FEDERAL RESERVE statistical release

G.12.3

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INDUSTRIAL PRODUCTION

Industrial production increased 0.2 percent in June after rising 0.5 percent in May. Revisions to the March, April and May indexes indicate slightly higher production levels than previously published. The June increase was paced by gains in the production of materials. So far this year, industrial production has risen at a 2.4 percent annual rate compared with a gain of less than 1 percent over the twelve months of 1986. The current level of the index is 128.2 percent of the 1977 average.

Market Groupings. Total output of consumer goods was about unchanged in June; slight gains in the output of home goods and nondurable consumer items were offset by reduced production of motor vehicles. Autos were assembled at an annual rate of 6.9 million units compared with a rate of 7.1 million in May; output of light-weight trucks also was reduced in June.

Business equipment production also was little changed in June; further gains occurred in commercial, manufacturing, and construction and farm machinery, but output of transit equipment fell--owing largely to the reduced volume of motor vehicle assemblies. Defense equipment output posted another small gain in June--so far in 1987 this sector has shown more moderate gains than in recent years. Production of construction supplies retreated in June after increasing in May and was slightly below levels at the end of last year; the recent sluggishness probably reflects weaker construction activity so far in 1987.

In June, gains occurred in the production of durable, nondurable, and energy materials as well. In the nondurable category advances continued in the output of textiles, paper, and chemicals. Energy materials advanced sharply in June due largely to increased electricity generation. (Over)

Industrial Production: Summary

Seasonally adjusted

Item	Index, 1977=100		Monthly percent change					Current month from a year ago
	1987 MAY	1987 JUN	FEB	MAR	APR	MAY	JUN	
Total	128.0	128.2	.5	.1	.0	.5	.2	3.2
Market Groupings								
Products, total	136.5	136.4	.9	.1	-0.5	.6	-0.1	3.0
Final products	135.2	135.1	1.0	.0	-0.5	.6	-0.1	3.1
Consumer goods	127.3	127.1	.6	.0	-0.7	.6	-0.1	2.2
Durable goods	119.6	118.3	2.0	-1.0	-2.6	1.3	-1.0	3.5
Nondurable goods	130.2	130.4	.2	.3	.0	.3	.2	1.8
Business equipment	141.3	141.1	1.9	.0	-0.2	.6	-0.1	3.3
Defense and space	187.1	187.6	.7	.0	.0	.3	.3	5.2
Intermediate products	140.9	140.8	.4	.5	-0.4	.8	-0.1	2.8
Construction supplies	127.9	127.1	.1	.1	-1.0	.6	-0.6	2.4
Materials	116.4	117.2	.0	.1	.6	.4	.7	3.6
Industry Groupings								
Manufacturing	132.8	132.8	.7	.2	.0	.4	.0	3.6
Durable	130.4	130.4	1.1	.1	-0.5	.4	.0	3.4
Nondurable	136.1	136.2	.1	.4	.7	.3	.1	3.8
Mining	97.0	97.7	-1.0	.3	.1	.4	.7	-1.2
Utilities	110.7	112.2	.1	-0.1	-0.8	1.9	1.3	3.2

Industry Groupings. Manufacturing output was unchanged overall in June at a level about 3-1/2 percent higher than a year ago. Mining output increased in June--in particular, coal and metal mining. Output by utilities rose sharply.

Revisions.

Total Industrial Production
(Estimates as shown last month and current estimates)

Month	Index (1977=100)		Percentage change from previous months	
	Previous	Current	Previous	Current
March	127.3	127.3	.0	.1
April	127.2	127.3	-.1	.0
May	127.8	128.0	.5	.5
June	NA	128.2	NA	.2

NA--not applicable.

FEDERAL RESERVE

Industrial Production

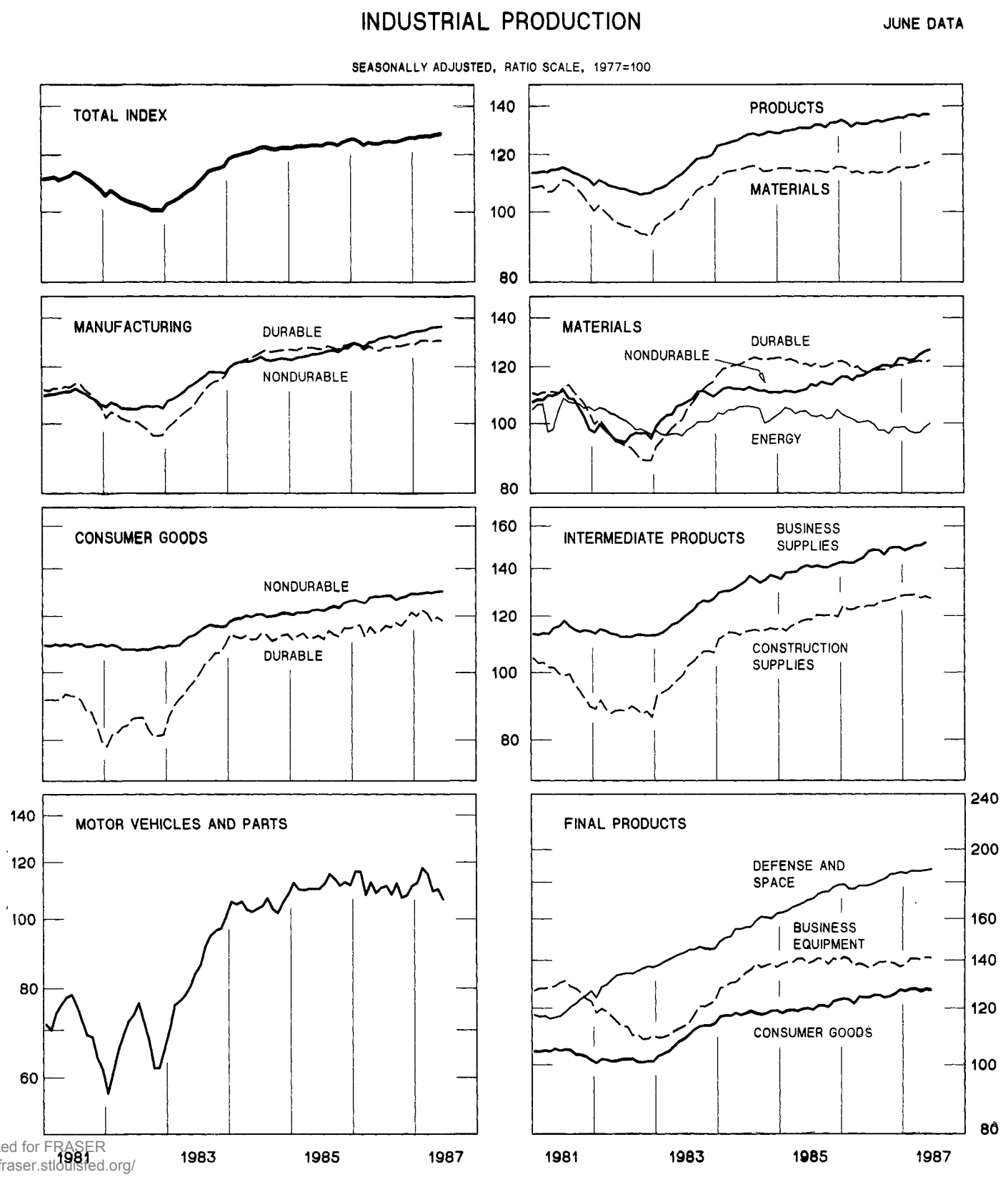

Table 1A

INDUSTRIAL PRODUCTION: MARKET GROUPINGS

Seasonally adjusted, 1977 = 100

Major Market Groupings	1977 Proportion	1986 Ann. Avg.	1986 JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY	JUN
TOTAL INDEX	100.00	125.1	124.2	124.9	125.1	124.9	125.3	126.0	126.7	126.5	127.2	127.3	127.3	128.0	128.2
PRODUCTS, TOTAL	57.72	133.2	132.4	133.2	133.8	133.3	134.0	134.5	135.0	134.9	136.1	136.2	135.6	136.5	136.4
FINAL PRODUCTS	44.77	132.3	131.1	132.0	132.6	132.2	132.7	133.1	133.7	133.6	135.0	135.0	134.4	135.2	135.1
CONSUMER GOODS	25.52	124.5	124.4	125.2	125.1	124.2	124.7	125.6	127.2	126.8	127.5	127.5	126.6	127.3	127.1
EQUIPMENT, TOTAL	19.25	142.7	140.0	141.0	142.5	142.8	143.3	143.1	142.2	142.8	144.9	145.0	144.8	145.6	145.6
INTERMEDIATE PRODUCTS	12.94	136.4	137.0	137.3	137.8	137.0	138.7	139.2	139.7	139.1	139.7	140.4	139.8	140.9	140.8
MATERIALS	42.28	113.9	113.1	113.6	113.2	113.5	113.3	114.3	115.2	115.2	115.1	115.2	115.9	116.4	117.2
CONSUMER GOODS	25.52	124.5	124.4	125.2	125.1	124.2	124.7	125.6	127.2	126.8	127.5	127.5	126.6	127.3	127.1
DURABLE CONSUMER GOODS	6.89	116.2	114.3	116.3	115.7	117.4	116.3	118.4	121.5	120.0	122.4	121.2	118.0	119.6	118.3
Automotive products	2.98	115.1	113.7	116.4	114.5	117.0	112.7	114.6	117.7	117.6	123.5	121.2	115.8	117.5	114.5
Autos and trucks,consumer	1.79	112.9	112.2	114.5	110.4	116.8	107.7	107.6	115.6	117.9	125.2	121.6	111.5	113.1	107.7
Autos, consumer	1.16	97.3	99.3	95.3	87.8	96.2	91.9	92.3	99.5	94.3	105.3	100.9	91.8	91.0	87.9
Trucks, consumer	.63	141.8	136.1	150.3	152.4	155.1	137.1	136.0	145.6	161.9	162.1	159.9	148.1		
Auto parts & allied gds	1.19	118.4	116.1	119.1	120.7	117.3	120.1	125.2	120.8	117.1	121.0	120.5	122.2	124.2	124.7
Home goods	3.91	117.1	114.8	116.3	116.7	117.7	119.0	121.2	124.4	121.9	121.6	121.2	119.8	121.1	121.3
Appliances,TV & air-cond	1.24	139.5	137.5	138.9	139.4	141.2	142.6	148.2	153.2	146.9	145.2	142.9	137.7	142.2	141.6
Appliances and TV	1.19	141.6	139.1	141.6	142.5	143.5	144.3	150.0	155.1	148.9	146.7	143.8	139.2	142.3	
Carpeting & furniture	.96	125.8	122.5	126.6	125.8	126.2	128.8	131.1	132.0	129.1	130.8	131.3	133.0	132.9	
Misc. home goods	1.71	96.0	94.1	94.1	95.1	96.0	96.5	96.3	99.4	99.8	99.3	99.8	99.4	99.3	
NONDURABLE CONSUMER GOODS	18.63	127.5	128.1	128.4	128.6	126.7	127.8	128.3	129.4	129.2	129.4	129.8	129.8	130.2	130.4
Clothing	3.34	97.0	95.9	97.0	96.8	95.4	97.4	97.6	99.0	98.8	99.9	99.4	99.3	100.6	
Consumer staples	15.29	134.2	135.1	135.3	135.5	133.6	134.4	135.0	136.0	135.9	135.9	136.5	136.4	136.7	137.0
Consumer foods & tobacco	7.80	131.9	133.3	132.2	133.2	131.0	131.6	132.6	133.9	132.9	134.0	134.8	134.1	134.5	
Nonfood staples	7.49	136.5	137.0	138.5	137.9	136.3	137.2	137.4	138.2	139.0	137.9	138.2	138.9	138.9	139.5
Consumer chem. products	2.75	161.3	163.6	166.4	163.4	161.1	161.7	161.0	163.1	165.9	164.7	165.7	165.7	165.3	
Consumer paper products	1.88	147.3	147.1	146.4	147.7	145.7	150.3	151.5	150.1	149.4	147.8	147.5	148.9	151.4	
Consumer energy	2.86	105.7	104.8	106.6	107.1	106.3	105.2	105.5	106.4	106.3	105.7	105.8	106.5	105.4	
Consumer fuel	1.44	92.8	91.8	91.2	94.9	92.0	90.8	91.7	92.2	95.0	92.5	94.1	94.5	91.7	
Residential utilities	1.42	118.8	118.1	122.3	119.6	120.9	119.8	119.6	120.8	117.8	119.2	117.7	118.7		
EQUIPMENT, TOTAL	19.25	142.7	140.0	141.0	142.5	142.8	143.3	143.1	142.2	142.8	144.9	145.0	144.8	145.6	145.6
BUSINESS & DEFENSE EQUIP.	18.01	147.1	145.1	146.4	147.8	148.0	148.4	148.1	147.0	147.7	150.1	150.1	149.9	150.6	150.6
BUSINESS EQUIPMENT	14.38	138.6	136.6	137.9	139.3	139.3	139.1	138.6	137.1	138.1	140.8	140.8	140.5	141.3	141.1
Constr, mining, & farm	2.08	59.9	61.9	60.6	58.3	58.1	58.0	56.6	58.2	57.2	56.8	58.1	58.2	60.8	
Manufacturing equipment	3.27	111.9	111.7	112.6	113.3	113.0	112.7	109.6	108.8	110.1	111.5	110.9	111.1	111.5	111.8
Power equipment	1.27	81.6	83.5	81.7	81.7	80.3	80.5	79.5	80.2	79.6	81.2	81.7	82.4	83.3	83.1
Commercial equipment	5.22	214.6	208.2	214.5	217.5	215.1	215.4	217.3	213.7	215.9	218.4	219.7	220.2	220.8	221.6
Transit equipment	2.49	109.2	108.8	103.9	106.9	113.3	111.8	110.7	108.9	109.5	117.4	114.0	110.4	110.8	107.5
DEFENSE & SPACE EQUIPMENT	3.63	180.3	178.4	179.5	181.0	182.0	184.6	184.9	185.8	185.2	186.5	186.6	186.6	187.1	187.6
INTERMEDIATE PRODUCTS	12.94	136.4	137.0	137.3	137.8	137.0	138.7	139.2	139.7	139.1	139.7	140.4	139.8	140.9	140.8
Construction supplies	5.95	124.7	124.1	124.0	125.4	125.9	126.3	126.8	127.9	128.3	128.4	128.5	127.2	127.9	127.1
Business supplies	6.99	146.4	147.9	148.6	148.4	146.4	149.3	149.7	149.8	148.3	149.4	150.5	150.6	152.0	
Gen. business supplies	5.67	150.6	151.6	153.3	152.5	151.2	154.1	153.7	154.3	153.3	154.1	155.2	155.6	156.8	
Commercial energy prod.	1.31	128.3	131.9	128.3	130.6	125.8	128.8	132.6	130.3	126.8	128.8	130.3	129.0	131.2	
MATERIALS	42.28	113.9	113.1	113.6	113.2	113.5	113.3	114.3	115.2	115.2	115.1	115.2	115.9	116.4	117.2
DURABLE GOODS MATERIALS	20.50	119.7	117.8	118.8	118.6	118.9	119.2	120.4	120.7	120.5	121.5	121.8	122.2	121.7	122.3
Consumer durable parts	4.92	98.5	96.3	96.7	95.2	95.3	97.0	98.0	98.8	99.0	100.0	98.9	96.2	95.5	95.6
Equipment parts	5.94	153.9	151.8	154.3	155.6	154.8	153.5	154.5	154.2	154.0	155.6	155.8	157.2	155.3	155.6
Durable materials nec	9.64	109.4	107.9	108.2	108.1	108.8	109.4	110.7	111.2	110.8	111.5	112.6	114.0	114.4	115.4
Basic metal materials	4.64	80.0	76.7	77.4	76.9	78.4	78.8	82.1	80.3	79.2	80.3	80.8	81.9	81.7	
NONDURABLE GOODS MATERIALS	10.09	118.3	117.7	118.9	119.7	120.6	120.3	120.2	123.1	123.2	122.5	122.8	124.7	125.8	126.5
Textile,paper,&chem.mater.	7.53	118.9	118.2	119.0	120.5	121.8	121.3	121.1	124.7	125.0	123.6	124.0	126.2	127.3	128.1
Textile materials	1.52	110.7	109.5	111.2	113.4	116.0	114.3	115.6	116.1	116.5	115.8	118.5	121.5	120.8	
Pulp & paper materials	1.55	132.3	132.7	135.6	136.0	133.7	133.5	134.2	140.2	137.9	136.7	134.7	135.8	138.2	
Chemical materials	4.46	117.1	116.1	115.9	117.5	119.7	119.5	118.5	122.3	123.4	121.8	122.1	124.4	125.7	
Misc. nondurable materials	2.57	116.5	116.4	116.3	117.2	117.1	117.5	117.6	118.4	118.0	119.0	119.2	120.4		
ENERGY MATERIALS	11.69	99.9	100.8	99.9	97.9	98.0	96.9	98.7	98.8	98.9	97.6	97.0	97.2	98.9	100.0
Primary energy	7.57	105.5	106.5	104.8	103.7	103.8	102.7	104.8	105.1	104.1	102.6	101.5	101.9	103.2	
Converted fuel materials	4.12	89.7	90.4	90.9	87.3	87.4	86.2	87.6	87.3	89.4	88.5	88.9	88.7	90.9	

NOTE: Two components--oil and gas well drilling and manufactured homes--are included in total equipment but not shown here. They are shown in Tables 4A and 4B on page 8 and 9.

Table 1B

INDUSTRIAL PRODUCTION: MARKET GROUPINGS

Not seasonally adjusted, 1977 = 100

Major Market Groupings	1977 Proportion	1986 Ann. Avg.	1986 JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY	JUN
TOTAL INDEX	100.00	125.1	126.9	123.3	127.6	129.1	128.0	125.4	122.4	123.0	126.9	127.0	126.2	127.1	131.0
PRODUCTS, TOTAL	57.72	133.2	135.8	132.9	138.0	139.6	138.0	133.9	130.1	129.9	134.0	134.2	133.3	134.7	139.8
FINAL PRODUCTS	44.77	132.3	134.4	131.3	136.3	138.1	136.4	132.4	128.9	129.6	133.6	133.5	131.8	133.4	138.4
CONSUMER GOODS	25.52	124.5	128.3	124.7	130.5	131.8	129.7	124.6	120.3	121.6	125.5	125.1	123.8	125.2	131.2
EQUIPMENT, TOTAL	19.25	142.7	142.5	140.1	143.9	146.5	145.2	142.7	140.4	140.1	144.2	144.7	142.5	144.2	148.0
INTERMEDIATE PRODUCTS	12.94	136.4	140.6	138.3	143.9	144.8	143.6	139.2	134.1	131.1	135.6	136.6	138.2	139.5	144.6
MATERIALS	42.28	113.9	114.8	110.1	113.4	114.8	114.4	113.9	111.8	113.5	117.2	117.2	116.5	116.6	119.0
CONSUMER GOODS	25.52	124.5	128.3	124.7	130.5	131.8	129.7	124.6	120.3	121.6	125.5	125.1	123.8	125.2	131.2
DURABLE CONSUMER GOODS	6.89	116.2	119.3	104.8	113.6	121.4	125.9	119.5	110.2	115.6	124.8	124.5	120.8	121.9	122.7
Automotive products	2.98	115.1	122.9	99.2	106.2	119.2	121.4	115.1	104.1	115.1	129.1	128.9	121.5	122.5	122.8
Autos and trucks,consumer	1.79	112.9	127.6	89.1	95.4	116.8	118.7	109.1	95.3	115.5	135.3	134.5	120.7	122.8	121.5
Autos, consumer	1.16	97.3	111.6	72.2	74.3	94.9	104.2	96.4	83.6	95.0	114.7	111.5	98.7	98.5	98.2
Trucks, consumer	.63	141.8	157.3	120.3	134.7	157.5	145.8	132.6	117.0	153.4	173.4	177.2	161.4		
Auto parts & allied gds	1.19	118.4	115.8	114.5	122.5	122.8	125.5	124.1	117.4	114.5	119.8	120.4	122.8	122.0	124.7
Home goods	3.91	117.1	116.6	109.0	119.2	123.0	129.4	122.8	114.8	116.0	121.5	121.1	120.3	121.5	122.6
Appliances,TV & air-cond	1.24	139.5	136.2	127.2	140.0	144.5	164.5	151.1	130.0	145.1	146.9	142.0	139.2	145.3	139.8
Appliances and TV	1.19	141.6	136.7	130.0	145.2	148.5	168.5	154.5	132.0	146.5	147.0	140.3	138.0	143.1	
Carpeting & furniture	.96	125.8	126.1	116.8	129.0	133.4	135.2	132.0	126.8	118.3	132.3	133.1	135.6	131.7	
Misc. home goods	1.71	96.0	97.1	91.5	98.6	101.7	100.6	97.2	97.1	93.6	97.1	99.3	98.1	98.7	
NONDURABLE CONSUMER GOODS	18.63	127.5	131.6	132.1	136.8	135.6	131.1	126.5	124.1	123.8	125.8	125.3	124.9	126.4	134.3
Clothing	3.34	97.0	99.7	94.4	102.0	99.5	99.6	96.6	94.2	93.5	99.2	99.2	98.3	100.3	
Consumer staples	15.29	134.2	138.6	140.3	144.4	143.5	138.0	133.0	130.6	130.5	131.6	131.0	130.7	132.1	140.9
Consumer foods & tobacco	7.80	131.9	137.7	134.1	141.4	140.9	137.9	132.1	127.4	126.0	127.8	129.5	129.5	131.7	
Nonfood staples	7.49	136.5	139.5	146.8	147.6	146.1	138.2	134.0	133.9	135.2	135.6	132.5	131.9	132.5	142.2
Consumer chem. products	2.75	161.3	169.5	178.3	172.6	176.5	167.9	158.2	154.8	154.5	156.9	158.4	157.3	160.1	
Consumer paper products	1.88	147.3	149.6	153.6	163.2	156.2	153.2	148.3	141.5	141.4	144.2	142.5	143.4	146.1	
Consumer energy	2.86	105.7	104.0	112.2	113.3	110.4	99.8	101.3	108.9	112.6	109.5	101.0	99.9	97.1	
Consumer fuel	1.44	92.8	95.3	94.0	96.2	94.7	90.9	95.2	96.2	92.2	87.2	87.2	91.6	92.5	
Residential utilities	1.42	118.8	112.9	130.7	130.8	126.4	108.9	107.5	121.9	133.3	132.3	115.1	108.4		
EQUIPMENT, TOTAL	19.25	142.7	142.5	140.1	143.9	146.5	145.2	142.7	140.4	140.1	144.2	144.7	142.5	144.2	148.0
BUSINESS & DEFENSE EQUIP.	18.01	147.1	147.9	145.5	149.3	152.0	150.2	147.4	144.8	144.8	149.4	150.0	147.7	149.4	153.3
BUSINESS EQUIPMENT	14.34	138.6	140.0	137.5	141.7	144.3	141.8	137.6	133.4	134.1	139.8	140.5	137.8	139.7	144.5
Constr, mining, & farm	2.08	59.9	62.4	59.9	58.3	59.9	57.9	55.7	56.9	55.5	58.7	58.9	58.2	60.3	
Manufacturing equipment	3.27	111.9	113.9	111.2	114.6	115.8	114.2	109.4	107.0	106.9	112.1	111.5	110.1	110.1	113.9
Power equipment	1.27	81.6	84.6	78.9	82.1	83.7	81.8	80.3	80.2	77.7	80.5	81.5	80.4	81.4	84.2
Commercial equipment	5.22	214.6	212.2	219.9	226.8	226.5	220.3	215.1	208.4	208.3	212.9	215.3	212.5	215.9	225.8
Transit equipment	2.49	109.2	116.3	94.2	99.3	111.3	114.6	110.1	102.4	109.1	121.1	120.4	113.8	115.4	114.1
DEFENSE & SPACE EQUIPMENT	3.67	180.3	178.6	177.0	178.8	181.8	183.1	185.6	189.3	186.3	186.7	187.0	186.0	187.0	187.8
INTERMEDIATE PRODUCTS	12.94	136.4	140.6	138.3	143.9	144.8	143.6	139.2	134.1	131.1	135.6	136.6	138.2	139.5	144.6
Construction supplies	5.95	124.7	129.1	123.7	128.9	131.2	130.5	127.4	122.2	119.5	123.2	126.3	128.2	129.5	132.2
Business supplies	6.99	146.4	150.4	150.8	156.7	156.4	154.7	149.3	144.4	141.0	146.2	145.4	146.6	148.0	
Gen. business supplies	5.67	150.6	153.3	153.9	160.5	160.9	161.3	154.3	149.1	144.6	149.7	150.9	152.3	153.9	
Commercial energy prod.	1.31	128.3	138.0	137.8	140.4	137.1	126.5	127.7	123.8	125.2	130.9	121.8	121.9	122.4	
MATERIALS	42.28	113.9	114.8	110.1	113.4	114.8	114.4	113.9	111.8	113.5	117.2	117.2	116.5	116.6	119.0
DURABLE GOODS MATERIALS	20.50	119.7	120.7	115.7	118.6	121.1	120.6	119.4	117.0	116.5	122.0	124.1	123.3	123.4	125.2
Consumer durable parts	4.92	98.5	98.2	92.5	94.0	97.1	99.7	98.3	97.4	96.0	100.8	101.1	97.6	96.3	96.8
Equipment parts	5.94	153.9	153.6	151.0	153.6	155.7	153.7	155.5	156.1	154.0	155.5	157.0	155.3	155.5	157.5
Durable materials nec	9.64	109.4	111.9	105.9	109.5	112.0	111.0	107.9	102.9	103.9	112.2	115.6	116.6	117.5	119.8
Basic metal materials	4.64	80.0	80.6	72.5	74.0	77.3	77.2	77.0	71.9	77.0	83.6	87.4	88.0	87.8	
NONDURABLE GOODS MATERIALS	10.09	118.3	120.2	112.3	119.3	121.9	123.0	120.7	115.9	120.7	125.9	125.6	126.8	126.4	129.0
Textile,paper,&chem.mater.	7.53	118.9	120.7	112.0	119.3	122.8	122.6	121.9	118.3	122.5	127.4	127.2	128.7	128.8	130.6
Textile materials	1.52	110.7	112.9	94.6	116.2	117.2	119.7	116.7	104.9	114.3	119.7	121.8	123.7	125.4	
Pulp & paper materials	1.55	132.3	135.7	126.0	136.4	134.0	135.3	136.0	128.8	137.3	141.8	139.6	138.2	138.5	
Chemical materials	4.46	117.1	118.2	113.0	118.4	120.8	119.2	118.8	119.2	120.1	125.0	124.7	127.1	126.6	
Misc. nondurable materials	2.57	116.5	118.7	113.3	119.3	119.4	124.2	117.0	108.7	115.4	121.5	121.0	121.2		
ENERGY MATERIALS	11.69	99.9	99.6	98.2	99.3	97.6	96.1	98.3	99.1	102.0	101.2	97.9	95.8	96.2	99.3
Primary energy	7.57	105.5	105.7	101.4	104.6	104.1	103.7	104.6	104.4	105.2	105.4	103.2	101.6	102.1	
Converted fuel materials	4.12	89.7	88.5	92.4	89.6	85.7	82.3	86.7	89.3	96.3	93.5	88.2	85.3	85.4	

NOTE: Two components--oil and gas well drilling and manufactured homes--are included in total equipment but not shown here. They are shown in Tables 4A and 4B on page 8 and 9.

Table 2A

INDUSTRIAL PRODUCTION: INDUSTRY GROUPINGS

Seasonally adjusted, 1977 = 100

Major Industry Groupings	SIC Code	1977 Proportion	1986 Ann. Avg.	1986 JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY	JUN
MINING AND UTILITIES		15.78	103.4	102.6	101.8	100.9	100.8	100.7	102.6	101.9	101.9	101.3	101.4	101.1	102.2	103.2
MINING		9.83	99.6	98.9	97.1	96.4	96.2	95.6	97.4	96.7	97.2	96.2	96.5	96.6	97.0	97.7
UTILITIES		5.96	109.7	108.6	109.7	108.3	108.3	109.3	111.2	110.6	109.5	109.6	109.5	108.6	110.7	112.2
MANUFACTURING		84.22	129.1	128.3	129.2	129.5	129.5	129.9	130.3	131.1	131.1	132.0	132.3	132.3	132.8	132.8
NONDURABLE		35.11	130.9	131.2	131.7	132.2	131.4	132.3	132.7	133.7	134.1	134.3	134.8	135.7	136.1	136.2
DURABLE		49.10	127.9	126.2	127.4	127.5	128.1	128.1	128.6	129.2	129.0	130.4	130.5	129.9	130.4	130.4
MINING																
Metal mining	10	.50	71.8	65.9	69.2	70.9	70.7	68.5	68.3	73.5	72.1	72.0	71.6	66.9		
Coal	11,12	1.60	124.2	127.3	120.2	122.2	120.8	117.6	130.1	124.3	133.5	127.7	121.8	121.6	126.6	129.0
Oil & gas extraction	13	7.07	94.7	93.3	92.4	90.7	91.0	90.5	90.4	90.9	89.9	89.5	91.0	91.5	91.1	91.3
Stone & earth minerals	14	.66	113.7	114.5	111.8	114.8	111.7	116.4	115.2	109.6	107.1	110.0	113.1	113.3	111.9	
NONDURABLE MANUFACTURES																
Foods	20	7.96	133.6	134.6	134.3	135.1	134.3	133.7	134.4	135.3	135.3	135.7	136.1	135.8	136.5	
Tobacco products	21	.62	96.4	97.6	97.9	97.1	89.8	100.1	96.8	92.9	89.1	98.7	100.7	101.0		
Textile mill products	22	2.29	113.2	112.6	113.4	114.7	116.0	116.1	117.8	118.4	118.0	118.4	119.3	121.0	121.6	
Apparel products	23	2.79	103.6	101.7	102.5	102.5	102.7	104.2	105.1	106.4	107.2	107.4	107.1	106.6		
Paper & products	26	3.15	136.4	137.2	138.1	138.6	136.9	137.8	139.5	141.6	139.8	140.5	139.2	139.9	140.7	
Printing & publishing	27	4.54	163.4	164.0	165.4	164.6	163.0	167.8	168.5	167.7	168.1	166.7	168.2	171.2	172.8	173.4
Chemicals & products	28	8.05	133.0	134.2	134.1	134.4	133.9	133.9	132.3	134.6	137.4	137.7	138.3	138.5	138.6	
Petroleum products	29	2.40	92.1	91.8	90.6	94.0	93.3	91.1	92.0	92.5	94.7	91.9	91.4	93.0	91.6	91.0
Rubber & plastics prod.	30	2.80	153.4	152.2	155.5	155.5	154.9	157.6	159.0	160.7	158.1	159.2	161.3	163.1	162.6	
Leather & products	31	.53	61.3	57.9	61.9	62.0	59.4	60.2	61.3	59.4	58.3	59.6	59.1	59.3	61.3	
DURABLE MANUFACTURES																
Lumber & products	24	2.30	123.4	120.9	120.8	122.5	125.0	125.9	129.5	133.1	130.2	130.0	129.5	128.9	130.0	
Furniture & fixtures	25	1.27	146.8	147.1	149.5	148.3	147.7	149.2	148.6	150.5	148.7	151.8	153.4	155.9	156.3	
Clay, glass, stone prod.	32	2.72	120.2	120.8	119.6	119.7	121.6	118.1	120.6	121.7	122.8	121.5	122.7	123.2	122.4	
Primary metals	33	5.33	75.8	71.4	73.6	73.4	74.1	74.2	76.8	73.5	73.6	76.3	77.5	77.0	77.9	78.7
Iron & steel	331,2	3.49	63.4	58.3	61.7	60.8	61.1	62.2	64.8	60.5	60.2	63.1	65.1	65.0	66.3	
Fabricated metal prod.	34	6.46	107.4	106.6	105.7	105.9	107.3	108.3	107.1	108.3	108.0	108.2	108.8	109.0	108.2	109.2
Nonelectrical machinery	35	9.54	141.9	140.4	142.6	142.6	140.9	142.2	141.2	139.9	140.3	142.3	143.7	144.2	145.7	146.2
Electrical machinery	36	7.15	166.5	163.2	166.8	167.2	166.9	167.7	168.3	170.2	169.2	169.3	167.6	166.5	167.7	168.2
Transportation equip.	37	9.13	125.8	125.1	125.6	125.1	127.7	125.2	125.6	127.0	128.1	131.8	130.6	127.2	127.9	125.9
Motor vehicles & pts.	371	5.26	110.9	110.6	111.2	108.2	112.2	107.1	107.9	111.2	112.2	117.8	115.5	109.3	110.1	106.5
Aerospace & misc.	372-6,9	3.87	146.1	144.7	145.2	148.0	148.7	149.7	149.6	148.4	149.6	150.7	151.2	151.4	152.0	152.1
Instruments	38	2.66	141.4	139.9	141.7	142.0	141.7	140.3	141.1	142.4	142.5	143.3	142.0	143.3	142.7	142.5
Miscellaneous mfrs.	39	1.46	99.4	98.3	97.5	98.3	97.7	99.0	98.9	103.1	101.8	101.1	101.4	100.9	99.7	
UTILITIES																
Electric		4.17	122.2	123.1	125.4	122.4	122.8	123.8	125.1	123.5	121.7	122.3	123.3	122.9	124.4	

Table 3A

INDUSTRIAL PRODUCTION: PERCENT CHANGES

Based on seasonally adjusted indexes

Series	1986 JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY	JUN
CHANGE FROM PREVIOUS MONTH													
TOTAL INDEX	.0	.5	.1	-0.1	.3	.6	.5	-0.1	.5	.1	.0	.5	.2
Final products	-0.4	.7	.4	-0.3	.4	.4	.4	.0	1.0	.0	-0.5	.6	-0.1
Consumer goods	.1	.6	.0	-0.7	.4	.8	1.3	-0.4	.6	.0	-0.7	.8	-0.1
Durable consumer goods	.5	1.7	-0.5	1.4	-1.0	1.8	2.7	-1.2	2.0	-1.0	-2.6	1.2	-1.0
Nondurable consumer goods	.0	.3	.1	-1.4	.8	.4	.8	-0.1	.2	.3	.0	.9	.2
Business equipment	-0.9	1.0	1.0	.0	-0.2	-0.4	-1.1	.7	1.9	.0	-0.2	.3	-0.1
Construction Supplies	.5	-0.1	1.1	.4	.3	.5	.8	.3	.1	.1	-1.0	.6	-0.6
Materials	.1	.4	-0.3	.3	-0.2	.9	.8	.0	.0	.1	.5	.3	.7
Durable goods materials	-0.5	.8	.0	.1	.2	1.0	.3	-0.2	.9	.3	.3	-0.4	.5
Nondurable goods materials	1.1	.9	.7	.8	-0.2	-0.1	2.4	.7	-0.6	.2	1.6	.9	.6
Manufacturing	.0	.7	.2	.0	.3	.3	.6	.1	.7	.2	.0	.4	.0
Durable manufacturing	-0.6	1.0	.1	.5	.0	.4	.5	-0.1	1.1	.1	-0.5	.4	.0
Nondurable manufacturing	1.0	.4	.4	-0.6	.7	.3	.8	.3	.1	.4	.7	.3	.1
Mining and utilities	-0.5	-0.7	-0.9	-0.2	.0	1.9	-0.7	-0.1	-0.6	.2	-0.2	1.0	.9
CHANGE FROM SAME MONTH A YEAR EARLIER													
TOTAL INDEX	.5	1.2	.5	.5	1.4	.9	.9	.3	1.6	3.0	2.1	3.1	3.2
Final products	.4	1.0	.3	.0	1.3	.0	.3	-0.2	1.7	3.4	1.7	2.8	3.1
Consumer goods	3.7	4.9	3.5	2.6	3.5	2.4	3.2	2.4	3.4	4.7	1.7	2.5	2.2
Durable consumer goods	1.5	4.4	1.1	3.8	3.6	2.6	5.4	3.5	5.0	7.8	1.9	5.1	3.5
Nondurable consumer goods	4.5	5.0	4.3	2.2	3.5	2.3	2.4	2.1	2.9	3.6	1.6	1.6	1.8
Business equipment	-1.4	-1.2	-1.2	-0.8	.6	-1.5	-2.1	-2.4	.2	2.2	1.3	2.5	3.3
Construction Supplies	4.6	4.5	4.1	4.7	5.0	5.3	6.8	3.4	4.7	4.8	2.9	3.6	2.4
Materials	-0.9	.0	-0.6	-0.2	-0.1	.4	-0.2	-0.2	.3	1.7	1.9	3.0	3.6
Durable goods materials	-2.8	-1.1	-2.0	-0.9	-0.7	-0.7	-1.0	-1.4	.2	2.1	1.7	2.8	3.8
Nondurable goods materials	5.6	4.9	6.1	5.6	5.9	6.1	7.2	6.0	5.4	6.9	7.1	8.0	7.5
Manufacturing	1.7	2.3	1.7	2.0	2.8	2.0	2.2	1.3	2.6	4.0	2.8	3.6	3.6
Durable manufacturing	-0.6	.4	-0.5	.5	1.1	.3	.3	-0.4	1.4	2.9	1.4	2.7	3.4
Nondurable manufacturing	5.1	5.0	4.9	4.0	5.2	4.3	4.9	3.7	4.3	5.6	4.7	4.7	3.8
Mining and utilities	-6.9	-6.1	-7.3	-8.5	-7.4	-5.7	-7.5	-7.2	-5.2	-3.7	-2.9	-0.9	.6

Table 2B

INDUSTRIAL PRODUCTION: INDUSTRY GROUPINGS

Not seasonally adjusted, 1977 = 100

Major Industry Groupings	SIC Code	1977 Proportion	1986 Ann. Avg.	1986 JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY	JUN
MINING AND UTILITIES		15.78	103.4	102.1	102.1	103.8	101.9	99.1	101.4	102.4	104.6	105.0	100.1	97.8	97.7	102.6
MINING		9.83	99.6	97.9	93.8	97.4	96.6	97.4	99.1	97.4	96.9	97.5	96.0	95.2	95.6	96.9
UTILITIES		5.96	109.7	109.1	115.9	114.5	110.6	101.9	105.2	110.7	117.3	117.4	106.8	102.2	101.0	112.1
MANUFACTURING		84.22	129.1	131.6	127.3	132.3	134.0	133.4	130.0	126.2	126.2	131.0	132.1	131.5	132.4	136.2
NONDURABLE		35.11	130.9	134.7	131.5	137.7	138.1	137.0	132.3	127.9	127.2	131.9	132.8	133.8	134.8	140.1
DURABLE		49.10	127.9	129.3	124.3	128.3	131.2	130.8	128.4	125.0	125.5	130.4	131.6	129.9	130.6	133.4
MINING																
Metal mining	10	.50	71.8	72.3	68.1	69.8	69.6	67.7	64.8	64.2	67.0	72.6	73.5	70.2		
Coal	11,12	1.60	124.2	128.0	109.0	132.2	125.2	125.3	128.7	114.4	122.9	130.1	125.0	122.0	126.1	131.4
Oil & gas extraction	13	7.07	94.7	91.0	90.4	89.4	90.2	90.7	92.8	94.8	93.3	91.4	90.0	89.1	88.5	88.8
Stone & earth minerals	14	.66	113.7	117.8	111.9	118.8	116.6	124.3	120.7	108.9	95.6	102.2	106.8	113.6	111.2	
NONDURABLE MANUFACTURES																
Foods	20	7.96	133.6	137.9	136.3	142.7	142.7	139.4	134.5	131.5	127.7	129.3	130.9	131.0	133.6	
Tobacco products	21	.62	96.4	108.6	85.8	103.2	93.9	108.6	99.7	71.3	88.6	103.7	103.9	98.0		
Textile mill products	22	2.29	113.2	117.4	103.0	120.3	121.1	122.9	118.6	106.1	110.2	118.4	124.2	124.9	125.0	
Apparel products	23	2.79	103.6	104.7	100.4	106.7	106.4	106.5	104.6	105.2	103.2	106.7	104.6	105.0		
Paper & products	26	3.15	136.4	140.3	129.9	139.3	137.9	142.4	137.6	131.3	139.4	145.2	143.4	143.1	140.7	
Printing & publishing	27	4.54	163.4	166.8	173.1	181.5	178.2	176.7	167.7	159.7	153.2	158.7	159.6	164.2	167.3	176.7
Chemicals & products	28	8.05	133.0	137.9	137.1	135.9	139.8	136.3	131.4	130.5	131.3	135.7	136.8	137.8	138.9	
Petroleum products	29	2.40	92.1	95.9	95.2	97.8	96.4	92.2	94.1	93.5	89.2	85.5	85.7	89.8	91.8	95.3
Rubber & plastics prod.	30	2.80	153.4	155.9	146.9	156.9	160.5	162.1	156.4	151.0	149.6	165.1	167.2	165.5	162.9	
Leather & products	31	.53	61.3	58.7	53.8	63.3	60.4	62.4	62.5	55.5	56.8	61.7	60.8	59.8	62.3	
DURABLE MANUFACTURES																
Lumber & products	24	2.30	123.4	126.8	117.9	130.5	131.4	131.8	127.8	120.6	119.9	126.4	129.4	129.8	131.2	
Furniture & fixtures	25	1.27	146.8	147.2	139.2	152.8	152.9	153.8	150.2	149.1	144.2	158.6	154.7	153.0	151.5	
Clay, glass, stone prod.	32	2.72	120.2	124.7	120.8	125.4	125.3	124.1	122.4	115.5	115.1	114.5	119.2	123.8	123.9	
Primary metals	33	5.33	75.8	76.8	68.7	69.8	72.6	72.6	72.9	67.3	71.8	78.6	82.8	83.4	83.3	84.0
Iron & steel	331,2	3.90	63.4	64.2	59.1	57.4	59.3	59.4	59.8	53.9	57.8	64.4	70.0	72.1	72.9	
Fabricated metal prod.	34	6.86	107.3	108.4	104.3	107.4	110.4	109.6	106.9	107.2	103.5	108.2	109.7	108.2	109.7	110.9
Nonelectrical machinery	35	8.54	147.9	143.8	145.6	149.0	148.2	144.3	139.7	134.4	135.4	140.7	142.9	140.1	142.7	149.4
Electrical machinery	36	7.15	166.5	163.3	162.0	166.9	169.5	173.3	170.9	168.0	167.6	168.5	167.1	165.5	166.1	168.0
Transportation equip.	37	9.13	125.8	130.3	114.7	117.8	127.3	128.8	126.9	123.3	127.9	135.4	135.2	130.1	131.1	130.4
Motor vehicles & pts.	371	5.26	110.9	120.0	95.3	98.7	111.9	113.5	108.7	101.1	111.5	123.5	122.7	114.4	115.9	114.8
Aerospace & misc.	372-6,9	3.87	146.1	144.3	140.9	143.8	148.1	149.5	151.6	153.5	150.1	151.7	152.1	151.4	151.7	151.5
Instruments	38	2.66	141.4	142.6	143.1	145.1	145.4	141.7	140.8	141.6	138.1	140.6	140.6	140.4	141.2	145.3
Miscellaneous mfrs.	39	1.46	99.4	100.3	97.6	104.0	105.7	103.4	97.9	97.1	94.2	100.8	101.4	98.1	97.7	
UTILITIES																
Electric		4.17	122.2	125.7	135.7	133.0	127.8	114.8	116.9	121.7	128.3	130.1	117.8	113.5	111.8	

Table 3B

INDUSTRIAL PRODUCTION: HISTORICAL DATA

Seasonally adjusted, 1977 = 100

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	Q I	Q II	Q III	Q IV	ANNUAL
INDEX																	
72	83.8	84.4	85.1	86.5	86.3	86.5	86.4	87.6	88.5	89.8	90.9	91.8	84.4	86.4	87.5	90.8	87.3
73	91.8	93.1	93.1	93.4	93.8	94.5	95.1	95.1	95.8	96.1	96.2	94.7	92.7	93.9	95.3	95.7	94.4
74	93.3	93.0	93.4	93.2	94.3	94.6	94.2	93.9	94.2	93.6	90.9	87.1	93.2	94.1	94.1	90.5	93.0
75	84.8	83.5	82.0	82.7	82.5	83.6	84.1	85.6	86.4	86.9	87.7	88.4	83.4	82.9	85.3	87.6	84.8
76	89.3	90.9	90.7	91.1	92.1	92.2	92.7	93.2	93.5	93.9	95.4	96.2	90.3	91.8	93.2	95.2	92.6
77	96.5	97.2	98.0	99.0	99.6	100.4	100.7	101.0	101.4	101.8	102.1	102.1	97.3	99.7	101.0	102.0	100.0
78	101.6	101.6	103.0	105.5	105.8	106.9	107.5	107.7	108.3	109.2	109.9	110.8	102.1	106.1	107.9	110.0	106.5
79	110.3	110.9	111.2	109.9	110.9	110.9	110.5	110.2	110.4	111.0	111.0	111.0	110.8	110.6	110.4	111.0	110.7
80	111.3	111.4	111.4	109.1	106.2	105.0	104.8	106.3	107.7	108.5	110.7	111.0	111.4	106.8	106.3	110.1	108.6
81	111.0	111.2	111.6	110.6	111.2	112.0	113.4	112.8	111.5	110.4	109.0	107.4	111.2	111.3	112.5	108.9	111.0
82	105.4	107.0	105.8	104.5	103.6	103.0	102.5	102.0	101.3	100.5	100.6	100.5	106.1	103.7	102.0	100.6	103.1
83	102.5	103.3	104.2	105.6	106.9	107.8	109.8	111.6	113.7	114.4	114.8	115.5	103.3	106.8	111.7	114.9	109.2
84	118.5	119.3	119.9	120.5	121.0	121.9	122.8	123.0	122.4	122.1	122.7	122.7	119.3	121.1	122.7	122.5	121.4
85	122.7	123.2	123.4	123.3	123.6	123.6	123.4	124.4	124.3	123.6	124.8	125.6	123.1	123.5	124.0	124.7	123.8
86	126.2	125.3	123.6	124.7	124.2	124.2	124.9	125.1	124.9	125.3	126.0	126.7	125.0	124.4	125.0	126.0	125.1
CHANGE*																	
72	2.2	0.7	0.8	1.6	-0.2	0.2	-0.1	1.4	1.0	1.5	1.2	1.0	3.8	2.4	0.3	3.8	9.7
73	0.0	1.4	0.0	0.3	0.4	0.7	0.6	0.0	0.7	0.3	0.1	-1.6	2.1	1.3	1.5	0.4	8.1
74	-1.5	-0.3	0.4	-0.2	1.2	0.3	-0.4	-0.3	0.3	-0.6	-2.9	-4.2	-2.6	1.0	0.0	-3.8	-1.5
75	-2.6	-1.5	-1.8	0.9	-0.2	1.3	0.6	1.8	0.9	0.6	0.9	0.8	-7.8	-0.6	2.9	2.7	-8.8
76	1.0	1.8	-0.2	0.4	1.1	0.1	0.5	0.5	0.3	0.4	1.6	0.8	3.1	1.7	1.5	2.1	9.2
77	0.3	0.7	0.8	1.0	0.6	0.8	0.3	0.3	0.4	0.4	0.3	0.0	2.2	2.5	1.3	1.0	8.0
78	-0.5	0.0	1.4	2.4	0.3	1.0	0.6	0.2	0.6	0.8	0.6	0.8	0.1	3.9	1.7	1.9	6.5
79	-0.5	0.5	0.3	-1.2	0.9	0.0	-0.4	-0.3	0.2	0.5	0.0	0.0	0.7	-0.2	-0.2	0.5	3.9
80	0.3	0.1	0.0	-2.1	-2.7	-1.1	-0.2	1.4	1.3	0.7	2.0	0.3	0.4	-4.1	-0.5	3.6	-1.9
81	0.0	0.2	0.4	-0.9	0.5	0.7	1.2	-0.5	-1.2	-1.0	-1.3	-1.5	1.0	0.1	1.1	-3.2	2.2
82	-1.9	1.5	-1.1	-1.2	-0.9	-0.6	-0.5	-0.5	-0.7	-0.8	0.1	-0.1	-2.6	-2.3	-1.6	-1.4	-7.1
83	2.0	0.8	0.9	1.3	1.2	0.8	1.9	1.6	1.9	0.6	0.3	0.6	2.7	3.4	4.6	2.9	5.9
84	2.6	0.7	0.5	0.5	0.4	0.7	0.7	0.2	-0.5	-0.2	0.5	0.0	3.8	1.5	1.3	-0.2	11.2
85	0.0	0.4	0.2	-0.1	0.2	0.0	-0.2	0.8	-0.1	-0.6	1.0	0.6	0.5	0.3	0.4	0.6	2.0
86	0.5	-0.7	-1.4	0.9	-0.4	0.0	0.6	0.2	-0.2	0.3	0.6	0.5	0.2	-0.5	0.5	0.8	1.1

*CHANGE IS THE PERCENT CHANGE FROM THE PRECEEDING LIKE PERIOD.

Table 4A

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Pro-portion	1986 Ann. Avg.	1986 MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY
METAL MINING	10	.50	71.8	72.0	65.9	69.2	70.9	70.7	68.5	68.3	73.5	72.1	72.0	71.6	66.9	66.5
Iron ore	101	.15	70.7	84.3	56.0	58.5	59.2	69.1	61.9	62.3	73.4	74.6	73.8	69.5	58.3	
Nonferrous ores	102-6,8,9	.35	72.2	68.9	72.1	75.6	74.7	72.0	71.0	69.2	71.5	71.1	71.6	71.8	70.2	
Copper ore	102	.15	83.3	80.4	83.3	86.1	89.4	86.8	83.0	80.6	84.4	87.9	87.9	89.4		
Lead and zinc ores	103	.05	57.9	59.4	51.1	56.3	49.3	52.2	51.6	47.0	52.4	49.9	53.4	53.9		
Gold and silver ores	104	.02	165.8	157.7	170.0	162.8	175.7	163.7	169.0	187.6	162.7	189.4	200.7	206.4		
Ferroalloy ores	106	.04	79.4	75.5	80.3	89.3	77.3	68.1	73.6	69.3	77.2	61.5	61.0	50.1	55.0	
ANTHRACITE	11	.02	65.9	62.6	63.8	55.0	59.6	61.9	72.8	74.9	60.9	76.9	86.4	79.9	91.1	79.6
BITUMINOUS	12	1.58	124.9	122.5	128.7	121.0	122.8	121.4	117.7	133.1	124.6	135.3	128.0	117.7	121.7	126.6
OIL AND GAS EXTRACTION	13	7.07	94.7	95.1	93.3	92.4	90.7	91.0	90.5	90.4	90.9	89.9	89.5	91.0	91.5	91.1
Crude oil & natural gas	131	5.62	97.4	99.0	97.9	97.5	95.3	96.2	95.5	94.4	96.1	94.3	92.4	93.7	93.3	93.8
Crude oil, total		3.46	105.7	107.5	106.4	106.6	104.1	105.1	103.9	102.0	101.4	98.4	97.6	98.3	98.4	98.4
Texas crude		1.34	73.7	76.2	73.7	73.1	71.5	70.6	70.7	70.1	70.7	68.0	67.0	67.2	67.2	67.3
Alaska,Calif.crude		.57	209.6	214.1	211.1	211.1	206.4	207.5	211.0	205.9	208.4	196.5	196.7	198.3	199.6	199.4
La. and other crude		1.54	94.8	95.7	95.8	96.9	94.3	97.0	92.9	91.0	88.5	88.4	87.3	88.1	88.0	87.9
Natural gas		2.16	84.1	85.3	84.4	82.9	81.4	82.1	82.1	82.4	87.6	87.8	84.1	86.4		
Natural gas liquids	132	.47	96.2	101.1	97.7	96.8	92.4	90.6	90.9	90.7	90.5	96.7	99.4	99.2	99.8	
Propane		.05	98.9	98.6	97.3	96.6	93.3	96.2	95.2	97.4	99.2	99.2	97.4	99.7		
Liquefied petroleum		.42	95.9	101.3	97.7	96.9	92.3	89.9	90.4	89.9	89.5	96.4	99.6	99.1	99.7	
Oil & gas well drilling	138	.99	77.7	67.8	60.9	58.4	60.8	62.0	64.9	67.4	67.9	66.8	66.4	68.5	67.5	70.3
FOODS	20	7.96	133.6	133.7	134.6	134.3	135.1	134.3	133.7	134.4	135.3	135.3	135.7	136.1	135.8	136.5
Meat products	201	1.06	120.6	121.5	121.9	122.1	118.3	120.3	115.6	116.5	121.0	122.0	122.7	121.5	120.2	115.3
Beef		.43	96.7	100.1	99.4	101.6	98.1	94.7	92.0	92.5	93.1	96.1	92.3	94.9	97.2	91.6
Pork		.25	107.2	108.4	104.3	106.5	104.2	104.9	104.0	102.5	104.8	111.2	111.1	108.4	102.6	99.9
Poultry		.20	150.6	146.6	151.4	146.7	142.9	156.6	145.2	153.6	166.6	160.8	167.2	166.5	160.4	158.8
Misc. meats		.18	163.6	163.6	168.1	166.1	159.4	163.5	155.8	152.3	159.7	156.0	162.4	153.7	155.6	145.3
Dairy products	202	.80	130.4	132.0	130.0	129.7	130.3	127.9	126.4	126.0	127.4	126.0	128.9	126.3	127.7	129.6
Butter	2021	.01	111.0	111.0	108.9	106.5	104.3	108.4	96.0	106.3	104.2	96.5	99.0	106.6	99.7	101.9
Cheese	2022	.13	155.6	155.9	150.3	157.0	158.6	160.4	155.1	148.6	154.0	152.3	159.1	155.3	155.2	157.3
Concentrated milk	2023	.11	137.4	142.4	137.5	130.4	131.5	128.4	118.1	121.7	131.6	120.3	125.8	120.0	122.3	133.1
Frozen desserts	2024	.09	145.4	149.5	146.2	144.8	150.3	135.5	146.3	147.4	143.7	146.3	153.7	147.1	154.0	152.0
Canned and frozen food	203	1.09	149.1	150.2	146.2	149.3	153.2	150.1	143.7	151.0	162.7	152.8	147.3	153.7	158.4	158.9
Grain mill products	204	.94	135.1	135.0	135.9	136.5	136.4	131.1	135.5	140.5	140.8	135.5	137.4	139.0	138.1	140.4
Flour	2041	.12	123.2	117.0	121.8	120.1	132.0	124.6	126.0	145.4	126.1	120.6	123.8	125.6	124.9	133.0
Bakery products	205	1.00	133.1	129.9	133.1	131.8	134.5	135.1	138.1	130.3	129.6	134.2	135.1	134.0	132.4	132.1
Beverages	208	1.41	129.1	130.5	135.2	132.3	130.4	129.5	125.6	133.0	127.7	129.0	133.9	132.7	130.4	130.3
Beer and ale	2082,3	.38	115.2	115.0	117.1	108.0	113.5	111.0	114.6	121.6	117.6	117.5	123.2	121.1	111.8	
Wine and brandy	2084	.07	188.1	207.1	208.7	223.2	182.8	204.7	182.6	175.9	180.8	187.0	198.0			
Soft drinks	2086,7	.79	139.2	140.2	140.6	142.3	141.5	140.4	134.6	144.3	135.2	137.8	142.3	144.8	142.7	140.7
Liquors	2085	.16	87.2	86.2	90.1	100.4	92.8	87.5	83.1	86.7	91.9	87.7	90.7			
Fats and oils	207	.27	121.2	117.8	121.5	124.9	119.2	121.0	124.4	121.8	120.0	120.1	123.7	124.5	128.0	119.7
Coffee & misc.foods	209	.79	145.5	142.7	142.7	141.2	149.2	146.5	147.0	148.6	145.8	150.6	152.1	151.3	153.3	157.6
TOBACCO PRODUCTS	21	.62	96.4	101.6	97.6	97.9	97.1	89.8	100.1	96.8	92.9	89.1	98.7	100.7	101.0	
Cigarettes	211	.54	97.9	104.3	97.3	99.4	97.2	90.6	103.1	98.3	96.8	85.5	100.1	101.1		
Cigars	212	.02	70.9	87.0	72.7	75.2	69.1	71.7	64.6	77.5	69.6	55.6	58.5	48.7		
TEXTILE MILL PRODUCTS	22	2.29	113.2	111.3	112.6	113.4	114.7	116.0	116.1	117.8	118.4	118.0	118.4	119.3	123.0	121.6
Fabrics	221-4	.77	110.3	107.7	109.4	109.4	107.1	114.6	112.4	116.8	117.8	116.1	114.5	120.0	119.8	118.9
Cotton fabrics	221	.28	130.6	126.0	129.1	127.7	135.4	136.7	133.2	138.4	143.4	144.2	142.6	150.2	149.1	148.6
Synthetic fabrics	222	.40	101.5	100.1	101.0	102.6	92.5	105.9	103.3	108.3	107.6	103.4	100.4	105.7	106.6	104.7
Knit goods	225	.55	106.2	107.2	106.9	101.6	110.6	103.9	109.8	109.2	105.1	104.4	110.9	109.9	111.7	109.7
Hosiery	2251,2	.12	155.0	150.5	150.8	129.0	171.2	152.1	166.5	179.9	148.1	148.7	167.3	160.1	168.0	
Knit garments	2253,4,7-9	.43	92.3	94.8	94.3	93.7	93.2	90.1	93.6	89.0	92.8	91.7	94.7	95.6	95.5	94.2
Fabric finishing	226	.20	85.7	86.5	83.1	92.6	81.8	85.4	84.6	85.9	83.5					
Carpeting	227	.22	148.7	137.3	140.8	153.9	157.1	151.4	153.1	165.0	161.2	168.2	156.5	147.3	148.4	151.1
Yarns & misc. text.	228,9	.55	120.2	116.1	121.1	121.3	126.4	126.6	120.5	126.9	136.4	132.4	132.1	130.5	141.6	135.8
APPAREL PRODUCTS	23	2.79	103.6	102.6	101.7	102.5	102.5	102.7	104.2	105.1	106.4	107.2	107.4	107.1	106.6	
LUMBER AND PRODUCTS	24	2.30	123.4	121.6	120.9	120.8	122.5	125.0	125.9	129.5	133.1	130.2	130.0	129.5	128.9	130.0
Logging and lumber	241,2	1.05	111.8	110.2	107.3	101.6	114.9	115.1	112.7	126.3	126.9	117.4	117.2	116.0	110.7	116.1
Lumber products	243-5,9	1.25	133.1	131.5	131.4	136.5	133.2	132.7	134.5	135.2	138.0	138.3	139.3	141.7	144.0	
Millwork & plywood	243	.67	161.7	159.1	160.6	167.9	160.9	164.2	164.4	165.4	170.6	170.9	176.8	179.1	181.5	
Manufactured homes	245	.25	88.3	86.9	83.5	85.0	84.3	84.7	86.3	89.5	90.4	88.0	84.4	84.1	84.2	83.2
FURNITURE AND FIXTURES	25	1.27	146.8	146.2	147.1	149.5	148.3	147.7	149.2	148.6	150.5	148.7	151.8	153.4	155.9	156.3
Household furniture	251	.74	119.2	119.3	117.2	120.9	118.4	117.9	121.9	121.3	123.7	120.1	122.9	124.7	128.3	127.6
Fixt.,office furn.	252,4,9	.47	192.7	192.1	198.4	192.1	194.5	191.3	195.1	197.7	199.6	198.0	199.6	202.7	203.1	205.8
PAPER AND PRODUCTS	26	3.15	136.4	133.2	137.2	138.1	138.6	136.9	137.8	139.5	141.6	139.8	140.5	139.2	139.9	140.7
Pulp and paper	261-3	1.33	126.3	122.9	128.2	129.2	129.3	125.3	125.4	128.0	135.7	130.4	128.7	126.9	128.2	130.6
Wood pulp	261	.44	121.8	117.7	123.0	129.4	123.1	121.6	121.4	120.2	130.0	128.7	123.6	120.7	124.6	
Paper	262	.44	130.2	127.4	133.4	130.5	135.4	131.3	128.1	133.8	135.3	128.5	131.6	130.9	130.8	134.2
Paperboard	263	.44	126.8	123.7	128.2	127.6	129.4	122.9	126.8	130.0	141.8	133.9	130.8	129.2	129.1	133.9
Converted paper prod.	264	1.03	159.0	153.7	161.1	159.1	163.1	163.8	163.1	162.9	167.0	162.3	165.9	161.2	163.4	166.0
Paperboard containers	265	.75	125.6	122.9	126.4	128.5	125.6	124.8	126.7	127.2	127.7	128.7	129.2	127.6	132.8	130.0

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Table 4B

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Not seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Proportion	1986 Ann. Avg.	1986 MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY
METAL MINING	10	.50	71.8	79.5	72.3	68.1	69.8	69.6	67.7	64.8	64.2	67.0	72.6	73.5	70.2	73.7
Iron ore	101	.15	70.7	102.7	69.3	65.5	65.7	65.6	58.7	49.7	49.7	59.0	71.7	70.3	67.6	
Nonferrous ores	102-6,8,9	.35	72.2	69.7	73.6	69.2	71.6	71.3	71.6	71.2	70.4	70.4	72.9	74.8	71.4	
Copper ore	102	.15	83.3	81.0	86.1	80.0	82.9	85.5	84.6	84.3	81.9	87.0	89.5	93.9		
Lead and zinc ores	103	.05	57.9	58.0	49.9	51.2	48.4	51.7	53.6	46.5	51.4	50.6	57.6	57.2		
Gold and silver ores	104	.02	165.8	153.0	180.6	159.6	178.1	171.1	171.1	186.0	163.5	174.2	192.0	210.0		
Ferroalloy ores	106	.04	79.4	83.4	83.7	77.8	81.0	68.3	75.6	71.2	68.7	58.1	60.2	51.9	56.1	
ANTHRACITE	11	.02	65.9	59.2	62.7	56.6	68.6	66.1	83.1	82.7	65.5	65.9	74.7	78.4	73.1	75.3
BITUMINOUS	12	1.58	124.9	122.6	128.8	109.6	132.9	125.9	125.7	129.2	115.0	123.6	130.7	125.6	122.5	126.7
OIL AND GAS EXTRACTION	13	7.07	94.7	92.7	91.0	90.4	89.4	90.2	90.7	92.8	94.8	93.3	91.4	90.0	89.1	88.5
Crude oil & natural gas	131	5.62	97.4	97.5	96.6	96.1	94.1	95.3	95.0	94.9	97.9	96.5	94.9	94.0	93.1	92.4
Crude oil, total		3.46	105.7	107.3	106.2	106.3	103.9	105.2	104.3	102.2	101.0	98.0	98.2	98.4	98.4	98.2
Texas crude		1.34	73.7	76.4	73.6	72.7	71.0	70.7	70.5	70.4	70.4	67.4	67.3	67.7	67.7	67.5
Alaska,Calif.crude		.57	209.6	213.2	211.4	212.2	206.0	207.7	211.3	204.1	206.7	197.9	197.7	198.9	198.9	198.6
La. and other crude		1.54	94.8	94.8	95.4	96.2	94.5	97.2	94.0	92.0	88.4	87.3	88.0	87.7	87.7	87.6
Natural gas		2.16	84.1	81.9	81.4	79.9	78.6	79.3	80.0	83.1	92.8	94.1	89.7	86.9		
Natural gas liquids	132	.47	96.2	98.1	95.9	96.7	93.3	90.7	90.8	93.8	92.1	96.6	99.9	98.8	98.1	
Propane		.05	98.9	98.6	95.5	94.1	91.2	93.5	93.7	99.2	100.8	103.1	101.0	99.8		
Liquefied petroleum		.42	95.9	98.1	96.0	97.0	93.6	90.4	90.5	93.2	91.1	95.9	99.8	98.7	97.8	
Oil & gas well drilling	138	.99	77.7	62.4	56.5	55.2	58.9	61.1	66.5	73.2	78.7	73.7	67.2	63.6	62.3	63.3
FOODS	20	7.96	133.6	130.9	137.9	136.3	142.7	142.7	139.4	134.5	131.5	127.7	129.3	130.9	131.0	133.6
Meat products	201	1.68	120.6	120.6	121.8	116.0	119.5	123.5	125.1	118.2	117.0	121.3	118.3	120.8	119.5	114.6
Beef		.83	96.7	98.7	101.1	98.5	101.4	98.0	98.5	92.2	90.4	98.4	91.1	91.1	92.1	90.3
Pork		.25	107.2	108.6	101.8	93.5	97.1	104.2	112.5	109.0	107.3	111.7	107.0	112.3	107.1	100.1
Poultry		.20	150.6	149.4	159.4	149.2	153.1	163.3	159.0	149.8	149.5	151.8	155.0	160.0	159.7	161.8
Misc. meats		.18	163.6	158.1	157.5	152.9	157.1	168.0	169.3	159.0	158.4	156.0	159.1	160.4	157.8	140.5
Dairy products	202	.80	130.4	144.1	144.8	134.7	129.4	123.4	118.3	115.8	119.1	117.9	126.5	129.3	135.7	141.5
Butter	2021	.01	111.0	124.3	105.4	85.8	81.0	87.0	89.1	98.4	106.4	117.4	117.1	118.1	114.4	114.1
Cheese	2022	.13	155.6	168.5	166.3	154.1	149.0	150.3	149.2	144.1	152.8	145.0	155.6	159.9	166.1	170.0
Concentrated milk	2023	.11	137.4	167.0	164.0	141.8	125.0	111.2	100.8	101.2	121.5	114.3	124.8	123.9	140.2	156.0
Frozen desserts	2024	.09	145.4	166.8	185.8	177.7	177.0	146.8	131.0	119.5	108.2	108.3	136.1	149.4	157.3	169.5
Canned and frozen food	203	1.09	149.1	140.2	147.2	151.6	168.5	178.4	165.3	150.7	149.5	136.8	138.2	144.7	144.3	148.3
Grain mill products	204	.94	135.1	130.9	136.3	136.0	141.9	137.6	137.7	139.2	140.1	134.3	135.8	137.3	133.4	136.2
Flour	2041	.12	123.2	115.2	119.6	113.2	135.6	130.5	130.3	142.7	121.4	118.7	130.5	126.9	121.3	131.0
Bakery products	205	1.00	133.1	126.3	139.8	144.9	149.2	150.4	142.2	128.1	123.0	123.2	123.9	123.5	123.8	128.4
Beverages	208	1.41	129.1	131.7	147.4	141.3	142.8	138.4	128.9	127.1	115.0	117.7	122.8	126.4	128.8	131.4
Beer and ale	2082,3	.38	115.2	128.1	136.3	123.3	122.0	106.9	105.0	101.1	93.9	107.1	119.5	123.7	122.0	
Wine and brandy	2084	.07	188.1	206.0	225.4	195.7	192.0	200.0	218.0	191.0	180.0	155.0	176.0			
Soft drinks	2086,7	.79	139.2	136.5	155.9	156.9	159.0	157.0	137.9	141.0	126.3	127.5	128.2	131.7	135.1	137.0
Liquors	2085	.16	87.2	83.9	96.2	84.6	91.9	95.7	101.9	93.4	81.1	73.9	81.2			
Fats and oils	207	.27	121.2	115.2	119.4	113.6	112.9	118.0	130.4	130.0	126.0	122.9	129.2	127.1	123.3	116.9
Coffee & misc.foods	209	.79	145.5	139.7	142.2	145.7	161.1	152.8	151.0	150.7	152.3	144.3	144.3	140.9	144.2	154.2
TOBACCO PRODUCTS	21	.62	96.4	94.9	108.6	85.8	103.2	93.9	108.6	99.7	71.3	88.6	103.7	103.9	98.0	
Cigarettes	211	.54	97.9	96.4	110.1	86.9	104.4	94.4	110.0	100.7	71.0	90.9	105.4	106.5		
Cigars	212	.02	70.9	88.8	75.5	59.3	74.1	77.7	74.3	79.3	52.6	55.0	61.2	52.5		
TEXTILE MILL PRODUCTS	22	2.29	113.2	114.4	117.4	103.0	120.3	121.1	122.9	118.6	106.1	110.2	118.4	121.2	124.9	125.0
Fabrics	221-4	.77	110.3	111.8	110.7	95.0	110.3	116.2	120.0	117.7	101.8	116.0	119.7	124.0	121.9	123.4
Cotton fabrics	221	.28	130.6	131.9	128.5	109.9	140.8	138.0	144.2	139.8	121.9	144.5	148.8	155.6	152.1	155.5
Synthetic fabrics	222	.40	101.5	103.8	102.8	86.1	94.6	107.1	110.0	109.1	91.8	104.1	106.6	109.9	108.5	108.6
Knit goods	225	.55	106.2	108.1	117.8	106.7	119.3	113.4	112.5	105.3	93.9	89.3	105.7	107.2	110.7	110.6
Hosiery	2251,2	.12	155.0	151.8	160.6	144.3	159.3	148.0	164.4	168.0	132.7	142.6	168.8	167.6	179.7	
Knit garments	2253,4,7-9	.43	92.3	95.6	105.5	96.0	107.9	103.5	97.6	87.3	82.3	74.1	87.6	90.0	91.0	95.0
Fabric finishing	226	.20	85.7	90.9	85.6	67.5	84.9	84.9	90.4	88.0	75.4					
Carpeting	227	.22	148.7	143.4	148.4	152.4	151.3	167.7	171.6	165.7	144.5	131.0	141.6	152.8	151.8	157.8
Yarns & misc. text.	228,9	.55	120.2	121.5	125.8	103.9	135.9	130.3	129.9	125.8	120.0	126.8	132.9	132.3	142.9	142.3
APPAREL PRODUCTS	23	2.79	103.6	101.9	104.7	100.4	106.7	106.4	106.5	104.6	105.2	103.2	106.7	106.8	105.0	
LUMBER AND PRODUCTS	24	2.30	123.4	122.5	126.8	117.9	130.5	131.4	131.8	127.8	120.6	119.9	126.4	129.4	129.8	131.2
Logging and lumber	241,2	1.05	111.8	108.7	115.3	100.3	120.1	123.3	121.0	121.5	112.2	108.0	114.7	115.5	111.9	114.5
Lumber products	243-5,9	1.25	133.1	134.1	136.4	132.7	139.2	138.2	140.8	133.0	127.6	130.0	136.2	141.0	144.9	
Millwork & plywood	243	.67	161.7	160.7	164.9	163.9	168.3	170.9	173.0	164.2	161.3	163.8	171.7	176.2	179.8	
Manufactured homes	245	.25	88.3	96.0	96.6	83.2	97.2	92.1	94.9	81.4	64.9	68.9	77.1	84.6	91.4	91.5
FURNITURE AND FIXTURES	25	1.27	146.8	141.2	147.2	139.2	152.8	152.9	153.8	150.2	149.1	144.2	158.6	154.7	153.0	154.5
Household furniture	251	.74	119.2	115.9	119.5	107.6	122.4	123.3	124.5	122.1	121.6	114.5	129.5	127.3	128.0	124.8
Fixt.,office furn.	252,4,9	.47	192.7	183.7	193.4	191.1	203.2	202.2	202.7	196.5	194.0	192.7	207.7	200.9	195.1	196.8
PAPER AND PRODUCTS	26	3.15	136.4	133.2	140.3	129.9	139.3	137.9	142.4	137.6	131.3	139.4	145.2	143.4	143.1	140.7
Pulp and paper	261-3	1.33	126.3	124.5	130.4	121.4	129.2	125.9	127.5	128.5	123.4	129.6	133.6	132.5	130.4	132.3
Wood pulp	261	.44	121.8	118.8	125.6	121.0	123.1	121.2	122.5	121.2	120.3	127.6	128.5	126.3	126.7	
Paper	262	.44	130.2	126.7	134.3	122.4	133.5	131.1	132.4	134.3	126.3	129.8	137.8	135.6	132.1	133.4
Paperboard	263	.44	126.8	128.0	131.1	120.8	131.1	125.3	127.7	129.9	123.6	131.2	134.5	135.7	132.9	136.1
Converted paper prod.	264	1.03	159.0	154.9	162.7	148.4	162.2	161.6	166.5	163.2	157.1	162.0	172.3	168.2	167.0	167.3
Paperboard containers	265	.75	125.6	120.9	129.6	121.5	128.4	129.2	138.5	121.4	112.0	128.2	131.2	131.2	135.6	127.9

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Table 4A—continued

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Pro-portion	1986 Ann. Avg.	1986 MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY
PRINTING & PUBLISHING	27	4.58	163.4	161.9	164.0	165.4	164.6	163.0	167.8	168.5	167.7	168.1	166.7	168.2	171.2	172.8
Newspapers	271	1.35	140.0	139.2	144.2	145.9	144.4	141.5	140.7	139.2	137.9	140.9	141.1	142.0	143.9	143.3
Period.,books,cards	272,3,7	1.24	156.4	156.8	156.1	156.7	158.6	150.2	159.8	162.5	158.7	158.0	154.5	157.6	158.0	163.4
Job printing	274-6,8,9	1.95	184.1	179.6	183.6	185.3	182.9	183.8	193.4	191.3	194.4	194.7	192.5	196.3	199.5	200.4
CHEMICALS & PRODUCTS	28	8.05	133.0	131.5	134.2	134.1	134.4	133.9	133.9	132.3	134.6	137.4	137.7	138.3	138.5	138.6
Chemicals & syn. mat.	281,2,6	3.86	123.3	121.6	122.5	123.8	124.1	125.3	125.9	124.7	128.4	131.1	128.8	127.8	129.8	132.6
Basic chemicals	281	.92	99.5	100.7	98.4	98.2	97.4	103.1	101.2	97.8	101.3	109.7	105.1	101.2	101.7	105.4
Alkalies & chlorine	2812	.12	97.5	96.5	97.8	98.9	100.8	99.0	93.5	93.4	100.6	97.9	103.9	114.3	97.9	103.3
Industrial Gases	2813	.10	131.8	110.4	126.2	129.7	139.1	139.8	140.7	140.1	146.1	144.8	141.1	138.8	140.6	
Inorganic pigments	2816	.08	100.6	107.9	92.1	106.2	99.7	93.6	100.1	94.1	113.5	113.8	96.4	93.9	88.2	106.1
Inorganic chem, nec	2819	.62	94.3	98.9	94.7	91.8	89.4	99.0	96.1	92.0	92.4	105.5	100.4	93.4	97.6	99.4
Acids & other chem.		.40	95.6	102.8	95.9	91.0	87.4	103.0	99.3	92.9	93.8	113.6	105.9	94.8	101.7	104.6
Synthetic materials	282	1.11	163.1	157.5	158.9	165.6	165.5	165.8	168.0	165.5	175.1	178.7	173.5	170.5	174.2	176.1
Plastics materials	2821	.59	220.9	211.3	216.5	224.5	226.0	223.7	229.8	229.6	241.4	248.5	237.1	232.2	239.6	
Synthetic rubber	2822	.08	96.5	104.6	105.2	101.6	91.9	91.2	87.8	71.2	77.1	91.9	99.1	97.1	90.7	
Synthetic fibers	2823,4	.44	98.5	95.9	92.4	99.3	98.8	102.8	100.8	97.8	105.0	102.0	102.8	102.2	102.9	104.0
Indust. organic chem.	286	1.83	111.2	110.2	112.4	111.2	112.4	111.8	112.7	113.5	113.7	112.9	113.5	115.2	117.0	119.9
Chemical products	283-5,9	3.65	150.1	150.8	151.6	156.2	150.4	148.2	150.9	148.8	150.8	152.4	153.4	154.0	155.2	153.7
Drugs & medicines	283	1.41	135.3	134.7	135.8	138.6	135.8	134.4	139.1	135.0	138.5	140.9	142.8	142.5	141.2	140.2
Soap & toiletries	284	1.34	188.7	191.7	193.4	201.3	187.5	185.8	186.7	185.9	189.1	191.6	187.3	192.5	194.8	191.5
Paints	285	.40	100.3	102.3	98.0	101.3	101.1	98.0	98.7	96.9	93.7	95.4	105.9	99.3	100.6	101.0
Agricultural chemicals	287	.54	85.6	90.8	85.7	80.9	78.7	86.4	87.1	82.8	84.3	91.4	92.6	90.8	95.6	93.0
PETROLEUM PRODUCTS	29	2.40	92.1	95.7	91.8	90.6	94.0	93.3	91.1	92.0	92.5	94.7	91.9	91.4	93.0	91.6
Petroleum refining	291,9	2.21	91.0	94.8	91.1	90.1	93.8	91.9	90.0	91.0	91.8	92.2	88.7	89.3	93.6	91.0
Automotive gasoline		.96	96.0	100.8	97.4	96.0	100.3	96.1	96.6	96.7	96.5	96.9	93.5	96.6	100.5	97.0
Distillate fuel oil		.43	85.1	89.5	81.7	80.9	87.0	86.5	81.3	85.3	85.9	83.1	80.0	77.5	84.4	79.2
Residual fuel oil		.15	50.6	54.4	49.4	51.9	55.9	50.8	47.5	53.8	49.9	48.9	45.0	50.2	47.0	49.0
Aviation fuel & keros.		.18	119.7	113.4	117.3	117.7	117.3	120.2	120.3	119.3	128.8	128.1	119.1	113.7	115.6	113.5
Misc. petroleum prod.		.48	88.3	93.6	90.7	88.7	90.3	91.3	86.7	85.9	87.5	91.5	89.7	88.7	94.6	
Refinery fuel, nec		.09	122.4	124.4	122.0	118.9	128.1	124.3	122.6	119.4	120.8	127.3	126.6	124.8		
Refinery nonfuel mat.		.26	73.3	75.9	73.8	71.9	73.2	77.5	73.3	72.6	78.5	79.1	75.3	72.3		
Refinery products, nec		.13	95.0	107.7	102.9	101.5	98.5	96.1	89.1	89.6	82.8	91.9	93.2	96.5		
RUBBER & PLASTICS PROD.	30	2.80	153.4	150.1	152.2	155.5	155.5	154.9	157.6	159.0	160.7	158.1	159.2	161.3	163.1	162.6
Tires	301	.62	106.4	100.1	100.8	109.0	109.2	106.0	110.7	116.5	112.3	112.1	111.0	110.6	107.7	
Rub.prod.ex.tires	302-4,6	.51	123.3	122.9	123.6	125.6	127.6	128.1	125.8	123.5	126.4	126.3	129.3	127.7	131.6	130.5
Plastics products, nec	307	1.67	179.8	177.7	180.6	181.8	180.7	180.6	183.7	184.4	188.8	186.6	187.7	192.4	193.3	192.8
LEATHER AND PRODUCTS	31	.53	61.3	59.5	57.9	61.9	62.0	59.4	60.2	61.3	59.4	58.3	59.6	59.1	59.3	61.3
Pers. leather gds	313,5-7,9	.16	73.8	72.4	72.3	69.8	72.2	72.2	73.1	73.1	76.5	76.7	74.7	75.8	75.5	78.9
Shoes	314	.29	55.6	53.4	50.7	58.5	58.1	52.5	52.3	56.1	50.4	49.9	53.3	51.3	53.7	53.0
CLAY,GLASS & STONE PROD.	32	2.72	120.2	120.2	120.8	119.6	119.7	121.6	118.1	120.6	121.7	122.8	121.5	122.7	123.2	122.4
Pressed & blown glass	322	.51	110.7	111.5	113.1	109.1	110.1	110.8	110.7	112.4	108.2	114.3	109.8	110.8	116.5	116.9
Glass containers	3221	.30	95.1	95.2	97.0	96.4	93.4	96.1	93.8	95.5	90.5	97.3	92.4	97.4	98.3	99.9
Cement	324	.24	108.2	106.4	105.1	106.1	104.8	105.9	107.0	105.2	111.8	125.8	114.0	113.4	114.8	
Structural clay prod.	325	.15	129.0	123.9	126.2	138.5	137.3	136.3	133.8	141.4	150.0	136.7	133.2	136.2	138.8	136.6
Brick	3251	.07	92.9	87.9	90.9	99.8	90.1	91.9	98.9	92.0	97.7	99.3	97.4	97.5	101.1	93.1
Clay sewer pipe	3259	.02	31.9	37.1	32.8	35.1	34.6	31.1	33.0	33.2	34.7	31.9	33.7	28.6	31.6	33.4
Clay tile	3253,5	.07	191.8	183.8	187.1	205.7	212.8	209.6	196.5	220.6	234.0	202.9	196.4	204.4	206.0	208.4
Concrete and misc.	326-9	1.55	123.2	123.7	123.7	121.9	122.2	124.7	119.0	123.6	124.8	126.7	121.4	124.0	124.3	122.5
PRIMARY METALS	33	5.33	75.8	74.8	71.4	73.6	73.4	74.1	74.2	76.8	73.5	73.6	76.3	77.5	77.0	77.9
Iron and steel	331,2	3.49	63.4	60.2	58.3	61.7	60.8	61.1	62.2	64.8	60.5	60.2	63.1	65.1	65.0	66.3
Basic st. & mill prod.	331	2.60	68.8	67.7	64.3	67.6	65.4	63.7	64.4	69.4	65.0	63.0	66.4	69.5	69.3	71.2
Basic iron and steel		1.11	58.1	59.4	55.9	56.3	51.5	51.7	53.8	54.1	52.5	54.0	53.9	58.2	60.6	61.1
Pig iron		.42	54.0	56.2	51.3	50.2	45.0	46.9	48.4	49.6	49.1	49.7	49.5	53.1	55.8	55.8
Raw steel		.51	64.3	65.4	63.6	63.7	58.9	57.3	59.6	59.1	57.1	60.2	59.9	63.3	66.2	67.5
Steel mill products		1.49	76.8	73.8	70.5	76.0	75.6	72.6	72.3	80.7	74.3	69.7	75.6	77.9	75.8	78.6
Consumer dur. steel		.38	57.1	56.9	52.1	50.9	52.0	52.5	53.7	60.4	51.7	55.2	58.7	58.6	52.9	52.4
Equipment steel		.36	40.2	38.7	36.3	37.8	41.3	36.6	35.4	37.7	37.2	33.1	36.5	38.2	37.8	40.0
Construction steel		.19	73.1	72.9	70.6	77.6	77.0	67.4	67.7	73.1	67.0	55.7	62.9	63.1	63.7	68.1
Can & closure steel		.10	59.3	57.2	57.4	69.0	69.2	60.6	51.7	57.5	52.3	49.8	55.7	53.5	58.7	63.1
Misc. steel		.46	126.7	119.0	115.0	127.3	122.6	121.7	122.4	138.9	129.3	120.1	129.4	136.0	132.6	137.8
Iron & steel foundries	332	.89	47.6	42.3	44.9	46.0	47.2	54.4	50.5	50.6	47.4	52.0	52.0	52.7	54.0	53.8
Nonferrous metals	333-6,9	1.85	99.0	102.3	96.3	95.9	97.3	98.6	96.8	99.5	98.1	98.8	101.1	100.9	99.6	99.8
Primary nonf. metals	333	.51	80.9	85.4	77.0	76.8	81.1	78.9	76.9	76.5	80.7	81.7	81.5	79.8	81.5	79.4
Copper	3331	.13	92.4	88.8	87.2	101.0	103.3	99.9	94.3	88.9	99.7	91.6	91.8	81.1	88.5	88.0
Aluminum	3334	.28	73.8	80.7	71.7	67.7	68.6	68.1	69.2	70.4	71.3	74.8	74.6	76.0	77.3	76.9
Secondary nonf. mtls.	334	.11	75.7	81.4	76.2	77.2	78.4	70.6	69.7	75.7	74.3	73.0	74.1	72.5	77.6	
Nonferrous products	335,6	1.12	109.1	112.5	108.1	106.0	106.5	109.0	107.6	110.7	107.0	109.2	112.3	112.9	110.2	110.2
Nonf. mill products	335	.84	97.1	100.6	95.5	93.6	96.3	98.8	96.5	96.9	97.6	99.5	100.5	101.9	99.7	99.5
Copper mill prod.	3351	.14	88.7	92.4	88.8	86.6	91.3	100.7	84.6	86.4	88.4	92.0	91.6	95.8	94.6	96.6
Alum. mill prod.	3353-7	.32	107.7	113.2	108.6	107.6	105.5	108.2	108.7	107.3	107.0	109.5	112.1	115.1	112.3	110.2
Construction		.09	114.7	116.0	115.0	116.2	108.9	117.6	115.6	114.1	122.8	113.0	121.1	117.7	113.4	113.9
Misc. alum. mats.		.23	105.0	112.1	98.2	104.2	104.2	104.6	106.1	104.6	100.8	108.1	108.6	114.0	111.8	108.7
Nonferrous foundries	336	.28	145.3	148.3	145.9	143.3	137.0	139.6	140.8	152.2	135.2	138.2	147.9	146.1	141.8	142.4

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Table 4B—continued

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Not seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Pro-portion	1986 Ann. Avg.	1986 MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY
PRINTING & PUBLISHING	27	4.54	163.4	156.4	166.8	173.1	181.5	178.2	176.7	167.7	159.7	153.2	158.7	159.6	164.2	167.3
Newspapers	271	1.35	140.0	143.1	142.3	131.2	136.5	143.1	151.4	152.5	141.0	126.8	139.5	143.0	149.2	147.3
Period.,books,cards	272,3,7	1.24	156.4	148.7	159.6	169.7	180.3	169.0	163.3	156.5	148.4	146.4	148.5	147.5	148.5	155.0
Job printing	274-6,8,9	1.95	184.1	170.5	188.4	204.3	213.4	208.4	202.6	185.3	179.8	175.8	178.5	181.0	185.0	190.3
CHEMICALS & PRODUCTS	28	8.05	133.0	132.1	137.9	137.1	135.9	139.8	136.3	131.4	130.5	131.3	135.7	136.8	137.8	138.9
Chemicals & syn. mat.	281,2,6	3.86	123.3	122.0	124.4	120.3	120.9	127.2	125.7	124.4	126.2	127.0	131.3	130.9	132.7	133.2
Basic chemicals	281	.92	99.5	99.7	100.5	94.8	94.9	105.3	100.8	97.3	98.8	104.5	109.1	104.5	104.9	104.4
Alkalies & chlorine	2812	.12	97.5	98.1	101.7	98.7	97.5	100.6	92.2	92.6	100.3	91.6	105.9	113.2	101.4	105.0
Industrial Gases	2813	.10	131.8	111.9	127.7	125.3	137.6	141.0	137.7	140.0	141.9	140.3	144.8	142.9	145.3	
Inorganic pigments	2816	.08	100.6	106.1	98.9	101.7	93.4	103.0	96.3	93.1	102.4	102.1	103.6	97.5	95.5	104.2
Inorganic chem, nec	2819	.62	94.3	97.2	96.0	88.1	87.4	100.4	96.8	91.5	90.7	101.3	104.5	97.3	100.0	97.6
Acids & other chem.		.40	95.6	99.5	97.9	85.4	84.7	105.7	99.8	91.9	90.8	107.2	113.2	100.6	105.2	101.3
Synthetic materials	282	1.11	163.1	159.9	163.7	157.0	158.7	170.2	168.4	163.7	168.3	168.8	179.7	178.5	180.5	178.8
Plastics materials	2821	.59	220.9	215.2	224.2	212.9	216.7	231.7	230.6	226.5	228.1	230.7	245.9	246.4	248.7	
Synthetic rubber	2822	.08	96.5	105.6	103.9	95.0	84.6	91.1	91.0	77.5	76.8	93.4	98.5	97.6	91.6	
Synthetic fibers	2823,4	.44	98.5	96.7	94.4	94.2	95.3	103.1	100.1	96.3	105.8	100.5	106.7	103.4	106.3	104.8
Indust. organic chem.	286	1.83	111.2	110.2	112.6	110.9	111.0	112.1	112.2	114.1	114.4	112.8	113.0	115.2	117.7	120.0
Chemical products	283-5,9	3.65	150.1	148.7	158.7	163.6	160.1	161.0	154.8	145.9	141.9	142.3	146.7	149.4	148.7	151.6
Drugs & medicines	283	1.41	135.3	130.4	145.1	152.4	147.7	149.9	144.0	132.5	129.2	129.0	130.3	133.2	133.6	135.7
Soap & toiletries	284	1.34	188.7	186.2	195.1	205.7	198.8	202.4	193.1	185.5	181.9	181.4	185.1	188.8	182.4	186.0
Paints	285	.40	100.3	117.3	121.1	107.5	110.4	101.3	94.8	81.1	67.8	78.5	99.7	103.1	110.6	116.0
Agricultural chemicals	287	.54	85.6	91.3	85.4	77.4	76.0	86.3	86.9	83.9	85.3	88.5	92.8	93.7	100.8	93.6
PETROLEUM PRODUCTS	29	2.40	92.1	95.6	95.9	95.2	97.8	96.4	92.2	94.1	93.5	89.2	85.5	85.7	89.8	91.8
Petroleum refining	291,9	2.21	91.0	94.4	94.4	93.5	96.0	94.3	89.8	92.3	92.8	89.3	85.4	85.8	90.5	90.6
Automotive gasoline		.96	96.0	100.8	101.0	99.2	101.0	98.1	94.4	97.9	98.9	95.1	90.5	93.2	97.4	97.0
Distillate fuel oil		.43	85.1	87.0	82.6	82.6	89.1	87.1	82.8	88.8	89.6	84.5	78.4	72.6	77.7	77.0
Residual fuel oil		.15	50.6	52.1	46.7	48.5	51.2	48.8	47.2	55.6	56.4	52.5	47.6	49.5	47.4	47.0
Aviation fuel & keros.		.18	119.7	108.9	115.1	117.8	117.3	120.1	121.3	123.1	131.7	128.4	120.7	115.4	111.5	109.0
Misc. petroleum prod.		.48	88.3	96.2	99.3	97.2	98.5	98.1	88.8	84.6	80.7	79.2	80.6	83.5	93.9	
Refinery fuel, nec		.09	122.4	124.3	128.6	124.9	133.3	128.6	119.3	119.2	121.1	121.5	121.2	121.0		
Refinery nonfuel mat.		.26	73.3	77.6	77.6	75.2	72.5	77.0	71.9	71.4	75.3	72.4	74.1	74.4		
Refinery products, nec		.13	95.0	113.7	122.2	121.6	126.1	118.8	101.5	87.3	64.2	64.4	66.2	76.4		
RUBBER & PLASTICS PROD.	30	2.80	153.4	150.8	155.9	146.9	156.9	160.5	162.1	156.4	151.0	149.6	165.1	167.2	165.5	162.9
Tires	301	.62	106.4	98.9	101.9	91.9	107.3	109.6	117.2	109.1	100.3	113.7	121.8	120.3	114.5	
Rub.prod.ex.tires	302-4,6	.51	123.3	125.1	126.1	118.0	127.1	129.9	129.3	125.3	122.3	118.6	131.7	131.4	132.6	132.9
Plastics products, nec	307	1.67	179.8	177.9	185.0	176.1	184.4	188.7	188.8	183.4	178.5	172.3	191.4	195.4	195.8	193.1
LEATHER AND PRODUCTS	31	.53	61.3	60.7	58.7	53.8	63.3	60.4	62.4	62.5	55.5	56.8	61.7	60.8	59.8	62.3
Pers. leather gds	313,5-7,9	.16	73.8	71.3	73.3	65.6	73.1	74.7	76.8	77.2	77.0	73.1	73.0	74.8	74.2	77.6
Shoes	314	.29	55.6	56.1	51.2	48.4	59.9	53.8	56.2	55.7	44.4	48.9	56.9	54.6	53.5	55.6
CLAY,GLASS & STONE PROD.	32	2.72	120.2	121.4	124.7	120.8	125.4	125.3	124.1	122.4	115.5	115.1	114.5	119.2	123.8	123.9
Pressed & blown glass	322	.51	110.7	111.9	118.2	110.7	115.7	112.5	115.3	109.9	93.2	105.6	112.0	113.9	118.7	117.3
Glass containers	3221	.30	95.1	96.9	103.8	98.5	100.2	94.4	99.3	90.0	68.3	89.8	98.3	101.9	102.8	101.7
Cement	324	.24	108.2	117.7	130.0	125.1	132.3	127.7	131.0	104.1	82.0	69.6	75.5	94.8	115.4	
Structural clay prod.	325	.15	129.0	126.8	133.8	126.3	139.4	141.8	138.6	141.5	137.2	131.2	131.7	138.6	141.7	139.8
Brick	3251	.07	92.9	92.5	97.9	98.8	96.4	100.7	104.5	92.3	90.2	84.1	86.5	95.2	102.9	98.0
Clay sewer pipe	3259	.02	31.9	34.5	34.5	37.3	35.5	35.0	36.2	33.9	29.2	29.0	27.7	29.2	34.0	31.1
Clay tile	3253,5	.07	191.8	186.4	196.9	178.2	211.1	212.3	200.7	220.3	214.0	206.4	205.5	212.0	210.0	211.5
Concrete and misc.	326-9	1.55	123.2	124.2	124.8	121.6	124.9	126.7	123.7	126.5	122.9	121.5	117.2	121.1	124.1	123.0
PRIMARY METALS	33	5.33	75.8	80.4	76.8	68.7	69.8	72.6	72.6	72.9	67.3	71.8	78.6	82.8	83.4	83.3
Iron and steel	331,2	3.49	63.4	66.9	64.2	59.1	57.4	59.3	59.4	59.8	53.9	57.8	64.4	70.0	72.1	72.9
Basic st. & mill prod.	331	2.60	68.8	74.4	69.6	65.1	61.4	61.3	61.5	64.0	59.2	60.3	68.0	74.8	76.2	78.3
Basic iron and steel		1.11	58.1	64.1	58.7	54.7	47.8	49.0	51.3	51.2	49.7	52.7	55.6	62.4	66.0	66.0
Pig iron		.42	54.0	62.1	55.4	51.1	43.0	44.6	45.8	46.4	45.6	46.6	49.2	56.4	60.6	61.7
Raw steel		.51	64.3	69.5	65.2	59.5	53.3	54.2	57.6	56.5	54.7	60.1	63.4	69.2	72.6	71.7
Steel mill products		1.49	76.8	82.1	77.7	72.8	71.5	70.5	69.0	73.4	66.2	65.9	77.1	84.0	83.8	87.4
Consumer dur. steel		.38	57.1	63.3	57.4	48.8	49.2	51.0	51.3	54.9	46.1	52.2	59.9	63.2	58.5	58.3
Equipment steel		.36	40.2	43.0	40.0	36.2	39.1	35.5	33.9	34.3	33.1	31.3	37.2	41.2	41.8	44.4
Construction steel		.19	73.1	81.1	77.8	74.4	72.8	65.5	64.6	66.5	59.7	52.7	64.1	68.0	70.4	75.7
Can & closure steel		.10	59.3	63.6	63.3	66.1	65.4	58.9	49.4	52.3	46.6	47.1	56.9	57.6	65.0	70.2
Misc. steel		.46	126.7	132.3	126.7	122.0	115.8	118.2	116.9	126.4	115.2	113.6	132.0	146.6	146.7	153.3
Iron & steel foundries	332	.89	47.6	45.0	48.5	41.6	45.8	53.5	53.2	47.5	38.5	50.5	54.2	55.8	60.1	57.3
Nonferrous metals	333-6,9	1.85	99.0	105.7	100.5	86.7	93.1	97.6	97.6	97.6	92.6	98.0	105.2	107.0	104.6	102.8
Primary nonf. metals	333	.51	80.9	87.7	78.3	71.0	75.2	75.6	77.4	77.8	80.0	82.0	84.6	81.9	85.5	81.6
Copper	3331	.13	92.4	95.5	94.7	89.6	88.6	89.8	92.9	92.6	96.5	88.3	95.3	85.1	100.6	94.6
Aluminum	3334	.28	73.8	81.3	71.5	66.2	67.3	68.1	69.6	70.7	72.1	74.8	75.2	76.0	77.7	77.5
Secondary nonf. mtls.	334	.11	75.7	79.7	77.5	67.3	77.0	74.8	74.2	78.4	68.8	68.6	79.5	74.8		
Nonferrous products	335,6	1.12	109.1	116.5	112.2	94.8	102.1	109.0	108.4	107.6	99.8	108.2	117.5	121.3	115.2	114.2
Nonf. mill products	335	.84	97.1	103.6	98.7	88.9	93.8	99.6	96.2	94.0	92.8	97.4	102.8	108.0	102.3	102.6
Copper mill prod.	3351	.14	88.7	100.0	92.0	75.1	83.9	105.2	83.7	80.0	79.0	92.0	96.9	108.6	99.0	104.6
Alum. mill prod.	3353-7	.32	107.7	118.2	115.2	103.9	104.5	107.2	108.0	101.2	96.7	104.2	116.3	123.8	116.6	115.1
Construction		.09	114.7	117.3	141.6	111.8	110.6	120.4	120.4	111.6	102.9	108.1	124.7	123.2	118.3	115.2
Misc. alum. mats.		.23	105.0	118.6	104.9	100.8	102.1	102.0	103.1	97.1	94.3	102.6	113.0	124.0	116.0	115.0
Nonferrous foundries	336	.28	145.3	155.2	152.9	112.5	127.3	137.4	145.1	148.7	120.8	140.5	161.6	161.4	154.1	149.1

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Table 4A—continued

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Pro-portion	1986 Ann. Avg.	1986 MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY
FABRICATED METAL PRODUCTS	34	6.46	107.4	106.5	106.6	105.7	105.9	107.3	108.3	107.1	106.3	108.0	108.2	108.8	109.0	108.2
Metal containers	341	.52	90.4	90.6	91.7	88.3	89.2	92.3	92.0	90.7	93.0	89.5	91.4	90.6	93.5	93.7
Hardware,tools,cutlery	342	.73	102.1	100.1	104.4	103.5	104.8	104.1	104.7	100.7	101.0	100.6	102.3	106.7	104.1	103.8
Structural metal prod.	344	1.67	107.8	109.7	107.8	107.5	107.6	107.8	106.5	106.1	106.8	107.9	107.3	108.8	108.2	108.3
Fasteners, stamp, etc.	345-7	1.95	111.3	108.4	107.9	108.2	108.1	110.3	113.4	109.7	115.0	113.1	115.3	114.7	114.6	110.5
NONELECTRICAL MACHINERY	35	9.54	141.9	141.3	140.4	142.6	142.6	140.9	142.2	141.2	139.9	140.3	142.3	143.7	144.2	145.7
Engine & farm equip.	351,2	1.48	60.5	60.9	61.0	60.5	59.9	58.1	58.3	57.7	57.8	57.7	60.9	61.5	62.6	62.2
Construct. & allied eq.	353	1.68	74.3	76.0	76.6	73.4	74.9	73.6	72.6	70.6	72.1	71.0	68.5	69.5	68.9	72.3
Metalworking machinery	354	1.24	132.0	129.5	134.9	134.0	136.8	133.6	134.1	130.7	128.1	130.6	131.2	130.9	130.4	132.0
Spec. & genl. ind. eq.	355,6	2.12	95.0	95.9	95.0	96.2	94.9	93.7	96.0	93.0	93.0	93.9	94.7	94.2	95.6	94.7
Office, serv, & misc.	357-9	3.02	256.6	252.1	250.7	257.4	255.5	254.8	256.2	259.4	254.3	260.6	264.9	269.8	271.2	268.3
ELECTRICAL MACHINERY	36	7.15	166.5	166.0	163.2	166.8	167.2	166.9	167.7	168.3	170.2	169.2	169.3	167.6	166.5	167.7
Major elect. eq.& pts	361,2	1.27	88.7	91.3	90.9	91.1	89.3	86.4	85.8	86.1	86.9	88.1	93.3	94.5	95.7	95.3
Household appliances	363	.75	136.3	131.9	137.8	137.1	138.1	137.5	136.0	142.3	147.6	145.0	144.0	138.2	135.4	137.1
Cooking equipment	3631	.11	263.6	266.6	296.0	254.4	253.1	267.7	242.7	262.0	278.4	310.5	281.7	242.8	253.3	243.8
Refrigeration appl.	3632	.17	110.1	103.5	117.0	107.7	121.1	104.7	113.3	116.0	121.3	111.9	123.2	114.7	109.3	114.6
Laundry appliances	3633	.12	145.5	137.9	133.2	164.7	147.1	147.0	153.5	154.6	166.4	144.6	151.7	166.4	145.3	150.1
Misc. appliances	3634-6,9	.35	105.3	100.6	99.2	104.5	106.6	108.6	107.0	112.7	112.2	108.5	107.6	106.5	107.0	109.6
TV and radio sets	365	.44	150.7	147.5	139.8	147.9	152.6	148.7	146.0	166.0	167.1	159.3	151.4	153.2	148.2	157.0
Communication equipment	366	2.01	216.7	218.4	207.1	216.5	218.6	219.4	218.7	216.4	218.2	219.3	219.6	215.8	215.4	215.4
Electronic components	367	1.31	244.1	243.4	239.2	243.9	240.7	242.6	244.5	248.4	249.2	247.1	245.8	245.6	245.7	249.0
TV tubes	3671-3	.13	122.4	111.8	105.9	125.4	95.6	87.7	130.9	149.0	146.8	125.7	108.8	107.8	113.4	130.6
Misc. electrical supp.	369	.70	116.0	118.9	113.8	117.6	118.1	114.5	114.9	119.0	114.9	111.4	117.7	115.6	113.5	115.8
Storage battery,repl.	3691	.13	127.9	140.5	123.7	137.6	142.6	124.2	127.9	141.7	117.9	90.7	121.4	123.9	132.4	144.9
TRANSPORTATION EQUIPMENT	37	9.13	125.8	124.1	125.1	125.6	125.1	127.7	125.2	125.6	127.0	128.1	131.8	130.6	127.2	127.9
Motor vehicles & parts	371	5.26	110.9	108.7	110.6	111.2	108.2	112.2	107.1	107.9	111.2	112.2	117.8	115.5	109.3	110.1
Autos, total		1.82	111.0	103.2	113.4	108.8	100.2	109.7	104.9	105.3	113.6	107.6	120.1	115.2	104.8	103.8
Consumer		1.16	97.3	94.8	99.3	95.3	87.8	96.2	91.9	92.3	99.5	94.3	105.3	100.9	91.8	91.0
Business		.66	135.4	132.0	138.2	132.6	122.2	133.8	127.9	128.4	138.5	131.2	146.5	140.5	127.7	126.5
Trucks and buses		1.03	131.8	126.8	125.6	136.4	139.8	143.2	126.3	127.7	132.1	144.3	147.9	146.6	135.9	141.2
Business vehicles		.41	114.5	107.9	109.4	115.0	120.4	124.9	109.6	114.8	111.4	117.2	126.1	126.1	117.2	
Consumer trucks		.63	141.8	139.1	136.1	150.3	152.4	155.1	137.1	136.0	145.6	161.9	162.1	159.9	148.1	
Truck trailers	3715	.09	125.4	133.5	135.0	133.3	134.0	130.3	122.8	111.6	113.4	123.8	140.2	134.3	144.2	148.3
Motor vehicle parts	3714	2.31	101.2	100.1	100.8	101.0	99.3	99.5	99.7	100.9	100.0	101.1	101.6	101.0	99.6	99.6
Aircraft and parts	372	2.09	157.7	155.7	156.5	155.6	161.6	161.1	162.2	164.2	163.7	164.1	163.8	164.0	164.1	164.8
Ships and boats	373	.66	86.4	85.9	84.5	86.7	87.4	88.7	87.8	87.1	87.0	85.2	83.7	84.5	82.4	83.4
Rail & misc trans eq.	374-6,9	1.11	159.8	159.2	157.4	159.4	161.2	162.1	161.9	160.1	162.8	161.5	164.4	163.8	167.2	167.2
Railroad equipment	374	.27	22.9	29.0	20.2	20.6	27.8	30.8	30.0	18.2	16.6					
INSTRUMENTS	38	2.66	141.4	140.3	139.9	141.7	142.0	141.7	140.3	141.1	142.4	142.5	143.3	142.0	143.3	142.7
Equipment instr.& pts	381-4	1.52	163.2	161.9	162.0	162.0	163.7	161.6	163.7	166.7	170.6	166.5	169.4	169.0	170.5	169.7
MISC. MANUFACTURES	39	1.46	99.4	101.0	98.3	97.5	98.3	97.7	99.0	98.9	103.1	101.8	101.1	101.4	100.9	99.7
Misc. cons. goods	391,3,4,6	.84	95.3	95.2	94.4	93.4	93.5	95.3	95.9	93.8	100.7	96.3	96.4	98.4	97.6	97.8
Misc. bus. supplies	395,9	.62	104.9	108.9	102.6	104.2	104.6	103.0	108.1	108.1	106.7	105.5	106.4	104.9	103.7	101.7
ELECTRIC UTILITIES	491	4.17	122.2	121.7	123.1	125.4	122.4	122.8	123.8	125.1	123.5	121.7	122.3	123.3	122.9	124.4
Elec. util. generation		1.76	116.2	116.8	117.0	121.5	114.8	117.9	118.4	118.0	116.0	115.5	115.1	116.3	117.2	
Fossil fuel generation		1.41	107.8	110.0	110.7	115.1	105.6	107.6	105.8	107.6	105.4	105.7	106.9	108.8	111.5	
Hydro & nuclear gener.		.35	149.6	144.1	141.9	147.4	151.5	159.3	168.7	159.3	158.4	154.6	148.1	146.7	140.3	
Elec. util. sales		2.41	126.5	125.3	127.6	128.3	128.0	126.3	127.7	130.3	129.0	126.2	127.5	128.4		
Residential elec.		.95	129.0	125.6	128.0	134.8	130.7	132.6	132.0	130.7	132.6	128.1	130.1	127.9	129.4	
Nonresidential elec.		1.46	124.9	125.1	127.4	124.0	126.2	122.2	124.9	130.1	126.7	124.9	125.8	128.6		
Industrial elec.		.68	105.5	104.4	104.7	103.9	105.9	102.9	104.9	108.1	105.9	104.4	105.8	108.1	106.6	
Commercial & other elec.		.78	141.9	143.2	147.1	141.5	143.9	139.0	142.4	149.2	144.8	142.8	143.2	146.5	142.0	

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Table 4B—continued

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Not seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Proportion	1986 Ann. Avg.	1986 MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY
FABRICATED METAL PRODUCTS	34	6.46	107.4	106.2	108.4	104.3	107.4	110.4	109.6	106.9	107.2	103.5	108.2	109.9	108.2	107.7
Metal containers	341	.52	90.4	90.3	95.2	92.2	94.1	97.7	92.3	88.9	87.2	82.8	89.6	89.5	92.6	93.3
Hardware,tools,cutlery	342	.73	102.1	99.4	105.4	101.8	106.7	108.2	107.2	101.2	98.2	95.3	104.3	107.6	102.0	103.0
Structural metal prod.	344	1.67	107.8	107.7	109.2	107.8	110.2	111.8	110.0	108.9	109.4	104.7	102.8	105.2	104.1	106.3
Fasteners, stamp, etc.	345-7	1.95	111.3	108.7	110.7	105.0	108.0	112.6	115.0	109.8	110.2	105.8	117.1	119.0	115.9	110.7
NONELECTRICAL MACHINERY	35	9.54	141.9	138.4	143.8	145.6	149.0	148.2	144.3	139.7	134.4	135.4	140.7	142.9	140.1	142.7
Engine & farm equip.	351,2	1.48	60.5	61.1	61.1	58.6	57.6	58.0	57.4	57.7	59.0	57.8	62.3	63.4	62.8	62.4
Construct. & allied eq.	353	1.68	74.3	74.1	77.2	74.1	75.2	76.3	72.9	70.5	72.1	69.5	69.3	68.7	67.6	70.6
Metalworking machinery	354	1.24	132.0	127.9	134.7	131.7	137.5	138.8	137.7	128.8	123.7	126.3	134.1	132.4	131.4	130.4
Spec. & genl. ind. eq.	355,6	2.12	95.0	95.4	96.2	94.1	95.3	97.0	95.7	93.6	92.6	91.6	95.1	95.1	94.2	94.2
Office, serv, & misc.	357-9	3.02	256.6	246.7	258.7	270.2	277.4	272.5	263.2	255.6	239.3	244.9	254.0	262.4	259.4	263.0
ELECTRICAL MACHINERY	36	7.15	166.5	164.6	163.3	162.0	166.9	169.5	173.3	170.9	168.0	167.6	168.5	167.1	165.5	166.1
Major elect. eq.& pts	361,2	1.27	88.7	90.2	92.6	90.8	91.3	90.9	89.2	85.9	84.0	85.5	91.3	93.9	93.3	94.1
Household appliances	363	.75	136.3	132.2	138.0	122.0	131.2	143.4	155.3	137.4	127.4	146.1	150.9	142.6	140.8	137.3
Cooking equipment	3631	.11	263.6	279.1	286.6	224.7	246.5	280.8	292.1	268.3	248.6	309.3	281.3	234.0	253.2	255.3
Refrigeration appl.	3632	.17	110.1	109.7	123.5	109.7	88.2	111.3	127.5	100.6	86.6	114.5	132.9	129.4	123.4	121.5
Laundry appliances	3633	.12	145.5	134.0	135.0	137.3	148.3	147.8	177.1	138.5	140.6	153.8	168.3	177.0	148.6	145.4
Misc. appliances	3634-6,9	.35	105.3	95.8	98.8	90.2	109.2	113.6	117.7	112.9	103.8	106.8	112.3	108.1	110.8	104.6
TV and radio sets	365	.44	150.7	143.9	134.6	143.5	169.1	157.2	191.2	183.8	140.0	147.0	140.3	136.4	133.4	153.0
Communication equipment	366	2.01	216.7	216.1	207.2	213.8	215.0	217.5	217.7	218.9	225.8	220.5	219.3	217.7	213.5	213.2
Electronic components	367	1.31	244.1	242.1	241.5	236.1	242.0	245.0	247.7	252.0	251.2	246.2	243.1	243.7	244.3	247.7
TV tubes	3671-3	.13	122.4	117.2	101.2	107.2	106.7	95.2	155.7	154.0	108.2	119.8	109.6	102.5	120.2	137.0
Misc. electrical supp.	369	.70	116.0	112.3	111.2	109.3	117.9	123.1	124.0	125.9	122.8	112.4	112.5	110.0	106.9	109.1
Storage battery,repl.	3691	.13	127.9	106.7	107.0	112.3	149.6	163.0	167.5	171.5	144.4	96.1	103.4	99.2	98.4	110.0
TRANSPORTATION EQUIPMENT	37	9.13	125.8	127.4	130.3	114.7	117.8	127.3	128.8	126.9	123.3	127.9	135.4	135.2	130.1	131.1
Motor vehicles & parts	371	5.26	110.9	114.5	120.0	95.3	98.7	111.9	113.5	108.7	101.1	111.5	123.5	122.7	114.4	115.9
Autos, total		1.82	111.0	116.5	127.4	82.4	84.8	108.3	118.9	110.1	95.4	108.4	130.9	127.3	112.6	112.4
Consumer		1.16	97.3	102.0	111.6	72.2	74.3	94.9	104.2	96.4	83.6	95.0	114.7	111.5	98.7	98.5
Business		.66	135.4	142.0	155.3	100.5	103.4	132.1	144.9	134.2	116.3	132.2	159.6	155.2	137.3	137.0
Trucks and buses		1.03	131.0	139.9	145.2	109.5	124.3	142.4	134.2	124.0	106.5	139.4	158.4	160.9	147.6	154.4
Business vehicles		.41	114.5	119.8	126.6	92.9	108.5	119.2	116.5	110.7	90.3	117.7	135.4	135.7	126.2	
Consumer trucks		.63	141.8	153.0	157.3	120.3	134.7	157.5	145.8	132.6	117.0	153.4	173.4	177.2	161.4	
Truck trailers	3715	.09	125.4	134.3	140.3	117.1	133.7	136.8	125.0	113.3	116.1	110.0	139.5	142.6	148.3	149.2
Motor vehicle parts	3714	2.31	101.2	100.8	102.1	98.3	96.7	100.1	99.5	100.6	102.6	101.5	101.2	101.1	99.7	100.0
Aircraft and parts	372	2.09	157.7	155.2	155.7	151.6	155.4	160.4	162.6	166.9	168.5	164.6	166.2	165.9	163.5	164.2
Ships and boats	373	.66	86.4	87.1	85.0	84.5	84.2	86.9	87.5	88.4	88.4	84.7	84.3	85.7	83.7	84.8
Rail & misc trans eq.	374-6,9	1.11	159.8	160.1	158.1	154.6	157.7	161.7	161.6	160.6	164.2	161.6	164.6	165.9	168.9	168.2
Railroad equipment	374	.27	22.9	30.8	22.5	19.7	22.1	31.5	32.1	18.5	17.0					
INSTRUMENTS	38	2.66	141.4	138.6	142.6	143.1	145.1	145.4	141.7	140.8	141.6	138.1	140.6	140.6	140.4	141.2
Equipment instr.& pts	381-4	1.52	163.2	159.5	165.8	167.1	170.6	172.0	165.1	164.2	164.8	160.1	165.4	166.1	165.3	167.1
MISC. MANUFACTURES	39	1.46	99.4	99.2	100.3	97.6	104.0	105.7	103.4	97.9	97.1	94.2	100.8	101.4	98.1	97.7
Misc. cons. goods	391,3,4,6	.84	95.3	94.6	97.9	92.4	99.4	102.7	100.0	91.8	93.1	89.7	94.8	98.0	95.7	97.2
Misc. bus. supplies	395,9	.62	104.9	105.5	103.7	104.7	109.6	109.7	108.0	106.1	102.5	100.3	108.8	106.0	101.5	98.5
ELECTRIC UTILITIES	491	4.17	122.2	109.2	125.7	135.7	133.0	127.8	114.8	116.9	121.7	128.3	130.1	117.8	113.5	111.8
Elec. util. generation		1.76	116.2	108.6	122.4	134.0	124.1	117.4	108.5	111.4	117.0	122.3	117.9	110.7	107.5	
Fossil fuel generation		1.41	107.8	99.1	115.8	130.0	118.5	109.5	99.7	101.7	105.4	112.0	107.4	100.6	98.5	
Hydro & nuclear gener.		.35	149.6	146.6	146.7	149.8	146.6	149.1	143.6	150.1	163.5	163.4	160.0	151.2	143.5	
Elec. util. sales		2.41	126.5	109.6	128.2	137.0	139.5	135.4	119.5	120.9	125.2	132.7	139.0	123.0		
Residential elec.		.95	129.0	100.4	120.3	147.2	147.4	140.9	115.7	112.7	134.2	151.2	149.6	124.0	114.1	
Nonresidential elec.		1.46	124.9	115.7	133.3	130.4	134.4	131.8	122.0	126.2	119.4	120.7	132.1	122.4		
Industrial elec.		.68	105.5	102.5	109.1	103.9	107.8	108.0	104.3	108.7	99.0	98.7	110.5	106.0	106.2	
Commercial & other elec.		.78	141.9	127.1	154.4	153.4	157.6	152.5	137.4	141.5	137.0	140.0	151.0	136.7	132.6	

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Table 5

INDUSTRIAL PRODUCTION: INDEXES; 1977 = 100

Quarterly averages, seasonally adjusted

SERIES	Quarterly Averages of Monthly Indexes									
	1985 Q1	Q2	Q3	Q4	1986 Q1	Q2	Q3	Q4	1987 Q1	Q2
Industrial production	123.1	123.5	124.0	124.7	125.0	124.4	125.0	126.0	127.0	127.8
Products, total	129.1	130.4	131.6	132.3	132.7	132.5	133.4	134.5	135.7	136.2
Final products	129.7	130.6	131.7	132.4	132.5	131.6	132.3	133.2	134.6	134.9
Consumer goods	118.8	119.5	120.5	122.1	123.0	124.4	124.8	125.8	127.3	127.0
Durable consumer goods	112.4	112.1	113.0	114.3	115.0	114.7	116.5	118.7	121.2	118.7
Automotive products	113.7	112.4	115.9	114.2	114.7	114.4	116.0	115.0	120.8	115.9
Home goods	111.4	111.8	110.8	114.4	115.2	114.8	116.9	121.6	121.5	120.7
Nondurable consumer goods	121.2	122.2	123.2	125.0	125.9	128.0	127.9	128.5	129.5	130.1
Equipment, total	144.0	145.3	146.5	146.1	145.0	141.2	142.1	142.9	144.3	145.3
Business & defense equipment	144.0	145.8	146.9	147.3	147.5	145.9	147.4	147.8	149.3	150.4
Business equipment	138.8	140.0	140.3	139.7	139.9	137.7	138.8	138.3	139.9	141.0
Defense and space equipment	164.5	168.4	172.9	176.8	177.1	178.1	180.8	185.1	186.1	187.1
Intermediate products	127.2	129.9	131.2	131.7	133.7	135.5	137.4	139.2	139.7	140.5
Construction supplies	115.3	117.9	119.8	120.2	123.1	123.7	125.1	127.0	128.4	127.4
Business supplies	137.4	140.2	140.9	141.5	142.7	145.6	147.8	149.6	149.4	
Commercial energy products	121.5	122.3	123.1	125.1	125.0	129.5	128.2	130.6	128.6	
Materials	114.9	114.0	113.8	114.3	114.5	113.3	113.4	114.3	115.2	116.5
Durable goods materials	123.0	121.4	120.4	121.1	120.9	118.8	118.8	120.1	121.3	122.1
Basic metal materials	84.1	84.3	84.0	87.1	82.6	79.5	77.6	80.4	80.1	82.1
Nondurable goods materials	110.7	111.0	113.4	113.9	115.7	116.9	119.7	121.2	122.8	125.7
Textile, paper, & chem materials	111.2	110.6	113.3	114.0	116.2	117.0	120.4	122.4	124.2	127.2
Textile materials	93.2	95.2	101.7	105.0	105.8	108.2	113.5	115.3	116.9	
Pulp and paper materials	126.6	121.6	123.8	124.8	128.8	130.1	135.1	136.0	136.4	
Chemical materials	112.0	112.1	113.6	113.4	115.3	115.4	117.7	120.1	122.4	
Energy materials	104.4	103.7	102.5	102.6	102.2	100.6	98.6	98.2	97.9	98.7
Manufacturing	125.3	126.1	126.8	127.4	128.4	128.4	129.4	130.4	131.8	132.6
Durable	126.8	127.3	127.5	127.9	128.3	127.1	127.7	128.6	130.0	130.2
Nondurable	123.3	124.6	125.9	126.8	128.6	130.2	131.8	132.9	134.4	136.0
Mining and Utilities	111.6	109.8	109.1	109.3	107.3	103.3	101.2	101.8	101.5	102.2
Mining	110.1	109.9	107.9	107.1	105.4	99.9	96.6	96.6	96.7	97.1
Utilities	114.1	109.6	111.1	112.8	110.5	108.9	108.8	110.4	109.5	110.5

Table 6

INDUSTRIAL PRODUCTION: GROSS VALUE OF PRODUCTS

Billions of 1982 dollars at annual rates, seasonally adjusted

SERIES	1982 Dollars	1986 Ann. Avg.	Billions of 1982 Dollars at Annual Rates										
			Quarters						Months				
			1986 Q1	Q2	Q3	Q4	1987 Q1	Q2	1987 JAN	FEB	MAR	APR	MAY	JUN
Products, total	1376.8	1683.1	1683.1	1683.5	1676.3	1692.2	1717.6	1714.2	1707.1	1721.4	1724.3	1712.7	1721.2	1708.7
Final products	1084.5	1297.5	1304.7	1299.2	1289.2	1298.9	1325.8	1319.1	1315.1	1331.9	1330.5	1319.3	1323.1	1314.9
Consumer goods	703.7	845.7	842.7	849.5	843.0	849.0	868.4	860.5	865.5	869.7	870.0	862.7	862.6	856.3
Durable consumer goods	133.3	200.7	199.6	198.6	201.8	203.0	211.6	204.2	208.8	214.4	211.6	203.8	206.3	202.3
Automotive products	65.9	109.2	109.6	108.8	110.4	108.0	116.6	109.6	113.5	119.5	116.9	109.9	111.6	107.4
Home goods	67.4	91.6	90.0	89.9	91.4	95.0	95.0	94.5	95.3	94.9	94.7	93.9	94.7	94.9
Nondurable consumer goods	570.4	644.9	643.1	650.9	641.2	646.0	656.8	656.4	656.7	655.3	658.4	658.9	656.3	653.9
Equipment, total	380.8	451.8	462.0	449.7	446.2	449.9	457.4	458.6	489.6	462.2	460.4	456.6	460.5	458.6
Business & defense equipment	345.4	433.2	437.0	432.8	430.8	433.2	440.8	441.7	432.9	445.8	443.7	440.1	443.5	441.5
Business equipment	278.0	341.1	345.9	341.9	338.9	338.7	346.0	346.9	338.7	350.8	348.7	345.4	348.6	346.7
Defense and space equipment	67.4	92.1	91.0	91.0	91.9	94.6	94.8	94.8	94.3	95.0	95.0	94.7	94.8	94.8
Intermediate products	292.2	385.7	378.4	384.3	387.1	393.3	391.8	395.1	391.9	389.5	393.9	393.3	398.1	393.9
Construction supplies	108.3	152.3	150.3	151.1	153.0	154.8	156.0	154.9	156.3	155.8	156.0	154.2	155.7	154.9
Business supplies	183.9	233.4	228.1	233.2	234.1	238.5	235.7		235.7	233.6	237.9	239.2	242.4	
Commercial energy products	63.4	76.3	73.8	77.6	75.7	78.4	74.6		74.8	72.8	76.4	77.6		

Table 7

INDUSTRIAL PRODUCTION: DIFFUSION INDEXES

Percent of component series higher than in earlier months

	ONE MONTH EARLIER	THREE MONTHS EARLIER	SIX MONTHS EARLIER
1977-86			
AVERAGE	53.5	55.7	57.5
HIGH	76.6	79.4	88.3
LOW	26.4	23.2	23.0
1985			
MAY	54.6	54.0	56.9
JUNE	53.4	52.2	59.1
JULY	53.4	51.8	56.0
AUGUST	57.5	57.9	57.7
SEPTEMBER	51.2	57.1	57.1
OCTOBER	49.6	56.0	58.3
NOVEMBER	61.7	56.2	58.3
DECEMBER	57.5	60.9	63.5
1986			
JANUARY	60.7	68.7	67.1
FEBRUARY	42.5	55.4	56.2
MARCH	37.1	38.9	51.0
APRIL	65.9	46.2	60.9
MAY	42.7	47.8	55.2
JUNE	46.6	56.0	47.8
JULY	55.2	46.4	47.4
AUGUST	53.0	54.4	56.0
SEPTEMBER	43.7	53.8	59.9
OCTOBER	54.0	51.6	48.6
NOVEMBER	57.3	54.6	56.5
DECEMBER	58.5	60.1	61.5
1987			
JANUARY	49.8	62.1	58.5
FEBRUARY	58.7	62.7	63.9
MARCH	48.2	55.6	64.7
APRIL	54.8	60.7	66.3
MAY	56.3	56.7	61.5

NOTE: THE DIFFUSION INDEXES SHOW THE PERCENT OF THE INDUSTRIAL PRODUCTION INDEX'S 252 SEASONALLY ADJUSTED COMPONENT SERIES THAT IN THE MONTH INDICATED WERE HIGHER THAN THEY WERE ONE MONTH EARLIER, THREE MONTHS EARLIER, AND SIX MONTHS EARLIER. IN CALCULATING THE DIFFUSION INDEXES HALF OF THE UNCHANGED COMPONENTS ARE COUNTED AS BEING HIGHER AND NO ALLOWANCE IS MADE FOR THE RELATIVE IMPORTANCE OF THE INDIVIDUAL COMPONENTS IN TOTAL INDUSTRIAL PRODUCTION. DIFFUSION INDEXES BASED ON CHANGES OVER A SIX-MONTH PERIOD GENERALLY SHOW MORE PRONOUNCED CYCLICAL PATTERNS THAN DIFFUSION INDEXES BASED ON CHANGES OVER SHORTER PERIODS.

Table 8

AUTO ASSEMBLIES AT ANNUAL RATES

Seasonally adjusted

	1986 Ann. Avg.	Millions of Units												
		1986 JUN	JUL	AUG	SEP	OCT	NOV	DEC	1987 JAN	FEB	MAR	APR	MAY	JUN
Autos, total	7.8	8.0	7.6	7.0	7.7	7.3	7.3	7.9	7.5	8.3	7.9	7.2	7.1	6.9

Table 9A

ELECTRIC POWER USE BY INDUSTRIES

Seasonally adjusted indexes, 1977 = 100

Series	SIC code	1977 (bil. KWH)	Indexes						Percentage change from previous quarter					Indexes	
			1986 Avg.	1986 Q1	1986 Q2	1986 Q3	1986 Q4	1987 Q1	1986 Q2	1986 Q3	1986 Q4	1987 Q1	year ago 1986 Q1	1987 APR	1987 MAY
TOTAL	10-14,20-39	785.8	99.1	100.0	98.0	98.5	99.8	100.1	-2.0	.5	1.3	.3	.2	101.0	100.3
MAJOR INDUSTRY DIVISIONS															
MINING	10-14	59.4	111.3	121.2	110.5	106.9	106.1	106.1	-8.8	-3.3	-0.8	.1	-12.4	105.8	106.0
MANUFACTURING	20-39	726.4	98.2	98.6	97.2	97.9	99.4	99.8	-1.4	.7	1.6	.4	1.3	100.8	99.7
DURABLE	24,25,32-39	344.3	95.6	97.2	95.8	93.9	95.9	96.0	-1.5	-2.0	2.1	.1	-1.3	98.7	97.1
NONDURABLE	20-23,26-31	382.1	100.6	99.6	98.5	101.6	102.6	103.2	-1.2	3.2	1.0	.5	3.6	103.0	102.5
INDUSTRY GROUPS AND SERIES															
METAL MINING	10	15.1	93.1	104.1	92.3	90.7	84.4	88.3	-11.3	-1.8	-6.9	4.7	-15.1	80.8	85.5
Iron ore	101	6.3	86.8	97.5	89.7	82.2	73.8	73.8	-8.0	-8.3	-10.3	.0	-24.3	74.1	70.6
Copper ore	102	5.9	108.8	116.7	95.9	112.3	112.2	123.6	-17.8	17.1	-0.1	10.2	5.9	94.7	128.1
COAL	11,12	10.3	133.0	140.3	135.9	127.4	127.4	127.8	-3.1	-6.2	-0.1	.4	-8.9	133.8	132.1
OIL AND GAS EXTRACTION	13	23.0	122.5	137.2	120.6	116.9	115.6	116.9	-12.0	-3.1	-1.1	1.1	-14.8	114.0	115.4
Crude oil and natural gas	131	18.2	125.3	140.4	123.5	118.9	117.7	118.9	-12.0	-3.8	-1.0	1.1	-15.3	118.2	117.2
Natural gas liquids	132	3.4	100.3	111.1	101.4	94.0	97.8	99.4	-8.8	-7.3	4.0	1.6	-10.6	84.9	95.3
STONE AND EARTH MINERALS	14	11.0	92.1	93.4	90.2	92.6	92.5	87.1	-3.4	2.7	-0.1	-5.8	-6.7	92.7	92.2
Crushed stone	142	2.4	141.9	139.8	142.0	139.8	145.6	130.4	1.6	-1.6	4.1	-10.4	-6.8	138.5	132.8
Sand and gravel	144	2.0	96.4	90.8	96.8	95.9	101.3	95.4	6.6	-1.0	5.6	-5.7	5.1	99.8	100.4
Chemical & fertilizer mat.	147	5.0	72.2	77.5	69.6	72.7	68.7	66.3	-10.2	4.5	-5.5	-3.5	-14.4	71.4	72.0
FOODS	20	42.4	121.0	120.1	121.7	121.7	120.7	121.6	1.4	.0	-0.8	.8	1.3	124.4	124.1
Meat products	201	6.9	113.0	112.3	114.1	112.0	113.9	113.7	1.7	-1.8	1.7	-0.2	1.2	119.5	118.6
Dairy products	202	5.3	124.5	122.9	126.0	124.3	124.7	126.5	2.6	-1.4	.4	1.4	3.0	126.1	132.3
Canned and frozen foods	203	5.7	134.0	131.6	132.8	135.2	136.8	136.3	1.0	1.8	1.2	-0.4	3.6	143.0	141.4
Grain mill products	204	7.4	109.8	110.4	109.2	110.4	109.4	107.4	-1.1	1.1	-0.9	-1.8	-2.7	111.4	108.7
Bakery products	205	2.5	141.8	142.5	140.7	142.3	141.6	143.1	-1.3	1.2	-0.5	1.0	.4	141.1	140.6
Sugar and confectionery	206	3.3	176.8	171.8	179.1	177.6	178.7	178.4	4.2	-0.8	.6	-0.2	3.8	188.5	177.6
Fats and oils	207	3.4	110.8	114.4	113.4	113.0	103.1	99.8	-0.9	-0.3	-8.8	-3.2	-12.8	94.0	92.4
Beverages	208	4.8	124.0	121.2	126.3	125.6	122.2	123.6	4.2	-0.5	-2.7	1.2	2.0	124.0	118.8
Misc. food preparations	209	3.1	115.9	115.5	117.0	117.1	114.2	115.1	1.3	.1	-2.5	.8	-0.3	117.8	121.8
TOBACCO PRODUCTS	21	1.3	98.2	97.7	99.6	96.7	99.2	102.7	1.9	-3.0	2.6	3.5	5.0	109.9	100.6
TEXTILE MILL PRODUCTS	22	28.3	98.9	96.8	97.9	99.9	101.2	103.5	1.2	2.0	1.3	2.3	7.0	106.1	102.6
Fabrics	221-4	12.1	91.7	91.5	91.9	91.3	92.4	95.5	.4	-0.7	1.3	3.4	4.4	96.0	92.8
Knit goods	225	3.7	82.5	81.2	84.1	82.6	82.1	84.9	3.5	-1.8	-0.5	3.3	4.5	87.5	85.2
Fabric finishing	226	2.2	123.5	119.2	118.3	129.2	126.9	126.5	-0.8	9.2	-1.8	-0.3	6.1	134.1	131.7
Yarn and thread	228	6.7	113.2	107.9	109.7	115.7	119.5	121.5	1.6	5.5	3.3	2.1	13.0	124.3	118.7
Miscellaneous textiles	229	2.1	99.1	96.2	98.9	99.8	101.4	103.9	2.7	1.0	1.6	2.5	7.9	113.3	106.2
APPAREL PRODUCTS	23	6.6	120.5	118.9	121.8	119.7	122.0	129.3	2.4	-1.7	1.9	6.0	8.7	134.1	134.7
Men's outerwear	231,2	2.1	114.8	114.7	116.7	112.5	115.7	135.0	1.7	-3.6	2.8	16.6	17.7	139.0	136.1
Women's outerwear	233	1.9	111.8	116.4	113.0	106.6	113.3	114.9	-2.9	-5.6	6.3	1.3	-1.3	116.3	115.7
LUMBER AND PRODUCTS	24	16.4	126.7	122.9	128.4	126.8	128.8	133.6	4.5	-1.3	1.6	3.7	8.8	137.3	136.8
Lumber	242	6.9	106.4	103.9	107.6	105.5	108.8	110.5	3.6	-2.0	3.1	1.6	6.3	113.0	113.2
Millwork and plywood	243	4.4	137.4	133.9	138.1	138.4	139.5	149.3	3.1	.2	.8	7.0	11.5	148.5	143.9
FURNITURE AND FIXTURES	25	4.2	128.8	126.4	127.7	129.2	131.9	135.2	1.1	1.2	2.1	2.4	7.0	141.1	139.1
Home furniture	251	2.8	118.9	117.0	117.8	118.8	122.4	123.2	.7	.9	3.1	.7	5.3	133.1	128.1
PAPER AND PRODUCTS	26	71.9	120.8	119.5	120.3	121.0	122.5	122.8	.6	.6	1.2	.3	2.7	122.9	125.1
Wood pulp	261	5.9	125.5	129.1	118.9	125.1	129.4	134.9	-7.9	5.2	3.5	4.3	4.5	128.6	138.3
Paper	262	34.4	129.6	127.9	129.9	130.6	130.0	131.6	1.6	.5	-0.4	1.2	2.9	130.2	134.7
Paperboard	263	22.1	101.4	99.8	101.7	99.7	104.6	100.6	2.0	-2.0	4.9	-3.8	.9	99.5	94.2
Converted paper	264	5.0	110.7	109.7	109.0	111.2	113.1	112.5	-0.7	2.0	1.7	-0.5	2.5	112.6	115.3
Paperboard containers	265	3.4	117.5	111.7	114.6	121.1	122.7	123.2	2.6	5.7	1.4	.4	10.2	124.9	128.8
Building paper and board	266	1.1	158.4	156.6	154.4	163.5	159.9	157.4	-1.4	5.9	-2.2	-1.5	.5	170.7	169.0
PRINTING AND PUBLISHING	27	10.6	149.1	145.4	149.3	148.7	152.9	155.1	2.7	-0.4	2.9	1.4	6.7	158.0	160.5
Newspapers	271	2.6	126.3	123.7	128.6	125.7	127.1	131.0	4.0	-2.2	1.1	3.1	5.9	132.8	132.1
Commercial Printing	275	4.8	169.9	162.6	169.1	170.3	176.8	178.1	4.0	.7	3.8	.7	9.5	184.1	183.4
CHEMICALS AND PRODUCTS	28	162.1	83.2	83.0	80.1	84.6	85.2	85.8	-3.5	5.6	.8	.7	3.3	84.3	82.8
Basic chemicals	281	85.6	69.2	69.5	66.4	70.6	70.6	72.1	-4.4	6.2	.0	2.1	3.8	70.6	68.0
Alkalies and chlorine	2812	13.3	88.2	90.1	91.1	88.9	82.9	98.7	1.1	-2.4	-6.8	19.1	9.6	94.4	93.7
Inorganic chemicals,nec	2819	58.1	51.1	52.2	48.6	51.4	52.4	50.7	-6.7	5.7	1.8	-3.3	-2.8	48.1	48.2
Acid and fertilizer mat.		13.0	71.3	75.1	66.9	68.5	75.2	74.4	-11.0	2.3	9.9	-1.1	-1.0	70.0	75.1
Nuclear mats., nondefense		44.6	42.6	42.8	40.9	44.2	42.9	41.0	-4.4	8.2	-3.0	-4.4	-4.1	38.4	37.6
Synthetic materials	282	19.3	117.7	119.1	109.6	118.9	123.6	125.7	-8.0	8.5	3.9	1.6	5.5	122.6	120.3
Plastics materials	2821	9.2	150.9	146.7	132.9	157.5	167.7	165.4	-9.4	18.5	6.5	-1.3	12.7	149.3	148.9
Drugs	283	4.1	146.7	141.1	148.7	146.8	150.0	155.3	5.4	-1.2	2.2	3.5	10.1	152.4	152.9
Soaps and toiletries	284	2.1	126.1	124.3	129.1	127.7	123.6	125.5	3.9	-1.1	-3.2	1.5	1.0	127.6	122.5
Industrial organic chem.	286	35.8	94.7	92.4	93.3	96.6	97.0	93.3	.9	3.5	.4	-3.8	.9	92.4	92.4
Farm chemicals	287	10.5	86.5	87.3	91.2	82.9	84.6	86.9	4.5	-9.1	2.0	2.7	-0.5	86.6	88.3

Table 9B

ELECTRIC POWER USE BY INDUSTRIES

Not seasonally adjusted, 1977 = 100

Series	SIC code	1977 (bil. KWH)	Indexes: 1986 Avg.	1986 Q1	1986 Q2	1986 Q3	1986 Q4	1987 Q1	Percentage change from previous quarter: 1986 Q2	1986 Q3	1986 Q4	1987 Q1	Percentage change from year ago: 1986 Q1	Indexes: 1987 APR	1987 MAY
TOTAL	10-14,20-39	785.8	99.1	98.1	99.3	100.3	98.5	98.3	1.2	1.0	-1.8	-0.2	.2	101.3	101.4
MAJOR INDUSTRY DIVISIONS															
MINING	10-14	59.4	111.3	125.5	113.0	103.2	103.6	109.9	-9.9	-8.7	.4	6.1	-12.4	109.0	109.0
MANUFACTURING	20-39	726.4	98.2	96.3	98.4	100.1	98.1	97.5	2.2	1.7	-2.0	-0.6	1.3	100.8	100.9
DURABLE	24,25,32-39	344.3	95.6	96.1	97.0	95.3	94.2	94.9	.9	-1.8	-1.1	.7	-1.3	98.8	98.6
NONDURABLE	20-23,26-31	382.1	100.6	96.5	99.7	104.5	101.7	99.9	3.4	4.8	-2.7	-1.7	3.6	102.6	103.0
INDUSTRY GROUPS AND SERIES															
METAL MINING	10	15.1	93.1	106.8	101.9	84.9	78.9	92.3	-6.3	-16.7	-9.4	20.1	-15.1	88.1	99.2
Iron ore	101	6.1	86.8	107.8	103.3	74.9	61.2	81.6	-4.2	-27.5	-18.3	33.5	-24.3	82.9	88.1
Copper ore	102	5.9	108.8	113.8	102.7	108.4	110.5	120.5	-9.8	5.5	2.0	9.0	5.9	105.7	133.5
COAL	11,12	10.3	133.0	160.0	133.4	111.8	126.9	145.7	-16.6	-16.2	13.5	14.8	-9.0	140.5	126.4
OIL AND GAS EXTRACTION	13	23.0	122.5	136.1	120.5	117.9	115.5	115.9	-11.5	-2.1	-2.1	.4	-14.8	114.3	113.1
Crude oil and natural gas	131	18.2	125.1	140.5	122.5	119.5	118.0	118.9	-12.9	-2.4	-1.2	.8	-15.4	118.4	114.4
Natural gas liquids	132	3.4	100.8	104.9	104.7	100.0	93.7	93.8	-0.2	-4.4	-6.4	.1	-10.6	85.8	98.2
STONE AND EARTH MINERALS	14	11.0	92.1	91.6	92.2	90.9	93.9	85.4	.7	-1.4	3.4	-9.1	-6.7	95.6	94.4
Crushed stone	142	2.4	141.9	126.8	146.0	146.2	148.5	118.3	15.1	.1	1.5	-20.3	-6.7	141.0	137.0
Sand and gravel	144	2.0	96.4	78.9	97.0	101.9	107.9	82.9	22.8	5.1	5.9	-23.2	5.1	95.6	101.7
Chemical & fertilizer mat.	147	5.0	72.2	80.2	70.8	68.2	69.4	68.6	-11.6	-3.7	1.8	-1.2	-14.4	75.1	72.9
FOODS	20	42.4	121.0	112.7	118.2	131.2	122.0	114.2	4.8	11.0	-7.0	-6.4	1.3	116.6	118.0
Meat products	201	6.9	113.0	104.0	111.0	123.2	113.9	105.3	6.7	11.0	-7.5	-7.6	1.2	110.7	113.7
Dairy products	202	5.3	124.5	113.6	125.9	137.5	120.9	116.9	10.9	9.2	-12.1	-3.3	3.0	122.4	127.7
Canned and frozen foods	203	5.7	134.0	121.3	126.5	149.1	138.9	125.7	4.3	17.9	-6.9	-9.5	3.6	131.0	132.0
Grain mill products	204	7.4	109.8	108.6	105.6	113.5	111.6	105.7	-2.8	7.5	-1.7	-5.3	-2.7	106.1	103.5
Bakery products	205	2.5	141.8	130.9	138.5	157.6	140.0	131.4	5.9	13.8	-11.2	-6.1	.4	131.7	136.6
Sugar and confectionery	206	3.3	176.8	168.5	160.1	174.8	203.8	174.6	-5.0	9.2	16.6	-14.3	3.6	161.5	154.9
Fats and oils	207	3.4	110.8	114.9	107.7	111.0	109.7	100.1	-6.3	3.1	-1.2	-8.7	-12.8	88.9	85.8
Beverages	208	4.8	124.0	110.6	125.8	139.9	119.6	112.8	13.8	11.2	-14.5	-5.7	2.0	117.4	115.8
Misc. food preparations	209	3.1	115.9	107.8	114.3	126.6	115.1	107.4	6.1	10.7	-9.0	-6.7	-0.3	110.7	116.8
TOBACCO PRODUCTS	21	1.3	98.2	91.5	96.7	103.9	100.8	96.3	5.7	7.4	-3.0	-4.5	5.2	99.8	96.8
TEXTILE MILL PRODUCTS	22	28.3	98.9	87.7	101.1	105.5	101.3	93.8	15.2	4.4	-4.0	-7.4	6.9	102.4	105.0
Fabrics	221-4	12.1	91.7	82.0	95.0	96.8	92.9	85.6	15.8	2.0	-4.0	-7.9	4.4	91.9	95.1
Knit goods	225	3.7	82.5	72.3	86.4	91.6	79.9	75.6	19.6	6.1	-12.9	-5.4	4.6	83.4	86.0
Fabric finishing	226	2.2	123.5	113.7	120.4	131.5	128.3	120.7	5.9	9.2	-2.5	-5.9	6.2	131.9	131.6
Yarn and thread	228	6.7	113.2	96.9	114.6	121.4	119.7	109.2	18.2	5.9	-1.4	-8.8	12.7	120.8	123.5
Miscellaneous textiles	229	2.1	99.1	90.6	100.3	105.0	100.5	97.8	10.7	4.7	-4.3	-2.6	8.0	109.1	108.2
APPAREL PRODUCTS	23	6.6	120.5	108.6	117.8	137.9	117.8	118.1	8.5	17.1	-14.5	.2	8.8	121.3	125.2
Men's outerwear	231,2	2.1	114.8	100.9	114.7	132.3	111.3	118.7	13.7	15.3	-15.9	6.7	17.7	125.6	129.2
Women's outerwear	233	1.9	111.8	103.0	108.6	127.0	108.6	101.8	5.5	16.9	-14.5	-6.2	-1.2	103.1	106.0
LUMBER AND PRODUCTS	24	16.4	126.7	125.5	128.3	123.9	129.0	136.4	2.3	-3.5	4.2	5.8	8.7	140.2	136.5
Lumber	242	6.9	106.4	106.2	107.8	102.4	109.4	112.8	1.6	-5.0	6.8	3.2	6.3	116.3	113.6
Millwork and plywood	243	4.4	137.4	136.3	139.4	135.0	138.7	152.0	2.2	-3.2	2.7	9.6	11.4	153.2	144.7
FURNITURE AND FIXTURES	25	4.2	128.8	126.4	126.1	130.1	132.5	135.2	-0.3	3.2	1.8	2.1	7.0	139.6	134.2
Home furniture	251	2.8	118.9	118.1	117.2	117.8	122.7	124.5	-0.8	.5	4.2	1.4	5.4	132.9	124.0
PAPER AND PRODUCTS	26	71.9	120.8	117.9	120.9	122.2	122.1	121.2	2.5	1.1	-0.1	-0.8	2.8	124.0	124.7
Wood pulp	261	5.9	125.5	124.2	120.2	125.9	131.7	129.8	-3.2	4.7	4.6	-1.4	4.5	130.3	140.2
Paper	262	34.4	129.6	127.0	131.2	131.1	129.1	130.7	3.3	-0.1	-1.5	1.2	2.9	133.6	134.8
Paperboard	263	22.1	101.4	100.7	103.7	99.0	102.2	101.6	3.0	-4.5	3.2	-0.6	.9	101.7	94.9
Converted paper	264	5.0	110.7	106.2	109.9	114.7	112.1	108.9	3.5	4.4	-2.3	-2.9	2.5	111.6	113.7
Paperboard containers	265	3.4	117.5	109.6	114.4	124.0	122.0	120.9	4.4	8.4	-1.6	-0.9	10.3	124.2	125.4
Building paper and board	266	1.1	158.4	154.5	156.3	162.2	160.5	155.4	1.2	3.8	-1.0	-3.2	.6	170.2	171.0
PRINTING AND PUBLISHING	27	10.6	149.1	133.5	144.7	168.1	150.2	142.4	8.4	16.1	-10.6	-5.2	6.7	146.4	151.7
Newspapers	271	2.6	126.3	112.9	125.6	141.5	124.9	119.6	11.4	12.5	-11.7	-4.2	5.9	122.4	126.6
Commercial Printing	275	4.8	169.9	149.2	162.4	193.0	174.9	163.5	8.8	18.8	-9.4	-6.5	9.5	170.0	172.5
CHEMICALS AND PRODUCTS	28	162.1	83.2	81.5	82.6	85.2	83.3	84.3	1.3	3.1	-2.1	1.1	3.4	86.4	85.4
Basic chemicals	281	85.6	69.2	68.5	68.5	70.3	69.5	71.1	.0	2.7	-1.2	2.2	3.8	72.5	71.2
Alkalies and chlorine	2812	13.3	88.2	87.9	94.5	86.5	82.1	96.3	7.4	-6.3	-7.2	17.3	9.5	99.2	96.4
Inorganic chemicals,nec	2819	58.1	51.1	51.6	50.7	50.9	51.1	50.2	-1.8	.4	.4	-1.7	-2.7	49.5	51.7
Acid and fertilizer mat.		13.0	71.3	73.8	68.5	68.4	74.6	73.1	-7.2	-0.1	9.1	-2.0	-1.0	71.7	76.2
Nuclear mats., nondefense		44.6	42.6	42.4	43.3	43.6	41.3	40.7	2.1	.7	-5.3	-1.5	-4.0	40.2	41.5
Synthetic materials	282	19.3	117.7	114.0	113.3	123.0	120.4	120.3	-0.6	8.6	-2.1	-0.1	5.5	125.4	121.5
Plastics materials	2821	9.2	150.9	142.0	137.3	162.2	162.2	160.3	-3.3	18.1	.0	-1.2	12.9	157.2	147.4
Drugs	283	4.1	146.7	129.5	147.9	162.7	146.6	142.6	14.3	10.0	-9.9	-2.8	10.1	144.9	147.2
Soaps and toiletries	284	2.1	126.1	120.6	125.8	134.8	123.3	121.9	4.2	7.2	-8.5	-1.2	1.0	119.6	119.8
Industrial organic chem.	286	35.8	94.7	93.8	96.2	96.3	92.6	94.7	2.5	.2	-3.8	2.2	.9	92.6	95.4
Farm chemicals	287	10.5	86.5	85.8	93.0	83.5	83.8	85.3	8.4	-10.2	.3	1.8	-0.6	90.2	88.5

Table 9A—continued

ELECTRIC POWER USE BY INDUSTRIES

Seasonally adjusted indexes, 1977 = 100

Series	SIC code	1977 (bil. KWH)	Indexes						Percentage change from previous quarter					Indexes		
			1986 Avg.	1986 Q1	Q2	Q3	Q4	1987 Q1	1986 Q2	Q3	Q4	1987 Q1	year ago 1986 Q1	1987 APR	MAY
PETROLEUM PRODUCTS	29	34.7	118.5	115.0	117.1	118.8	123.0	118.5	1.9	1.4	3.6	-3.7	3.0	119.1	121.7
RUBBER & PLASTICS PRODUCTS	30	23.1	130.2	128.7	127.2	131.7	133.6	136.5	-1.1	3.5	1.4	2.2	6.1	140.4	138.6
Tires	301	5.4	70.0	71.2	67.3	72.4	69.4	72.0	-5.5	7.6	-4.2	3.9	1.2	74.9	71.6
Rubber products, nec	306	2.2	96.4	97.1	93.0	97.8	97.9	99.6	-4.2	5.1	.2	1.7	2.6	100.7	100.8
Plastics products, nec	307	14.2	174.0	170.3	171.2	174.9	179.9	183.4	.6	2.1	2.9	1.9	7.7	188.1	187.7
LEATHER AND PRODUCTS	31	1.4	84.6	87.4	83.6	83.6	84.1	85.9	-4.4	.1	.5	2.1	-1.8	86.1	88.2
Shoes	314	.7	78.6	82.3	77.1	76.6	78.5	83.8	-6.3	-0.6	2.4	6.9	1.9	84.7	85.9
CLAY, GLASS, AND STONE	32	31.4	105.3	106.7	105.7	104.2	105.1	106.1	-1.0	-1.4	.9	.9	-0.5	107.7	106.2
Flat glass	321	1.3	105.5	107.1	107.6	105.5	102.0	111.5	.4	-1.9	-3.3	9.3	4.1	119.3	117.3
Pressed and blown glass	322	6.8	104.3	104.8	106.2	101.9	104.3	103.2	1.3	-4.0	2.3	-1.1	-1.5	108.0	107.9
Cement	324	10.2	98.7	100.7	97.4	98.6	98.9	98.8	-3.4	1.3	.3	-0.2	-1.9	96.6	93.7
Structural clay products	325	1.5	102.0	102.9	100.3	101.1	103.9	113.8	-2.6	.9	2.7	9.5	10.5	113.8	111.8
Concrete products	327	3.6	112.2	113.5	111.8	111.2	112.6	112.1	-1.5	-0.5	1.3	-0.5	-1.3	108.0	102.4
PRIMARY METALS	33	171.3	74.7	78.4	75.4	71.5	73.4	73.9	-3.9	-5.1	2.6	.7	-5.7	78.1	76.1
Basic steel and mill prod.	331	65.7	70.2	73.9	70.4	67.9	68.4	65.4	-4.8	-3.5	.7	-4.4	-11.5	68.1	64.5
Iron and steel foundries	332	12.0	70.1	71.6	69.1	67.8	71.9	72.2	-3.5	-2.0	6.1	.3	.8	71.0	71.9
Primary nonferrous metals	333	78.1	85.9	84.2	85.5	88.9	85.2	85.8	1.6	3.9	-4.1	.6	1.9	103.6	102.7
Aluminum	3334	70.3	72.4	80.2	73.2	64.9	72.1	78.6	-8.7	-11.4	11.2	9.1	-1.9	77.6	76.6
Nonferrous foundries	336	2.1	115.5	115.6	115.3	115.8	115.5	123.1	-0.3	.5	-0.3	6.6	6.5	123.7	118.1
FABRICATED METAL PRODUCTS	34	26.4	115.8	114.9	115.5	115.0	117.9	118.2	.6	-0.5	2.5	.2	2.8	118.8	120.2
Metal cans	341	2.2	119.3	115.8	120.5	119.2	122.0	119.3	4.1	-1.0	2.3	-2.2	3.1	122.7	122.5
Hardware	342	2.3	103.7	100.7	103.2	106.1	104.9	105.0	2.5	2.9	-1.2	.1	4.2	106.2	106.5
Structural metal products	344	.8	111.5	107.9	110.8	113.1	114.4	111.7	2.7	2.0	1.2	-2.4	3.5	112.9	119.7
Fasteners	345	1.6	105.1	102.9	104.3	105.9	107.4	102.5	1.3	1.5	1.5	-4.6	-0.4	113.2	112.3
Metal stampings	346	6.2	111.1	110.4	110.5	104.2	113.8	112.1	-5.1	-5.7	9.2	-1.5	-3.7	110.3	102.7
NONELECTRICAL MACHINERY	35	28.6	114.3	115.8	113.9	113.7	114.1	114.0	-1.6	-0.1	.3	-0.1	-1.5	115.7	114.6
Engines and turbines	351	2.4	63.1	63.5	63.3	63.2	62.3	62.6	-0.4	-0.1	-1.5	.5	-1.5	60.7	60.0
Farm equipment	352	2.1	51.3	52.0	49.8	51.9	51.8	49.2	-4.2	4.1	-0.1	-5.0	-5.3	54.1	53.3
Construction equipment	353	5.1	78.3	82.2	78.7	77.1	75.3	71.6	-4.3	-2.0	-2.4	-5.0	-13.0	71.2	76.2
Metalworking machinery	354	3.8	115.3	114.2	114.7	115.3	117.2	113.8	.5	.5	1.7	-2.9	-0.3	114.7	116.3
Special industry machinery	355	2.0	101.4	101.9	99.9	103.3	100.8	103.0	-1.9	3.4	-2.4	2.2	1.1	98.4	101.5
General industrial mach.	356	4.6	108.5	108.2	108.7	109.1	108.2	108.6	.5	.3	-0.8	.4	.5	108.2	106.6
Office and computing mach.	357	2.8	201.5	207.9	195.6	200.7	202.3	208.1	-5.9	2.6	.8	2.9	.1	217.6	202.2
Service industry machinery	358	2.8	99.5	95.5	98.7	101.2	102.6	103.7	3.3	2.6	1.4	1.1	8.6	108.2	111.4
ELECTRICAL MACHINERY	36	25.0	126.5	124.1	127.0	126.9	128.2	128.1	2.3	-0.1	1.0	-0.1	3.2	130.3	129.9
Elect. distribution equip.	361	1.5	97.4	98.6	99.8	95.7	95.5	99.5	1.2	-4.0	-0.2	4.2	.9	100.6	104.6
Elect. indust. apparatus	362	4.3	79.1	78.0	79.0	80.8	78.7	82.8	1.2	2.3	-2.5	5.2	6.1	83.5	82.3
Household appliances	363	2.7	93.0	89.0	94.0	95.1	94.2	93.4	5.7	1.2	-0.9	-0.8	5.0	91.0	92.6
Lighting and wiring prod.	364	2.3	100.5	101.6	101.3	99.9	99.2	102.7	-0.4	-1.3	-0.8	3.6	1.1	104.8	103.8
Radio and TV sets	365	.9	119.0	122.7	117.7	115.7	120.4	116.7	-4.0	-1.7	4.0	-3.1	-4.9	111.9	107.7
Communication equipment	366	4.6	167.6	169.5	167.4	163.5	171.2	170.1	-1.2	-2.3	4.8	-0.7	.3	166.2	164.9
Electronic components	367	6.0	179.5	176.2	180.0	180.7	181.2	180.3	2.2	.4	.3	-0.5	2.4	184.2	184.0
TRANSPORTATION EQUIPMENT	37	31.4	113.9	114.5	112.2	112.1	116.9	116.7	-2.1	.0	4.3	-0.2	1.9	115.0	112.2
Motor vehicles and parts	371	19.3	100.3	103.2	98.9	96.9	103.1	103.9	-4.1	-2.1	6.4	.8	.6	100.9	96.5
Aircraft and parts	372	6.5	149.8	143.7	149.0	154.1	151.9	155.1	3.7	3.4	-1.4	2.1	7.9	158.8	157.1
Ships and boats	373	2.1	110.9	113.0	106.2	109.0	115.5	120.4	-6.1	2.7	5.9	4.3	6.5	107.6	131.1
INSTRUMENTS	38	5.5	149.9	149.2	149.5	150.4	150.7	151.1	.1	.6	.2	.3	1.3	153.9	156.1
Copiers and related equip.	386	1.4	134.2	136.9	134.0	135.5	130.0	130.5	-2.1	1.1	-4.1	.3	-4.7	128.8	135.5
MISCELLANEOUS MANUFACTURES	39	4.1	102.2	102.4	102.9	100.9	102.9	103.5	.5	-1.9	1.9	.6	1.1	100.1	100.9
SUPPLEMENTARY GROUPINGS																
TOTAL, LESS NUCLEAR NONDEFENSE		740.7	103.8	104.7	102.9	103.3	104.5	105.0	-1.7	.3	1.2	.5	.3	106.6	105.5
UTILITY SALES TO INDUSTRY		715.7	99.9	100.7	98.9	99.4	100.8	101.0	-1.8	.6	1.4	.2	.3	102.1	101.3
INDUSTRIAL GENERATION		70.1	84.3	86.2	83.2	81.7	86.3	84.6	-3.5	-1.7	5.6	-2.0	-1.9	82.4	83.1

Note- The electric power use data by industry, shown in billions of kilowatt hours for 1977, are from the Census of Manufactures of that year and from other sources. They are provided for information and are not used as weights to compile the electric power use indexes. All index aggregations, with their detailed components, are calculated from the kilowatt hour data collected in the Federal Reserve survey of electric power use by industry. The electric power total includes only those major divisions of industries--mining and manufacturing--for which data are collected in this Federal Reserve survey. The total does not include gas or electric utility kilowatt hour use. The supplementary grouping, "Total, less nondefense, nuclear" is shown separately because the nondefense nuclear materials series (part of SIC 2819) accounts for a disproportionally large part of total electric power use. Since the value added proportion for this industry is a considerably smaller part of total IP than its share of total electric power use, excluding this component from total power use facilitates comparisons with total IP.

Table 9B—continued

ELECTRIC POWER USE BY INDUSTRIES

Not seasonally adjusted, 1977 = 100

Series	SIC code	1977 (bil. KWH)	Indexes: 1986 Avg.	1986 Q1	1986 Q2	1986 Q3	1986 Q4	1987 Q1	Percentage change from previous quarter: 1986 Q2	1986 Q3	1986 Q4	1987 Q1	Percentage change from year ago: 1986 Q1	Indexes: 1987 APR	1987 MAY
PETROLEUM PRODUCTS	29	34.7	118.5	112.2	115.6	124.0	122.3	115.5	3.1	7.3	-1.4	-5.5	3.0	114.3	118.8
RUBBER & PLASTICS PRODUCTS	30	23.1	130.2	126.0	128.7	133.6	132.6	133.8	2.2	3.8	-0.7	.9	6.2	141.3	139.3
Tires	301	5.4	70.0	66.8	68.0	74.1	69.2	69.7	-1.0	8.9	-6.7	.8	1.4	74.8	72.0
Rubber products, nec	306	2.2	96.4	96.2	94.4	97.9	97.3	98.7	-1.9	3.7	-0.6	1.5	2.6	101.2	101.4
Plastics products, nec	307	14.2	174.0	167.1	173.2	177.5	178.4	180.1	3.7	2.4	.5	.9	7.8	190.4	187.9
LEATHER AND PRODUCTS	31	1.4	84.6	86.8	83.5	85.9	82.3	85.2	-3.7	2.8	-4.2	3.5	-1.8	84.5	86.0
Shoes	314	.7	78.6	82.1	76.1	80.4	75.7	83.6	-7.3	5.7	-5.9	10.4	1.8	81.8	82.3
CLAY, GLASS, AND STONE	32	31.4	105.3	99.5	106.7	108.4	106.8	99.0	7.2	1.6	-1.5	-7.3	-0.5	107.0	107.0
Flat glass	321	1.3	105.5	104.9	107.2	108.1	101.6	109.2	2.1	.9	-6.0	7.5	4.1	118.3	115.4
Pressed and blown glass	322	6.8	104.3	101.3	106.1	105.1	104.8	99.7	4.7	-0.9	-0.3	-4.9	-1.6	107.6	105.9
Cement	324	10.2	98.7	84.4	99.9	106.9	103.8	82.8	18.3	7.0	-2.9	-20.2	-1.9	94.2	99.0
Structural clay products	325	1.5	102.0	98.8	100.7	102.2	106.4	109.2	1.9	1.5	4.0	2.6	10.5	114.5	109.3
Concrete products	327	3.6	112.2	108.6	113.3	113.9	113.2	107.2	4.3	.5	-0.6	-5.4	-1.3	109.0	103.7
PRIMARY METALS	33	171.3	74.7	79.3	77.4	70.3	71.7	74.8	-2.3	-9.2	2.0	4.2	-5.7	79.8	79.8
Basic steel and mill prod.	331	65.7	70.2	75.7	74.9	65.5	64.7	67.0	-1.1	-12.5	-1.2	3.6	-11.5	73.8	70.5
Iron and steel foundries	332	12.0	70.1	71.4	71.8	66.8	70.3	72.0	.6	-7.0	5.2	2.4	.8	74.2	73.9
Primary nonferrous metals	333	78.1	85.9	82.9	85.8	87.2	87.8	84.4	3.5	1.6	.7	-3.8	1.8	98.2	106.0
Aluminum	3334	70.3	72.4	78.4	74.0	66.0	71.2	76.9	-5.6	-10.9	8.0	8.0	-1.9	77.0	79.4
Nonferrous foundries	336	2.1	115.5	116.2	115.5	114.2	116.2	123.8	-0.6	-1.1	1.8	6.5	6.5	123.0	118.7
FABRICATED METAL PRODUCTS	34	26.4	115.8	114.4	115.5	117.0	116.1	117.7	1.0	1.3	-0.8	1.3	2.9	119.0	118.0
Metal cans	341	2.2	119.3	111.7	122.3	125.5	117.8	115.3	9.5	2.7	-6.1	-2.2	3.2	122.2	122.6
Hardware	342	2.3	103.7	100.2	102.9	107.8	103.9	104.6	2.7	4.7	-3.6	.7	4.3	104.5	105.5
Structural metal products	344	.8	111.9	110.8	108.8	112.9	113.4	114.8	-1.8	3.7	.5	1.2	3.5	113.3	114.6
Fasteners	345	1.6	105.1	103.7	103.9	107.0	105.5	103.4	.2	3.0	-1.4	-2.0	-0.3	113.5	110.7
Metal stampings	346	6.2	111.1	110.7	112.0	104.6	111.3	112.5	-4.0	-6.6	6.5	1.1	-3.6	111.9	104.0
NONELECTRICAL MACHINERY	35	28.6	114.3	112.9	113.4	119.2	111.8	111.2	.4	5.1	-6.2	-0.5	-1.5	112.7	113.1
Engines and turbines	351	2.4	63.1	63.1	62.3	65.4	61.4	62.2	-1.3	4.9	-6.1	1.4	-1.4	58.6	59.1
Farm equipment	352	2.1	51.3	54.4	50.1	50.9	49.9	51.7	-7.9	1.6	-2.1	3.7	-5.0	54.6	53.5
Construction equipment	353	5.3	78.3	81.0	77.9	80.0	74.3	70.4	-3.8	2.7	-7.1	-5.3	-13.1	69.5	74.5
Metalworking machinery	354	3.8	115.3	114.5	113.9	118.6	114.4	114.1	-0.5	4.1	-3.5	-0.2	-0.3	114.5	113.6
Special industry machinery	355	2.0	101.4	101.1	99.8	105.4	99.5	102.2	-1.3	5.6	-5.5	2.7	1.1	97.9	99.4
General industrial mach.	356	4.6	108.5	106.6	109.5	112.0	105.9	107.1	2.7	2.3	-5.5	1.1	.4	107.0	106.3
Office and computing mach.	357	2.8	201.5	197.3	191.9	215.9	200.7	197.5	-2.7	12.5	-7.0	-1.6	.1	204.9	197.1
Service industry machinery	358	2.8	99.5	92.6	99.3	106.6	99.5	100.7	7.2	7.4	-6.7	1.2	8.7	106.2	110.3
ELECTRICAL MACHINERY	36	25.0	126.5	120.3	126.3	133.0	126.5	124.2	5.0	5.3	-4.9	-1.8	3.3	126.6	127.8
Elect. distribution equip.	361	1.5	97.4	96.8	99.3	98.8	94.5	97.8	2.6	-0.5	-4.3	3.4	1.0	98.1	102.5
Elect. indust. apparatus	362	4.3	79.1	77.2	80.4	81.6	77.2	82.0	4.2	1.4	-5.4	6.3	6.2	84.7	83.7
Household appliances	363	2.7	93.0	89.8	95.5	94.8	92.1	94.3	6.4	-0.8	-2.9	2.4	5.0	90.2	93.3
Lighting and wiring prod.	364	2.3	100.5	101.0	101.2	100.4	99.2	102.1	.3	-0.8	-1.2	2.9	1.1	104.9	102.2
Radio and TV sets	365	.9	119.0	116.4	116.1	125.9	117.6	110.6	-0.2	8.4	-6.6	-6.0	-4.9	106.5	105.5
Communication equipment	366	4.6	167.6	158.4	165.0	179.1	168.0	159.0	4.2	8.6	-6.2	-5.4	.4	158.6	159.3
Electronic components	367	6.0	179.5	167.3	178.5	192.3	179.9	171.3	6.7	7.7	-6.5	-4.8	2.4	177.2	180.1
TRANSPORTATION EQUIPMENT	37	31.4	113.9	110.7	113.4	117.2	114.1	112.9	2.4	3.3	-2.6	-1.1	1.9	113.7	112.3
Motor vehicles and parts	371	19.3	100.3	99.1	101.4	100.7	100.2	99.9	2.4	-0.8	-0.5	-0.3	.8	100.9	97.7
Aircraft and parts	372	6.5	149.8	137.5	148.1	161.5	152.0	148.4	7.7	9.1	-5.9	-2.4	7.9	153.0	155.0
Ships and boats	373	2.1	110.9	118.7	104.1	108.9	111.8	126.5	-12.3	4.6	2.7	13.1	6.6	108.5	124.1
INSTRUMENTS	38	5.5	149.9	143.1	148.1	161.2	147.2	144.9	3.5	8.9	-8.7	-1.6	1.3	147.2	151.7
Copiers and related equip.	386	1.4	134.2	132.8	133.9	141.1	128.9	126.5	.9	5.4	-8.7	-1.9	-4.7	125.6	132.6
MISCELLANEOUS MANUFACTURES	39	4.1	102.2	100.3	101.3	105.8	101.5	101.4	1.0	4.4	-4.0	-0.1	1.1	97.3	97.6
SUPPLEMENTARY GROUPINGS															
TOTAL, LESS NUCLEAR NONDEFENSE		740.7	103.8	102.8	104.0	105.2	103.2	103.1	1.2	1.1	-1.8	-0.1	.3	106.4	106.4
UTILITY SALES TO INDUSTRY		715.7	99.9	98.7	100.3	101.4	99.3	99.0	1.6	1.1	-2.0	-0.3	.3	102.4	102.5
INDUSTRIAL GENERATION		70.1	84.3	87.7	83.5	82.1	83.9	86.1	-4.8	-1.7	2.3	2.6	-1.8	83.0	83.7

Explanatory Note

Coverage. The index is a measure of industrial production expressed as a percentage of output in a reference period (currently 1977). The changes in the physical output of the nation's factories, mines, and electric and gas utilities are represented by 252 individual series in the index, covering 27 pertinent two-digit codes of the *Standard Industrial Classification* (SIC). For each individual series, index series relatives are calculated first and are then aggregated in the following two ways: (1) market groupings, such as consumer goods, equipment, intermediate products, and materials, from which the seasonally adjusted total index is derived (tables 1A and 1B), and (2) industry groupings, such as SIC two-digit industries, and major aggregates of these groupings, such as durable and nondurable manufacturing, mining, and utilities (tables 2A and 2B).

Market groupings. For purposes of analysis the individual industrial output series are grouped into materials, intermediate products, and final products; together, the latter two form the products category. Materials are industrial output requiring further processing within industry; intermediate products are expected to become inputs in nonindustrial sectors such as construction, farming, and services; and final products are assumed to enter final use as items of private consumption, government use, or capital formation. In the index, final products are subdivided into consumer goods and equipment.

Timing. A first estimate of output for a month is published about the 15th of the following month. This estimate may be revised in each of the next three months as new data become available. After the fourth month, indexes are not revised further until the time of an annual revision or a benchmark revision. The last three benchmark revisions were published in 1971, 1976, and 1985. Such revisons are derived mainly from the quinquennial *Census of Manufactures,* the quinquennial *Census of Mineral Industries,* and the *Annual Survey of Manufactures,* all prepared by the Bureau of the Census, and the *Minerals Yearbook* of the Bureau of Mines.

Source data. The indexes of industrial production are constructed from monthly data of two types: (1) directly measured output in physical units; and (2) estimates of output derived from data on input, expressed in physical units, adjusted by conversion factors that relate these inputs to physical output. The data on directly measured physical product (pounds, yards, barrels, and the like) are obtained from reports of the Bureau of the Census, the Bureau of Mines, other government agencies, and trade associations. When suitable monthly data on physical product are unavailable, estimates of physical output based on input data (kilowatt hours, production-worker hours) are used. The hours worked by production workers are collected in the monthly establishment survey of the Bureau of Labor Statistics, while data on the kilowatt hours used in industry are collected from electric utilities by the Federal Reserve Banks. The estimates of input conversion are based mainly on historical relationships that were derived from censuses and annual surveys and, when appropriate, on more recent cyclical, technological and statistical developments. Users of the index should bear in mind that, especially for the first and second estimates of a given month's indexes, the available source data are limited and are subject to change in the months following their initial receipt as well as in benchmark revisions.

Seasonal adjustment. Individual series are seasonally adjusted by the X-11 Method II of the Bureau of the Census with the intervention analysis technique applied to the series. The seasonal factors currently being used are based on data through 1985. The individual series and the major aggregate series are seasonally adjusted independently, and the factors for the aggregate series in the summary table and in tables 1 and 2 are reviewed monthly. The seasonally adjusted total index is aggregated from the seasonally adjusted market groupings of the index and may not precisely equal an aggregation of the seasonally adjusted industry groupings. A simple aggregation of the seasonally adjusted individual series within groupings may not precisely equal the seasonally adjusted groupings, primarily because aggregates are adjusted independently.

Weights. The total index and the various groupings of the component series are currently aggregated on the basis of 1977 value-added weights, which are shown in the first column of the index tables under the heading proportions. Value-added weights for 1972 are used for the 1972–77 period, while 1967 weights are used for the 1967–72 period. The weight years for earlier periods after World War II are 1963, 1958, 1954, and 1947. The indexes for the various periods are linked to provide the continuous final results expessed in relation to the 1977 comparison year taken as 100. The gross-value-weighted product series are expressed in terms of 1982 dollars.

Formula. The symbolic expression for the total index (I) is

$$I_t = \sum \left(\frac{q_{77}p_{77}}{\Sigma q_{77}p_{77}}\right) \cdot \left(\frac{q_t}{q_{77}}\right) \cdot 100 = \frac{\Sigma q_t p_{77}}{\Sigma q_{77}p_{77}} \cdot 100,$$

where q is quantity, p is Census value added per unit of output, t represents the tth period, and 77 denotes base-year values.

Reliability. The median of the revisions in total industrial production, without regard to sign, between the first and fourth estimates is 0.3 percent: that is, in about half of the cases the absolute value of the revision from the first to the fourth estimate was less than 0.3 percent. (This calculation used data for the period from January 1972 to January 1985.) Over the same period, positive changes in the first estimate were confirmed in the fourth estimate (available three months later) about 94 percent of the time. Negative changes in the first estimate were confirmed in the fourth estimate about 85 percent of the time. Thus the likelihood is high that the first estimate for a month will indicate the direction of change in the total index in a reliable manner. However, the magnitude of change as first estimated typically is revised during the next three months; these revisions are based on revised and more complete data sources. The estimates for the higher aggregates generally are considered more reliable than the estimates for their individual components. Revisions to the components often offset each other and thereby reduce the size of revisions to the aggregates.

Rounding. Changes shown for index components may not aggregate to changes for totals because of independent rounding. Percentage changes are calculated from indexes expressed in more digits following the decimal point than shown in their rounded form in the present release. Therefore, percentage changes calculated from the rounded indexes may not entirely coincide with the percentage changes calculated from unrounded indexes.

Literature. *Industrial Production—1986 Edition* contains a more detailed description of the index and the procedures used in compiling it, plus a history of its development, a glossary of terms, and a bibliography. The new edition was published in December 1986. To obtain copies of *Industrial Production—1986 Edition,* write to the Publication Services, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. The price of this volume of about 440 pages is $9.00 per copy. Selected data on industrial production are also published monthly in the Financial and Business Statistics section of the *Federal Reserve Bulletin.*

Release date. The industrial production index is released in midmonth. For the specific date, phone 202-452-3206 about the 11th of the month.