



**MANUFACTURING PRODUCTION, AUSTRALIA
SEPTEMBER 1992, PRELIMINARY**

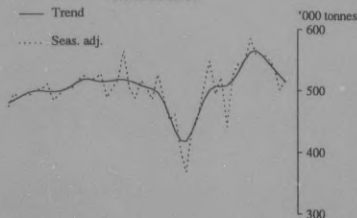
NOTES

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 monthly and quarterly. For details of these see "Related publications", in the Explanatory Notes at the back of this publication.

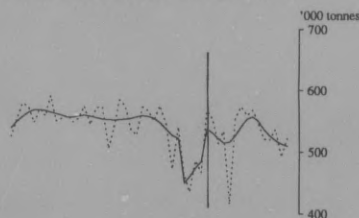
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PRODUCTION STATISTICS, AUSTRALIA : TRENDS

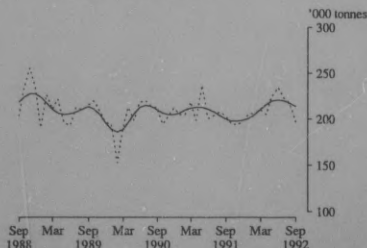
1. BASIC IRON



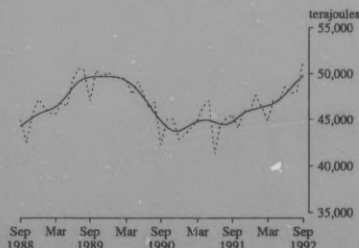
2. IRON AND STEEL IN PRIMARY FORMS(a)



3. BLOOMS AND SLABS



4. GAS



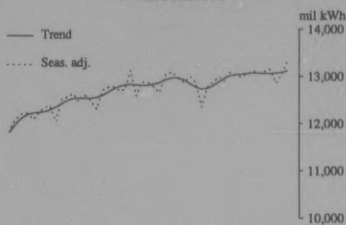
(a) Break in series after July 1991. See footnote (a) on page 6.

INQUIRIES

- * for further information about statistics in this publication and the availability of related unpublished statistics, contact Vaughn Moore on Melbourne (03) 615 7635 or any ABS office.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

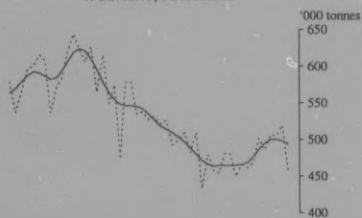
5. ELECTRICITY



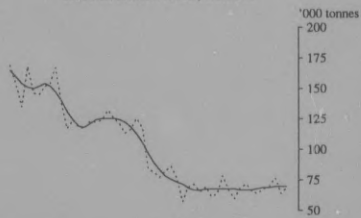
6. BRICKS, CLAY



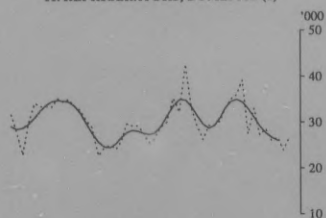
7. CEMENT, PORTLAND



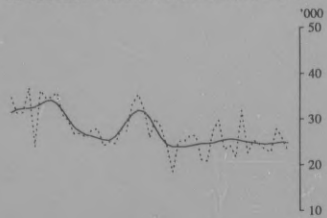
10. SULPHURIC ACID; OLEUM



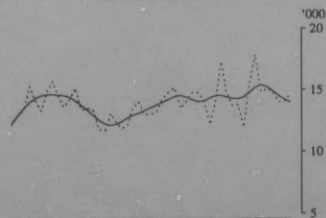
11. REFRIGERATORS, DOMESTIC (a)



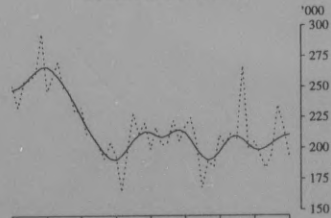
12. CLOTHES WASHING MACHINES, DOMESTIC



13. TELEVISION SETS



14. ELECTRIC MOTORS

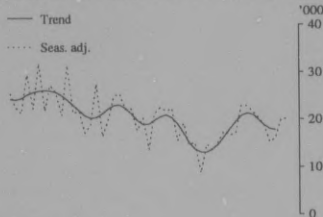


Sep 1988 Mar Sep 1989 Mar Sep 1990 Mar Sep 1991 Mar Sep 1992

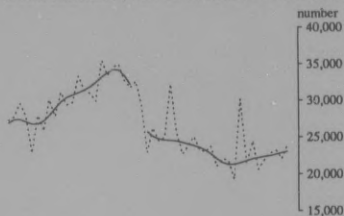
(a) Trend estimates are not available for the last two periods

PRODUCTION STATISTICS, AUSTRALIA : TRENDS

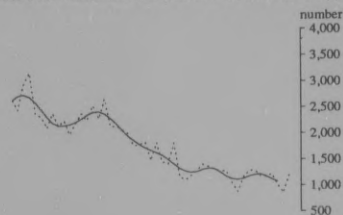
15. LAWN MOWERS, PETROL-ROTARY TYPE(a)



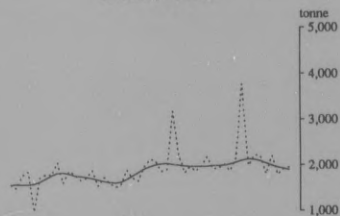
16. MOTOR VEHICLES (CARS AND STATION WAGONS)(b)



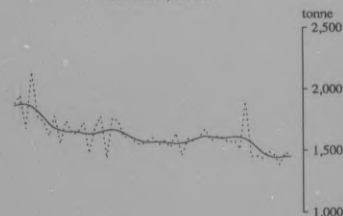
17. MOTOR VEHICLES FOR GOODS AND MATERIALS(a)



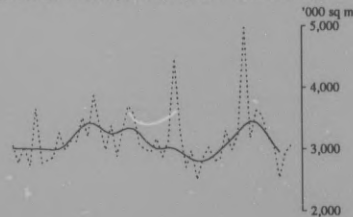
18. YARN, COTTON



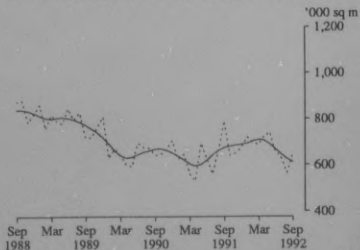
19. YARN, WOOL



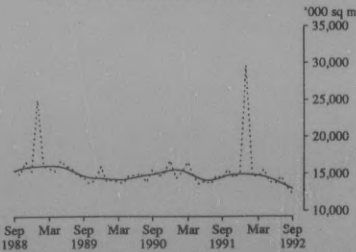
20. WOVEN FABRIC, COTTON (INCL. TOWELLING)(a)



21. WOVEN FABRIC, WOOL (INCL. BLANKETING)



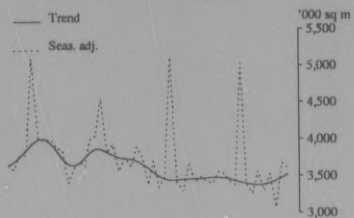
22. WOVEN FABRIC, MAN-MADE FIBRE



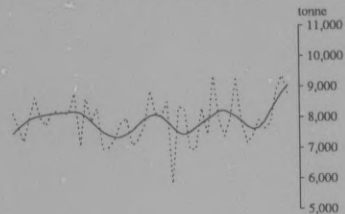
(a) Trend estimates are not available for the last two periods. (b) There is a lowering of the level of the trend series from August 1990 attributable to various factory shutdowns.

PRODUCTION STATISTICS, AUSTRALIA : TRENDS

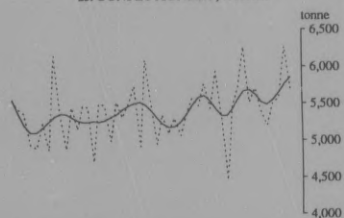
23. TEXTILE FLOOR COVERINGS



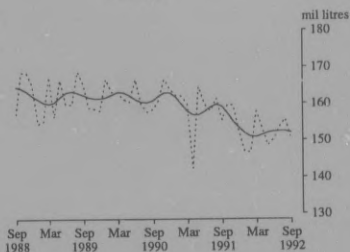
24. CONFECTIONERY, CHOCOLATE BASED



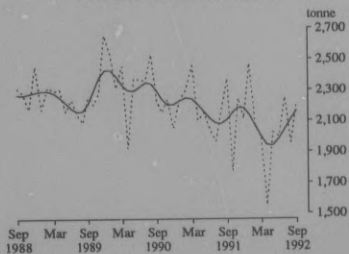
25. CONFECTIONERY, OTHER



26. BEER



27. TOBACCO AND CIGARETTES



PRODUCTION STATISTICS, AUSTRALIA, SEPTEMBER 1992, PRELIMINARY

No. Item	Series	Unit	1992									Percentage changes between		
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Aug 92	Sept 91	and Sept 92
1. Basic iron, spiegeleisen and sponge iron	Orig.	'000 tonnes	552	502	557	533	510	517	572	537	543	1.1	4.0	
	S. adj.	"	547	547	586	560	555	555	540	501	519	3.5	4.8	
	Trend r	"	533	551	564	566	559	548	536	525	514	-2.1	1.3	
2. Iron and steel in ingots or other primary forms(a)	Orig.	"	577	517	558	518	489	502	569	540	550	1.9	0.9	
	S. adj.	"	574	560	568	548	521	519	537	492	523	6.2	1.8	
	Trend r	"	541	553	557	550	537	526	519	514	510	-0.8	-2.4	
3. Blooms and slabs(b)	Orig.	"	201	182	219	202	209	231	235	232	211	-9.1	-2.8	
	S. adj.	"	206	206	210	205	225	235	223	217	197	-9.3	-2.8	
	Trend r	"	201	205	211	216	220	221	220	217	214	-1.7	6.7	
4. Gas(c)	Orig.	terajoules	38,963	38,690	39,792	42,545	50,145	58,164	r 59,035	59,408	56,170	-5.5	14.5	
	S. adj.	"	47,612	46,396	44,875	47,073	47,035	48,573	r 47,884	47,991	51,483	7.3	13.1	
	Trend r	"	46,152	46,339	46,496	46,721	47,130	47,741	48,440	49,150	49,833	1.4	11.4	
5. Electricity	Orig.	mil kWh	12,621	12,380	13,023	12,302	13,339	13,825	r 14,428	r 14,151	13,226	-6.5	3.2	
	S. adj.	"	12,994	13,057	13,118	13,062	13,108	13,154	r 12,864	r 13,033	13,325	2.2	2.5	
	Trend r	"	13,052	13,070	13,077	13,073	13,067	13,067	13,075	13,095	13,121	0.2	1.8	
6. Bricks, clay	Orig.	million	92	136	159	131	134	148	146	144	171	18.8	24.8	
	S. adj.	"	139	141	142	132	126	140	137	141	160	13.8	17.8	
	Trend r	"	141	139	137	135	135	137	140	144	148	3.0	8.5	
7. Cement, Portland	Orig.	'000 tonnes	330	450	487	484	504	513	526	539	473	-12.2	2.2	
	S. adj.	"	466	462	470	502	486	506	506	520	457	-12.2	0.5	
	Trend r	"	466	469	477	487	495	500	500	498	494	-0.9	6.3	
8. Particle board and similar boards(d)	Orig.	'000 cu m	31.7	51.0	58.4	59.3	60.7	52.1	54.7	55.6	64.8	16.5	22.5	
	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	"	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
9. Plastics in primary forms(e)	Orig.	'000 tonnes	79.0	84.1	89.9	79.7	72.9	76.0	r 76.4	r 86.4	92.6	7.2	10.4	
	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	"	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
10. Sulphuric acid; oleum	Orig.	"	82	81	78	67	75	69	62	52	57	9.6	5.6	
	S. adj.	"	69	72	66	64	68	70	77	64	69	7.4	7.1	
	Trend r	"	67	67	67	68	69	69	70	70	70	0.1	2.7	
11. Refrigerators, domestic	Orig.	'000	29.2	28.8	30.1	25.0	30.1	26.0	29.7	25.1	29.2	16.4	-9.4	
	S. adj.	"	39.3	27.5	33.1	27.3	28.6	26.0	26.8	24.0	26.6	10.8	-12.4	
	Trend r	"	34.5	33.0	31.1	29.2	27.7	26.8	26.1	(f)	(f)	n.a.	n.a.	
12. Clothes washing machines, domestic	Orig.	"	16.1	23.5	27.1	23.3	24.1	22.0	31.2	28.9	26.3	-9.0	-14.1	
	S. adj.	"	32.0	22.7	25.4	24.7	23.4	22.9	27.9	25.8	23.0	-10.8	-23.1	
	Trend r	"	25.4	25.1	24.9	24.8	24.6	24.6	24.8	25.0	24.8	-0.6	-1.8	
13. Television sets(g)	Orig.	"	4.2	15.7	18.4	13.5	16.3	14.5	16.4	16.3	15.2	-4.9	-10.3	
	S. adj.	"	12.0	15.5	17.9	14.8	15.1	14.8	14.0	14.1	14.6	4.1	-15.6	
	Trend r	"	14.4	14.8	15.2	15.4	15.3	14.9	14.5	14.2	14.0	-1.5	-3.7	
14. Electric motors	Orig.	"	148	192	219	170	188	210	257	r 217	233	7.3	1.5	
	S. adj.	"	267	199	205	195	184	195	235	r 218	194	-11.0	-7.9	
	Trend r	"	207	203	199	199	200	204	207	210	211	0.5	7.0	

For footnotes see end of table

PRODUCTION STATISTICS, AUSTRALIA, SEPTEMBER 1992, PRELIMINARY

No. Item	Series	Unit	1992										Percentage changes between:	
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Aug. 92 Sept. 91 and Sept. 92 Sept. 92		
15. Lawn mowers petrol-rotary type	Orig. '000		16.6	24.7	18.9	11.7	9.0	7.8	13.1	r 21.4	31.8	48.8	46.9	
	S. adj. "		23.0	22.9	-21.6	20.3	18.9	15.2	16.1	r 20.1	20.1	-0.1	30.8	
	Trend r		20.8	21.3	21.0	20.0	18.8	18.0	17.8	(f)	(f)	n.a.	n.a.	
Motor vehicles—														
16. Cars and station wagons	Orig. number		11,055	21,181	25,467	18,725	24,435	27,129	r 24,473	26,352	7.7	18.2		
	S. adj. "		30,208	21,397	24,472	20,626	21,909	22,381	23,209	r 22,087	23,881	8.1	13.2	
	Trend r		21,550	21,822	22,075	22,250	22,386	22,498	22,688	22,932	23,075	0.6	4.1	
17. Vehicles for goods and materials(h)	Orig. "		496	1,256	1,408	1,064	1,311	1,364	1,177	961	1,284	33.6	-5.4	
	S. adj. "		1,162	1,286	1,281	1,181	1,160	1,220	1,017	853	1,189	39.4	-6.5	
	Trend r		1,133	1,176	1,209	1,211	1,174	1,120	1,075	(f)	(f)	n.a.	n.a.	
Yarn(i)—														
18. Cotton	Orig. tonne		1,353	2,081	2,158	2,054	2,112	2,327	2,191	2,045	2,247	9.9	8.0	
	S. adj. "		3,783	1,995	2,217	2,221	1,809	2,203	1,794	1,924	1,958	1.8	0.8	
	Trend r		2,113	2,137	2,128	2,093	2,042	1,994	1,955	1,926	1,894	-1.6	-5.2	
19. Wool	Orig. "		888	1,509	1,533	1,294	1,548	1,627	r 1,554	r 1,523	1,689	10.9	1.5	
	S. adj. "		1,903	1,455	1,458	1,440	1,496	1,472	r 1,388	r 1,486	1,452	-2.3	-9.5	
	Trend r		1,595	1,563	1,523	1,484	1,457	1,446	1,447	1,452	1,451	-0.1	-9.3	
Woven fabric(i)—														
20. Cotton (incl. towelling)	Orig. '000 sq m		1,440	3,399	3,613	3,673	3,681	3,098	3,328	3,189	3,313	3.9	10.2	
	S. adj. "		4,987	3,184	3,634	3,550	3,202	3,065	2,542	2,946	3,061	3.9	7.2	
	Trend r		3,386	3,451	3,437	3,348	3,211	3,070	2,956	(f)	(f)	n.a.	n.a.	
21. Wool (incl. blanketing)	Orig. "		452	768	714	629	717	671	r 680	r 606	711	17.3	-5.1	
	S. adj. "		719	693	687	721	739	656	r 633	r 565	649	14.9	-17.6	
	Trend r		692	701	708	705	688	667	645	626	610	-2.5	-9.4	
22. Man-made fibre	Orig. "		9,228	16,027	15,579	14,752	14,694	15,447	16,258	r 14,269	13,507	-5.3	-12.1	
	S. adj. "		29,679	14,651	14,619	15,575	13,875	13,762	14,604	r 13,240	12,299	-7.1	-14.5	
	Trend r		14,961	14,891	14,813	14,669	14,432	14,107	13,736	13,356	12,984	-2.8	-11.0	
23. Textile floor coverings	Orig. "		1,911	3,392	3,277	3,248	3,495	3,725	3,464	r 3,905	4,107	5.2	5.8	
	S. adj. "		5,046	3,378	3,266	3,562	3,302	3,529	3,075	r 3,683	3,598	-2.3	0.9	
	Trend r		3,417	3,399	3,384	3,379	3,384	3,403	3,435	3,477	3,521	1.3	1.2	
Confectionery —														
24. Chocolate base	Orig. tonne		4,444	7,261	8,607	8,084	8,158	7,968	9,765	r 9,531	9,070	-4.8	16.4	
	S. adj. "		7,822	7,171	7,447	7,916	7,635	7,827	8,868	r 9,370	8,769	-6.4	10.9	
	Trend r		7,878	7,716	7,628	7,658	7,873	8,213	8,543	8,833	9,050	2.5	10.2	
25. Other	Orig. "		3,174	5,439	6,106	4,402	5,272	5,808	6,184	r 6,839	6,480	-5.2	10.9	
	S. adj. "		6,267	5,519	5,710	5,398	5,202	5,515	5,577	r 6,269	5,702	-9.0	7.6	
	Trend r		5,673	5,689	5,624	5,525	5,488	5,548	5,654	5,770	5,860	1.6	9.8	
26. Beer(j)	Orig. mil litres		147	133	163	150	129	131	145	r 137	138	0.7	-0.1	
	S. adj. "		147	147	158	153	149	150	154	r 156	150	-3.7	-3.5	
	Trend r		152	151	151	151	152	152	152	152	152	-0.3	-4.5	
27. Tobacco and cigarettes(k)	Orig. tonne		1,311	2,175	2,291	1,490	2,255	2,108	2,438	2,080	2,148	3.3	-3.1	
	S. adj. "		2,472	2,070	1,994	1,552	2,025	1,998	2,253	1,959	2,217	13.2	-6.6	
	Trend r		2,135	2,065	1,994	1,944	1,940	1,985	2,048	2,111	2,165	2.6	2.7	

(a) Includes ingots, puddled bars, pilings, blocks or lumps and steel in the molten state. There is a break in the three 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. (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 lignous material. Includes boards for subsequent conversion to other purposes. Excludes laminated. (e) Includes liquid, paste, powder, granules, flakes, blocks, irregular shapes, lumps and similar forms. (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 September 1992 for certain major indicators of production are shown in the table on page 5. Production statistics for September 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 monthly

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Manufacturing Production, Australia, Metal Products (8367.0) — issued monthly

Manufacturing Production, Australia, Energy Products (8368.0) — issued monthly

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

Manufacturing Commodities: Selected Principal Articles Produced, Australia, 1986-87, Preliminary (8365.0)

Manufacturing Commodities: Principal Articles Produced, Australia, 1986-87 (8303.0)

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

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