



Australian Bureau of Statistics

CATALOGUE 8125.0

EMBARGOED UNTIL 11.30 A.M. 14 AUGUST 1992

QUARTERLY INDEXES OF INDUSTRIAL PRODUCTION, AUSTRALIA JUNE QUARTER 1992

MAIN FEATURES

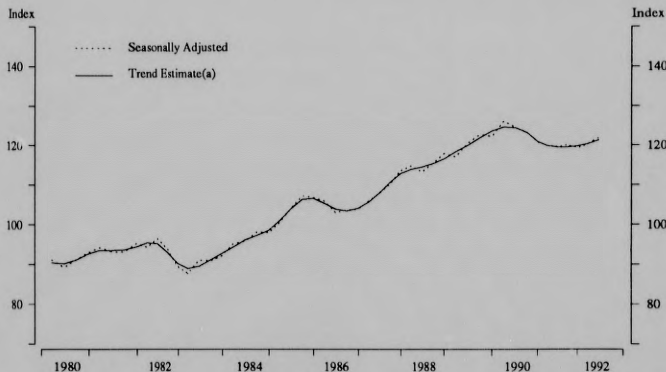
Preliminary estimates for the June quarter 1992 show that the index of industrial production (seasonally adjusted) rose moderately (by 1.3%) following a moderate rise in the previous quarter. The index now stands 1.9 per cent above the June quarter 1991 estimate.

The trend estimate, which removes much of the irregular influences, rose (by 0.7%) in the latest quarter, to 1.5 per cent above the June quarter 1991

estimate, indicating a gradual turnaround in industrial production.

Movements in the manufacturing sector, the major component, dominate the industrial production index. In the latest quarter a moderate rise in manufacturing of 1.0 per cent seasonally adjusted, overshadowed a larger rise of 2.5 per cent in the mining sector and a slight rise of 0.1 per cent in the utilities sector, resulting in the 1.3 per cent quarterly growth.

INDEX OF INDUSTRIAL GROSS PRODUCT AT AVERAGE 1984-85 PRICES
(BASE: 1984-85 = 100.0)



(a) See paragraph 19 to 21 of the Explanatory Notes. Trend estimates for the most recent periods are provisional and could change when data for further quarters are available.

Longer term trends

Industrial production, like most other economic aggregates, is subject to periods of rapid expansion and contraction. Over the 10 years from the June

quarter 1982, the index of industrial production has had an average annual trend rate of growth of 3.3 per cent. As can be seen from the graph above, recovery from the latest slump is proving to be slower than from the two previous downturns.

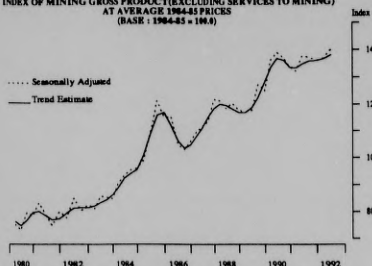
INQUIRIES

- for information about statistics in this publication and the availability of related unpublished statistics, contact Mr Mal Lawrie on Canberra (06) 252 7421 or any ABS State office.
- for information about other ABS statistics and services please refer to the back page of this publication

MAIN FEATURES — continued

*Components of the industrial production index**(i) Mining*

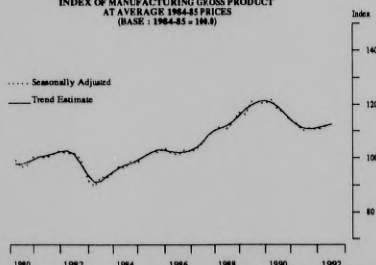
INDEX OF MINING GROSS PRODUCT (EXCLUDING SERVICES TO MINING)
AT AVERAGE 1984-85 PRICES
(BASE: 1984-85 = 100.0)



The index of mining production (excluding services to mining) rose by 2.5 per cent (seasonally adjusted) in the June quarter 1992 following a slight rise after two successive slight falls. The trend estimate has been rising over the last five quarters, and now stands 2.5 per cent above the June quarter 1991 estimate. The average annual trend rate of growth for the past 10 years is 5.9 per cent.

(ii) Manufacturing

INDEX OF MANUFACTURING GROSS PRODUCT
AT AVERAGE 1984-85 PRICES
(BASE: 1984-85 = 100.0)



In the June quarter 1992 the seasonally adjusted index of manufacturing production recorded a second successive increase, with a moderate rise of 1.0 per cent following a similar rise in the previous quarter, after falls in six of the preceding seven quarters. Since the June quarter 1991 the index has risen by 2.3 per cent. The trend in manufacturing production is now showing three quarters of weak growth, suggesting a turning point in the September quarter 1991 ending a seven quarter downturn.

The index recorded rises (seasonally adjusted) in seven of the twelve manufacturing subdivisions in the June quarter 1992. The largest percentage rises were for

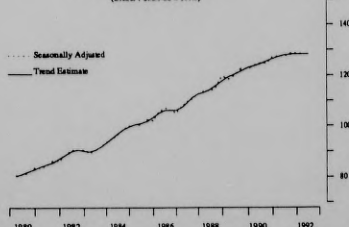
Non-metallic mineral products (up 9.2%) a second successive rise after a period of eight falls in nine quarters; Other machinery and equipment (up 8.3%) not quite offsetting a larger fall in the previous quarter; and Food, beverages and tobacco (up 5.2%) following a moderate rise in the March quarter 1992. The most significant falls were recorded for Fabricated metal products (down 9.2%) following three successive rises; Miscellaneous manufacturing (down 6.1%) also after three successive rises; and Clothing and footwear which fell 5.6 per cent although not enough to offset the large rise of the previous quarter.

Over the 10 years from the June quarter 1982, the average annual trend rate of growth of the index of manufacturing production has been 2.2 per cent.

The component industry subdivisions display varying patterns and rates of growth. Over the 10 year period the average annual trend rate of growth rose in ten of the twelve industry subdivisions. The largest average rises were for Paper, printing and publishing (up 4.2%), with the level of the index still below the 1989 peak; Fabricated metal products (up 3.8%), still below the 1990 peak; Textiles (up 3.2%) with erratic growth since the 1982-83 slump; and Food, beverages and tobacco (up 2.8%) which has returned to 1990-91 levels. Those to fall were Transport equipment (down 1.4%) showing little sign of recovery after a massive slump from the 1989 high; and Clothing and footwear (down 1.3%) which has remained at very depressed levels since early 1990.

(iii) Electricity, gas and water

INDEX OF UTILITIES GROSS PRODUCT
AT AVERAGE 1984-85 PRICES
(BASE: 1984-85 = 100.0)



In the June quarter 1992 the production index for electricity, gas and water rose slightly (by 0.1%). The trend in electricity, gas and water gross product has shown continuous growth since 1982-83, although the trend growth has slowed noticeably over the last three quarters. Over the 10 years since the June quarter 1982, the average annual trend rate of growth for the index has been 4.1 per cent.

NOTE: Explanatory Notes are published at the back of this publication.

TABLE 1. INDEXES OF INDUSTRIAL GROSS PRODUCT AT AVERAGE 1984-85 PRICES — SEASONALLY ADJUSTED AND TREND ESTIMATES

Index numbers (Base : 1984-85 = 100.0)

Index numbers (Base: 1984-85 = 100.0)

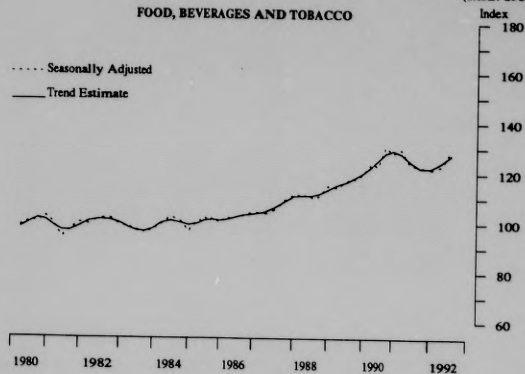
	Quarters ended													
	1988-89		1989-90				1990-91				1991-92			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
	Seasonally adjusted													
Mining (excluding services to mining)	117.2	117.7	127.2	124.9	136.6	139.1	137.2	133.6	132.3	137.8	137.1	136.2	137.0	140.4
Manufacturing	116.1	121.1	120.5	120.3	121.9	118.3	116.9	114.0	113.0	110.3	111.3	110.5	111.7	112.8
Electricity, gas and water	118.4	120.1	122.6	122.5	124.0	124.8	124.8	127.2	127.5	127.5	128.6	128.5	128.3	128.4
Total industrial production	116.7	120.1	122.4	121.8	125.8	124.2	122.9	120.5	119.6	119.3	119.8	119.1	120.0	121.6
Trend estimates														
Mining (excluding services to mining)	117.0	118.7	122.7	128.3	133.8	136.9	136.2	133.6	133.4	134.9	135.9	136.1	136.8	138.3
Manufacturing	118.2	119.8	121.0	121.4	120.7	119.2	116.9	114.5	112.6	111.3	110.8	111.2	111.9	112.6
Electricity, gas and water	119.4	120.5	121.7	123.0	123.8	124.5	125.6	126.6	127.4	128.0	128.2	128.4	128.4	128.4
Total industrial production	118.0	119.6	121.5	123.3	124.3	124.2	122.8	120.7	119.6	119.2	119.2	119.5	120.1	121.0

TABLE 2. PERCENTAGE CHANGES IN INDEXES OF INDUSTRIAL GROSS PRODUCT AT AVERAGE 1984-85 PRICES — SEASONALLY ADJUSTED AND TREND ESTIMATES

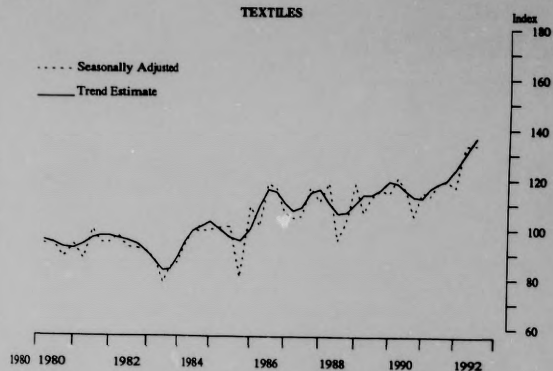
	Change from preceding quarter													June Qtr 1991
	1988-89		1989-90		1990-91		1991-92						June Qtr 1992	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	
	Seasonally adjusted													
Mining (excluding services to mining)	0.4	8.1	-1.8	9.4	1.8	-1.4	-2.6	-1.0	4.2	-0.5	-0.7	0.6	2.5	1.9
Manufacturing	4.3	-0.5	-0.2	1.3	-3.0	-1.2	-2.5	-0.9	-2.4	0.9	-0.7	1.1	1.0	2.3
Electricity, gas and water	1.4	2.1	-0.1	1.2	0.6	—	1.9	0.2	—	0.9	-0.1	-0.2	0.1	0.7
Total industrial production	2.9	1.9	-0.5	3.3	-1.3	-1.0	-2.0	-0.7	-0.3	0.4	-0.6	0.8	1.3	1.9
Trend estimates														
Mining (excluding services to mining)	1.5	3.4	4.6	4.3	2.3	-0.5	-1.9	-0.1	1.1	0.7	0.1	0.5	1.1	2.5
Manufacturing	1.4	1.0	0.3	-0.6	-1.2	-1.9	-2.1	-1.7	-1.2	-0.4	0.4	0.6	0.6	1.2
Electricity, gas and water	0.9	1.0	1.1	0.7	0.6	0.9	0.8	0.6	0.5	0.2	0.2	—	—	0.3
Total industrial production	1.4	1.6	1.5	0.8	-0.1	-1.1	-1.7	-0.9	-0.3	—	0.3	0.5	0.7	1.5

INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES
(BASE: 1984-85 = 100.0)

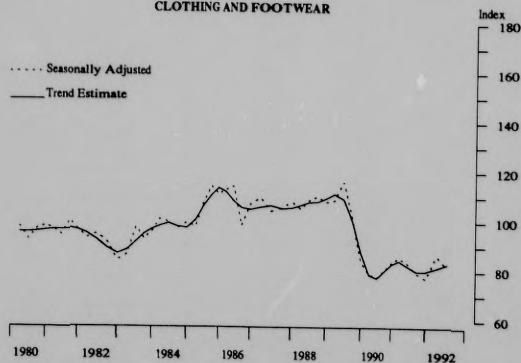
FOOD, BEVERAGES AND TOBACCO



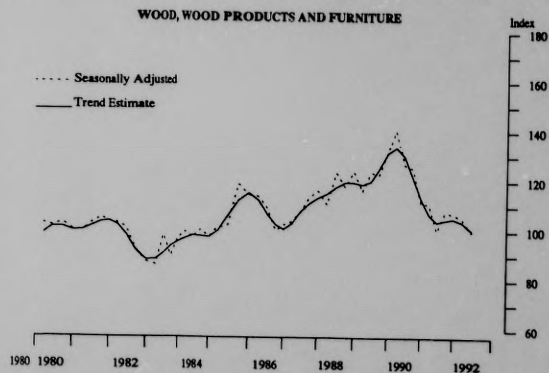
TEXTILES



CLOTHING AND FOOTWEAR

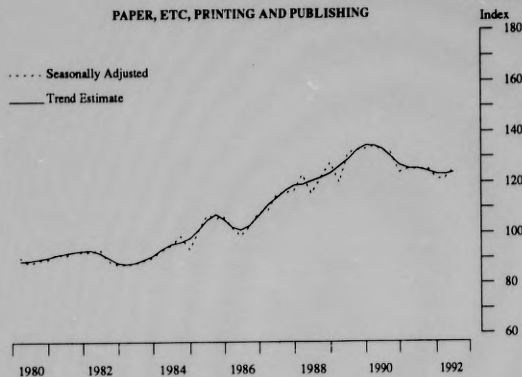


WOOD, WOOD PRODUCTS AND FURNITURE

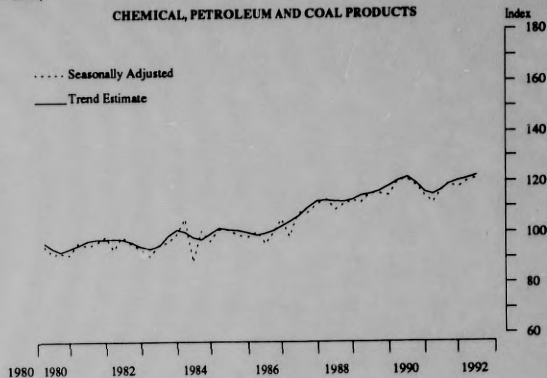


INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES
(BASE: 1984-85 = 100.0)

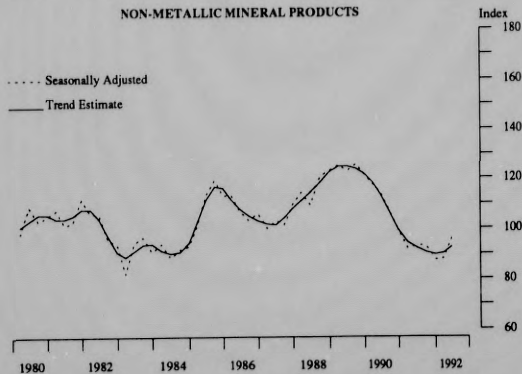
PAPER, ETC, PRINTING AND PUBLISHING



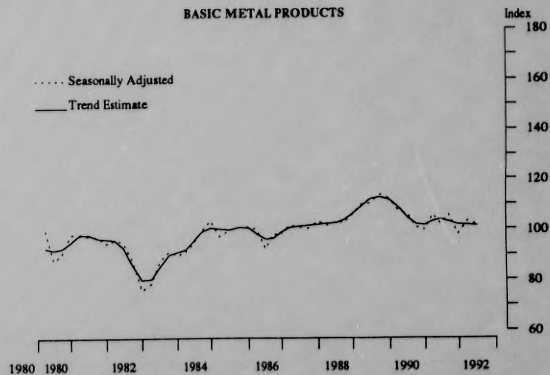
CHEMICAL, PETROLEUM AND COAL PRODUCTS



NON-METALLIC MINERAL PRODUCTS

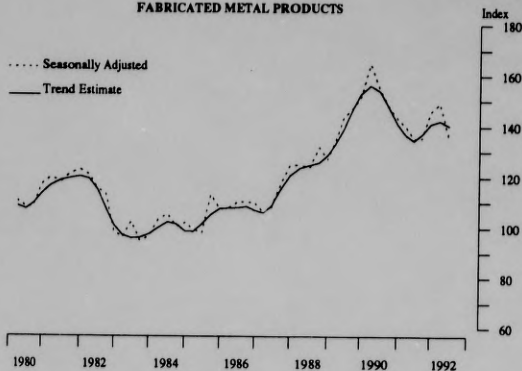


BASIC METAL PRODUCTS

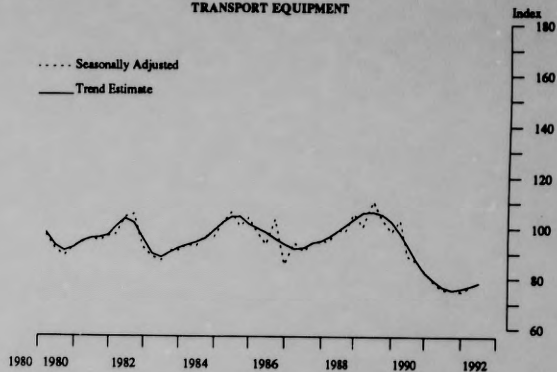


INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES
(BASE: 1984-85 = 100.0)

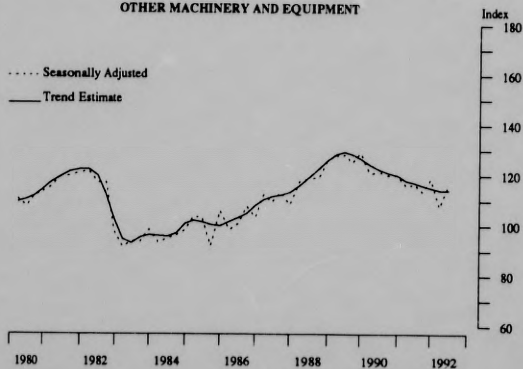
FABRICATED METAL PRODUCTS



TRANSPORT EQUIPMENT



OTHER MACHINERY AND EQUIPMENT



MISCELLANEOUS MANUFACTURING

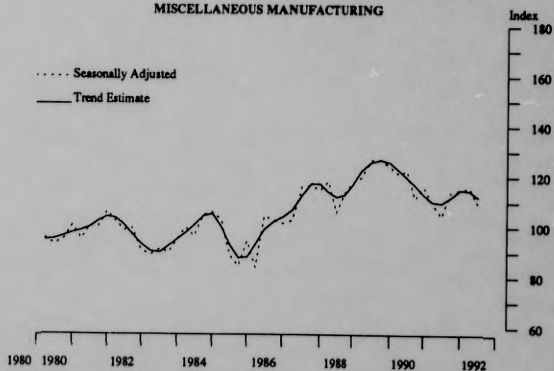


TABLE 3. INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES, BY SUBDIVISION — SEASONALLY ADJUSTED
Index numbers (Base : 1984-85 = 100.0)

ASIC Sub- Divn.	Industry	Quarters ended											
		1988-89			1989-90			1990-91			1991-92		
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
21	Food, beverages and tobacco	114.2	116.7	117.7	119.5	123.3	122.7	130.1	127.9	129.1	123.4	122.3	121.4
23	Textiles	106.6	112.8	115.6	114.2	120.4	115.6	105.2	114.7	113.3	118.0	119.4	116.6
24	Clothing and footwear	108.0	115.6	100.6	83.7	78.4	77.2	80.1	83.2	85.1	83.2	79.2	76.7
25	Wood, wood products and furniture	115.6	123.1	122.3	131.5	140.6	126.3	124.7	110.8	110.4	99.7	107.0	106.8
26	Paper, etc., printing and publishing	119.5	131.5	132.4	132.9	133.8	132.4	131.2	123.7	125.2	124.6	125.3	121.0
27	Chemical, petroleum and coal products	111.9	115.4	115.4	114.7	120.7	120.9	118.5	114.4	111.7	116.1	119.1	117.6
28	Non-metallic mineral products	125.1	122.8	125.4	121.2	117.4	113.9	107.1	99.6	91.9	93.1	92.9	87.5
29	Basic metal products	109.8	110.4	113.8	112.0	107.2	105.8	100.6	99.8	105.5	102.0	105.6	97.9
31	Fabricated metal products	134.7	143.7	146.8	151.3	164.7	154.6	147.9	143.1	140.1	135.3	135.5	145.7
32	Transport equipment	100.0	110.6	102.8	98.1	102.8	88.4	86.6	82.6	78.5	75.3	75.3	74.6
33	Other machinery and equipment	127.5	127.8	124.8	128.5	120.5	121.0	119.6	119.7	115.4	116.2	113.1	118.2
34	Miscellaneous manufacturing	119.2	126.2	126.4	123.4	120.7	122.0	110.9	115.6	109.4	103.9	113.5	114.5
Total manufacturing		116.1	121.1	120.5	120.3	121.9	118.3	116.9	114.0	113.0	110.3	111.3	110.5

TABLE 4. PERCENTAGE CHANGES IN INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES, BY SUBDIVISION — SEASONALLY ADJUSTED

ASIC Sub- Divn.	Industry	Change from preceding quarter											
		1988-89			1989-90			1990-91			1991-92		
		June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.
21	Food, beverages and tobacco	2.2	0.9	1.5	3.2	-0.5	6.0	-1.7	0.9	-4.4	-0.9	-0.7	1.2
23	Textiles	5.8	2.5	-1.2	5.4	-4.0	-9.0	9.0	-1.2	4.1	1.2	-2.3	14.2
24	Clothing and footwear	7.0	-13.0	-16.8	-6.3	-1.5	3.8	3.9	2.3	-2.2	-4.8	-3.2	12.1
25	Wood, wood products and furniture	6.5	-0.6	7.5	6.9	-10.2	-1.3	-11.1	-0.4	-9.7	7.3	-0.2	-2.1
26	Paper, etc., printing and publishing	10.0	0.7	0.4	0.7	-1.0	-0.9	-5.7	1.2	-0.5	0.6	-3.4	0.3
27	Chemical, petroleum and coal products	3.1	—	-0.6	5.2	0.2	-2.0	-3.5	-2.4	3.9	2.6	-1.3	2.0
28	Non-metallic mineral products	-1.8	2.1	-3.3	-3.1	-3.0	-6.0	-7.0	-7.7	1.3	-0.2	-5.8	0.6
29	Basic metal products	0.5	3.1	-1.6	-4.3	-1.3	-4.9	-0.8	5.7	-3.3	3.5	-7.3	5.5
31	Fabricated metal products	6.7	2.2	3.1	8.9	-6.1	-4.3	-3.2	-2.1	-3.4	0.1	7.5	2.5
32	Transport equipment	10.6	-7.1	-4.6	4.8	-14.0	-2.0	-4.6	-5.0	-4.1	—	-0.9	2.8
33	Other machinery and equipment	0.2	-2.3	3.0	-6.2	0.4	-1.2	0.1	-3.6	0.7	-2.7	4.5	-9.4
34	Miscellaneous manufacturing	5.9	0.2	-2.4	-2.2	1.1	-9.1	4.2	-5.4	-5.0	9.2	0.9	0.8
Total manufacturing		4.3	-0.5	-0.2	1.3	-3.0	-1.2	-2.5	-0.9	-2.4	0.9	-0.7	1.1

TABLE 5. INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES, BY SUBDIVISION — TREND ESTIMATES
Index numbers (Base : 1984-85 = 100.0)

ASIC Sub— Divn.	Industry	Quarters ended											
		1988-89		1989-90				1990-91				1991-92	
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
21	Food, beverages and tobacco	115.0	116.3	117.9	119.8	122.2	125.0	127.8	128.8	127.5	124.5	122.0	124.2
23	Textiles	113.8	113.8	115.7	119.1	118.1	115.2	112.8	112.4	116.2	118.1	119.6	123.9
24	Clothing and footwear	110.5	108.6	99.6	87.0	78.3	76.9	79.7	82.5	83.9	81.9	79.7	81.1
25	Wood, wood products and furniture	118.3	119.5	124.7	131.0	133.3	129.6	121.3	112.6	106.3	103.4	104.1	104.7
26	Paper, etc., printing and publishing	126.1	128.9	132.4	134.2	134.0	132.8	129.9	126.6	125.2	125.0	124.1	122.9
27	Chemical, petroleum and coal products	114.6	115.3	116.4	118.3	120.5	121.6	119.3	115.9	115.0	116.5	118.9	120.2
28	Non-metallic mineral products	124.6	124.6	123.7	121.6	118.1	113.2	106.6	99.4	94.4	92.1	90.5	89.5
29	Basic metal products	109.0	111.9	112.7	111.7	108.6	104.4	101.9	101.6	103.1	103.9	102.9	101.7
31	Fabricated metal products	133.4	139.0	146.2	152.8	156.1	153.8	147.4	141.1	136.7	134.4	137.1	141.1
32	Transport equipment	105.6	106.0	104.9	102.1	97.5	92.6	87.0	82.2	79.2	76.3	75.2	76.9
33	Other machinery and equipment	128.0	128.8	127.9	126.2	123.8	121.9	120.5	119.6	117.5	116.7	115.6	114.7
34	Miscellaneous manufacturing	122.0	125.4	126.2	125.2	122.2	119.2	116.2	112.6	109.6	109.2	111.5	114.5
Total manufacturing		118.2	119.8	121.0	121.4	120.7	119.2	116.9	114.5	112.6	111.3	110.8	111.2

TABLE 6. PERCENTAGE CHANGES IN INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES
BY SUBDIVISION — TREND ESTIMATES

ASIC Sub— Divn.	Industry	Change from preceding quarter											
		1988-89		1989-90				1990-91				1991-92	
		June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.
21	Food, beverages and tobacco	1.1	1.4	1.6	2.0	2.3	2.2	0.8	-1.0	-2.4	-2.0	—	1.8
23	Textiles	—	1.7	2.9	-0.8	-2.5	-2.1	-0.4	3.4	1.6	1.3	3.6	5.0
24	Clothing and footwear	-1.7	-8.3	-12.7	-10.0	-1.8	3.6	3.5	1.7	-2.4	-2.7	—	1.8
25	Wood, wood products and furniture	1.0	4.4	5.1	1.8	-2.8	-6.4	-7.2	-5.6	-2.7	0.7	0.6	-1.2
26	Paper, etc., printing and publishing	2.2	2.7	1.4	-0.1	-0.9	-2.2	-2.5	-1.1	-0.2	-0.7	-1.0	-0.1
27	Chemical, petroleum and coal products	0.6	1.0	1.6	1.9	0.9	-1.9	-2.8	-0.8	1.3	2.1	1.1	0.7
28	Non-metallic mineral products	—	-0.7	-1.7	-2.9	-4.1	-5.8	-6.8	-5.0	-2.4	-1.7	-1.1	0.8
29	Basic metal products	2.7	0.7	-0.9	-2.8	-3.9	-2.4	-0.3	1.5	0.8	-1.0	-1.2	-0.2
31	Fabricated metal products	4.2	5.2	4.5	2.2	-1.5	-4.2	-4.3	-3.1	-1.7	2.0	2.9	0.8
32	Transport equipment	0.4	-1.0	-2.7	-4.5	-5.0	-6.0	-5.5	-3.6	-3.7	-1.4	0.7	1.6
33	Other machinery and equipment	0.6	-0.7	-1.3	-1.9	-1.5	-1.1	-0.7	-1.8	-0.7	-0.9	-0.8	—
34	Miscellaneous manufacturing	2.8	0.6	-0.8	-2.4	-2.5	-2.5	-3.1	-2.7	-0.4	2.1	2.7	-0.3
Total manufacturing		1.4	1.0	0.3	-0.6	-1.2	-1.9	-2.1	-1.7	-1.2	-0.4	0.4	0.6

HISTORICAL TABLES

TABLE 7. INDEXES OF INDUSTRIAL GROSS PRODUCT AT AVERAGE 1984-85 PRICES,
BY INDUSTRY — ORIGINAL
Index numbers (Base : 1984-85 = 100.0)

	Mining excluding Services to mining	Manufacturing	Electricity, gas and water	Total
1976-77	76.3	90.3	70.0	84.3
1977-78	78.3	89.9	70.9	84.7
1978-79	80.3	93.6	74.7	88.0
1979-80	78.6	97.6	79.9	90.7
1980-81	80.1	99.6	83.5	92.8
1981-82	79.4	102.1	87.9	94.7
1982-83	82.4	93.7	90.4	90.5
1983-84	81.1	95.1	94.2	93.4
1984-85	100.0	100.0	100.0	100.0
1985-86	114.4	102.4	104.4	105.6
1986-87	107.7	103.8	107.1	105.2
1987-88	118.9	110.3	112.7	112.7
1988-89	118.4	116.9	118.2	117.4
1989-90	131.9	120.3	123.5	123.6
1990-91	135.4	114.1	126.8	120.9
1991-92	137.8	112.1	128.4	120.5
1976-77 — Sept.	79.7	91.5	71.6	86.1
Dec.	73.0	95.6	69.5	86.8
Mar.	74.9	83.7	68.9	79.6
June	77.7	90.4	70.2	84.7
1977-78 — Sept.	81.4	92.0	73.5	87.1
Dec.	77.7	93.8	70.5	86.9
Mar.	75.2	82.9	68.3	79.2
June	78.7	90.9	71.5	85.5
1978-79 — Sept.	81.2	94.0	76.0	88.6
Dec.	80.8	97.9	72.1	90.4
Mar.	77.1	87.8	74.5	83.5
June	81.9	94.8	76.2	89.3
1979-80 — Sept.	84.9	100.3	81.9	94.2
Dec.	83.9	101.9	78.6	94.5
Mar.	72.5	92.0	79.1	85.5
June	73.0	96.4	80.1	88.6
1980-81 — Sept.	81.3	100.6	85.2	93.9
Dec.	79.9	105.3	82.7	96.2
Mar.	80.3	93.0	81.6	88.4
June	78.7	99.7	84.3	92.6
1981-82 — Sept.	76.6	104.9	90.3	96.1
Dec.	81.6	107.6	85.0	98.3
Mar.	75.0	94.0	86.2	88.4
June	84.4	102.0	90.1	96.1
1982-83 — Sept.	82.3	103.1	94.4	96.0
Dec.	84.5	95.8	89.6	92.8
Mar.	78.5	83.0	87.3	82.4
June	84.8	93.0	90.2	90.6
1983-84 — Sept.	87.3	96.0	95.6	93.8
Dec.	86.7	98.4	92.2	94.7
Mar.	87.7	89.7	92.7	89.6
June	92.4	96.5	96.0	95.4
1984-85 — Sept.	97.9	102.3	102.6	101.3
Dec.	98.3	101.9	98.6	100.6
Mar.	96.1	93.3	98.7	94.7
June	107.7	102.4	100.1	103.4
1985-86 — Sept.	124.5	105.6	106.6	110.4
Dec.	117.7	108.2	100.8	109.6
Mar.	112.3	94.6	104.1	100.2
June	103.0	101.2	106.1	102.3
1986-87 — Sept.	106.0	106.3	110.2	106.7
Dec.	108.3	106.8	103.7	106.8
Mar.	106.9	96.6	106.2	100.4
June	109.7	105.4	108.4	106.8
1987-88 — Sept.	117.0	111.6	115.0	113.3
Dec.	124.2	114.8	111.4	116.7
Mar.	113.3	105.2	112.1	109.3
June	116.1	109.6	112.3	111.6
1988-89 — Sept.	124.1	116.0	119.1	118.4
Dec.	120.0	122.2	118.5	121.2
Mar.	114.5	109.3	116.6	111.5
June	115.1	120.0	118.6	118.6
1989-90 — Sept.	131.0	123.4	127.1	125.7
Dec.	127.3	125.7	121.6	125.6
Mar.	133.5	114.9	121.9	120.4
June	136.1	117.2	123.2	122.6
1990-91 — Sept.	141.3	119.9	129.2	126.3
Dec.	136.1	119.6	126.5	124.6
Mar.	129.3	107.3	125.7	115.0
June	134.8	109.7	125.6	117.9
1991-92 — Sept.	141.2	114.2	132.9	123.2
Dec.	138.8	116.1	127.8	123.2
Mar.	133.8	106.2	126.2	115.5
June	137.5	112.0	126.7	120.1

TABLE 8. INDEXES OF INDUSTRIAL GROSS PRODUCT AT AVERAGE 1984-85 PRICES,
BY INDUSTRY — SEASONALLY ADJUSTED AND TREND ESTIMATES
Index numbers (Base : 1984-85 = 100.0)

	Seasonally adjusted				Trend estimates			
	Mining excluding Services to mining	Manufacturing	Electricity, gas and water	Total	Mining excluding Services to mining	Manufacturing	Electricity, gas and water	Total
1976-77 — Sept.	78.5	89.3	69.2	84.1	74.8	89.2	69.1	83.1
Dec.	71.5	90.7	70.3	83.4	74.7	90.5	69.9	84.0
Mar.	77.4	90.2	69.9	84.5	75.8	90.8	70.1	84.5
June	77.8	90.9	70.8	85.2	77.3	90.6	70.7	84.8
1977-78 — Sept.	80.1	89.7	70.7	85.0	78.0	89.8	70.8	84.5
Dec.	76.0	89.0	71.4	83.6	77.2	89.5	70.8	84.1
Mar.	77.9	89.2	69.9	84.0	77.3	89.8	70.9	84.3
June	77.9	91.5	72.0	85.9	78.0	90.9	71.5	85.3
1978-79 — Sept.	79.9	91.6	72.8	86.4	78.8	92.1	72.6	86.3
Dec.	79.1	92.9	73.3	87.0	79.0	93.2	74.0	87.3
Mar.	79.9	94.6	76.1	88.6	79.9	94.5	75.5	88.5
June	82.0	95.4	76.8	89.8	81.6	95.9	77.1	90.0
1979-80 — Sept.	83.3	97.6	78.5	91.7	82.2	97.1	78.5	91.1
Dec.	82.1	96.9	79.8	91.1	79.7	98.0	79.7	91.1
Mar.	75.2	99.3	80.8	91.0	76.3	98.0	80.4	90.4
June	73.2	96.9	80.7	89.1	74.8	97.9	81.2	90.1
1980-81 — Sept.	79.5	97.5	81.9	91.1	76.7	98.5	82.1	91.0
Dec.	78.4	100.4	83.8	92.9	79.7	99.5	83.1	92.5
Mar.	83.2	100.5	83.6	94.1	80.1	100.5	84.0	93.4
June	79.1	100.1	84.6	93.0	78.6	101.0	84.8	93.4
1981-82 — Sept.	74.8	101.4	86.5	93.0	77.0	101.6	85.7	93.5
Dec.	80.1	102.8	86.3	95.1	77.4	102.4	87.1	94.3
Mar.	77.7	101.8	88.6	94.2	79.6	102.9	88.6	95.3
June	85.0	102.1	90.6	96.4	81.3	101.7	90.1	95.1
1982-83 — Sept.	80.3	99.6	90.7	93.7	81.4	97.9	90.7	92.9
Dec.	82.5	91.7	90.7	89.3	81.4	93.6	90.3	90.2
Mar.	81.1	89.7	89.5	87.6	82.1	91.2	90.0	88.8
June	85.6	93.0	90.5	90.9	83.4	91.5	90.5	89.4
1983-84 — Sept.	85.2	92.8	91.9	90.8	84.4	93.4	91.8	91.0
Dec.	84.9	94.5	93.6	92.0	86.2	94.9	93.4	92.6
Mar.	90.6	96.9	95.0	95.1	89.1	96.3	95.0	94.3
June	93.4	96.4	96.5	95.7	92.4	97.4	96.7	96.1
1984-85 — Sept.	95.5	99.0	98.6	98.1	94.2	98.1	98.5	97.2
Dec.	96.2	98.0	100.1	97.8	95.7	99.2	99.8	98.4
Mar.	99.1	100.7	100.6	100.3	101.0	100.6	100.6	100.7
June	109.2	102.3	100.7	103.8	109.1	102.1	101.1	103.7
1985-86 — Sept.	121.3	102.2	102.6	107.0	116.0	103.1	101.9	106.2
Dec.	115.2	104.0	102.2	106.6	117.0	103.0	103.4	106.5
Mar.	115.6	101.8	105.7	105.7	112.1	102.5	105.2	105.2
June	104.7	101.4	107.0	102.9	106.2	102.2	106.2	103.7
1986-87 — Sept.	103.2	103.1	106.2	103.5	103.7	102.3	106.2	103.2
Dec.	106.1	102.5	105.2	103.7	104.9	103.0	106.2	103.9
Mar.	109.8	103.7	107.8	105.7	108.1	104.1	107.4	105.5
June	111.8	105.7	109.6	107.7	111.3	106.0	109.3	107.7
1987-88 — Sept.	113.7	108.5	110.9	110.1	115.2	108.5	111.2	110.5
Dec.	121.9	110.1	112.7	113.3	118.5	110.3	112.6	112.6
Mar.	121.3	111.9	113.9	114.5	120.1	111.1	113.3	113.6
June	118.5	110.7	113.7	113.0	119.6	112.0	114.3	114.2
1988-89 — Sept.	120.5	113.0	115.0	115.1	118.3	113.5	115.9	115.0
Dec.	117.8	117.0	119.6	117.5	116.9	115.7	117.7	116.3
Mar.	117.2	116.1	118.4	116.7	117.0	118.2	119.4	118.0
June	117.7	121.1	120.1	120.1	118.7	119.8	120.5	119.6
1989-90 — Sept.	127.2	120.5	122.6	122.4	122.7	121.0	121.7	121.5
Dec.	124.9	120.3	122.5	121.8	128.3	121.4	123.0	123.3
Mar.	136.6	121.9	124.0	125.8	133.8	120.7	123.8	124.3
June	139.1	118.3	124.8	124.2	136.9	119.2	124.5	124.2
1990-91 — Sept.	137.2	116.9	124.8	122.9	136.2	116.9	125.6	122.8
Dec.	133.6	114.0	127.2	123.5	133.6	114.5	126.6	123.7
Mar.	132.3	113.0	127.5	119.6	133.4	112.6	127.4	119.6
June	137.8	110.3	127.5	119.3	134.9	111.3	128.0	119.2
1991-92 — Sept.	137.1	111.3	128.6	119.8	135.9	110.8	128.2	119.2
Dec.	136.2	110.5	128.5	119.1	136.1	111.2	128.4	119.5
Mar.	137.0	111.7	128.3	120.0	136.8	111.2	128.4	120.1
June	140.4	112.8	128.4	121.6	138.3	112.6	128.4	121.0

TABLE 9. INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES,
BY SUBDIVISION — ORIGINAL
Index numbers (Base : 1984-85 = 100.0)

	Food, beverages and tobacco	Textiles	Clothing and footwear	Wood, wood products and furniture	Paper, etc., printing and publishing	Chemicals, petroleum and coal products	Non-metallic mineral products
1976-77	92.4	87.4	87.3	94.9	76.7	83.7	96.4
1977-78	95.8	85.0	86.9	91.5	78.7	86.9	93.0
1978-79	97.2	90.8	91.7	94.7	82.9	91.5	95.5
1979-80	98.1	92.9	94.4	97.8	88.4	93.9	101.8
1980-81	99.2	92.4	96.3	101.3	90.6	93.6	104.4
1981-82	99.6	94.4	96.0	102.9	93.0	96.8	106.7
1982-83	99.2	87.0	89.7	90.8	88.1	94.0	91.9
1983-84	98.9	90.8	96.6	95.4	91.9	97.5	92.5
1984-85	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1985-86	101.5	102.1	112.5	113.8	103.2	98.4	113.4
1986-87	104.2	108.5	104.1	103.1	108.6	103.0	103.3
1987-88	110.4	109.8	106.3	115.7	117.6	110.5	108.9
1988-89	114.1	110.3	110.2	120.1	125.2	112.9	123.2
1989-90	120.8	116.6	85.8	129.9	133.0	117.9	120.0
1990-91	127.7	113.0	82.9	111.7	126.4	115.3	98.5
1991-92	123.9	125.7	80.7	104.5	123.3	119.5	91.3
1976-77 — Sept.	90.3	89.1	96.8	101.1	76.3	79.4	105.6
Dec.	98.1	96.2	96.3	102.5	80.9	86.4	103.5
Mar.	89.2	77.3	77.3	85.8	72.2	81.1	88.2
June	92.0	87.7	78.8	90.3	77.4	87.8	90.1
1977-78 — Sept.	95.5	89.6	93.4	93.9	82.0	85.2	93.2
Dec.	102.1	89.6	84.4	97.7	82.8	88.6	100.9
Mar.	93.2	74.4	78.5	77.8	72.6	86.9	88.2
June	92.5	86.3	91.5	96.7	77.4	90.1	91.5
1978-79 — Sept.	96.0	97.6	92.9	100.7	82.3	94.3	94.1
Dec.	105.4	90.5	92.6	102.5	85.7	92.9	96.9
Mar.	94.7	84.8	84.7	83.6	78.1	86.1	93.7
June	92.8	90.0	96.8	92.1	85.5	92.6	97.2
1979-80 — Sept.	98.2	93.4	97.7	102.3	91.4	90.5	106.6
Dec.	102.4	99.1	100.2	96.7	90.7	102.1	100.5
Mar.	95.2	83.4	87.8	91.1	84.0	90.2	91.8
June	96.4	95.7	92.0	101.1	87.4	92.9	108.5
1980-81 — Sept.	99.8	92.4	105.6	108.7	92.4	92.9	105.9
Dec.	110.2	97.6	99.4	105.3	93.7	94.2	109.9
Mar.	96.0	77.7	86.4	85.6	81.4	100.5	91.4
June	90.8	101.9	94.0	102.7	90.9	96.1	101.4
1981-82 — Sept.	96.8	99.1	109.8	110.8	95.1	97.4	105.6
Dec.	107.5	97.2	108.9	96.7	90.7	99.7	116.4
Mar.	95.8	85.8	82.7	91.3	86.2	98.7	99.7
June	98.2	95.7	94.3	100.5	93.3	100.1	105.6
1982-83 — Sept.	101.6	97.6	101.1	97.3	90.8	97.0	98.4
Dec.	106.3	91.9	84.4	91.9	91.7	95.8	97.7
Mar.	94.7	75.8	76.5	76.4	81.4	86.8	76.8
June	94.1	82.5	96.8	97.5	88.5	96.5	94.8
1983-84 — Sept.	95.8	90.5	102.2	94.3	90.6	97.4	99.3
Dec.	104.3	85.8	96.0	102.3	95.0	101.3	94.6
Mar.	96.1	80.6	89.2	88.0	86.5	102.0	87.6
June	99.3	106.2	99.1	96.9	95.3	89.5	88.7
1984-85 — Sept.	100.4	107.6	107.0	105.5	100.0	101.5	94.4
Dec.	103.4	97.2	99.9	102.9	99.0	98.0	97.2
Mar.	97.1	85.3	86.7	89.8	94.0	99.0	94.4
June	99.1	109.5	106.4	101.9	106.9	101.4	114.1
1985-86 — Sept.	100.8	87.7	125.3	124.8	106.9	99.5	123.0
Dec.	107.4	105.7	112.4	120.8	113.0	99.5	118.3
Mar.	98.5	85.8	100.2	100.7	94.8	99.0	104.7
June	99.5	129.4	112.1	108.9	98.2	95.7	107.7
1986-87 — Sept.	102.2	126.1	108.1	105.1	103.9	100.2	106.6
Dec.	111.8	102.8	109.5	108.3	115.1	106.6	110.6
Mar.	100.3	88.6	97.7	92.3	101.6	97.6	92.3
June	102.3	116.6	101.1	106.7	113.9	107.6	103.8
1987-88 — Sept.	107.9	124.6	116.0	119.2	117.7	108.2	105.2
Dec.	119.1	107.6	110.7	122.6	124.3	112.5	114.3
Mar.	109.8	100.9	93.7	88.5	115.0	111.7	110.6
June	104.9	106.2	104.7	122.4	113.2	109.7	105.4
1988-89 — Sept.	109.4	108.5	121.1	123.8	124.5	111.3	124.6
Dec.	123.0	115.2	111.5	130.9	135.4	113.5	128.9
Mar.	113.1	91.5	96.8	103.3	112.5	120.2	120.4
June	110.8	126.1	111.2	122.4	128.3	116.4	118.5
1989-90 — Sept.	116.4	119.9	111.5	129.0	136.0	115.5	129.6
Dec.	112.8	112.8	87.2	139.3	140.7	115.1	127.2
Mar.	122.3	103.8	70.3	125.8	126.4	118.3	113.1
June	116.4	129.9	74.2	125.6	128.8	122.8	110.1
1990-91 — Sept.	128.7	107.6	88.9	131.5	135.3	118.6	110.8
Dec.	136.9	114.2	86.7	117.4	130.7	114.5	104.9
Mar.	128.1	97.6	76.2	98.9	118.5	109.5	88.5
June	116.9	132.7	79.6	98.9	121.0	118.3	89.9
1991-92 — Sept.	120.9	120.9	87.8	113.0	129.4	119.2	96.0
Dec.	130.0	116.6	79.9	113.6	127.7	117.6	92.0
Mar.	122.1	114.7	77.1	94.3	115.0	117.5	84.5
June	122.5	150.7	77.9	96.9	121.2	123.7	92.7

TABLE 9. INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES,
BY SUBDIVISION — ORIGINAL—continued
Index numbers (Base: 1964-85 = 100.0)

	Basic metal products	Fabricated metal products	Transport equipment	Other machinery and equipment	Miscellaneous manufacturing	Total manufacturing
1976-77	78.5	100.1	94.2	104.3	86.3	90.3
1977-78	78.4	98.9	88.2	100.7	85.8	89.9
1978-79	83.6	105.1	89.7	104.8	92.8	93.6
1979-80	91.2	111.0	97.6	107.9	94.0	97.6
1980-81	95.5	115.8	92.4	114.7	96.9	99.6
1981-82	95.5	120.1	98.0	119.7	101.1	102.1
1982-83	82.6	102.6	93.2	100.2	92.0	93.7
1983-84	91.6	100.8	91.6	94.9	94.8	95.1
1984-85	100.0	100.0	100.0	100.0	100.0	100.0
1985-86	98.5	109.6	99.0	98.9	91.2	102.4
1986-87	99.7	108.6	93.3	107.9	105.2	103.8
1987-88	101.9	122.6	95.6	114.3	113.0	110.3
1988-89	107.1	134.3	103.9	125.1	118.5	116.9
1989-90	109.7	154.1	97.9	124.0	122.8	120.3
1990-91	101.8	141.8	80.9	118.0	109.8	114.1
1991-92	101.9	141.4	76.2	113.8	112.7	112.1
1976-77 — Sept.	79.7	97.7	95.5	112.1	84.4	91.5
Dec.	81.1	103.4	99.2	111.7	92.4	95.6
Mar.	73.1	93.2	82.2	96.3	77.2	83.7
June	80.2	106.2	99.9	97.0	91.4	90.4
1977-78 — Sept.	79.0	101.9	88.7	104.7	97.9	92.0
Dec.	78.3	101.1	90.4	110.4	84.0	93.8
Mar.	76.9	90.5	80.6	85.1	73.8	82.6
June	79.4	102.2	93.1	102.5	87.4	90.9
1978-79 — Sept.	80.9	105.6	91.1	103.7	96.5	94.0
Dec.	84.7	110.7	89.7	113.2	96.2	97.9
Mar.	82.3	96.6	79.6	95.2	84.8	87.8
June	86.4	107.3	98.4	107.1	93.7	94.8
1979-80 — Sept.	92.1	116.6	104.2	111.7	101.3	100.3
Dec.	89.8	117.7	107.1	114.3	98.8	101.9
Mar.	95.2	102.0	84.0	99.5	85.5	92.0
June	87.7	107.8	95.2	106.2	90.5	96.4
1980-81 — Sept.	92.8	111.5	93.1	116.5	99.4	100.6
Dec.	99.4	122.9	95.7	119.9	105.3	105.3
Mar.	92.4	110.7	81.1	103.8	85.9	93.0
June	97.4	118.0	99.7	118.4	97.1	99.7
1981-82 — Sept.	100.8	124.7	100.4	125.6	104.9	104.9
Dec.	95.7	128.6	99.5	127.0	111.7	107.6
Mar.	90.0	111.5	83.7	109.6	93.3	94.7
June	95.3	115.7	108.5	116.7	94.6	102.0
1982-83 — Sept.	92.2	116.3	112.2	122.7	103.9	103.1
Dec.	76.6	102.8	94.4	101.6	95.4	95.8
Mar.	73.3	88.6	75.9	82.8	81.6	83.0
June	88.4	102.8	90.4	93.6	87.1	93.0
1983-84 — Sept.	95.7	97.4	97.3	98.4	93.5	96.0
Dec.	90.8	101.2	92.8	101.5	100.1	98.4
Mar.	84.6	94.9	80.3	84.9	91.8	89.7
June	95.3	105.9	96.1	94.8	92.2	96.5
1984-85 — Sept.	104.1	103.4	103.4	101.3	108.7	102.3
Dec.	104.9	107.0	98.2	100.5	111.5	101.9
Mar.	90.4	91.0	88.1	95.7	94.6	93.3
June	100.6	98.6	110.2	102.5	85.2	102.4
1985-86 — Sept.	105.1	116.5	107.0	96.9	87.1	105.6
Dec.	103.0	112.9	106.4	106.9	99.4	108.2
Mar.	93.2	98.9	85.0	92.3	76.8	94.6
June	92.8	110.3	97.6	99.6	101.5	101.2
1986-87 — Sept.	101.6	113.7	109.1	113.2	105.8	106.3
Dec.	100.7	115.6	87.9	103.9	107.2	106.8
Mar.	95.2	97.4	81.3	106.5	93.7	96.6
June	101.3	107.9	95.0	108.0	114.0	105.4
1987-88 — Sept.	103.3	121.5	98.6	118.8	118.9	111.6
Dec.	105.7	130.9	97.4	108.9	121.8	114.8
Mar.	95.5	115.1	82.1	112.1	106.8	105.2
June	103.1	123.0	104.3	117.3	104.5	109.6
1988-89 — Sept.	105.2	136.7	102.7	123.8	115.3	116.0
Dec.	108.8	132.8	109.1	127.9	125.6	122.2
Mar.	103.6	124.6	86.8	122.0	107.7	109.3
June	110.6	143.1	116.8	126.8	125.2	120.0
1989-90 — Sept.	116.4	152.1	107.1	129.3	128.8	123.4
Dec.	115.1	157.4	101.6	131.3	132.8	125.7
Mar.	101.4	130.9	89.3	115.1	108.7	114.9
June	106.0	154.0	93.5	120.4	120.8	117.2
1990-91 — Sept.	102.9	153.2	90.0	123.1	113.2	119.9
Dec.	102.6	148.5	85.7	123.1	124.6	119.6
Mar.	99.8	130.5	68.1	110.0	98.6	107.3
June	102.0	134.8	79.7	115.8	103.0	109.7
1991-92 — Sept.	108.0	140.1	78.2	115.9	115.7	114.2
Dec.	100.6	151.0	76.8	121.9	123.7	116.1
Mar.	97.7	139.2	67.8	101.8	103.9	106.2
June	101.3	135.1	81.8	115.7	107.5	112.0

TABLE 10. INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES,
BY SUBDIVISION — SEASONALLY ADJUSTED
Index numbers (Base: 1984-85 = 100.0)

	Food, beverages and tobacco	Textiles	Clothing and footwear	Wood, wood products and furniture	Paper, etc., printing and publishing	Chemicals, petroleum and coal products	Non-metallic mineral products
1976-77 — Sept.	90.7	85.3	91.6	95.9	73.7	79.4	102.7
Dec.	91.3	90.5	92.7	96.7	76.9	83.7	98.7
Mar.	92.1	86.3	85.4	96.7	77.7	85.0	91.9
June	95.5	87.7	78.4	90.5	78.3	86.7	90.8
1977-78 — Sept.	96.0	85.8	88.2	89.1	79.1	85.0	90.8
Dec.	95.0	84.4	81.5	92.3	78.8	85.9	96.1
Mar.	96.2	83.4	86.5	87.5	78.0	87.8	91.9
June	96.2	85.8	91.3	96.9	78.3	89.0	91.9
1978-79 — Sept.	96.5	93.8	86.8	95.5	79.3	94.0	91.9
Dec.	97.9	85.3	89.6	96.9	81.7	90.2	92.4
Mar.	97.7	95.3	93.6	93.9	83.8	90.2	100.1
June	96.5	89.1	97.0	92.1	86.2	91.5	97.5
1979-80 — Sept.	98.8	89.6	90.5	96.9	88.3	89.9	103.9
Dec.	95.0	93.8	97.8	91.5	86.6	99.3	95.9
Mar.	98.5	93.8	97.5	102.4	90.2	94.8	88.0
June	100.2	94.3	92.2	101.2	87.8	91.7	108.8
1980-81 — Sept.	100.3	88.2	96.7	102.8	89.4	92.1	102.9
Dec.	102.3	93.4	97.8	99.7	89.6	91.5	105.3
Mar.	99.4	87.7	96.4	99.5	91.7	96.2	107.4
June	94.2	99.5	94.2	102.8	90.9	94.8	101.5
1981-82 — Sept.	97.3	94.3	99.8	104.8	92.5	96.4	102.7
Dec.	99.9	94.3	96.1	103.2	92.6	98.6	111.8
Mar.	99.3	97.2	92.7	102.6	92.4	93.4	106.2
June	101.6	92.4	94.4	100.6	93.6	98.6	105.5
1982-83 — Sept.	102.0	91.9	91.1	91.9	88.7	95.9	95.4
Dec.	99.1	90.5	83.7	87.1	87.5	93.7	93.5
Mar.	98.3	86.7	86.0	85.9	87.4	90.8	82.1
June	97.0	78.2	97.0	97.7	88.0	95.4	94.5
1983-84 — Sept.	96.2	84.4	92.2	89.3	89.0	96.4	96.6
Dec.	97.5	86.3	95.3	96.9	90.2	99.6	90.8
Mar.	99.7	93.4	100.4	99.1	93.0	105.7	94.0
June	102.2	99.1	99.2	96.9	94.9	88.6	88.4
1984-85 — Sept.	100.9	99.1	96.7	100.0	98.6	100.8	91.7
Dec.	96.8	99.5	98.9	97.1	93.4	96.7	93.1
Mar.	100.6	100.5	97.3	101.2	101.0	101.4	101.8
June	101.8	100.9	107.1	101.6	106.9	101.1	113.5
1985-86 — Sept.	101.5	80.6	113.6	118.5	105.6	99.0	119.3
Dec.	100.5	109.0	110.5	114.0	106.1	98.3	113.2
Mar.	101.9	100.9	112.2	113.4	101.8	100.5	113.2
June	102.3	118.0	113.6	108.8	98.6	95.8	107.1
1986-87 — Sept.	103.0	116.1	97.8	99.9	102.5	100.1	103.2
Dec.	104.5	106.6	106.8	102.2	107.8	105.4	106.0
Mar.	103.6	104.3	109.1	103.6	108.9	98.5	100.9
June	105.3	105.2	103.5	107.0	115.2	107.9	102.9
1987-88 — Sept.	109.0	116.6	105.1	113.0	115.7	108.0	101.5
Dec.	111.2	110.9	107.4	115.8	116.5	111.4	109.5
Mar.	111.2	118.5	104.6	110.2	122.8	113.0	114.2
June	110.4	95.3	108.0	123.1	115.2	109.2	109.2
1988-89 — Sept.	110.6	102.8	109.7	117.2	121.7	111.3	120.5
Dec.	114.8	118.0	107.4	123.7	127.4	112.6	123.0
Mar.	114.2	106.6	108.0	115.6	119.5	111.9	125.1
June	116.7	112.8	115.6	123.1	131.5	115.4	122.8
1989-90 — Sept.	117.7	115.6	100.6	122.3	132.4	115.4	125.4
Dec.	119.5	114.2	83.7	131.5	132.9	114.7	121.2
Mar.	123.3	120.4	78.4	140.6	133.8	120.7	117.4
June	122.7	115.6	77.2	126.3	132.4	120.9	113.9
1990-91 — Sept.	130.1	105.2	80.1	124.7	131.2	118.5	107.1
Dec.	127.9	114.7	83.2	110.8	123.7	114.4	99.6
Mar.	129.1	113.3	85.1	110.4	125.2	111.7	91.9
June	123.4	118.0	83.2	99.7	124.6	116.1	93.1
1991-92 — Sept.	122.3	119.4	79.2	107.0	125.3	119.1	92.9
Dec.	121.4	116.6	76.7	106.8	121.0	117.6	87.5
Mar.	122.9	133.2	86.0	104.6	121.4	120.0	88.0
June	129.3	133.6	81.2	99.5	124.9	121.3	96.1

TABLE 10. INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES,
BY SUBDIVISION—SEASONALLY ADJUSTED—continued
Index numbers (Base: 1984-85 = 100.0)

	Basic metal products	Fabricated metal products	Transport equipment	Other machinery and equipment	Miscellaneous manufacturing	Total manufacturing
1976-77 — Sept.	78.9	95.5	92.3	108.2	78.9	89.3
Dec.	79.1	94.3	95.2	107.7	88.9	90.7
Mar.	76.0	101.2	93.4	105.9	87.2	90.2
June	80.3	105.8	95.7	99.0	91.8	90.9
1977-78 — Sept.	78.0	99.5	85.6	100.8	91.6	89.7
Dec.	76.3	96.0	86.7	102.7	80.8	89.0
Mar.	80.1	98.3	91.7	91.7	83.1	89.2
June	79.6	101.9	89.2	104.4	88.0	91.5
1978-79 — Sept.	79.7	103.3	87.7	99.7	90.6	91.6
Dec.	82.8	105.1	86.0	105.5	92.3	92.9
Mar.	85.9	104.7	91.1	105.1	95.0	94.6
June	86.6	107.3	94.2	108.7	95.0	95.4
1979-80 — Sept.	90.1	113.8	99.8	107.1	95.4	97.6
Dec.	88.1	112.0	102.8	107.0	94.2	96.9
Mar.	99.4	110.4	96.7	110.1	95.0	99.3
June	87.8	107.9	91.2	107.2	92.5	96.9
1980-81 — Sept.	89.9	108.6	88.4	111.4	94.2	97.5
Dec.	98.0	117.1	92.2	113.0	100.1	100.4
Mar.	97.8	119.8	93.9	115.0	94.6	100.5
June	97.3	118.0	95.5	119.0	100.1	100.1
1981-82 — Sept.	97.0	121.5	94.5	119.6	99.7	101.4
Dec.	94.6	122.9	96.3	120.7	105.6	102.8
Mar.	95.9	125.7	97.3	121.3	101.8	101.8
June	94.8	115.4	103.9	116.6	98.2	102.1
1982-83 — Sept.	88.2	113.2	105.0	116.7	99.0	99.6
Dec.	75.9	98.3	91.9	97.2	90.1	91.7
Mar.	78.7	96.1	88.2	93.4	88.4	89.7
June	87.7	102.3	86.7	91.4	90.8	93.0
1983-84 — Sept.	91.2	94.7	90.7	93.4	89.3	92.8
Dec.	89.9	96.7	90.7	98.0	94.4	94.5
Mar.	91.1	103.3	93.0	92.9	99.3	96.9
June	94.5	105.3	92.2	94.7	95.7	96.4
1984-85 — Sept.	99.4	100.5	96.5	96.0	104.3	99.0
Dec.	103.5	102.0	96.0	98.0	105.4	98.0
Mar.	97.1	99.4	101.8	103.2	102.2	100.7
June	99.9	98.1	105.8	102.8	88.0	102.3
1985-86 — Sept.	100.8	113.1	100.3	91.6	84.0	102.2
Dec.	101.1	107.3	103.6	105.5	94.0	104.0
Mar.	99.8	108.1	98.8	98.0	83.4	101.8
June	92.4	110.3	93.2	100.3	103.9	101.4
1986-87 — Sept.	98.1	110.1	103.1	107.2	102.4	103.1
Dec.	98.4	109.8	83.2	102.9	101.0	102.5
Mar.	101.6	106.2	93.8	111.9	102.4	103.7
June	101.0	108.2	90.4	109.1	115.8	105.7
1987-88 — Sept.	100.4	117.3	93.9	113.0	115.8	108.5
Dec.	103.1	124.9	94.2	107.9	114.3	110.1
Mar.	101.5	125.0	94.7	117.1	117.7	111.9
June	103.0	123.6	99.0	118.5	105.4	110.7
1988-89 — Sept.	102.6	131.9	98.4	118.6	112.8	113.0
Dec.	105.9	127.2	105.3	125.9	117.3	117.0
Mar.	109.8	134.7	100.0	127.5	119.2	116.1
June	110.4	143.7	110.6	127.8	126.2	121.1
1989-90 — Sept.	113.8	146.8	102.8	124.8	126.4	120.5
Dec.	112.0	151.3	98.1	128.5	123.4	120.3
Mar.	107.2	164.7	102.8	120.5	120.7	121.9
June	105.8	154.6	88.4	121.0	122.0	118.3
1990-91 — Sept.	100.6	147.9	86.6	119.6	110.9	116.9
Dec.	99.8	143.1	82.6	119.7	115.6	114.0
Mar.	105.5	140.1	78.5	115.4	109.4	113.0
June	102.0	135.3	75.3	116.2	103.9	110.3
1991-92 — Sept.	105.6	135.5	75.3	113.1	113.5	111.3
Dec.	97.9	145.7	74.6	118.2	114.5	110.5
Mar.	103.3	149.3	76.7	107.1	115.4	111.7
June	101.3	135.6	78.0	116.0	108.4	112.8

TABLE 11. INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES,
BY SUBDIVISION — TREND ESTIMATES
Index numbers (Base : 1984-85 = 100.0)

	<i>Food, beverages and tobacco</i>	<i>Textiles</i>	<i>Clothing and footwear</i>	<i>Wood, wood products and furniture</i>	<i>Paper, etc., printing and publishing</i>	<i>Chemicals, petroleum and coal products</i>	<i>Non-metallic mineral products</i>
1976-77 — Sept.	90.2	88.4	93.4	96.3	74.8	81.3	102.2
Dec.	91.3	88.8	89.2	95.5	76.5	83.9	97.7
Mar.	92.9	88.8	85.3	93.7	77.9	86.0	93.1
June	94.6	88.4	82.7	91.3	78.9	86.7	91.2
1977-78 — Sept.	95.5	86.4	82.2	89.2	79.1	86.7	91.9
Dec.	95.8	85.0	84.4	89.0	79.0	87.0	93.3
Mar.	95.8	86.0	86.4	90.7	78.5	88.6	93.0
June	96.2	87.9	87.5	93.3	78.7	91.2	91.6
1978-79 — Sept.	96.9	90.3	88.6	95.3	79.8	92.5	91.9
Dec.	97.2	92.2	90.3	95.1	81.8	92.5	94.2
Mar.	97.6	91.7	92.3	93.7	84.3	91.3	97.5
June	97.4	91.7	93.7	92.7	86.4	91.6	100.1
1979-80 — Sept.	96.9	92.7	94.5	92.9	87.8	94.3	99.4
Dec.	97.0	93.6	95.1	95.3	88.6	96.2	98.9
Mar.	97.9	95.1	98.4	98.9	88.9	96.2	100.8
June	99.6	94.1	95.1	101.0	89.1	94.0	103.3
1980-81 — Sept.	101.3	92.2	95.4	101.0	89.6	92.7	105.7
Dec.	100.8	91.7	95.9	99.4	90.3	93.9	105.7
Mar.	98.5	93.6	96.2	99.4	91.3	95.3	104.0
June	96.8	96.0	96.2	101.4	97.0	97.9	104.0
1981-82 — Sept.	96.8	97.0	96.5	103.0	92.5	97.6	105.2
Dec.	98.5	97.0	95.9	103.4	93.0	97.6	107.8
Mar.	100.5	96.0	94.5	101.8	93.2	97.7	107.8
June	101.2	95.1	92.0	97.8	92.1	97.6	103.8
1982-83 — Sept.	101.0	93.6	88.6	91.5	90.1	96.5	96.8
Dec.	99.8	90.3	86.4	87.8	88.1	94.7	90.7
Mar.	98.0	86.4	87.8	88.0	87.6	93.7	88.8
June	96.8	83.1	91.2	90.5	88.2	94.9	91.2
1983-84 — Sept.	96.6	83.6	94.2	93.3	89.3	98.9	93.7
Dec.	97.7	88.4	96.2	95.1	90.8	101.2	94.0
Mar.	99.9	94.6	97.6	96.6	93.4	100.3	91.4
June	100.9	98.9	98.7	97.8	95.4	98.2	90.2
1984-85 — Sept.	100.1	100.8	97.3	97.4	96.2	97.4	90.7
Dec.	99.2	102.8	96.8	97.2	97.7	99.5	94.4
Mar.	99.7	99.9	100.1	99.8	101.1	101.8	103.1
June	101.0	96.5	105.8	105.5	105.1	101.3	111.7
1985-86 — Sept.	101.4	95.1	110.0	111.8	107.2	101.0	116.7
Dec.	101.1	99.9	112.8	114.8	105.2	100.0	116.0
Mar.	101.4	109.0	111.4	112.0	102.1	99.1	111.5
June	102.7	115.7	107.7	106.3	101.1	99.8	107.8
1986-87 — Sept.	103.2	114.8	104.9	102.2	102.7	101.0	105.0
Dec.	103.6	110.4	104.3	100.4	106.7	102.6	103.1
Mar.	104.3	107.1	105.2	102.6	111.0	104.4	101.1
June	106.0	108.3	105.8	107.3	113.9	106.5	101.3
1987-88 — Sept.	108.3	114.3	104.6	110.5	116.7	109.9	104.3
Dec.	110.6	115.7	104.9	112.8	118.6	112.5	108.0
Mar.	110.9	110.4	106.0	114.6	118.9	112.6	111.0
June	110.8	106.1	107.2	117.2	120.3	112.3	114.3
1988-89 — Sept.	111.6	106.6	107.4	119.1	121.6	112.2	118.1
Dec.	113.3	110.0	108.8	119.1	123.4	112.9	123.3
Mar.	115.0	113.8	110.5	118.3	126.1	114.6	124.6
June	116.3	113.8	108.6	119.5	128.9	115.3	124.6
1989-90 — Sept.	117.9	115.7	99.6	124.7	132.4	116.4	123.7
Dec.	119.8	119.1	87.0	131.0	134.2	118.3	121.6
Mar.	122.2	118.1	78.3	133.3	134.0	120.5	118.1
June	125.0	115.2	76.9	129.6	132.8	121.6	113.2
1990-91 — Sept.	127.8	112.8	79.7	121.3	129.9	119.3	106.6
Dec.	128.8	112.4	82.5	112.6	126.6	115.9	99.4
Mar.	127.5	116.2	83.9	106.3	121.2	115.0	94.4
June	124.3	118.1	81.9	103.4	125.0	116.5	92.1
1991-92 — Sept.	122.0	119.6	79.7	104.1	124.1	118.9	90.5
Dec.	122.0	123.9	79.7	104.7	122.9	120.2	89.5
Mar.	124.2	130.1	81.1	103.4	122.8	121.1	90.2
June	127.1	136.4	82.7	100.0	123.5	122.2	92.6

TABLE 11. INDEXES OF MANUFACTURING GROSS PRODUCT AT AVERAGE 1984-85 PRICES,
BY SUBDIVISION — TREND ESTIMATES—continued
Index numbers (Base : 1984-85 = 100.0)

		Basic metal products	Fabricated metal products	Transport equipment	Other machinery and equipment	Miscellaneous manufacturing	Total manufacturing
1976-77	Sept.	78.7	94.0	93.7	108.2	82.1	89.2
	Dec.	78.4	97.4	95.0	106.4	86.1	90.5
	Mar.	78.4	100.3	94.8	104.0	89.8	90.8
	June	78.3	101.2	92.4	102.7	91.3	90.6
1977-78	Sept.	78.1	98.9	89.5	101.2	88.5	89.8
	Dec.	78.3	96.5	88.6	100.2	85.3	89.5
	Mar.	78.6	96.8	89.5	100.1	84.2	89.8
	June	79.6	99.7	89.9	100.9	87.0	90.9
1978-79	Sept.	80.9	102.0	88.2	102.9	90.8	92.1
	Dec.	82.7	102.8	88.0	105.3	93.4	93.2
	Mar.	85.5	104.3	90.8	106.9	94.9	94.5
	June	87.1	107.2	95.8	108.2	95.7	95.9
1979-80	Sept.	89.5	110.0	100.3	108.5	95.7	97.1
	Dec.	92.2	110.6	101.1	108.8	95.1	98.0
	Mar.	92.3	108.4	97.5	109.1	94.2	98.0
	June	92.0	107.1	92.6	110.0	94.5	97.9
1980-81	Sept.	92.6	109.4	90.4	111.4	95.7	98.5
	Dec.	95.0	113.5	91.8	113.8	97.2	99.5
	Mar.	98.1	116.7	94.2	116.7	98.1	100.5
	June	97.9	118.6	95.5	119.0	99.4	101.0
1981-82	Sept.	96.6	119.6	95.7	121.1	101.9	101.6
	Dec.	96.2	120.1	96.7	121.8	103.6	102.4
	Mar.	96.0	119.2	100.3	123.9	103.0	102.9
	June	93.0	114.9	103.2	119.4	100.4	101.7
1982-83	Sept.	86.2	107.5	101.6	111.8	96.4	97.9
	Dec.	80.1	100.8	95.3	101.8	92.5	93.6
	Mar.	80.3	96.9	89.4	94.2	89.8	91.2
	June	85.5	95.7	87.9	92.8	89.3	91.5
1983-84	Sept.	89.9	96.0	89.9	95.0	91.9	93.4
	Dec.	91.0	97.4	91.6	96.0	94.5	94.9
	Mar.	91.9	100.0	92.9	95.6	97.2	96.3
	June	95.4	102.1	93.9	95.3	100.2	97.4
1984-85	Sept.	99.2	101.4	95.5	96.7	103.8	98.1
	Dec.	100.7	98.6	96.7	100.5	104.7	99.2
	Mar.	100.2	98.5	101.9	101.7	99.4	100.6
	June	99.9	101.5	103.9	101.1	92.1	102.1
1985-86	Sept.	100.8	105.2	104.1	100.0	87.2	103.1
	Dec.	100.6	107.7	101.2	99.6	87.6	103.0
	Mar.	98.2	107.8	99.6	101.3	92.8	102.5
	June	96.3	108.0	97.9	102.8	98.5	102.2
1986-87	Sept.	96.6	108.4	95.4	104.5	101.5	102.3
	Dec.	99.0	106.9	93.1	107.7	103.6	103.0
	Mar.	100.8	106.0	91.4	110.0	106.4	104.1
	June	101.3	108.7	91.8	111.2	112.2	106.0
1987-88	Sept.	101.6	115.2	93.8	111.8	116.8	108.5
	Dec.	101.9	120.7	94.6	112.8	116.6	110.3
	Mar.	102.3	123.6	96.2	115.6	113.4	111.1
	June	102.5	124.7	98.4	118.8	111.5	112.0
1988-89	Sept.	103.7	125.8	100.6	122.3	112.4	113.5
	Dec.	106.1	128.7	103.1	125.6	116.4	115.7
	Mar.	109.0	133.4	105.6	128.0	122.0	118.2
	June	111.9	139.0	106.0	128.8	125.4	119.8
1989-90	Sept.	112.7	146.2	104.9	127.9	126.2	121.0
	Dec.	111.7	153.8	102.1	126.2	125.2	121.4
	Mar.	108.6	156.1	97.5	123.8	122.2	120.7
	June	104.4	153.8	92.6	121.9	119.2	119.2
1990-91	Sept.	101.9	147.4	87.0	120.5	116.2	116.9
	Dec.	101.6	141.1	82.2	119.6	112.6	114.5
	Mar.	103.1	136.7	79.2	117.5	109.6	112.6
	June	103.9	134.4	76.3	116.7	109.2	111.3
1991-92	Sept.	102.9	137.1	75.2	115.6	111.5	110.8
	Dec.	101.7	141.1	75.7	114.7	114.5	111.2
	Mar.	101.5	142.2	76.9	113.8	114.1	111.9
	June	101.3	140.2	78.1	113.8	111.5	112.6

EXPLANATORY NOTES

Introduction

This publication presents in index number form, quarterly estimates of gross product at constant prices (average 1984-85 prices) for the non-farm, goods producing sector which, for brevity, is termed the 'industrial sector' (see paragraph 2). Also presented are indexes for component industries, including individual manufacturing subdivisions.

Scope of the estimates

2. The scope of the industrial sector referred to in this publication is defined to include all *establishments* classified to the Australian Standard Industrial Classification (ASIC) Division B (Mining), excluding ASIC subdivision 16 (Services to mining n.e.c.); Division C (Manufacturing); and Division D (Electricity, gas and water). The base year weights used in constructing the indexes in this publication have been derived from establishment data. However, the quarterly indicator series used for manufacturing are based on data relating to *business units* which may cover more than one establishments.

The table below sets out the base year weights associated with the major components of the industrial sector, and each manufacturing subdivision.

	1984-85 Weight %
Mining (excluding services to mining)	24.0
Manufacturing	63.3
Food, beverages and tobacco	12.8
Textiles	1.5
Clothing and footwear	2.6
Wood, wood products and furniture	3.7
Paper, etc., printing and publishing	6.8
Chemicals, petroleum and coal products	4.9
Non-metallic mineral products	3.1
Basic metal products	6.7
Fabricated metal products	4.7
Transport equipment	6.3
Other machinery and equipment	6.8
Miscellaneous manufacturing	3.5
Electricity, gas and water	12.7
Total Industrial sector	100.0

3. The use of Manufacturers' sales and stocks data means that the manufacturing indexes have three important limitations as measures of manufacturing production:

- changes in quarterly production by manufacturing establishments of non-manufacturing businesses are not reflected in the indexes;
- changes in a part of the quarterly production of non-manufacturing establishments of manufacturing businesses are reflected in the indexes; and
- changes in quarterly production by government bodies such as shipyards and railway workshops are not reflected in the indexes.

4. The scope of the data used in the manufacturing indicator series also differs slightly from the general definition of manufacturing gross product. The stocks estimates used include finished goods bought in, but not manufactured, by a business. As far as can be assessed this has not had a significant influence on the estimates.

Derivation of the estimates of gross product

5. The estimates are derived using the *gross output* method whereby base year (1984-85) estimates of gross product are extrapolated by constant price estimates of gross output. All the quarterly indexes contained in this publication have been *benchmarked*, where possible, to annual estimates (see paragraph 6 below). For further details on the derivation of constant price gross product for individual industries refer to Chapter 18 in *Australian National Accounts: Concepts, Sources and Methods* (5216.0).

Benchmarking

6. Deriving quarterly estimates presents special problems in that it is often difficult to adhere strictly to the definitions and concepts used in annual estimates. Frequently, it is not possible to use the same data sources as used for annual estimates, and alternative quarterly data sources are generally much less detailed. For example, annual estimates of gross product for the Mining industry (as published in *Australian National Accounts: Gross Product, Employment and Hours Worked* (5211.0)) are compiled (using the double deflation method) from detailed output and input data from the annual census of mining establishments. On the other hand, the quarterly series draw on the quantities of minerals mined (gross output), reported in surveys of mining establishments. In such cases, where the quarterly estimates are inferior to the annual, the quarterly estimates are adjusted to agree with the annual estimates in such a way that preserves, as far as practical, the movements of the quarterly series. This is commonly referred to as *benchmarking*.

Data sources for quarterly output series

(i) *Mining (excluding services to mining)*
7. Quarterly constant price output estimates are derived for major ASIC classes by quantity revaluation (i.e. quantities produced each quarter multiplied by associated base year (1984-85) average prices). Estimates of quantities produced are obtained from data contained in *Quarterly Mineral Statistics* (Australian Bureau of Agriculture and Resource Economics) and *Mineral Production, Australia* (8405.0). Constant price estimates of value added are derived by the gross output method (see paragraph 5) for each ASIC class. Total quarterly estimates of value added are then benchmarked (see paragraph 6) to annual gross product estimates obtained from the mining census.

(ii) *Manufacturing*

8. Quarterly constant price estimates of gross output for 22 manufacturing industry groups (excluding petroleum) are derived by summing constant price estimates of manufacturers' sales of manufactured goods, other operating revenue (where significant) and changes in the level of stocks of finished goods and work-in-progress.

9. Constant price estimates of all components of manufacturing output are derived by price deflation, i.e. current price components (obtained from the quarterly Survey of Stocks and Manufacturers' Sales) are derived by fixed weighted producer price indexes (published in *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (6412.0)).

10. Quarterly petroleum production estimates are based on quarterly data published in *Major Energy Statistics* (released by the Department of Primary Industries and Energy).

11. Quarterly constant price estimates of output are used to derive constant price estimates of gross product at factor cost by the gross output method. The latter estimates are aggregated to 12 manufacturing ASIC subdivisions and then benchmarked to corresponding annual estimates of gross product at market prices (based on manufacturing census data).

(iii) Electricity

12. Quarterly quantities of electricity produced, as published in *Production of Energy Products, Australia* (8368.0), are benchmarked to annual gross product estimates based on the quantity of electricity sold (published by the Electricity Supply Association of Australia in *The Electricity Industry of Australia*).

(iv) Gas

13. Quarterly quantities of gas available through mains, are published in *Production of Energy Products, Australia* (8368.0), are benchmarked to gross product estimates derived from ABS economic census data relating to the performance of the gas production and distribution industry.

(v) Water and sewerage

14. Quarterly constant price output estimates are derived by quantity revaluation, i.e. quantities of water sold (to final consumers and for irrigation) and sewerage connections, are multiplied by average 1984-85 prices for each type of service. The quantity data are supplied by a selection of state and local government authorities. Quarterly output estimates are then benchmarked to annual constant price gross product estimates.

Reliability of estimates

15. Because the measures used in the derivation of the manufacturing indexes are based on a sample survey, the indexes themselves are subject to sampling variability. In terms of original estimates the standard errors in percentage terms approximate the errors reported in *Stocks and Manufacturers' Sales, Australia* (5629.0). However, for constant price estimates the standard errors may be up to 10 per cent higher than those for the corresponding current price estimates because of the sampling variability contained in the prices data used to deflate the current price estimates. Seasonally adjusting the estimates has an insignificant effect on standard errors.

16. The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections

in reporting by respondents and errors made in collecting and processing data. Inaccuracies of this kind are known as non-sampling errors and may occur in any collection, whether it be a sample or a full count. In addition to the non-sampling errors which may occur in current prices estimates, there may be non-sampling errors introduced by the process of compiling constant price estimates. These further errors may arise from the introduction of additional data and from the assumptions and approximations which are necessary in compiling constant price estimates. Every effort is made to minimise non-sampling errors by careful design of forms, editing of data and efficient operating procedures.

Seasonal adjustment

17. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series may be more clearly recognized. Seasonal adjustment procedures do not aim to remove the irregular or non-seasonal influences which may be present in any particular quarter, such as the effect of a major industrial dispute or major plant breakdowns. Irregular factors of this nature can make it difficult to interpret the movement of the series even after adjustment for seasonal variation.

18. Seasonal adjustment may be carried out by various methods and the results may vary slightly according to the procedure adopted. Accordingly, seasonally adjusted statistics should not be regarded as in any way definitive. In interpreting particular seasonally adjusted statistics it is important to note the methods by which they have been derived and the limitations to which the methods used are subject. Details of the various seasonal adjustment methods used are available on request.

Trend estimates

19. The seasonally adjusted series can be smoothed to reduce the impact of the irregular component in the adjusted series. There are a number of ways of accomplishing this, depending on the intended uses of the smoothed series. If importance is attached to measuring the underlying change in the most recent periods, moving averages employing appropriate weighting patterns should be adopted; the choice of averaging technique will determine the degree of smoothness of the derived series. For example, a 9-term moving average will even out more of the short term fluctuation in a series (and therefore appear 'smoother') than will a 5-term moving average. However, the longer the term of the moving average the longer the series affected by revisions resulting from more recent data becoming available. Such smoothed seasonally adjusted estimates are referred to as 'trend estimates' in this publication.

20. Trend estimates included in this issue are derived using a 7-term Henderson moving average. (The weights of the 7-term average are available upon request.) As a moving average approaches the end of a time series and begins to run out of observations, asymmetric averages have been used. Unlike the asymmetric weights of the standard 7-term Henderson moving averages, the weights employed here have been tailored to suit the particular characteristics of individual manufacturing subdivisions.)

21. 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 seasonally adjusted time series data.

Average annual trend rate of growth

22. It is sometimes more useful to study growth over a number of years by such means as average annual rates of growth rather than by year-to-year changes. Movements over relatively short periods may be subject to a high degree of irregularity and are therefore not indicative of the long-term trend in a series. It is a matter of judgement as to what represents the minimum number of observations required to permit the measurement of a long term trend growth rate. Moreover, the measure obtained is not independent of the behaviour of the business cycle during the measurement period. In the Main Features of this publication, the average trend rates of growth have been calculated as the linear least squares trend of the logarithms of the estimates for all years 1981-82 to 1991-92. Further information on the method used to derive trend rates of growth can be provided on request.

Related publications

23. Users may also wish to refer to the following publications:

Australian National Accounts : Gross Product, Employment and Hours Worked, 1988-89 (5211.0) — issued annually

Australian National Accounts : Gross Product, Employment and Hours Worked (5222.0) — issued quarterly

Australian National Accounts : Concepts, Sources and Methods (5216.0)

Constant Price Estimates of Manufacturing Production, Australia, 1988-89 (8211.0) — issued annually

Price Indexes of Articles Produced by Manufacturing Industry, Australia (6412.0) — issued monthly

Production Bulletins (8357.0 to 8363.0, 8367.0 to 8369.0) — issued monthly

Production Statistics, Australia, Preliminary (8301.0) — issued monthly

Stocks and Manufacturers' Sales, Australia (5629.0) — issued quarterly

24. Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia* (1101.0). The ABS also issues on Tuesday 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

— nil or rounded to zero
ASIC Australian Standard Industrial Classification, 1983 edition

IAN CASTLES
Australian Statistician



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