

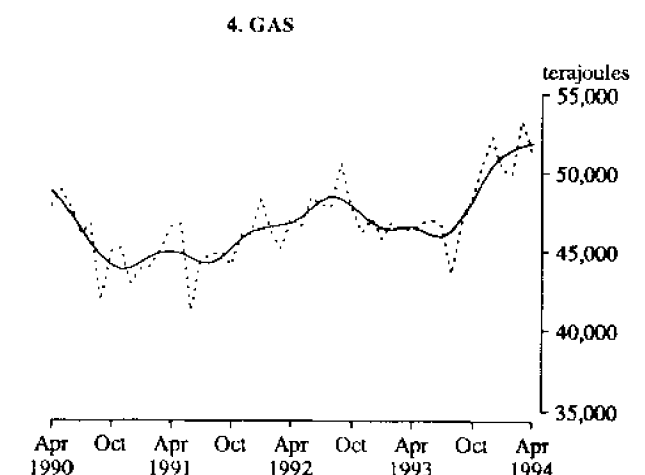
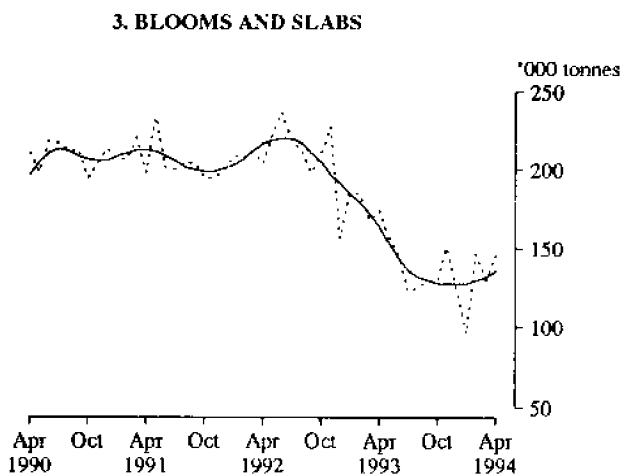
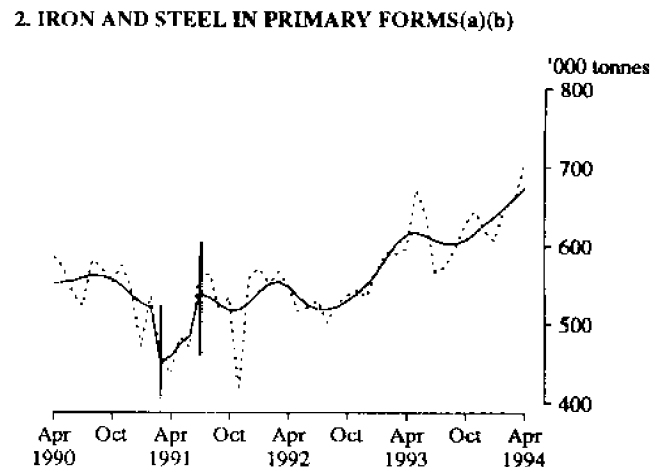
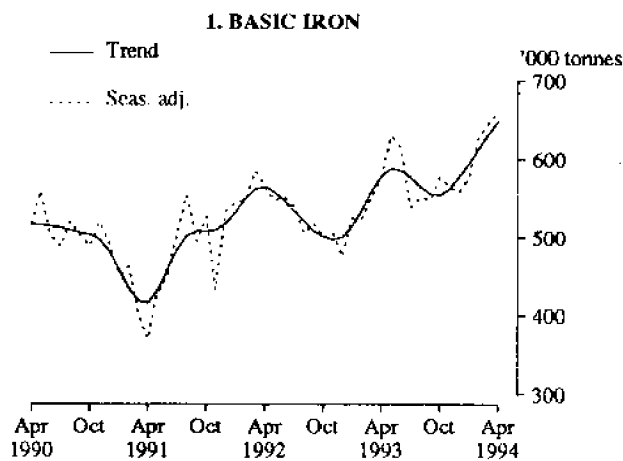
**MANUFACTURING PRODUCTION, AUSTRALIA  
APRIL 1994, PRELIMINARY**

**NOTES**

This publication presents preliminary monthly estimates for selected major indicators of manufacturing production for Australia. The statistics are collected from all the relevant manufacturing establishments other than single establishment manufacturing enterprises with fewer than four persons employed and are part of a much broader range of items published quarterly. For details of these see "Related publications", in the Explanatory Notes at the back of this publication. The next issue will be released on 28 June 1994.

**IAN CASTLES**  
Australian Statistician

**PRODUCTION STATISTICS, AUSTRALIA : TRENDS**



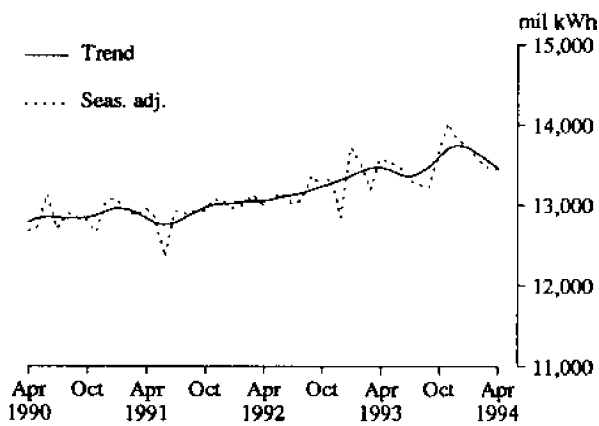
For footnotes see end of graph.

**INQUIRIES**

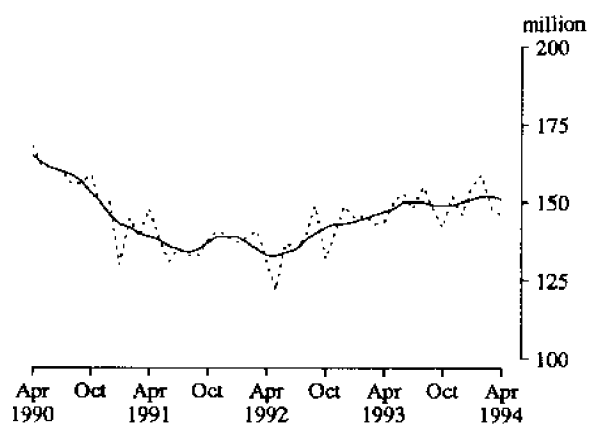
- for further information about statistics in this publication and the availability of related unpublished statistics, contact Rod Smith on Melbourne (03) 615 7635 or any ABS office.
- for information about other ABS statistics and services please refer to the back page of this publication.

## PRODUCTION STATISTICS, AUSTRALIA : TRENDS

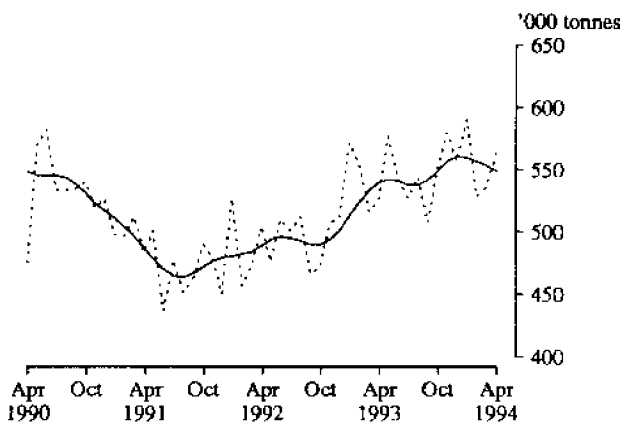
## 5. ELECTRICITY



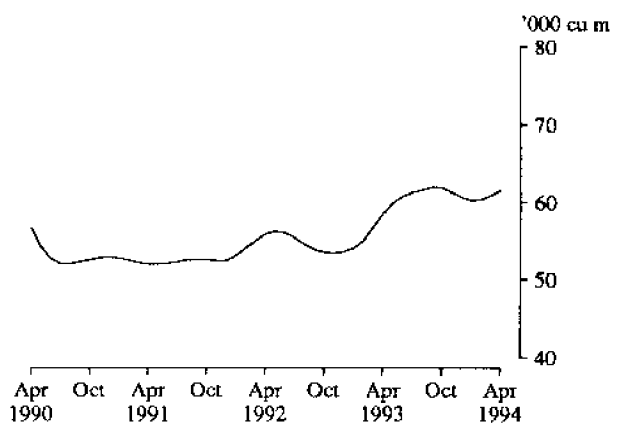
## 6. BRICKS, CLAY



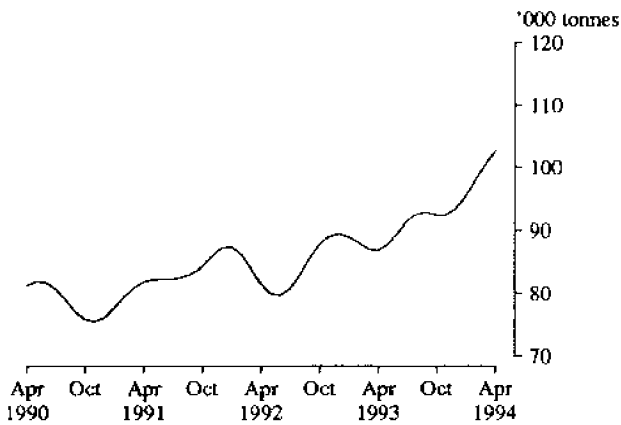
## 7. CEMENT, PORTLAND



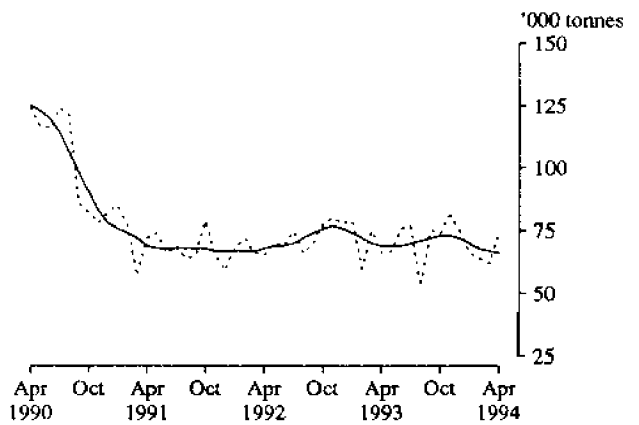
## 8. PARTICLE BOARD AND SIMILAR BOARD(c)



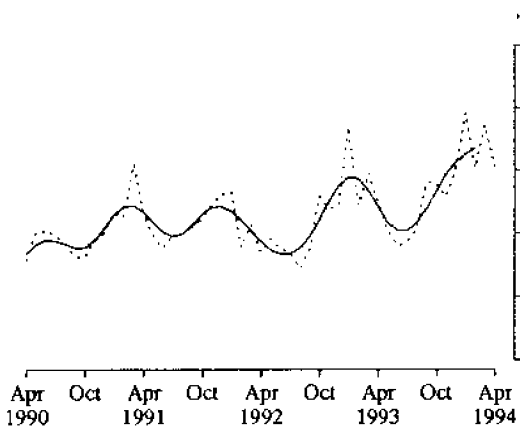
## 9. PLASTICS IN PRIMARY FORMS(c)



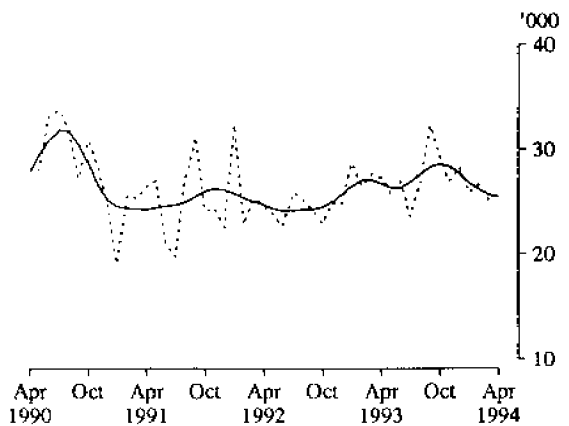
## 10. SULPHURIC ACID; OLEUM



## 11. REFRIGERATORS, DOMESTIC(d)

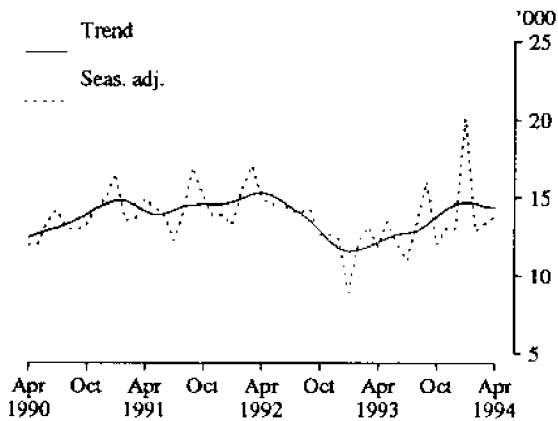


## 12. CLOTHES WASHING MACHINES, DOMESTIC

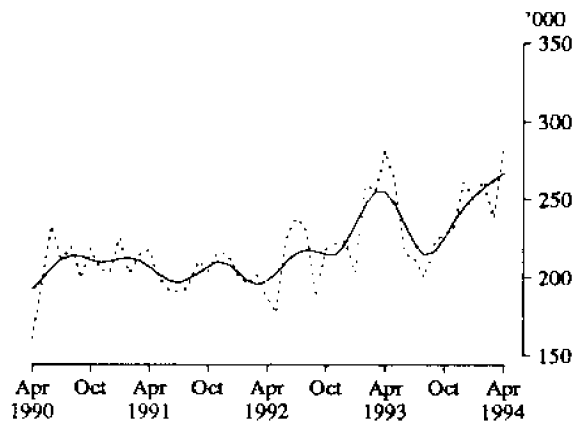


## PRODUCTION STATISTICS, AUSTRALIA : TRENDS

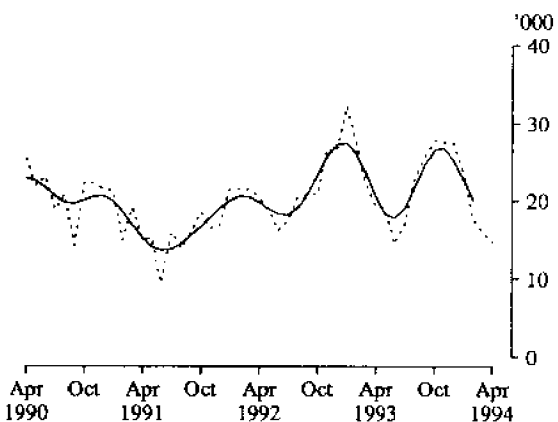
13. TELEVISION SETS



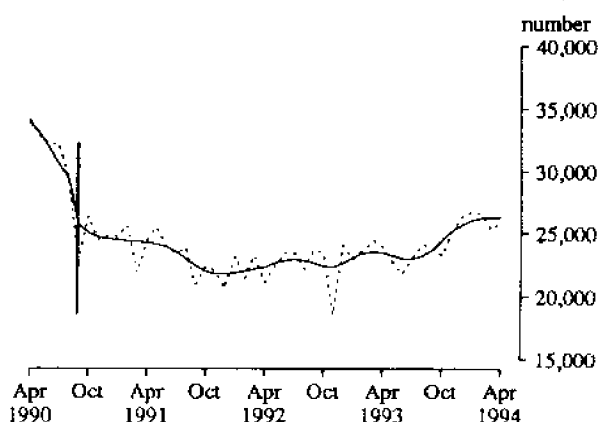
14. ELECTRIC MOTORS



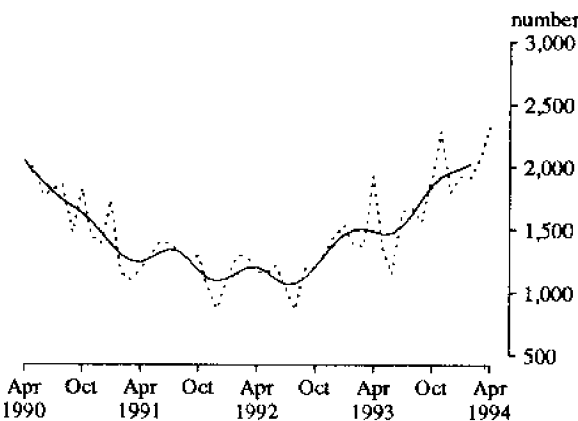
15. LAWN MOWERS, PETROL-ROTARY TYPE(d)



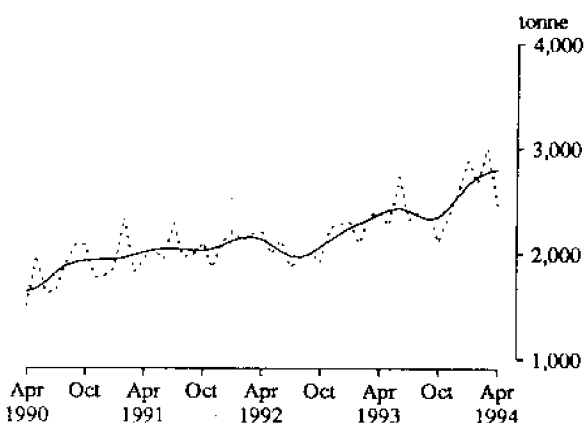
16. MOTOR VEHICLES (CARS AND STATION WAGONS)(e)



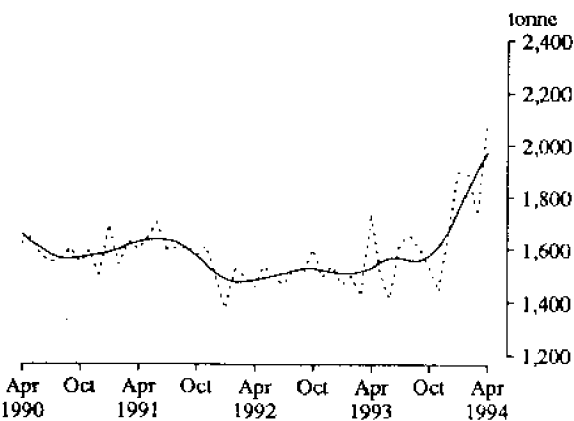
17. MOTOR VEHICLES FOR GOODS AND MATERIALS(d)



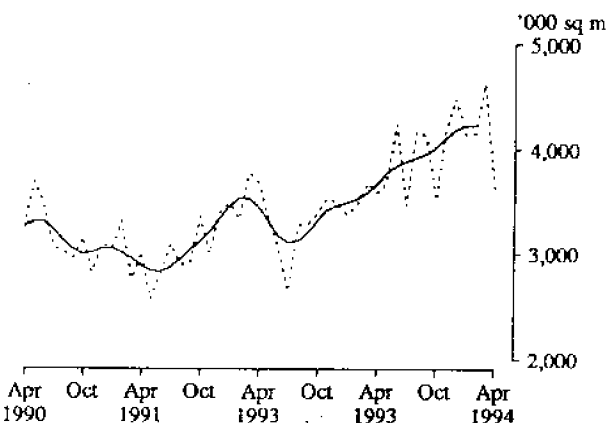
18. YARN, COTTON



19. YARN, WOOL

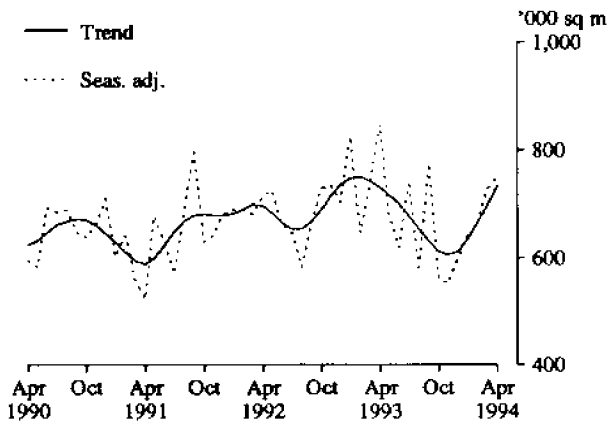


20. WOVEN FABRIC, COTTON (INCL. TOWELLING)(d)

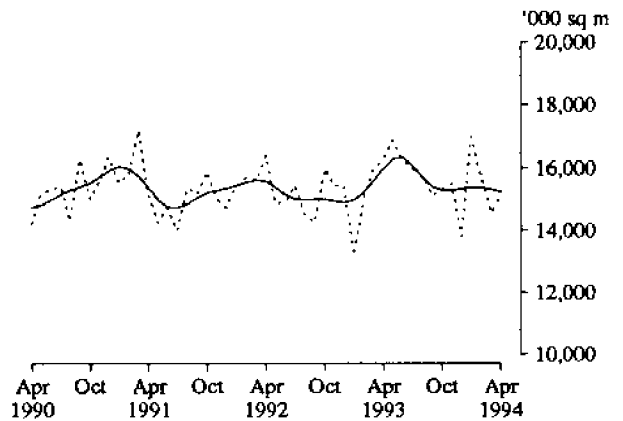


## PRODUCTION STATISTICS, AUSTRALIA : TRENDS

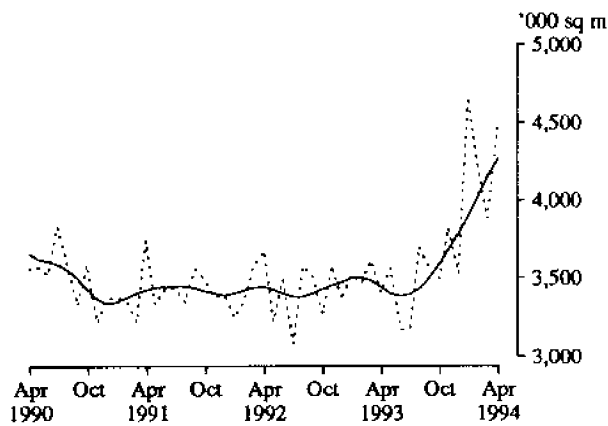
21. WOVEN FABRIC, WOOL(INCL. BLANKETING)



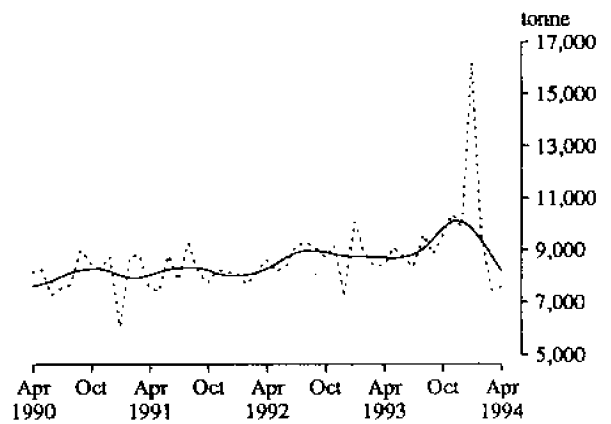
22. WOVEN FABRIC, MAN-MADE FIBRE



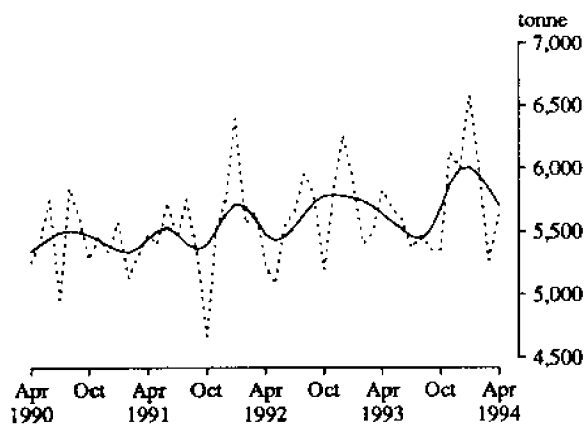
23. TEXTILE FLOOR COVERINGS



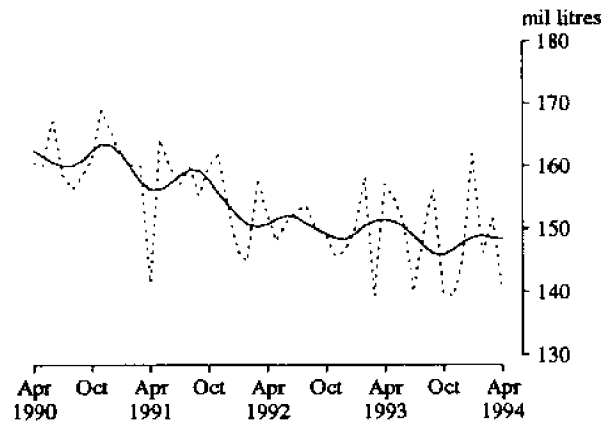
24. CONFECTIONERY, CHOCOLATE BASED



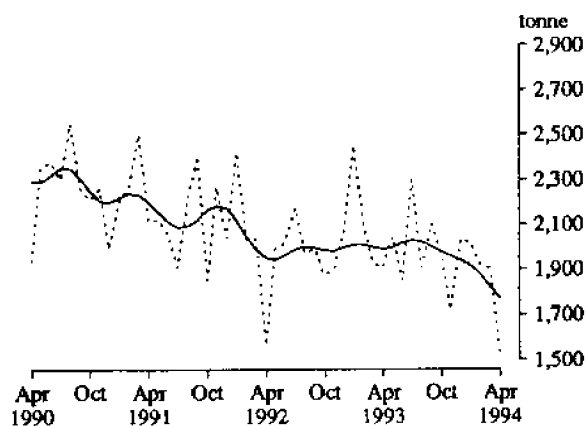
25. CONFECTIONERY, OTHER



26. BEER



27. TOBACCO AND CIGARETTES



(a) There is a drop in the level of the trend from March 1991 due to plant maintenance. (b) There is a break in the series as data after July 1991 excludes a small proportion of total production due to the withdrawal of consent for the ABS to release the information. (c) Seasonally adjusted estimates will not be published until the next issue of data is available to provide more reliable seasonal figures. (d) Trend estimates are not available for the last two periods. (e) There is

## PRODUCTION STATISTICS, AUSTRALIA, APRIL 1994, PRELIMINARY

No. Item	Series	Unit										Percentage	
												changes between-	
			1993					1994				Mar. 94	Apr. 93
Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Mar. 94 and Apr. 94	Apr. 93 and Apr. 94			
1. Basic iron, spiegeleisen and sponge iron	Orig.	'000 tonnes	588	574	613	600	591	582	556	607	628	3.5	14.2
	S. adj.	"	552	550	577	566	559	575	628	646	661	2.2	14.4
	Trend r	"	566	557	555	563	578	595	614	633	649	2.6	11.9
2. Iron and steel in ingots or other primary forms(a)	Orig.	"	613	625	654	638	638	613	590	647	667	3.1	18.7
	S. adj.	"	574	597	628	645	620	607	651	661	705	6.8	18.0
	Trend r	"	603	603	607	617	628	638	649	662	674	1.8	9.6
3. Blooms and slabs(b)	Orig.	"	138	139	137	137	126	92	129	135	143	5.9	-16.4
	S. adj.	"	126	130	130	151	124	96	147	130	146	12.1	-16.1
	Trend r	"	132	130	128	128	128	128	130	132	136	2.3	-17.3
4. Gas(c)	Orig.	terajoules	54,634	51,367	48,073	46,251	43,736	39,975	40,478	47,002	46,223	-1.7	10.8
	S. adj.	"	43,617	46,719	48,320	50,423	52,309	50,195	49,924	53,310	51,396	-3.6	10.7
	Trend r	"	46,330	47,112	48,215	49,411	50,426	51,096	51,497	51,762	51,919	0.3	11.5
5. Electricity	Orig.	mil kWh	14,354	13,254	13,464	13,302	13,456	13,171	12,517	13,489	12,641	-6.3	-1.4
	S. adj.	"	13,252	13,216	13,657	14,028	13,814	13,722	13,570	13,478	13,443	-0.3	-1.1
	Trend r	"	13,395	13,482	13,600	13,705	13,746	13,717	13,646	13,566	13,470	-0.7	-0.1
6. Bricks, clay	Orig.	million	166	156	147	161	r 135	98	150	r 170	141	-17.1	0.0
	S. adj.	"	155	148	142	152	r 146	155	159	r 148	146	-1.5	1.6
	Trend r	"	150	149	149	149	150	151	152	152	151	-0.4	2.6
7. Cement, Portland	Orig.	'000 tonnes	572	518	594	r 644	r 539	407	497	r 564	542	-3.9	6.7
	S. adj.	"	544	508	552	r 580	r 557	591	529	r 536	564	5.2	7.1
	Trend r	"	538	542	549	557	561	560	557	554	549	-0.9	1.5
8. Particle board and similar boards(d)	Orig.	'000 cu m	68	67	68	69	r 55	32	57	67	64	-4.5	10.3
	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	"	62	62	62	61	61	60	60	61	62	0.9	5.2
9. Plastics in primary forms(e)	Orig. r	'000 tonnes	98.2	98.1	99.2	94.9	83.9	82.2	95.4	105.1	100.2	-4.6	23.1
	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	"	92.7	92.8	92.4	92.4	93.4	95.5	98.1	100.5	102.7	2.2	18.2
10. Sulphuric acid; oleum	Orig.	"	42	61	67	76	83	82	71	72	75	4.2	10.3
	S. adj.	"	53	75	74	81	75	66	64	62	75	21.8	13.6
	Trend r	"	71	72	73	73	72	70	68	67	66	-0.8	-4.3
11. Refrigerators, domestic	Orig.	'000	32.5	41.8	38.8	41.6	37.2	35.8	41.6	49.4	34.4	-30.4	9.0
	S. adj.	"	30.8	38.2	38.0	35.8	39.8	49.3	40.4	47.4	40.7	-14.0	16.8
	Trend r	"	31.9	34.1	36.8	39.4	41.3	42.7	43.7	(f)	(f)	n.a.	n.a.
12. Clothes washing machines, domestic	Orig.	"	32.3	34.5	29.6	29.9	r 25.3	11.8	26.4	29.4	24.0	-18.3	-6.6
	S. adj.	"	26.8	32.3	29.1	27.0	r 28.3	25.9	26.7	25.1	26.0	3.5	-4.8
	Trend r	"	27.6	28.3	28.6	28.4	27.7	26.8	26.2	25.7	25.5	-0.7	-4.4
13. Television sets(g)	Orig.	"	15.7	17.4	13.8	14.7	12.1	5.4	13.1	15.6	12.1	-22.6	10.1
	S. adj.	"	13.4	16.1	12.0	13.1	13.0	20.1	12.9	13.4	13.8	3.2	16.1
	Trend r	"	12.9	13.3	13.8	14.3	14.6	14.7	14.6	14.5	14.4	-0.5	18.3
14. Electric motors	Orig.	"	200	262	252	254	r 238	161	256	279	255	-8.5	-2.3
	S. adj.	"	200	223	228	231	r 262	250	262	239	285	19.3	1.3
	Trend r	"	215	217	225	236	245	252	258	263	267	1.7	4.9

For footnotes see end of table

## PRODUCTION STATISTICS, AUSTRALIA, APRIL 1994, PRELIMINARY

No. Item	Series	Unit	1993					1994				Percentage changes between—	
			Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Mar. 94 and Apr. 94	Apr. 93 and Apr. 94
15. Lawn mowers petrol-rotary type	Orig.	'000	24.2	39.6	42.7	42.3	31.8	18.2	19.3	r 16.2	8.0	-50.6	-25.1
	S. adj.	"	22.9	25.6	27.8	27.6	27.4	23.9	17.8	r 15.9	14.7	-7.2	-23.8
	Trend r	"	21.8	24.6	26.5	26.8	25.3	22.8	20.1	(f)	(f)	n.a.	n.a.
Motor vehicles—													
16. Cars and station wagons	Orig.	number	27,637	26,918	24,592	27,982	21,120	11,978	26,012	r 29,548	21,654	-26.7	3.0
	S. adj.	"	24,217	23,918	23,291	25,090	26,410	26,792	26,644	r 25,328	26,024	2.7	8.3
	Trend r	"	23,247	23,795	24,510	25,183	25,693	26,051	26,258	26,337	26,331	0.0	12.0
17. Vehicles for goods and materials(h)	Orig.	"	1,877	1,752	2,223	2,172	1,549	803	1,857	2,358	1,951	-17.3	14.8
	S. adj.	"	1,672	1,557	1,901	2,287	1,794	1,924	1,914	2,066	2,316	12.1	20.3
	Trend r	"	1,622	1,739	1,848	1,922	1,955	1,988	2,029	(f)	(f)	n.a.	n.a.
Yarn(i)—													
18. Cotton	Orig.	tonne	2,539	2,618	2,478	2,357	2,306	1,583	r 2,550	3,081	2,414	-21.6	3.4
	S. adj.	"	2,398	2,386	2,116	2,332	2,568	2,883	r 2,672	3,011	2,464	-18.2	3.0
	Trend r	"	2,361	2,327	2,350	2,431	2,547	2,655	2,731	2,774	2,799	0.9	17.8
19. Wool	Orig.	"	1,819	1,798	1,617	1,694	1,421	1,113	r 1,845	r 1,899	1,744	-8.2	17.4
	S. adj.	"	1,652	1,605	1,532	1,440	1,653	1,896	r 1,886	r 1,734	2,091	20.6	20.2
	Trend r	"	1,558	1,558	1,574	1,612	1,669	1,747	1,830	1,907	1,975	3.6	29.1
Woven fabric(i)—													
20. Cotton (incl. towelling)	Orig.	'000 sq m	4,237	4,501	4,128	4,020	3,779	1,619	4,180	r 4,797	3,857	-19.6	0.0
	S. adj.	"	4,175	4,128	3,515	4,178	4,491	4,143	4,157	r 4,630	3,601	-22.2	0.3
	Trend r	"	3,922	3,961	4,029	4,112	4,189	4,226	4,223	(f)	(f)	n.a.	n.a.
21. Wool (incl. blanketing)	Orig.	"	633	806	601	652	544	369	725	832	625	-24.9	-13.0
	S. adj.	"	576	777	562	552	599	641	661	728	751	3.1	-11.6
	Trend r	"	655	631	613	607	613	635	666	696	735	5.6	0.5
22. Man-made fibre	Orig.	"	16,157	15,915	15,989	16,237	13,662	r 9,858	r 16,025	r 16,021	14,228	-11.2	-8.3
	S. adj.	"	15,707	15,104	15,307	15,503	13,812	r 16,989	r 15,717	r 14,561	15,100	3.7	-7.2
	Trend r	"	15,689	15,399	15,261	15,263	15,328	15,373	15,367	15,318	15,229	-0.6	-4.8
23. Textile floor coverings	Orig.	"	4,036	3,978	3,786	4,361	3,429	2,513	r 4,068	r 4,056	3,817	-5.9	28.9
	S. adj.	"	3,700	3,549	3,493	3,822	3,525	4,665	r 4,221	r 3,884	4,495	15.7	31.9
	Trend r	"	3,438	3,507	3,592	3,684	3,785	3,898	4,028	4,156	4,269	2.7	23.9
Confectionery—													
24. Chocolate base	Orig.	tonne	10,643	9,304	10,379	10,504	9,547	8,390	r 9,269	8,755	7,220	-17.5	-11.7
	S. adj.	"	9,574	8,836	9,564	10,368	9,858	16,212	r 9,388	7,492	7,611	1.6	-9.0
	Trend r	"	9,042	9,396	9,809	10,095	10,106	9,819	9,338	8,776	8,165	-7.0	-6.2
25. Other	Orig.	"	6,295	6,070	6,216	6,990	5,548	3,342	5,583	5,764	4,633	-19.6	-3.7
	S. adj.	"	5,466	5,351	5,357	6,133	6,001	6,578	5,989	5,270	5,635	6.9	-3.4
	Trend r	"	5,441	5,521	5,692	5,878	5,994	6,010	5,943	5,836	5,706	-2.2	1.2
26. Beer(j)	Orig.	mil litres	140	143	151	177	184	151	134	r 162	132	-18.4	-14.5
	S. adj.	"	150	156	140	139	145	162	146	r 152	140	-7.5	-10.8
	Trend r	"	147	146	146	147	148	149	149	149	149	-0.1	-1.9
27. Tobacco and cigarettes(k)	Orig.	tonne	2,082	2,035	1,810	1,988	1,877	1,001	2,070	2,240	1,382	-38.3	-23.6
	S. adj.	"	1,908	2,105	1,963	1,718	2,035	2,014	1,919	1,900	1,531	-19.5	-19.7
	Trend r	"	2,023	2,001	1,978	1,959	1,940	1,917	1,878	1,821	1,770	-2.8	-11.0

(a) Includes ingots, puddled bars, pilings, blocks or lumps and steel in the molten state. (b) From rolling and forging of iron and steel (primary mills output). (c) Available for issue through mains. Includes natural gas. (d) Particle boards and similar boards of wood or other ligneous material. Includes boards for subsequent conversion to other purposes. Excludes laminated. Seasonally adjusted estimates will not be published until a longer time span of data are available to provide more reliable seasonal factors. (e) Includes liquid, paste, powder, granules, flakes, blocks, irregular shapes, lumps and similar forms. Seasonally adjusted estimates will not be published until a longer time span of data are available to provide more reliable seasonal factors. (f) See paragraph 9 of Explanatory Notes. (g) Excludes combination with radio etc. (h) Includes utilities, panel vans and prime movers for semi-trailers. (i) Includes mixtures predominantly of the fibre named. (j) Includes ale and stout. Excludes beverages with alcohol content of less than 1.15 per cent. (k) Source: Australian Tobacco Marketing Advisory Committee.

## EXPLANATORY NOTES

**Introduction**

Preliminary estimates for April 1994 for certain major indicators of production are shown in the table on page 5. Production statistics for April 1994 for a more extensive range of commodities will be published later in the series of ten *Manufacturing Production Bulletins* (8357.0 to 8363.0 and 8367.0 to 8369.0).

**Scope and coverage**

2. Production statistics 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.

**Comparability with other estimates**

3. 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.

4. The production statistics published in the series of ten *Manufacturing Production Bulletins* (8357.0 to 8363.0 and 8367.0 to 8369.0) 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. The comment applies with still greater force to the preliminary estimates for the major indicators of production shown in this publication.

**Seasonally adjusted and trend estimates**

5. Seasonally adjusted statistics are shown for all but two of 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.

6. 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.

7. 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.

8. 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.

9. Because of the highly irregular nature of some production series it is not possible to discern with reasonable confidence the current direction of the trend at the end of these series. For such highly irregular series the ABS does not provide the last two trend estimates.

10. Users may wish to refer to the ABS Information Papers *A Guide to Smoothing Time Series — Estimates of 'Trend'* (1316.0) and *Time Series Decomposition — An Overview* (1317.0) for more detailed information on smoothing of seasonally adjusted time series data.

**Related publications**

11. Other ABS publications which may be of interest are:

*Manufacturing Production, Australia, Household Appliances and Electrical Equipment* (8357.0) — issued quarterly

*Manufacturing Production, Australia, Clothing and Footwear* (8358.0) — issued quarterly

*Manufacturing Production, Australia, Food, Drink, Tobacco, Stock and Poultry Food* (8359.0) — issued quarterly

*Manufacturing Production, Australia, Fibres, Yarns, Fabrics, Bedding and Floor Coverings*, (8360.0) — issued quarterly

*Manufacturing Production, Australia, Building Materials and Fittings* (8361.0) — issued quarterly

*Manufacturing Production, Australia, Plastics, Rubber, Paints, Detergents and Industrial Chemicals* (8362.0) — issued quarterly

*Manufacturing Production, Australia, Transport Equipment* (8363.0) — issued quarterly

*Manufacturing Production, Australia, Metal Products* (8367.0) — issued quarterly

*Manufacturing Production, Australia, Energy Products* (8368.0) — issued quarterly

*Manufacturing Production, Australia, Wood and Wood Products* (8369.0) — issued quarterly

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

*Unpublished production data* is also available from the ABS Sydney office. Please contact Colin Nicholson on (02) 268 4282.

12. 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



## 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).

### Information Consultancy Service

Information tailored to special needs of clients can be obtained from the Information Consultancy Service available at ABS Offices (see Information Inquiries below for contact details).

### National *Dial-a-Statistic* Line

0055 86 400

This number gives you 24 hour access, 365 days a year, for a range of statistics.

### Electronic Data Services

A wide range of our data is available on electronic media. Selections of the most frequently requested statistics are available, updated daily, on DISCOVERY (Key \*656#). The ABS PC TELESTATS service delivers major economic indicator main features ready to download into personal computers on the day of release. The PC AUSSTATS service enables on-line access to a data base of thousands of up-to-date time series. Selected datasets are also available on diskette or CD-ROM. For more details on electronic data services available, contact Information Services in any of the ABS Offices (see Information Inquiries below for contact details).

### Bookshops and Subscriptions

There are over 400 titles of various publications available from ABS Bookshops in all ABS Offices (see below Bookshop Sales for contact details). The ABS also provides a subscription service through which nominated publications are provided by mail on a regular basis at no additional cost (telephone Publications Subscription Service toll free on 008 02 0608 Australia wide).

## Sales and Inquiries

Regional Offices		Information Inquiries	Bookshop Sales
SYDNEY	(02)	268 4611	268 4620
MELBOURNE	(03)	615 7000	615 7829
BRISBANE	(07)	222 6351	222 6350
PERTH	(09)	323 5140	323 5307
ADELAIDE	(08)	237 7100	237 7582
HOBART	(002)	205 800	205 800
CANBERRA	(06)	207 0326	207 0326
DARWIN	(089)	432 111	432 111
<b>National Office</b>			
ACT	(06)	252 6007	008 020 608



Information Services, ABS, PO Box 10, Belconnen ACT 2616, or any ABS State office.

