

MANUFACTURING PRODUCTION, AUSTRALIA FEBRUARY 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 27 April 1994.

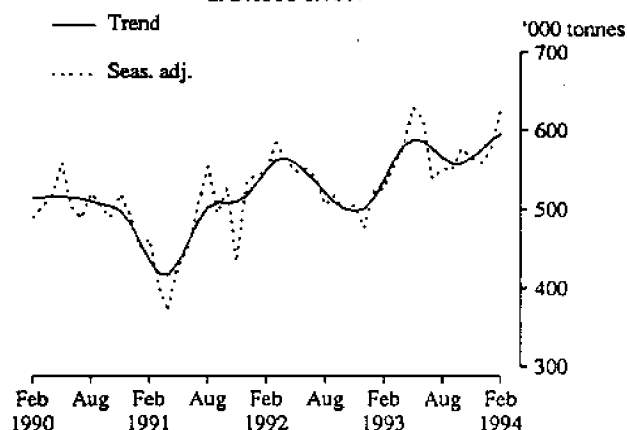
NOTES ON FEBRUARY STATISTICS

In the January 1994 issue of this publication trend estimates of the production of Textile Floor Coverings and Chocolate Based Confectionery were calculated to discount extraordinary movements in the January 1994 seasonally adjusted estimates in the expectation that production levels would quickly return to more normal levels. For both these commodities production levels for February 1993 have returned to more normal levels, and the trend estimates published continue to discount the significant rise and fall observed in the seasonally adjusted data.

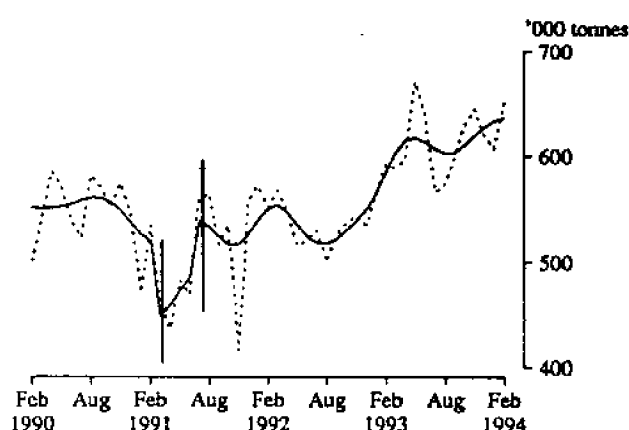
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PRODUCTION STATISTICS, AUSTRALIA : TRENDS

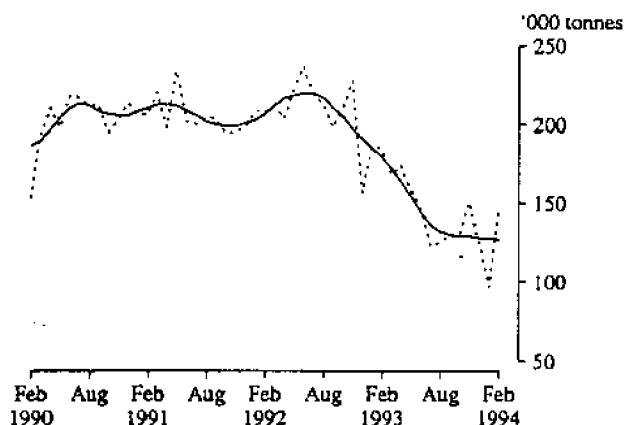
1. BASIC IRON



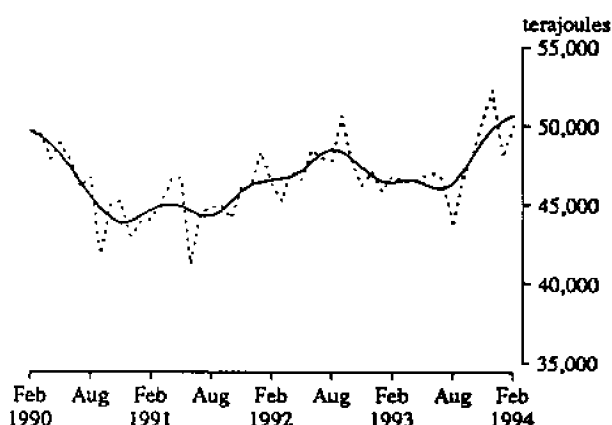
2. IRON AND STEEL IN PRIMARY FORMS(a)(b)



3. BLOOMS AND SLABS



4. GAS



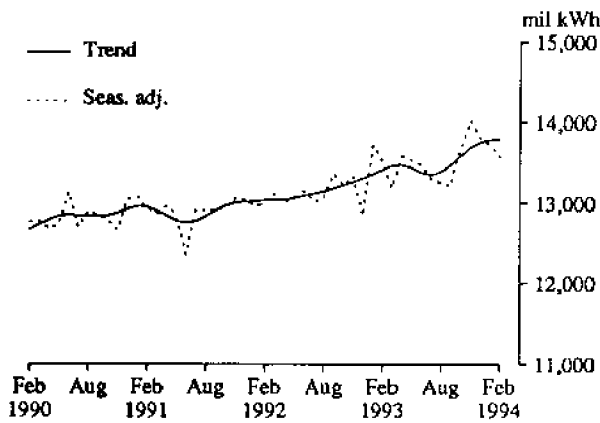
For footnotes see end of graph.

INQUIRIES

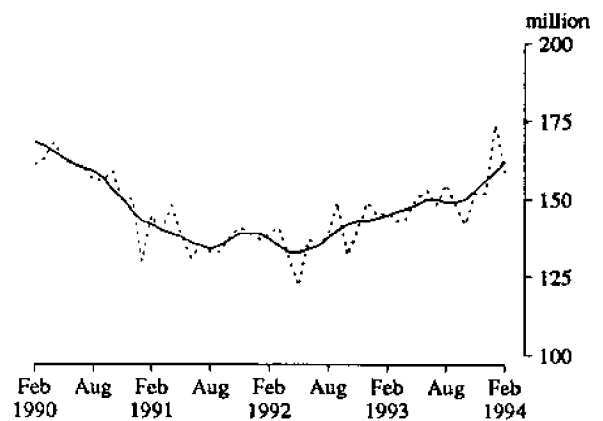
- for further information about statistics in this publication and the availability of related unpublished statistics, contact Rod Smith on Melbourne (03) 615 7635 or any ABS office.
- for information about other ABS statistics and services please refer to the back page of this publication.

PRODUCTION STATISTICS, AUSTRALIA : TRENDS

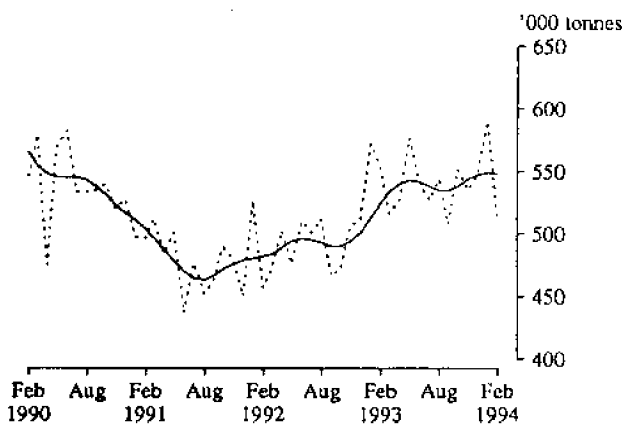
5. ELECTRICITY



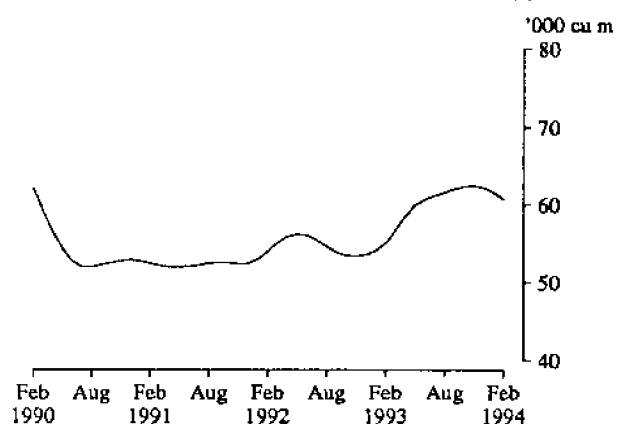
6. BRICKS, CLAY



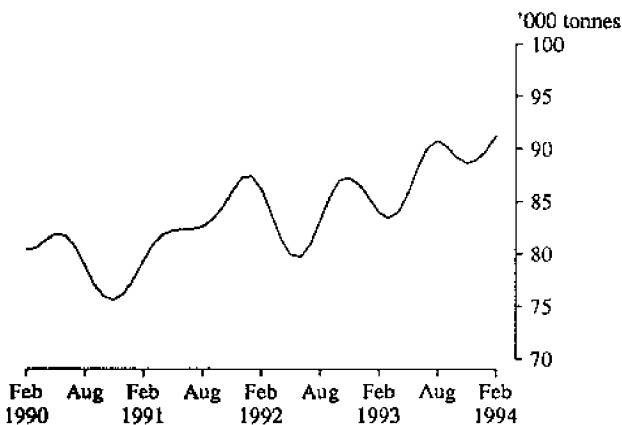
7. CEMENT, PORTLAND



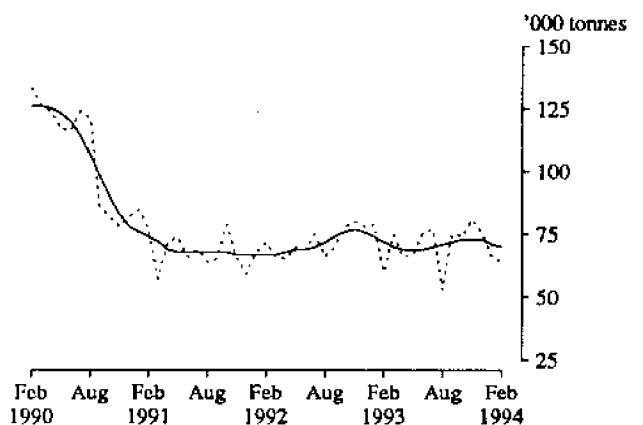
8. PARTICLE BOARD AND SIMILAR BOARD(c)



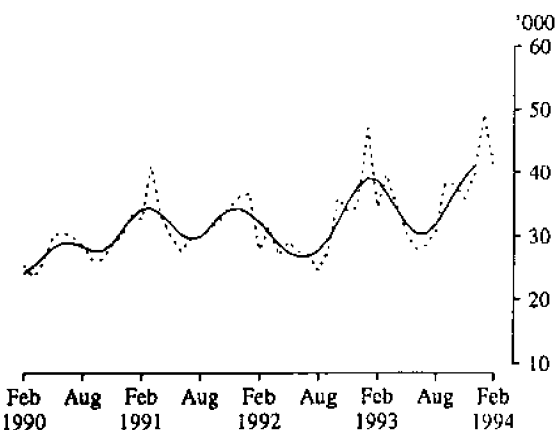
9. PLASTICS IN PRIMARY FORMS(c)



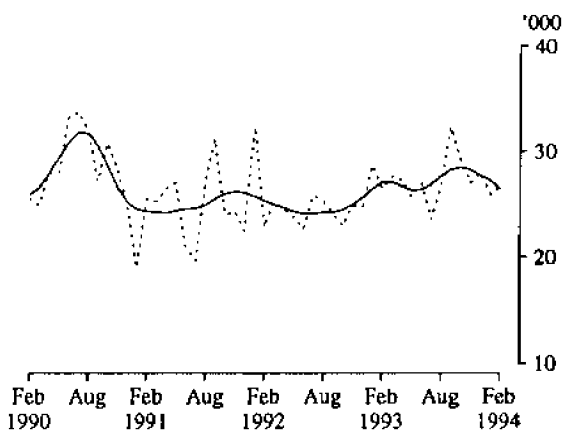
10. SULPHURIC ACID; OLEUM



11. REFRIGERATORS, DOMESTIC(d)

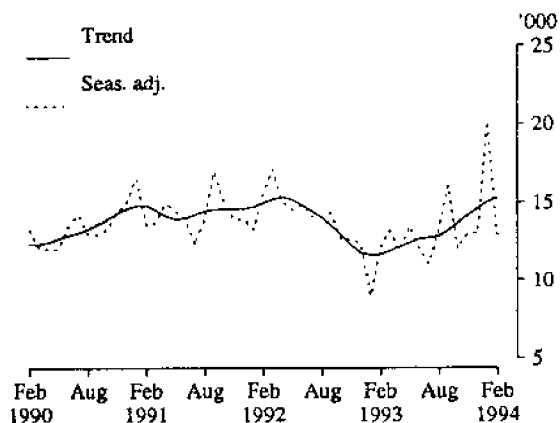


12. CLOTHES WASHING MACHINES, DOMESTIC

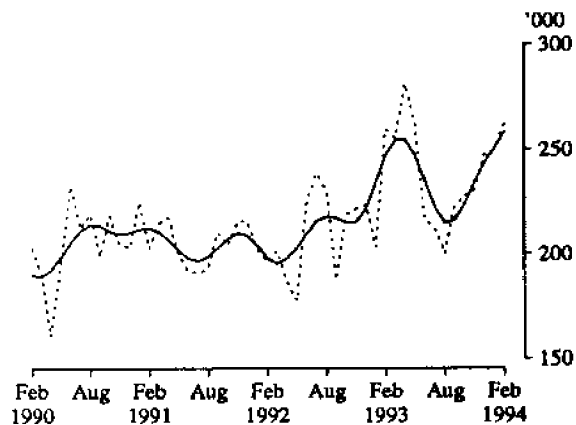


PRODUCTION STATISTICS, AUSTRALIA : TRENDS

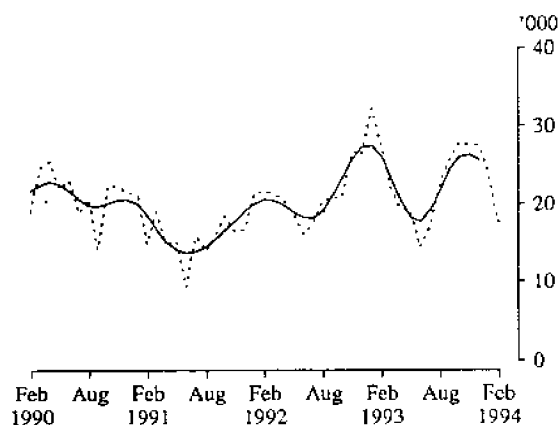
13. TELEVISION SETS



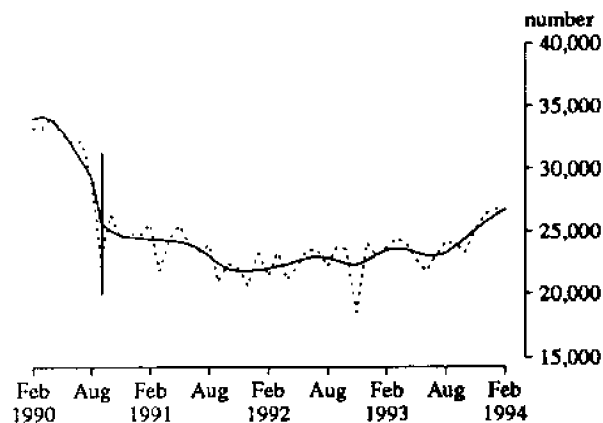
14. ELECTRIC MOTORS



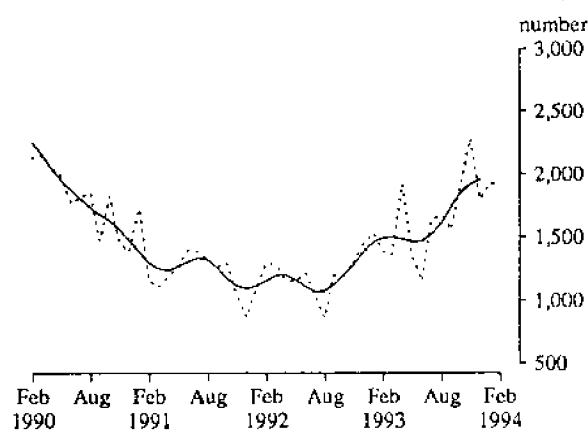
15. LAWN MOWERS, PETROL-ROTARY TYPE(d)



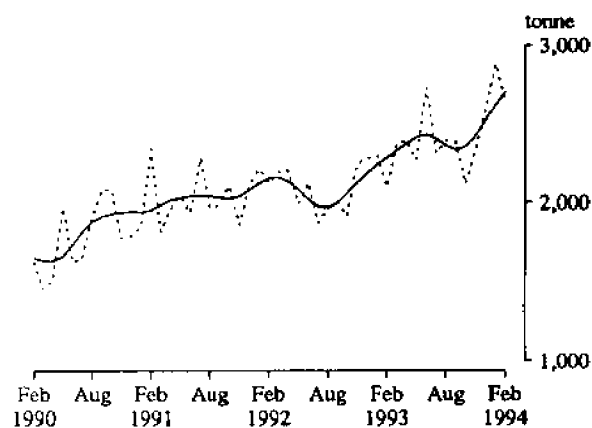
16. MOTOR VEHICLES (CARS AND STATION WAGONS)(e)



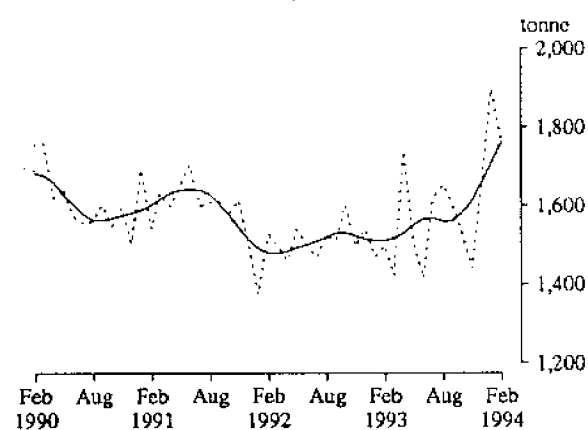
17. MOTOR VEHICLES FOR GOODS AND MATERIALS(d)



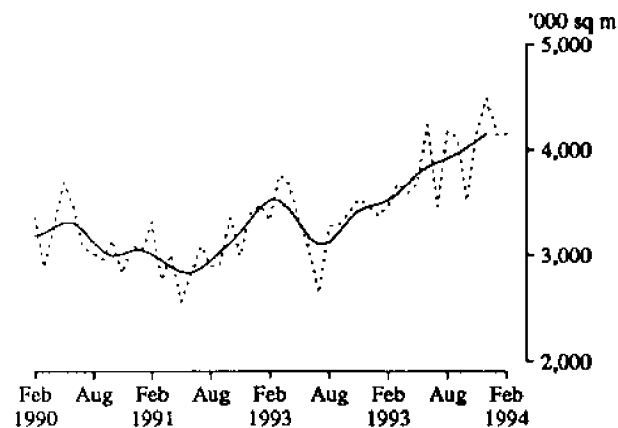
18. YARN, COTTON



19. YARN, WOOL

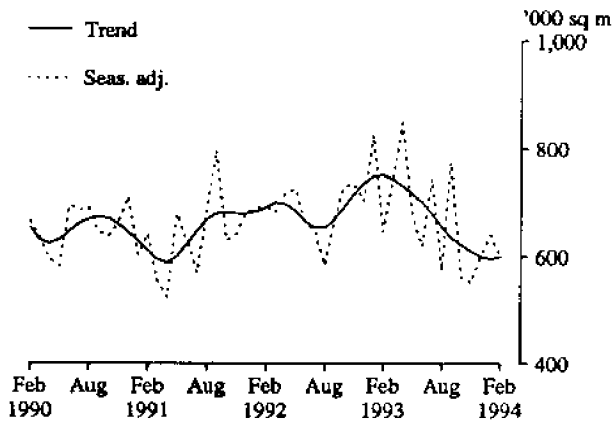


20. WOVEN FABRIC, COTTON (INCL. TOWELLING)(d)

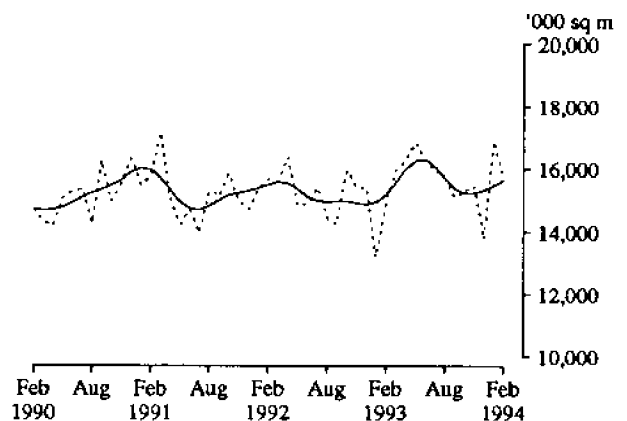


PRODUCTION STATISTICS, AUSTRALIA : TRENDS

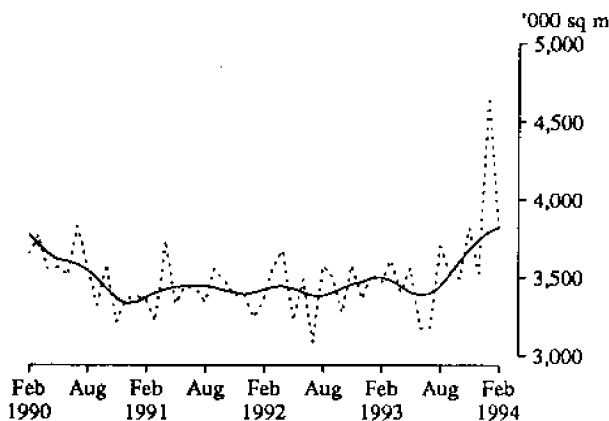
21. WOVEN FABRIC, WOOL(INCL. BLANKETING)



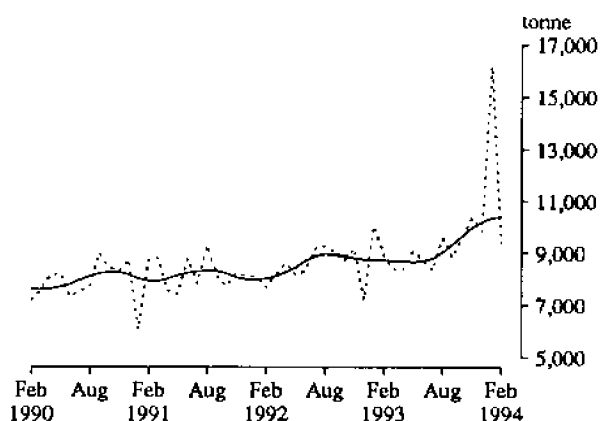
22. WOVEN FABRIC, MAN-MADE FIBRE



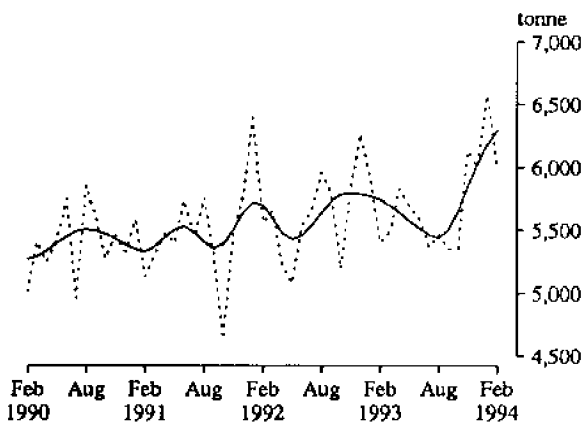
23. TEXTILE FLOOR COVERINGS(f)



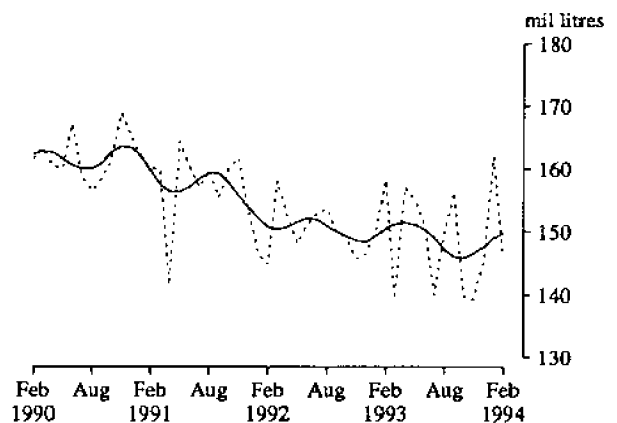
24. CONFECTIONERY, CHOCOLATE BASED (f)



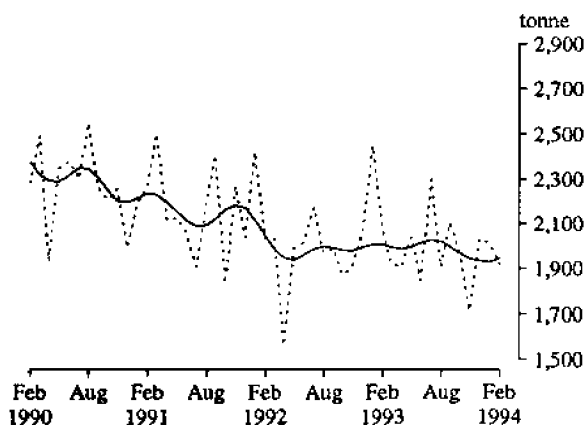
25. CONFECTIONERY, OTHER



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 a longer time span of data are available to provide more reliable seasonal factors. (d) Trend estimates are not available for the last two periods. (e) There is

PRODUCTION STATISTICS, AUSTRALIA, FEBRUARY 1994, PRELIMINARY

No. Item	Series	Unit	1993								1994		Percentage changes between-	
			June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Jan. 94 and Feb. 94	Feb. 93 and Feb. 94	
1. Basic iron, spiegeleisen and sponge iron	Orig.	'000 tonnes	568	572	588	574	613	600	591	582	556	-4.5	19.3	
	S. adj.	"	614	539	552	550	577	566	559	575	628	9.1	19.4	
	Trend r	"	587	577	566	558	558	566	576	587	596	1.6	10.9	
2. Iron and steel in ingots or other primary forms(a)	Orig.	"	613	604	613	625	654	638	638	613	590	-3.8	12.4	
	S. adj.	"	641	566	574	597	628	645	620	607	651	7.3	10.0	
	Trend r	"	613	607	603	604	610	620	628	634	637	0.5	9.0	
3. Blooms and slabs(b)	Orig.	"	143	133	138	139	137	137	126	r 93	129	38.7	-19.9	
	S. adj.	"	146	123	126	130	130	151	124	r 97	147	52.3	-19.8	
	Trend r	"	144	136	132	130	129	129	128	128	127	-0.6	-28.9	
4. Gas(c)	Orig.	terajoules	56,977	56,807	54,634	51,367	r 48,073	46,251	43,736	38,251	40,592	6.1	6.9	
	S. adj.	"	46,986	46,652	43,617	46,719	r 48,320	50,423	52,309	48,030	50,065	4.2	6.9	
	Trend r	"	46,082	46,030	46,388	47,168	48,165	49,135	49,875	50,352	50,702	0.7	9.2	
5. Electricity	Orig.	mil kWh	14,259	14,590	14,354	13,254	13,464	13,302	r 13,456	r 13,171	12,521	-4.9	0.7	
	S. adj.	"	13,479	13,303	13,252	13,216	13,657	14,028	r 13,814	r 13,722	13,574	-1.1	0.4	
	Trend r	"	13,383	13,356	13,395	13,476	13,587	13,691	13,757	13,787	13,790	0.0	2.8	
6. Bricks, clay	Orig.	million	162	154	166	156	147	161	r 140	110	150	36.4	10.3	
	S. adj.	"	153	148	155	148	142	152	r 152	174	159	-8.4	9.2	
	Trend r	"	150	150	149	149	150	153	156	159	162	1.8	12.0	
7. Cement, Portland	Orig.	'000 tonnes	546	558	572	518	594	594	r 530	r 407	479	17.7	-6.1	
	S. adj.	"	542	527	544	508	552	535	r 548	r 591	510	-13.7	-7.9	
	Trend r	"	542	538	535	535	538	544	547	549	548	-0.1	4.6	
8. Particle board and similar boards(d)	Orig.	'000 cu m	62	61	68	67	68	69	r 58	32	57	78.1	9.6	
	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	"	61	61	62	62	62	62	62	62	61	-1.5	10.2	
9. Plastics in primary forms(e)	Orig.	'000 tonnes	87.5	94.8	94.8	95.7	95.2	90.0	79.3	80.6	89.7	11.3	14.8	
	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	"	88.3	90.2	90.7	90.2	89.2	88.7	89.0	89.8	91.2	1.6	8.7	
10. Sulphuric acid; oleum	Orig.	"	75	64	42	61	67	76	83	82	71	-13.4	2.9	
	S. adj.	"	76	77	53	75	74	81	75	66	64	-4.2	6.4	
	Trend r	"	69	70	71	72	73	73	73	71	70	-1.7	-2.5	
11. Refrigerators, domestic	Orig.	'000	26.5	29.9	32.5	41.8	38.8	41.6	37.2	35.8	41.6	16.1	19.8	
	S. adj.	"	28.0	28.6	30.8	38.2	38.0	35.8	39.8	49.3	40.4	-18.0	17.1	
	Trend r	"	30.4	30.4	31.9	34.2	36.9	39.2	41.1	(f)	(f)	n.a.	n.a.	
12. Clothes washing machines, domestic	Orig.	"	27.4	27.8	32.3	34.5	29.6	29.9	25.0	11.8	26.4	124.9	4.8	
	S. adj.	"	27.0	23.6	26.8	32.3	29.1	27.0	28.0	25.9	26.7	3.0	0.9	
	Trend r	"	26.4	26.9	27.6	28.2	28.5	28.2	27.7	27.2	26.4	-2.7	-2.2	
13. Television sets(g)	Orig.	"	12.2	12.3	15.7	17.4	13.8	14.7	12.1	5.4	13.1	144.3	10.1	
	S. adj.	"	12.0	11.0	13.4	16.1	12.0	13.1	13.0	20.1	12.9	-35.9	7.0	
	Trend r	"	12.7	12.7	12.9	13.2	13.7	14.2	14.7	15.1	15.3	1.3	30.7	
14. Electric motors	Orig.	"	209	217	200	262	252	254	225	161	256	58.7	0.9	
	S. adj.	"	216	212	200	223	228	231	247	250	262	4.8	1.0	
	Trend r	"	234	222	215	216	224	234	243	251	258	2.8	4.4	

For footnotes see end of table

PRODUCTION STATISTICS, AUSTRALIA, FEBRUARY 1994, PRELIMINARY

												Percentage changes between—		
No. Item	Series	Unit	1993								1994		Jan. 94 and Feb. 94	Feb. 93 and Feb. 94
			June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.			
15. Lawn mowers petrol-rotary type	Orig. S. adj. Trend r	'000 " "	7.2 14.4 17.8	13.0 17.1 19.2	24.2 22.9 21.8	39.6 25.6 24.4	42.7 27.8 26.0	42.3 27.6 26.4	31.8 27.4 25.6	18.2 23.9 (f)	19.1 17.6 (f)	5.2 -26.3 n.a.	-35.7 -35.6 n.a.	
Motor vehicles—														
16. Cars and station wagons	Orig. S. adj. Trend r	number " "	23,869 21,787 23,002	25,995 23,022 23,002	27,637 24,217 23,247	26,918 23,918 23,776	24,592 23,291 24,452	27,982 25,090 25,123	21,120 26,410 25,759	11,978 26,792 26,332	26,012 26,644 26,794	117.2 -0.6 1.8	12.3 12.3 14.2	
17. Vehicles for goods and materials(h)	Orig. S. adj. Trend r	" " "	1,344 1,153 1,473	1,720 1,649 1,526	1,877 1,672 1,622	1,752 1,557 1,740	2,223 1,901 1,854	2,172 2,287 1,926	1,549 1,794 1,960	803 1,924 (f)	1,857 1,914 (f)	131.3 -0.5 n.a.	38.3 38.5 n.a.	
Yarn(i)—														
18. Cotton	Orig. S. adj. Trend r	tonne " "	3,109 2,734 2,434	r 2,623 r 2,316 2,407	2,539 2,398 2,361	r 2,618 r 2,386 2,336	2,478 2,116 2,358	2,357 2,332 2,425	2,306 2,568 2,520	1,583 2,883 2,621	2,525 2,645 2,704	59.5 -8.2 3.2	25.7 26.0 18.3	
19. Wool	Orig. S. adj. Trend r	" " "	1,601 1,414 1,566	1,694 1,623 1,567	1,819 1,652 1,560	r 1,798 r 1,605 1,561	1,617 1,532 1,581	1,694 1,440 1,614	1,421 1,653 1,659	1,113 1,896 1,710	1,728 1,767 1,762	55.3 -6.8 3.1	17.9 17.9 16.7	
Woven fabric(i)—														
20. Cotton (incl. towelling)	Orig. r S. adj. r Trend r	'000 sq m " "	4,462 4,243 3,842	4,511 3,466 3,885	4,237 4,175 3,922	4,501 4,128 3,967	4,128 3,515 4,024	4,020 4,178 4,090	3,779 4,491 4,157	1,619 4,143 (f)	4,180 4,157 (f)	158.2 0.3 n.a.	20.8 19.6 n.a.	
21. Wool (incl. blanketing)	Orig. S. adj. Trend r	" " "	680 620 700	731 744 679	633 576 656	806 777 636	601 562 622	652 552 610	r 544 r 599 601	369 641 596	659 601 600	78.6 -6.3 0.8	-6.1 -7.1 -20.1	
22. Man-made fibre	Orig. r S. adj. r Trend r	" " "	17,461 16,208 16,317	17,195 15,993 16,076	16,157 15,707 15,692	15,915 15,104 15,387	15,989 15,307 15,240	16,237 15,503 15,247	13,662 13,812 15,346	9,819 16,921 15,490	15,978 15,671 15,664	62.7 -7.4 1.1	4.4 4.5 3.0	
23. Textile floor coverings(j)	Orig. S. adj. Trend r	" " "	3,314 3,176 3,387	3,456 3,183 3,398	4,036 3,700 3,446	3,978 3,549 3,520	r 3,786 r 3,493 3,604	4,361 3,822 3,679	3,429 3,525 3,740	r 2,513 r 4,665 3,794	3,677 3,815 3,824	46.3 -18.2 0.8	11.9 10.1 9.2	
Confectionery—														
24. Chocolate base(j)	Orig. S. adj. Trend r	tonne " "	9,211 8,738 8,708	8,713 8,347 8,803	10,643 9,574 9,042	9,304 8,836 9,338	10,379 9,564 9,664	10,504 10,368 9,974	9,547 r 8,390 r 16,212	r 8,390 16,212 10,369	9,269 9,388 10,411	10.5 -42.1 0.4	4.5 5.8 19.2	
25. Other	Orig. S. adj. Trend r	" " "	5,865 5,597 5,516	5,734 5,366 5,460	6,295 5,466 5,441	6,070 5,351 5,505	6,216 5,357 5,658	r 6,990 r 6,133 5,851	r 5,548 r 6,001 6,033	3,342 6,578 6,184	5,583 5,989 6,295	67.1 -9.0 1.8	9.1 10.8 9.6	
26. Beer(k)	Orig. S. adj. Trend r	mil litres " "	129 151 150	128 140 149	140 150 147	143 156 146	151 140 146	r 177 r 139 147	184 145 148	151 162 149	134 146 150	-11.2 -9.8 0.5	-6.5 -7.6 -0.6	
27. Tobacco and cigarettes(l)	Orig. S. adj. Trend r	tonne " "	1,924 1,849 2,016	2,453 2,300 2,028	2,082 1,908 2,023	2,035 2,105 2,000	1,810 1,963 1,969	1,988 1,718 1,946	1,877 2,035 1,935	1,001 2,014 1,929	2,070 1,919 1,948	106.8 -4.7 1.0	-7.2 -8.0 -3.0	

(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) Trend estimates have been calculated to discount extraordinary movements in January 1994 seasonally adjusted estimates. (k) Includes ale and stout. Excludes beverages with alcohol content of less than 1.15 per cent. (l) Source: Australian Tobacco Marketing Advisory Committee.

EXPLANATORY NOTES

Introduction

Preliminary estimates for February 1994 for certain major indicators of production are shown in the table on page 5. Production statistics for February 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

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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.

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