40,682	38,811	35,589	n.y.a.	8.3	-4.0
	S. adj.	"	40,134	40,186	40,445	39,473	38,888	42,660	37,666	35,868	n.y.a.	-4.8	7.1
	Trend r	"	39,950	40,164	40,305	40,157	39,752	39,222	38,592	37,902	n.y.a.	1.8	1.5
M3. Cheese(c)	Orig.	"	18,857	16,808	9,215	11,009	16,386	24,954	n.y.a.	n.y.a.	n.y.a.	52.3	6.7
	S. adj.	"	22,666	27,611	18,537	18,528	19,719	19,323	n.y.a.	n.y.a.	n.y.a.	-2.0	4.4
	Trend r	"	22,493	22,205	21,436	20,503	19,637	18,799	n.y.a.	n.y.a.	n.y.a.	-4.3	8.0
M4. Butter(c)	Orig.	"	9,103	6,917	7,200	5,420	8,343	14,719	n.y.a.	n.y.a.	n.y.a.	76.4	5.8
	S. adj.	"	12,010	11,714	12,242	11,051	12,008	12,731	n.y.a.	n.y.a.	n.y.a.	6.0	7.0
	Trend r	"	12,114	11,957	11,882	11,886	11,952	12,029	n.y.a.	n.y.a.	n.y.a.	0.6	5.5
M5. Chocolate base confectionery	Orig.	"	7,417	8,621	9,145	8,840	10,725	10,527	9,790	r 10,391	9,357	-10.0	-2.0
	S. adj.	"	8,201	8,550	8,730	8,712	8,900	10,020	9,453	r 9,368	10,012	6.9	4.3
	Trend r	"	8,535	8,497	8,619	8,854	9,125	9,358	9,548	9,704	9,829	1.3	2.8
M6. Other confectionery	Orig.	"	4,707	5,722	6,292	6,014	7,296	7,284	6,595	r 7,068	5,723	-19.0	3.2
	S. adj.	"	5,773	5,748	5,923	5,657	5,975	6,442	6,327	r 5,900	6,087	3.2	5.6
	Trend r	"	5,753	5,744	5,806	5,919	6,033	6,106	6,149	6,166	6,161	-0.1	3.5
M7. Beer(d)	Orig.	mil litres	126	131	125	127	143	143	160	190	182	-4.3	1.7
	S. adj.	"	134	140	145	147	146	155	147	155	150	-3.4	3.1
	Trend r	"	144	143	143	145	148	150	151	152	152	0.2	2.5
M8. Tobacco and cigarettes(e)	Orig.	tonnes	1,382	2,164	2,171	2,419	2,395	2,186	2,049	2,200	1,836	16.5	-2.2
	S. adj.	"	1,615	1,861	2,094	2,238	2,124	2,188	2,309	1,957	2,057	5.1	2.8
	Trend r	"	1,857	1,923	2,015	2,106	2,163	2,177	2,159	2,127	2,086	2.0	9.3
M9. Man-made fibre woven fabric	Orig.	'000 sq m	14,435	15,945	17,325	16,825	17,362	18,601	16,164	r 15,428	13,696	-11.2	0.9
	S. adj.	"	15,127	15,340	15,798	16,035	16,437	17,350	15,745	r 14,671	14,826	1.1	2.0
	Trend r	"	15,343	15,516	15,823	16,123	16,260	16,141	15,867	15,525	15,157	-2.4	1.8
M10. Cotton Woven fabric(f)	Orig.	"	3,977	4,414	4,874	4,157	4,534	r 4,958	r 4,013	r 4,143	3,982	-3.9	6.5
	S. adj.	"	3,798	4,265	4,413	3,497	4,293	r 4,360	r 3,692	r 4,247	4,541	6.9	4.7
	Trend r	"	4,162	4,123	4,089	4,064	4,063	4,094	4,144	4,203	4,278	1.8	3.6
M11. Cotton yarn(f)	Orig.	tonnes	2,422	2,612	3,201	2,736	2,818	3,000	2,571	2,971	2,336	-21.4	0.2
	S. adj.	"	2,547	2,594	2,699	2,568	2,520	2,648	2,426	2,891	2,710	6.2	3.6
	Trend r	"	2,710	2,654	2,603	2,577	2,580	2,603	2,635	2,670	2,704	1.3	4.7
M12. Wool yarn(f)	Orig.	"	1,954	2,141	2,040	2,011	2,197	2,162	2,264	r 2,236	1,627	-27.2	14.5
	S. adj.	"	2,309	1,984	1,908	1,948	1,893	1,975	2,164	r 1,863	2,029	r 8.9	21.1
	Trend r	"	1,993	1,999	1,988	1,975	1,967	1,971	1,985	2,001	2,011	0.5	20.0
M13. Wool woven fabric(f)	Orig.	'000 sq m	636	735	629	636	885	665	768	r 775	552	-28.8	1.4
	S. adj.	"	725	716	623	634	774	639	771	r 623	649	4.1	8.0
	Trend r	"	695	693	690	687	687	688	685	679	673	-0.8	9.1
M14. Textile floor coverings	Orig. r	"	3,901	4,427	4,148	4,076	4,244	4,311	4,596	4,873	3,538	-27.4	1.2
	S. adj. r	"	4,343	4,132	4,063	4,124	3,720	3,823	4,325	4,212	3,735	-11.3	2.1
	Trend r	"	4,165	4,125	4,069	4,021	4,001	3,998	4,005	4,009	4,005	-0.1	3.5
M15. Unlaminated particle board(g)	Orig.	'000 cu m	64	70	73	66	78	79	73	77	61	-20.3	11.8
	S. adj.	"	71	68	69	68	69	71	68	64	78	22.1	23.3
	Trend r	"	64	67	68	69	69	69	69	70	71	1.2	16.9

For footnotes see end of tables

PRODUCTION STATISTICS, AUSTRALIA, DECEMBER 1994, PRELIMINARY

No. Item	Series	Unit	1994									Percentage changes between latest month shown and-	
			Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	prev. month	same month prev. year
M16. Automotive gasoline(h)	Orig.	megalitres	1,358	1,591	1,338	1,589	1,620	1,434	1,432	n.y.a.	n.y.a.	-0.1	-5.2
	S. adj.	"	1,432	1,553	1,334	1,526	1,630	1,430	1,439	n.y.a.	n.y.a.	0.6	-5.3
	Trend r	"	1,488	1,488	1,487	1,489	1,490	1,488	1,486	n.y.a.	n.y.a.	-0.1	0.9
M17. Fuel oil(h)	Orig.	"	192	175	198	196	187	216	181	n.y.a.	n.y.a.	16.2	10.0
	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	"	185	190	193	193	192	191	189	n.y.a.	n.y.a.	-1.0	-5.0
M18. Aviation turbine fuel(h)	Orig.	"	348	353	342	334	378	373	375	n.y.a.	n.y.a.	0.5	-2.6
	S. adj.	"	403	350	372	339	399	375	347	n.y.a.	n.y.a.	-7.5	-3.1
	Trend r	"	367	370	371	369	367	366	364	n.y.a.	n.y.a.	-0.5	2.2
M19. Plastics in primary forms(i)	Orig.	'000 tonnes	100.9	86.9	101.0	105.4	113.7	103.6	109.4	102.0	94.8	7.0	12.2
	S. adj.	"	105.5	86.7	103.9	104.9	102.4	101.7	99.7	95.4	107.2	12.4	17.9
	Trend r	"	103.0	104.0	103.9	103.1	102.2	101.4	101.0	100.9	100.9	0.0	7.4
M20. Portland cement	Orig.	"	515	625	616	659	661	642	614	615	602	2.2	-3.6
	S. adj.	"	541	581	590	641	625	645	572	546	616	12.9	-4.5
	Trend r	"	561	577	598	613	616	610	602	593	585	1.3	1.1
M21. Clay bricks	Orig.	million	143.8	166.9	161.3	155.5	174.9	163.0	159.1	166.7	146.9	-11.9	9.1
	S. adj.	"	150.9	150.9	154.9	155.4	155.6	156.6	157.8	154.6	164.6	6.5	12.0
	Trend r	"	152.6	152.9	153.5	154.4	155.5	156.6	157.7	158.8	159.8	0.6	6.3
M22. Basic iron, spiegeleisen and sponge iron	Orig.	'000 tonnes	628	652	646	643	649	643	644	627	590	5.9	0.2
	S. adj.	"	649	696	696	609	613	614	602	600	573	-4.4	0.1
	Trend r	"	658	664	659	645	628	612	599	588	581	-1.2	0.5
M23. Blooms and Slabs(j)	Orig.	"	667	681	658	661	680	681	697	653	626	-4.2	-1.9
	S. adj.	"	705	738	704	611	618	645	671	612	611	-0.1	1.2
	Trend r	"	697	695	683	665	648	637	630	624	622	0.4	0.4
M24. Cars and station wagons	Orig.	number	21,375	28,792	26,159	25,221	29,115	30,391	29,057	30,412	20,991	-31.0	0.6
	S. adj.	"	25,630	25,235	23,846	23,510	24,982	27,759	27,254	26,887	26,749	0.5	2.0
	Trend r	"	25,258	24,750	24,601	24,875	25,445	26,101	26,683	27,123	27,476	1.3	7.1
M25. Vehicles for goods and materials(k)	Orig.	"	1,949	2,401	2,074	2,119	2,385	2,461	2,451	2,621	1,875	-28.5	21.0
	S. adj.	"	2,251	2,132	1,800	2,049	2,001	2,330	2,015	2,606	2,335	-10.4	29.7
	Trend r	"	2,048	2,044	2,037	2,042	2,085	2,162	2,251	2,334	2,414	3.4	23.7
M26. Refrigerators, domestic	Orig.	'000	34.4	38.9	38.1	31.2	30.8	32.8	36.5	40.8	34.1	-16.3	8.3
	S. adj.	"	40.7	38.0	42.9	36.1	28.1	34.1	34.3	34.4	38.2	11.1	-3.6
	Trend r	"	41.0	39.8	37.9	35.9	34.4	33.8	33.9	34.4	35.0	1.7	-9.6
M27. Clothes washing machines, domestic	Orig.	"	24.0	25.2	29.4	30.2	30.0	30.4	26.3	30.4	21.0	-30.9	-17.0
	S. adj.	"	26.0	25.3	28.6	27.9	24.0	27.1	26.7	26.3	24.1	-8.2	-14.4
	Trend r	"	26.2	26.4	26.6	26.7	26.6	26.4	26.0	25.7	25.2	-1.8	-8.3
M28. Electric motors	Orig.	"	260	275	298	276	283	302	271	274	208	-24.3	-13.5
	S. adj.	"	278	278	298	281	275	253	262	240	234	2.7	9.8
	Trend r	"	274	280	283	280	273	264	254	245	237	3.3	3.9
M29. Electricity	Orig.	mil k Wh	12,509	13,785	13,921	14,603	14,749	13,540	13,457	13,243	12,673	-4.3	-5.8
	S. adj.	"	13,279	13,510	13,163	13,447	13,595	13,590	13,678	13,778	13,044	-5.3	-4.9
	Trend r	"	13,394	13,358	13,388	13,456	13,526	13,567	13,568	13,535	13,496	-0.3	-1.6
M30. Gas(l)	Orig.	terrajoules	46,147	55,011	57,799	62,450	63,896	57,784	53,231	50,354	39,319	-21.9	-9.9
	S. adj.	"	50,907	50,572	48,140	51,372	50,883	53,306	53,949	53,997	46,751	-13.4	-9.1
	Trend r	"	50,615	50,351	50,528	51,058	51,679	52,150	52,239	51,961	51,504	-0.9	2.3

For footnotes see end of tables

PRODUCTION STATISTICS, AUSTRALIA, SEPTEMBER QUARTER 1994, PRELIMINARY

No. Item	Series	Unit	1992		1993				1994			Percentage changes between latest quarter shown and-	
			Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	prev. quarter	same quarter prev. year
Q1. Undressed sawn Timber(m)(n)	Orig.	'000 cu m	795	766	709	831	856	850	830	928	914	-1.5	6.8
	S. adj.	"	771	754	772	803	829	838	902	897	885	-1.4	6.7
	Trend	"	761	763	777	797	826	857	882	895	897	0.2	8.6
Q2. Alumina(m)	Orig.	'000 tonnes	2,948	3,054	3,094	3,125	3,225	3,154	3,172	3,209	3,215	0.2	-0.3
	S. adj.	"	2,908	3,025	3,137	3,153	3,183	3,124	3,216	3,237	3,174	-2.0	0.3
	Trend	"	2,946	3,023	3,111	3,159	3,162	3,173	3,195	3,209	3,211	0.1	1.5
Q3. Zinc(m)(o)	Orig.	"	87	82	76	88	73	79	82	81	82	1.2	12.3
	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	"	85	84	81	79	79	79	80	81	82	0.1	3.6
Q4. Silver(m)	Orig.	tonnes	95	87	80	93	88	95	91	104	88	-15.4	0.0
	S. adj.	"	96	82	103	79	89	89	118	89	89	-0.5	-0.1
	Trend	"	95	93	89	87	89	96	101	97	92	-5.7	2.9
Q5. Copper(m)(o)	Orig.	'000 tonnes	84	82	71	75	84	79	79	87	86	-1.1	2.4
	S. adj.	"	79	78	77	78	79	76	85	90	81	-10.1	2.3
	Trend	"	77	78	78	77	77	80	84	86	86	0.3	11.1
Q6. Lead(m)(p)	Orig.	"	59	56	47	62	51	61	r 55	53	49	-7.5	3.9
	S. adj.	"	55	54	60	56	48	59	r 69	48	46	4.9	-3.9
	Trend	"	56	57	56	54	55	59	59	54	48	11.7	-12.8
Q7. Tin(m)(o)	Orig.	tonnes	75	37	73	73	13	63	18	92	70	23.9	438.5
	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	"	59	63	61	56	44	38	50	64	69	6.7	58.0
Q8. Gold(m)(q)	Orig.	kg	75,608	69,505	69,676	73,399	r 80,212	73,549	74,878	78,697	77,846	-1.1	2.9
	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	"	72,573	71,147	71,467	73,623	75,774	76,412	76,273	76,611	77,268	0.9	2.0

(a) Includes beef, veal, mutton, lamb, pigmeat and buffalo meat produced in the Northern Territory. (b) Chicken meat is shown in dressed weight of whole birds pieces and giblets. (c) Source: Australian Dairy Corporation. (d) Includes ale and stout. Excludes beverages with alcohol content of less than 1.15 per cent. (e) Source: Australian Tobacco Marketing Committee. (f) Includes mixtures predominantly of the fibre named. (g) Particle boards and similar boards of wood or other ligneous material. Includes boards for subsequent conversion to other purposes. Excludes laminated. (h) Produced by Australian refineries from imported and indigenous petroleum. Source: ABARE. (i) Includes liquid, paste, powder, granules, flakes, blocks, irregular shapes, lumps and similar forms. (j) From continuous casting. (k) Includes utilities, panel vans and prime movers for semi-trailers. (l) Available for issue through mains. Includes natural gas. (m) Source: ABARE. (n) Expressed in terms of green off saw volumes. (o) Primary origin only. (p) includes lead content of lead from primary sources. (q) 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.

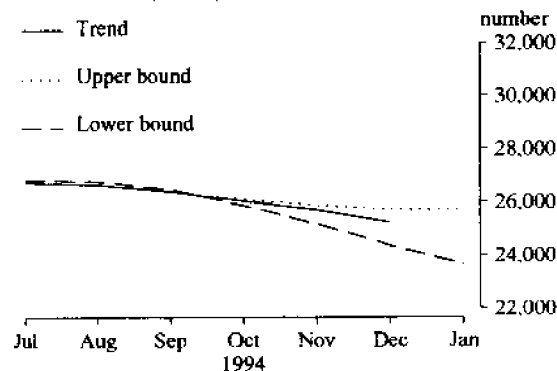
The graph below presents the effect of two possible scenarios on the current and previous trend estimates:

Upper bound The December seasonally adjusted estimate of the production of clothes washing machines, is higher than the November seasonally adjusted estimate by 10%.

Lower bound The December seasonally adjusted estimate of the production of clothes washing machines, is lower than the November seasonally adjusted estimate by 10%.

The percentage change of 10% was chosen because the average monthly absolute percentage change for this series since January 1965 has been 10%.

M27. CLOTHES WASHING MACHINES, DOMESTIC
(Average movement 10%)



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 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 enterprises with fewer than four persons employed or 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 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 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*, and data on tobacco and cigarettes produced are sourced from the Australian Tobacco Marketing Committee.

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, so differences may occur between the general tendency (if there is one) in these items and changes in the quarterly indexes of industrial production.

Seasonally adjusted and trend estimates

10. Seasonally adjusted statistics are shown for all the data items contained in this publication. 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 quarterly

Mining Industry, Australia, issued annually (8402.0)

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

Manufacturing Industry, Australia, issued annually (8221.0)

Stocks, Manufactures Sales and Expected Sales, Australia - issued annually (5629.0)

Quarterly Indexes of Industrial Production, Australia (8125.0)

Foreign Trade, Australia: FASTTRACCS Service - Hardcopy Reports.
Please call (03) 6157755

Additional manufacturing production data are collected by the ABS through user funded surveys and are available to users as a special data service. For further information please call Rod Smith on (03) 6157635

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 *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.

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

