

# FEDERAL RESERVE statistical release



G.12.3

For release at 9:15 am (EDT)  
September 16, 1986

## INDUSTRIAL PRODUCTION

The index of industrial production has been revised back to January 1984. A supplement, printed on yellow sheets, is attached with revised data for January 1984 through December 1985. The revised data for 1986 are included in the regular tables of this release. See page 2 for additional information.

### CURRENT DEVELOPMENTS

Industrial production edged up an estimated 0.1 percent in August. Gains in output were sizable in defense and space equipment, construction supplies, nondurable consumer goods, and nondurable materials; however, auto, steel and electricity production declined during the month. Revised data for the preceding two months indicate somewhat stronger industrial activity than the earlier estimates. In particular, total industrial production for June was revised to no change (from -0.3 percent) and July output to a small rise (from -0.1 percent). At 124.8 percent of the 1977 average, production in August was 0.3 percent higher than a year earlier and down 1.1 percent from January.

**Market Groupings.** Output of consumer goods rose 0.2 percent in August. Although autos were assembled at an annual rate of 7.0 million units--down about 8 percent from the 7.6 million unit rate in July--increased truck production moderated the effect of reduced auto output. Production of home goods--such as appliances and furniture--also advanced in August. Nondurable consumer goods increased 0.5 percent reflecting gains in consumer fuels, chemical products, and foods. Business equipment output gained 0.3 percent owing to increases in transit equipment--largely trucks and aircraft--and in commercial equipment. Defense and space equipment production

### Industrial Production: Summary

Seasonally adjusted

Item	Index, 1977 = 100		Monthly percent change					Current month from a year ago
	JUL 1986	AUG	APR	MAY	JUN	JUL	AUG	
<b>Total</b>	124.6	124.8	.8	-0.4	.0	.3	.1	.3
<b>Market Groupings</b>								
Products, total	132.9	133.3	1.1	-0.2	-0.1	.5	.4	1.0
Final products	131.7	132.2	1.2	-0.4	-0.5	.6	.4	.0
Consumer goods	124.8	125.1	2.2	-0.2	.0	.5	.2	3.4
Durable goods	115.9	115.2	3.1	-1.8	.5	1.4	-0.6	.6
Nondurable goods	128.1	128.7	1.9	.3	-0.2	.2	.5	4.4
Business equipment	137.5	137.9	.6	-0.5	-1.2	1.0	.3	-2.2
Defense and space	179.7	182.2	1.0	.0	.2	.8	1.4	5.1
Intermediate products	136.9	137.4	.9	.4	1.2	.1	.3	4.3
Construction supplies	124.2	125.1	.8	-0.1	.5	.1	.6	3.9
Materials	113.3	113.1	.5	-0.7	.2	.0	-0.2	-0.7
<b>Industry Groupings</b>								
Manufacturing	128.8	129.2	1.2	-0.4	-0.2	.6	.3	1.5
Durable	127.0	127.1	1.0	-0.9	-0.7	.7	.0	-0.8
Nondurable	131.4	132.1	1.5	.2	.5	.6	.6	4.8
Mining	97.4	96.0	-1.9	-1.2	-0.4	-2.0	-1.4	-11.2
Utilities	109.8	108.2	.1	-0.8	1.7	-0.6	-1.5	-1.7

advanced sharply in August and is currently about 5 percent higher than a year earlier. Output of supplies for construction and business continued to increase. Total materials output, however, declined during the month reflecting lower metals output (mainly steel) which was related to strike activity, less electricity generation, and reduced output of parts for consumer durables, especially autos. Within materials many nondurable industries evidenced sizable increases.

Industry Groupings. Manufacturing output increased 0.3 percent in August following a revised 0.6 percent gain in July. All of the August gain was due to increased production of nondurables--in particular, chemicals, petroleum products, and textiles. But mining output was curtailed further with reductions in all major industries with the exception of oil and gas well drilling, which posted a small gain in August following declines since July 1985. Production at utilities declined an estimated 1.5 percent, mainly because of a drop in electricity generation related to cooler weather in August.

#### REVISION OF THE INDEX

As part of the Federal Reserve's ongoing review of its statistical series, the indexes of industrial production have been revised beginning with January 1984.

Revision of the Index for 1984 and 1985. The revision of the indexes for 1984 and 1985 affects the series primarily through the incorporation of information not available at the time the indexes were originally estimated. In the present revision, unlike the 1985 general revision, no major modifications were introduced; in particular, the reference year, the weights and the groupings of the index have remained unchanged. The present revision, in addition to the incorporation of data previously not available, reflects the updating of the seasonal adjustment factors for the entire index (including its groupings and the basic series); these are now calculated with the use of data through December 1985. The production adjustment factors applied to the indexes were updated as well.

The revised data indicate slightly less growth in the total index of industrial production than previously estimated: a rise of 11.2 percent in 1984 (instead of 11.5 percent), and an increase of 2.0 percent during 1985 (instead of 2.2 percent). The cumulative effect is to lower the level of the total index in December 1985 by 0.6 percent.

Indexes for most industry and market groupings also were revised downward slightly. In three market categories--business equipment, defense and space equipment, and energy materials--1985 annual output levels were revised down one percent or more; the level of output in nondurable materials was revised up slightly for 1984. Among the major industry groupings, downward revisions of total manufacturing output for both 1984 and 1985 were about one-half percent; the level of mining output was slightly increased for 1984 but decreased for 1985; and the level of utility production was revised downward 0.2 percent and 1.3 percent in 1984 and 1985, respectively.

The attachment to this release (printed on yellow sheets) includes the revised monthly index series for 1984 and 1985, together with revised quarterly indexes, gross value of product data now expressed in 1982 dollars instead of 1972 dollars, and electric power use indexes for the period of the revision.

Revision of 1986 Indexes. The revisions of the data between January and July 1986 reflect in part the revisions undertaken for 1984 and 1985 as well as the receipt of new information for 1986. Unlike the revisions for 1984 and 1985, which show slightly less growth for those years, the revisions for the first seven months of 1986 indicate somewhat stronger industrial activity than estimated previously: a cumulative decline of 1.1 percent for the period, instead of 2.1 percent. The overall level of industrial output for July 1986--at 124.6 percent of the 1977 average--was slightly higher than published earlier (124.1).

An updated historical tape of all published series is available through the National Technical Information Service (NTIS) of the Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161, (703) 487-4807.

# FEDERAL RESERVE



## Industrial Production

### INDUSTRIAL PRODUCTION

AUGUST DATA

SEASONALLY ADJUSTED, RATIO SCALE, 1977=100

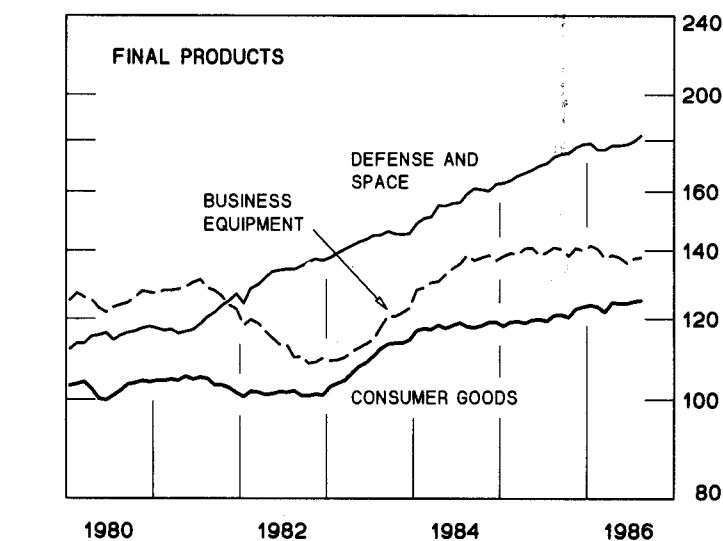
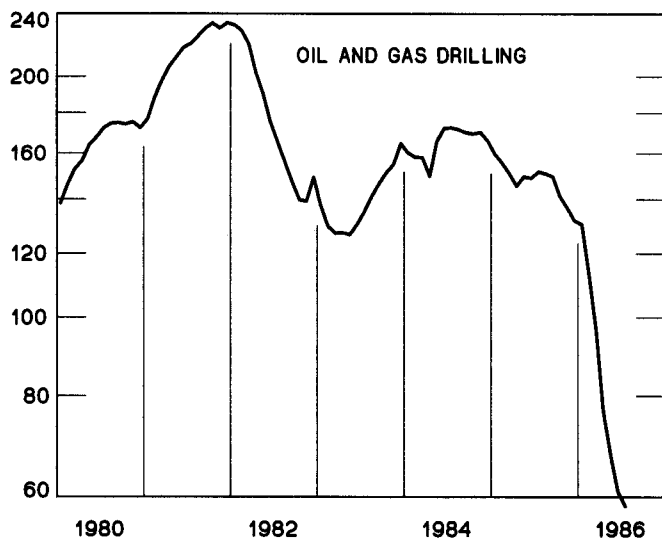
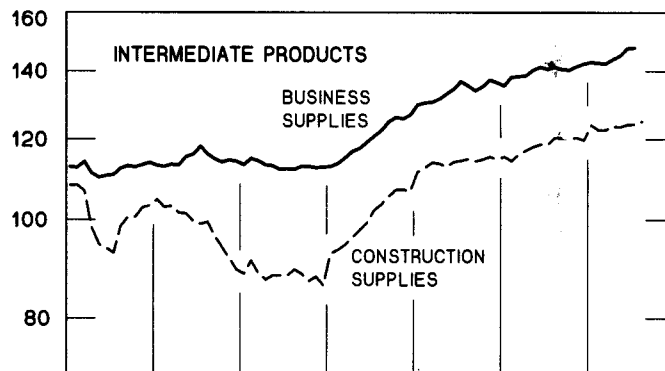
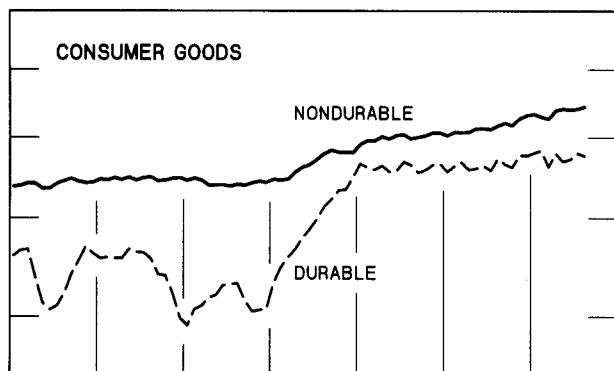
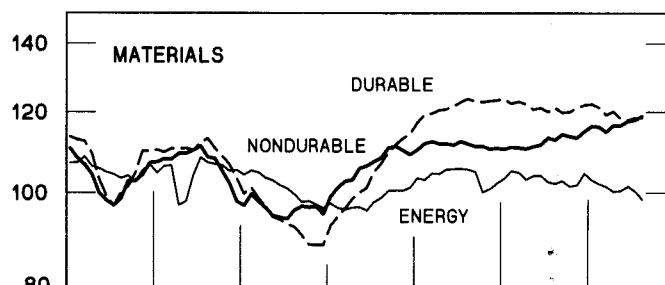
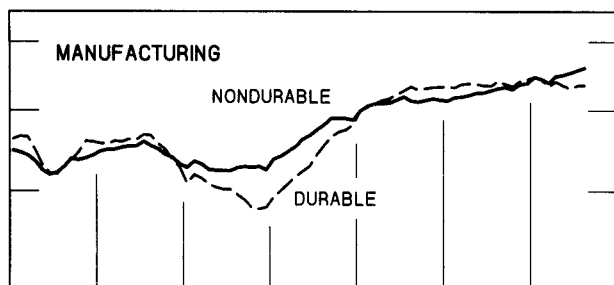
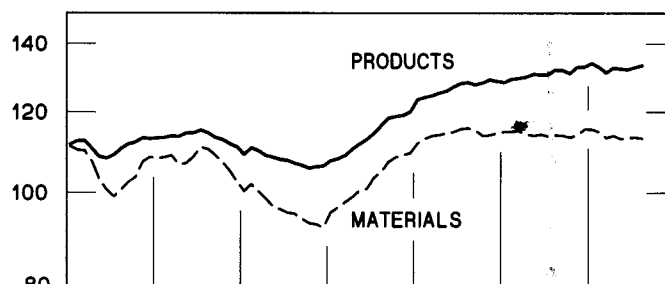
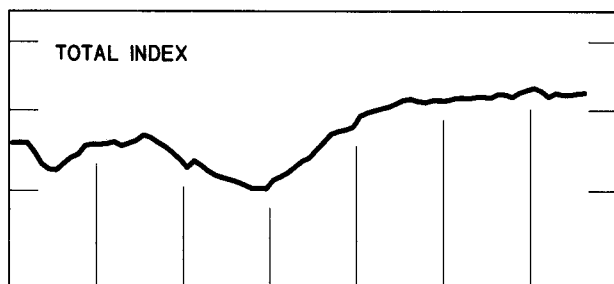


Table 1A

**INDUSTRIAL PRODUCTION: MARKET GROUPINGS**

Seasonally adjusted, 1977 = 100

Major Market Groupings	1977	1985	1985					1986							
	Pro- portion	Avg.	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
<b>TOTAL INDEX</b>	100.00	123.8	124.4	124.3	123.6	124.8	125.6	126.2	125.3	123.6	124.7	124.2	124.2	124.6	124.8
<b>PRODUCTS, TOTAL</b>	57.72	130.8	132.1	132.0	131.0	132.8	133.0	134.0	132.9	131.2	132.7	132.4	132.2	132.9	133.3
FINAL PRODUCTS	44.77	131.1	132.2	132.2	131.0	133.1	133.2	133.9	132.8	130.6	132.1	131.6	130.9	131.7	132.2
CONSUMER GOODS	25.52	120.2	120.9	121.1	120.5	122.7	123.3	123.8	123.3	121.8	124.5	124.3	124.2	124.8	125.1
EQUIPMENT, TOTAL	19.25	145.4	147.1	146.9	144.9	147.0	146.4	147.5	145.4	142.3	142.3	141.2	139.7	140.8	141.6
<b>INTERMEDIATE PRODUCTS</b>	12.94	130.0	131.7	131.3	131.2	131.8	132.0	134.2	133.4	133.3	134.5	135.1	136.7	136.9	137.4
<b>MATERIALS</b>	42.28	114.2	113.9	113.8	113.4	113.9	115.4	115.5	114.8	113.3	113.8	113.0	113.3	113.3	113.1
<b>CONSUMER GOODS</b>	25.52	120.2	120.9	121.1	120.5	122.7	123.3	123.8	123.3	121.8	124.5	124.3	124.2	124.8	125.1
<b>DURABLE CONSUMER GOODS</b>	6.89	112.9	114.5	113.1	112.3	115.4	115.3	116.0	116.6	112.4	115.9	113.8	114.3	115.9	115.2
Automotive products	2.98	114.0	118.6	116.2	113.2	115.6	113.9	116.2	117.6	110.4	116.4	113.2	113.7	115.8	113.4
Autos and trucks, consumer	1.79	112.0	119.4	115.8	111.3	114.1	110.4	118.2	119.4	106.3	115.1	110.3	112.2	114.5	110.8
Autos, consumer	1.16	98.9	101.2	98.8	94.9	95.6	94.6	105.5	107.1	93.7	100.8	94.8	99.3	95.3	87.8
Trucks, consumer	.63	136.3	153.1	147.4	141.8	148.6	139.8	141.7	142.1	129.6	141.5	139.1	136.1	150.3	
Auto parts & allied gds	1.19	116.9	117.3	116.8	116.0	117.7	119.0	113.3	114.9	116.6	118.4	117.4	116.1	117.7	117.5
Home goods	3.91	112.2	111.4	110.7	111.6	115.3	116.4	115.8	115.8	113.9	115.5	114.3	114.8	116.0	116.5
Appliances, TV & air-cond	1.24	131.0	128.7	126.1	127.5	136.8	140.4	133.2	135.1	133.7	138.8	133.9	137.5	138.9	139.9
Appliances and TV	1.19	131.8	129.5	128.3	129.8	141.3	143.2	135.7	137.6	136.0	140.6	135.8	139.1	141.5	
Carpeting & furniture	.96	119.8	119.5	121.7	121.9	124.6	123.3	125.1	124.4	121.2	121.8	123.3	122.5	125.2	
Misc. home goods	1.71	94.3	94.3	93.3	94.4	93.1	95.1	98.0	97.0	95.5	95.0	95.0	94.1	94.2	
<b>NONDURABLE CONSUMER GOODS</b>	18.63	122.9	123.3	124.1	123.5	125.3	126.3	126.6	125.8	125.3	127.7	128.1	127.9	128.1	128.7
Clothing	3.34	95.0	95.0	96.3	96.4	98.0	97.9	98.4	96.4	96.2	97.5	96.6	95.9	97.0	
Consumer staples	15.29	129.0	129.5	130.1	129.4	131.3	132.5	132.8	132.3	131.6	134.3	135.0	134.9	135.0	135.8
Consumer foods & tobacco	7.80	128.8	129.7	130.1	128.7	130.5	131.6	130.1	131.1	130.3	131.9	132.4	132.7	132.6	
Nonfood staples	7.49	129.2	129.3	130.1	130.1	132.1	133.4	135.6	133.5	133.0	136.7	137.7	137.1	137.4	138.6
Consumer chem. products	2.75	149.1	149.7	152.9	149.1	154.8	153.6	156.3	158.3	156.4	163.1	162.4	163.6	167.1	
Consumer paper products	1.88	141.9	141.6	142.6	143.5	143.2	146.5	148.9	143.4	143.1	145.1	148.6	147.2	144.6	
Consumer energy	2.86	101.8	101.8	99.9	103.0	103.1	105.4	107.0	103.2	104.0	106.0	106.8	104.9	104.3	
Consumer fuel	1.44	88.6	90.3	84.6	90.1	89.8	91.7	94.1	92.0	92.2	93.7	96.4	92.0	91.2	
Residential utilities	1.42	115.3	113.4	115.5	116.2	116.6	119.4	120.1	114.5	116.1	118.4	117.5	118.1		
<b>EQUIPMENT, TOTAL</b>	19.25	145.4	147.1	146.9	144.9	147.0	146.4	147.5	145.4	142.3	142.3	141.2	139.7	140.8	141.6
<b>BUSINESS &amp; DEFENSE EQUIP.</b>	18.01	146.0	147.5	147.4	145.7	148.2	147.8	149.1	147.8	145.5	146.6	146.0	144.8	146.1	146.9
<b>BUSINESS EQUIPMENT</b>	14.34	139.6	141.0	140.4	138.3	140.8	140.0	141.5	140.5	137.7	138.6	137.9	136.2	137.5	137.9
Const., mining, & farm	2.08	64.3	64.6	64.4	64.2	65.1	66.3	65.3	63.0	59.5	58.0	60.9	61.9	60.7	
Manufacturing equipment	3.27	110.7	111.9	112.2	110.0	110.5	111.6	113.0	112.9	112.4	111.9	111.9	111.7	112.4	111.9
Power equipment	1.27	83.5	84.8	84.3	85.3	84.1	85.4	82.9	82.3	82.0	83.0	82.9	83.5	81.4	81.2
Commercial equipment	5.22	217.9	219.5	216.9	212.3	218.6	217.0	217.8	214.3	214.3	213.4	212.9	207.2	213.6	214.8
Transit equipment	2.49	105.4	107.1	109.5	109.5	109.7	105.5	112.7	111.7	104.3	112.1	107.3	108.8	104.1	107.9
<b>DEFENSE &amp; SPACE EQUIPMENT</b>	3.67	170.6	173.3	174.5	174.8	177.2	178.5	178.7	176.3	176.2	178.0	178.0	178.4	179.7	182.2
<b>INTERMEDIATE PRODUCTS</b>	12.94	130.0	131.7	131.3	131.2	131.8	132.0	134.2	133.4	133.3	134.5	135.1	136.7	136.9	137.4
Construction supplies	5.95	118.3	120.4	120.3	120.2	120.5	119.8	124.0	122.6	122.6	123.6	123.5	124.1	124.2	125.1
Business supplies	6.99	140.0	141.3	140.7	140.5	143.5	142.4	142.9	142.6	142.5	143.8	145.0	147.4	147.7	
Gen. business supplies	5.67	143.9	145.7	144.2	144.3	145.3	146.2	147.2	146.7	146.4	148.0	148.3	151.0	152.1	
Commercial energy prod.	1.31	122.9	122.2	125.4	123.8	125.4	126.2	124.4	124.9	125.6	125.8	130.7	131.9	128.5	
<b>MATERIALS</b>	42.28	114.2	113.9	113.8	113.4	113.9	115.4	115.5	114.8	113.3	113.8	113.0	113.3	113.3	113.1
<b>DURABLE GOODS MATERIALS</b>	20.50	121.4	121.2	119.9	120.1	121.2	121.9	122.2	121.3	119.3	120.2	118.4	117.9	118.5	118.5
Consumer durable parts	4.92	100.3	99.7	98.6	99.8	100.7	101.1	103.5	103.2	99.9	99.3	96.4	96.3	95.7	94.8
Equipment parts	5.94	158.0	157.7	155.4	152.7	154.0	154.1	153.8	153.0	153.7	154.8	152.3	151.7	154.3	155.0
Durable materials nec	9.64	109.7	109.7	108.9	110.3	111.4	112.8	112.2	111.0	108.0	109.4	108.8	108.1	108.1	108.0
Basic metal materials	4.64	84.8	85.5	84.0	85.5	87.8	87.9	85.2	83.0	79.6	82.9	78.9	77.1	77.8	
<b>NONDURABLE GOODS MATERIALS</b>	10.09	112.2	112.7	114.2	113.6	113.3	114.9	116.2	116.1	114.8	116.5	116.5	117.6	117.9	119.0
Textile, paper, & chem. mater.	7.53	112.2	112.4	114.4	113.7	113.4	115.0	116.5	116.5	115.5	115.9	116.9	118.1	118.2	119.6
Textile materials	1.52	98.7	102.0	104.3	105.2	106.1	103.8	104.1	107.5	105.7	106.7	108.4	109.5	110.7	
Pulp & paper materials	1.55	124.1	121.9	123.8	121.8	123.6	129.0	129.7	128.8	128.0	129.0	128.6	133.0	132.5	
Chemical materials	4.46	112.7	112.7	114.6	113.7	112.4	114.0	116.2	115.4	114.5	114.5	115.7	115.9	115.9	
Misc. nondurable materials	2.57	112.1	113.8	113.5	113.4	112.8	114.4	115.4	115.0	112.8	118.2	115.3	116.0	117.1	
<b>ENERGY MATERIALS</b>	11.69	103.4	102.2	102.8	101.5	101.8	104.5	103.0	102.1	101.4	100.4	100.5	101.5	100.4	98.6
Primary energy	7.57	107.2	106.2	106.3	105.5	106.5	108.1	106.9	106.7	107.4	106.2	106.7	106.8	104.6	
Converted fuel materials	4.12	96.4	94.9	96.2	94.2	93.3	97.9	95.8	93.6	90.5	89.7	89.2	91.8	92.5	

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	1985	1985				1986								
	Pro-portion	Ann. Avg.	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
<b>TOTAL INDEX</b>	100.00	123.8	126.7	128.6	126.2	124.3	121.6	122.9	124.9	123.1	123.8	123.2	127.0	122.8	127.4
<b>PRODUCTS, TOTAL</b>	57.72	130.8	135.9	138.4	134.8	132.4	128.4	129.5	130.8	129.0	130.6	130.6	135.7	132.4	137.7
<b>FINAL PRODUCTS</b>	44.77	131.1	135.4	138.2	134.7	132.6	128.7	130.3	131.2	128.8	129.9	129.8	134.3	130.9	135.9
<b>CONSUMER GOODS</b>	25.52	120.2	125.7	128.7	125.6	121.7	116.5	119.2	121.2	118.9	122.1	122.1	128.1	124.1	130.5
<b>EQUIPMENT, TOTAL</b>	19.25	145.4	148.3	150.6	146.8	146.9	145.0	145.0	144.4	141.9	140.2	140.0	142.5	139.9	143.0
<b>INTERMEDIATE PRODUCTS</b>	12.94	130.0	137.8	139.3	135.3	131.9	127.1	126.9	129.5	129.6	133.0	133.5	140.4	137.5	143.9
<b>MATERIALS</b>	42.28	114.2	114.1	115.2	114.4	113.2	112.3	113.9	116.8	115.1	114.5	113.1	115.1	109.8	113.3
<b>CONSUMER GOODS</b>	25.52	120.2	125.7	128.7	125.6	121.7	116.5	119.2	121.2	118.9	122.1	122.1	128.1	124.1	130.5
<b>DURABLE CONSUMER GOODS</b>	6.89	112.9	110.9	116.3	121.5	116.6	103.9	112.1	117.9	114.9	119.1	116.1	119.3	104.2	112.8
<b>Automotive products</b>	2.98	114.0	107.6	116.9	121.5	116.6	100.5	114.4	121.2	116.8	122.1	118.2	122.9	98.3	104.9
<b>Autos and trucks, consumer</b>	1.79	112.0	99.9	113.3	121.8	116.5	90.3	115.0	126.0	117.0	124.4	119.9	127.6	89.1	95.4
<b>Autos, consumer</b>	1.16	98.9	79.5	95.9	104.7	101.2	78.5	105.3	112.5	102.2	108.3	102.0	111.6	72.2	74.3
<b>Trucks, consumer</b>	.63	136.3	137.9	145.5	153.6	144.9	112.4	133.0	151.1	144.5	154.2	153.0	157.3	120.3	
<b>Auto parts &amp; allied gds</b>	1.19	116.9	119.1	122.3	121.2	116.7	115.7	113.4	114.0	116.5	118.7	115.6	115.8	112.2	119.3
<b>Home goods</b>	3.91	112.2	113.5	115.9	121.5	116.7	106.6	110.3	115.3	113.4	116.8	114.5	116.6	108.7	118.8
<b>Appliances, TV &amp; air-cond</b>	1.24	131.0	128.3	129.1	149.0	141.8	117.7	132.4	137.1	131.7	143.0	135.9	136.2	127.1	140.1
<b>Appliances and TV</b>	1.19	131.8	132.0	132.7	153.3	145.6	120.5	134.4	138.7	132.3	142.1	136.5	136.7	129.9	
<b>Carpeting &amp; furniture</b>	.96	119.8	122.5	129.1	127.3	125.4	117.6	115.4	125.8	122.8	124.2	122.2	126.1	115.5	
<b>Misc. home goods</b>	1.71	94.3	97.7	98.9	98.4	93.6	92.3	91.6	93.7	95.0	93.8	94.6	97.1	91.6	
<b>NONDURABLE CONSUMER GOODS</b>	18.63	122.9	131.1	133.3	127.0	123.6	121.1	121.8	122.4	120.4	123.3	124.4	131.4	131.5	137.1
<b>Clothing</b>	3.34	95.0	99.7	101.0	98.6	97.0	93.1	93.3	95.6	95.9	96.4	96.4	95.7	94.4	
<b>Consumer staples</b>	15.29	129.0	138.0	140.4	133.3	129.4	127.2	128.0	128.3	125.8	129.1	130.5	138.3	139.6	145.0
<b>Consumer foods &amp; tobacco</b>	7.80	128.8	137.6	140.1	135.9	130.0	124.7	123.9	125.2	125.0	127.7	129.7	137.1	134.4	
<b>Nonfood staples</b>	7.49	129.2	138.5	140.7	130.6	128.9	129.8	132.3	131.5	126.6	130.6	131.3	139.5	144.9	148.8
<b>Consumer chem. products</b>	2.75	149.1	159.6	168.7	154.8	152.2	145.8	145.7	150.7	147.2	157.0	157.5	169.5	177.5	
<b>Consumer paper products</b>	1.88	141.9	155.4	154.0	146.2	140.2	138.1	140.6	140.5	138.3	140.0	142.7	149.8	151.6	
<b>Consumer energy</b>	2.86	101.8	107.0	105.1	97.0	99.1	108.9	114.1	107.1	99.1	99.2	98.6	104.1	109.3	
<b>Consumer fuel</b>	1.44	88.6	91.5	87.0	90.1	93.2	95.7	92.0	86.7	85.0	90.3	96.6	95.5	94.0	
<b>Residential utilities</b>	1.42	115.3	122.8	123.6	104.0	105.1	122.4	136.7	127.8	113.5	108.3	100.6	112.9		
<b>EQUIPMENT, TOTAL</b>	19.25	145.4	148.3	150.6	146.8	146.9	145.0	145.0	144.4	141.9	140.2	140.0	142.5	139.9	143.0
<b>BUSINESS &amp; DEFENSE EQUIP.</b>	18.01	146.0	148.8	151.4	147.4	147.6	145.6	146.1	146.8	145.4	144.5	144.9	147.9	145.4	148.3
<b>BUSINESS EQUIPMENT</b>	14.34	139.6	143.1	145.6	140.8	139.8	136.4	137.5	137.3	136.1	136.4	140.0	137.2	140.2	
<b>Constr., mining, &amp; farm</b>	2.08	64.3	64.6	66.5	64.2	64.1	64.8	63.3	65.1	60.3	58.6	60.5	62.4	60.0	
<b>Manufacturing equipment</b>	3.27	110.7	113.2	115.5	110.9	110.3	110.3	109.2	113.3	112.9	111.0	110.6	113.9	111.0	113.1
<b>Power equipment</b>	1.27	83.5	85.2	87.9	86.6	85.0	85.4	81.2	81.8	82.2	81.1	81.0	84.6	79.6	81.6
<b>Commercial equipment</b>	5.22	217.9	229.0	228.4	217.2	216.4	211.6	210.4	211.2	210.2	206.2	208.0	212.2	219.0	224.1
<b>Transit equipment</b>	2.49	105.4	97.7	107.1	111.9	109.7	98.9	112.4	113.3	109.1	115.1	112.2	116.3	94.3	100.3
<b>DEFENSE &amp; SPACE EQUIPMENT</b>	3.67	170.6	171.2	174.2	173.3	177.8	181.8	179.8	176.9	177.1	177.5	177.9	178.6	177.2	180.0
<b>INTERMEDIATE PRODUCTS</b>	12.94	130.0	137.8	139.3	135.3	131.9	127.1	126.9	129.5	129.6	133.0	133.5	140.4	137.5	143.9
<b>Construction supplies</b>	5.95	118.3	123.8	125.4	124.3	121.0	114.9	116.0	117.7	120.1	124.6	125.0	129.1	123.9	128.5
<b>Business supplies</b>	6.99	140.0	149.7	151.2	144.7	141.1	137.6	136.1	139.6	137.6	140.2	140.8	150.0	149.1	
<b>Gen. business supplies</b>	5.67	143.9	154.4	154.5	150.1	145.9	141.2	138.9	142.5	142.3	145.0	145.6	152.7	151.7	
<b>Commercial energy prod.</b>	1.31	122.9	129.4	136.7	121.6	120.7	121.9	124.4	127.0	117.4	119.1	120.1	138.0	138.0	
<b>MATERIALS</b>	42.28	114.2	114.1	115.2	114.4	113.2	112.3	113.9	116.8	115.1	114.5	113.1	115.1	109.8	113.3
<b>DURABLE GOODS MATERIALS</b>	20.50	121.4	120.9	122.2	121.4	120.0	118.3	118.2	121.8	121.4	121.2	120.2	120.8	115.4	116.3
<b>Consumer durable parts</b>	4.92	100.3	98.5	101.0	101.7	101.0	99.1	100.4	103.7	101.8	100.5	97.7	98.2	91.5	93.6
<b>Equipment parts</b>	5.94	158.0	155.7	156.3	152.9	154.9	156.0	153.7	152.9	154.9	153.0	152.5	153.5	151.0	153.0
<b>Durable materials nec</b>	9.64	109.7	110.8	111.9	112.0	108.3	104.8	105.3	112.0	110.8	112.2	111.7	112.2	105.8	109.5
<b>Basic metal materials</b>	4.64	84.8	82.2	82.9	84.3	81.8	79.8	82.8	86.4	86.2	89.0	84.9	81.1	72.8	
<b>NONDURABLE GOODS MATERIALS</b>	10.09	112.2	112.4	115.7	116.0	113.3	108.4	113.9	119.4	117.4	118.7	117.0	120.1	111.4	118.7
<b>Textile, paper, &amp; chem. mater.</b>	7.53	112.2	111.4	115.6	114.6	113.6	109.4	114.3	119.9	118.5	118.4	118.3	120.6	111.2	118.5
<b>Textile materials</b>	1.52	98.7	104.5	104.6	110.2	108.3	93.2	103.8	112.0	109.0	108.3	112.5	112.9	94.2	
<b>Pulp &amp; paper materials</b>	1.55	124.1	121.8	124.7	122.3	124.4	120.4	128.7	132.9	132.6	131.9	129.0	136.0	123.1	
<b>Chemical materials</b>	4.46	112.7	110.1	116.2	113.4	111.7	111.2	112.9	118.2	116.9	117.2	116.5	118.0	113.0	
<b>Misc. nondurable materials</b>	2.57	112.1	115.5	116.0	120.0	112.4	105.2	112.8	117.6	114.0	119.5	114.1	118.6	111.9	
<b>ENERGY MATERIALS</b>	11.69	103.4	103.7	102.5	100.6	101.3	105.2	106.4	105.7	102.1	99.1	97.5	100.8	98.4	100.0
<b>Primary energy</b>	7.57	107.2	107.1	106.7	106.4	106.3	107.4	108.4	109.6	108.7	105.8	105.0	106.0	101.2	
<b>Converted fuel materials</b>	4.12	96.4	97.4	94.9	90.0	92.1	101.2	102.6	98.6	90.1	86.6	83.8	91.1	93.3	

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					1985					1986								
		Pro- por- tion	Pro- por- tion	Pro- por- tion	Pro- por- tion	Pro- por- tion	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
<b>MINING AND UTILITIES</b>		15.79	110.0	108.8	110.1	108.8	108.8	108.8	110.2	109.8	106.8	105.4	104.2	103.1	103.6	102.1	100.6			
<b>MINING</b>		9.83	108.8	108.1	108.2	106.9	106.9	107.4	108.1	105.1	103.0	101.0	99.8	99.4	97.4	96.0				
<b>UTILITIES</b>		5.96	111.9	110.0	113.3	111.8	111.9	114.8	112.5	109.7	109.3	109.4	108.5	110.4	109.8	108.2				
<b>MANUFACTURING</b>		84.21	126.4	127.2	127.0	126.3	127.8	128.2	129.4	128.7	127.2	128.7	128.2	128.2	128.0	128.0	129.2			
<b>NONDURABLE</b>		35.11	125.1	126.0	126.4	125.8	127.2	127.5	129.3	128.7	127.7	129.6	129.9	130.6	131.4	132.1				
<b>DURABLE</b>		49.10	127.3	128.1	127.4	126.7	128.2	128.7	129.5	128.7	126.8	128.1	127.0	126.2	127.0	127.1				
<b>MINING</b>																				
Metal mining	10	.50	75.0	74.9	73.8	76.0	78.3	77.3	73.5	77.2	75.9	76.0	72.0							
Coal	11,12	1.60	126.8	125.0	126.9	122.9	125.8	128.8	100.3	93.8	97.0	93.6	100.3	101.6	97.6					
Oil & gas extraction	13	7.07	106.2	105.7	105.4	104.4	103.6	104.2	104.9	101.1	99.2	96.2	95.1	93.7	92.4	91.0				
Stone & earth minerals	14	.66	118.3	118.1	118.8	118.5	118.0	114.6	113.5	116.8	111.6	115.0	112.4	114.5	112.6					
<b>NONDURABLE MANUFACTURES</b>																				
Foods	20	7.96	130.2	131.5	132.2	129.4	131.5	132.1	132.0	132.9	132.2	133.1	133.7	134.0	134.1					
Tobacco products	21	.62	100.2	98.3	98.9	103.2	102.8	100.3	93.8	97.0	93.6	100.3	101.6	97.6						
Textile mill products	22	2.29	103.2	104.2	107.0	107.7	110.0	107.7	107.9	109.9	108.0	111.4	111.3	112.6	112.8					
Apparel products	23	2.79	100.9	100.0	101.8	102.1	103.8	104.5	105.5	102.8	102.8	103.1	102.6	101.7	102.1					
Paper & products	26	3.15	127.6	126.5	128.0	127.7	128.9	131.3	133.6	132.6	132.4	134.1	133.2	136.0	138.3					
Printing & publishing	27	4.54	153.9	155.8	153.4	154.5	156.8	157.6	160.9	156.7	157.8	161.6	161.9	163.2	165.0	165.7				
Chemicals & products	28	8.05	127.1	127.9	129.1	127.3	128.2	128.1	131.7	132.0	130.2	132.8	131.5	133.1	134.2					
Petroleum products	29	2.40	86.8	89.2	85.3	87.9	87.6	88.9	94.7	90.1	88.6	91.3	95.7	91.9	94.4	93.7				
Rubber & plastics prod.	30	2.80	146.9	148.2	148.8	149.0	150.1	149.4	150.2	151.1	147.8	146.8	150.1	152.2	153.5					
Leather & products	31	.53	68.5	70.7	70.1	68.2	68.7	66.4	65.4	64.8	62.7	61.5	59.5	57.9	60.0					
<b>DURABLE MANUFACTURES</b>																				
Lumber & products	24	2.30	113.4	115.3	116.0	116.2	115.0	116.1	120.5	120.3	120.7	121.3	121.6	120.9						
Furniture & fixtures	25	1.27	139.7	140.9	142.8	140.0	142.2	140.5	141.2	143.2	142.9	145.9	146.2	147.1	148.9					
Clay, glass, stone prod.	32	2.72	115.5	116.4	117.4	116.1	116.7	118.2	120.0	119.3	120.0	121.6	120.2	120.8	118.9					
Primary metals	33	5.33	80.5	82.3	80.8	81.9	82.9	81.7	82.4	80.3	76.3	78.1	74.8	71.3	73.1	73.3				
Iron & steel	331,21	3.49	70.4	72.3	70.3	72.4	73.9	71.6	72.2	69.5	64.3	65.6	60.2	58.3	61.3					
Fabricated metal prod.	34	6.46	107.3	107.4	106.7	107.9	107.6	108.2	109.2	108.5	107.6	108.2	106.5	106.6	105.7	106.5				
Nonelectrical machinery	35	9.54	145.3	145.4	144.2	141.7	144.8	146.2	144.9	143.9	141.7	140.8	141.3	140.4	142.0	140.5				
Electrical machinery	36	7.15	168.4	165.8	164.5	164.2	166.9	168.7	166.1	164.8	165.2	166.8	166.0	163.2	167.2	167.7				
Transportation equip.	37	9.13	121.4	125.0	124.5	123.3	124.8	124.0	128.2	127.5	122.6	126.2	124.1	125.1	125.2	124.8				
Motor vehicles & pts.	371	5.25	111.5	115.6	113.7	111.4	112.6	111.4	116.5	116.4	108.1	112.6	108.7	110.6	110.5	108.0				
Aerospace & misc.	372-6,9	3.87	134.9	137.8	139.1	139.4	141.3	141.0	143.9	142.6	142.4	144.8	145.0	144.7	145.0	147.5				
Instruments	38	2.66	139.1	141.0	139.0	138.4	139.9	140.4	141.5	141.9	142.0	142.4	140.3	139.9	138.5	140.0				
Miscellaneous mfrs.	39	1.46	96.1	96.5	95.3	95.0	94.8	96.6	100.9	100.9	99.0	99.2	101.0	98.3	97.3					
<b>UTILITIES</b>																				
Electric		4.17	119.7	117.6	120.8	119.4	120.1	122.4	119.7	119.5	119.8	121.6	121.7	123.3	122.0					

Table 3A

**INDUSTRIAL PRODUCTION: PERCENT CHANGES**

Based on seasonally adjusted indexes

Series	1985					1986							
	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
	CHANGE FROM PREVIOUS MONTH												
<b>TOTAL INDEX</b>	.8	-0.1	-0.6	1.0	-6.1	-5	-0.7	-1.3	.8	-0.4	-0	-3	-1
Final products	1.2	.0	-0.9	1.6	-1.1	-5	-0.8	-1.7	1.2	-0.4	-0.5	-6	-4
Consumer goods	1.3	.1	-0.5	1.8	-5.1	-4	-0.3	-1.2	2.2	-0.2	-0	-5	-2
Durable consumer goods	2.7	-1.2	-0.7	2.8	-0.1	-6	-5	-3.6	3.1	-1.8	-5	1.4	-0.5
Non-durable consumer goods	.8	.6	-0.5	1.5	-8.1	-3	-0.6	-0.4	1.9	.3	-0.2	2.2	-0.5
Business equipment	1.1	-0.4	-1.5	1.8	-0.5	1.1	-0.7	-2.0	.6	-0.5	-1.2	1.0	-3
Construction Supplies	1.5	-0.1	-0.1	-2	-0.6	3.5	-1.1	-0	.8	-0.1	-5	1	-3
Materials	.3	-0.1	-0.4	.5	1.3	.0	-0.6	-1.3	.5	-0.7	-2	-0	-0.2
Durable goods materials	.9	-1.1	-.1	.9	.6	.2	-0.7	-1.7	.7	-1.4	-0.5	-5	-0
Non-durable goods materials	-0.5	1.3	-0.5	-0.3	1.4	1.2	-0.1	-1.2	1.5	.0	1.0	-3	-9
Manufacturing	.8	-0.2	-0.5	1.2	-.4	-.9	-0.6	-1.2	1.2	-0.4	-0.2	-.6	-3
Durable manufacturing	1.0	-0.5	-0.6	1.2	-.4	-.6	-0.7	-1.4	1.0	-0.9	-0.7	-.7	-0
Non-durable manufacturing	-.5	-.3	-0.5	1.1	-.3	1.4	-0.5	-0.8	1.5	-.2	-.5	-.6	-.6
Mining and utilities	-.3	1.2	-1.2	-.0	1.3	-0.4	-2.7	-1.4	-1.1	-1.0	.4	-1.4	-1.5
	CHANGE FROM SAME MONTH A YEAR EARLIER												
<b>TOTAL INDEX</b>	1.1	1.6	1.2	1.7	2.3	2.9	1.7	-.2	1.2	-.5	1.0	-.3	-.3
Final products	2.5	2.9	1.6	2.6	3.0	3.8	2.2	-.5	1.4	-.4	-.3	-.8	-.0
Consumer goods	2.6	2.9	2.0	3.0	3.5	4.8	3.6	2.1	4.7	3.8	3.6	4.6	3.4
Durable consumer goods	1.4	2.0	-.6	2.2	1.8	4.4	3.6	-1.0	3.8	1.8	1.5	4.0	4.6
Non-durable consumer goods	3.0	3.3	2.4	3.3	4.1	5.0	3.6	3.2	5.1	4.6	4.3	4.8	4.4
Business equipment	1.8	2.5	.4	1.6	2.2	2.3	1.0	-0.9	-1.5	-2.1	-1.7	-1.4	-2.2
Construction Supplies	4.9	5.3	4.8	4.4	4.3	7.4	7.2	5.6	5.6	4.6	4.6	4.7	3.9
Materials	-1.6	-1.2	-0.3	.0	-.9	-.5	-0.1	-1.5	-.3	-0.7	-0.7	-0.3	-0.7
Durable goods materials	-2.0	-2.5	-2.2	-1.5	-1.1	-1.1	-0.9	-2.9	-1.7	-1.9	-0.7	-1.4	-2.3
Non-durable goods materials	-.9	2.8	2.2	2.6	3.9	5.3	4.7	3.6	5.4	4.9	5.5	4.1	5.5
Manufacturing	1.9	2.1	1.3	2.2	2.6	3.6	2.8	1.1	2.1	1.5	1.5	2.0	1.5
Durable manufacturing	1.2	1.3	-.5	1.4	1.7	2.3	1.8	-0.4	-.4	-0.3	-0.6	-.1	-0.8
Non-durable manufacturing	2.8	3.3	2.5	3.3	3.8	5.5	4.3	3.2	4.4	4.2	4.6	4.7	4.8
Mining and utilities	-2.8	-1.6	-.2	-1.0	-.3	-1.3	-4.9	-5.2	-5.0	-5.9	-6.0	-5.9	-7.5

Table 2B

**INDUSTRIAL PRODUCTION: INDUSTRY GROUPINGS**

Not seasonally adjusted, 1977 = 100

Major Industry Groupings	SIC Code	1977				1985				1986							
		Pro-portion	Ann. Avg.	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
<b>MINING AND UTILITIES</b>																	
MINING		15.79	110.0	111.2	111.3	106.8	107.6	111.8	113.1	110.8	104.5	101.1	98.5	103.1	102.1	103.6	
UTILITIES		9.83	108.8	108.8	108.7	108.8	108.7	108.5	108.0	106.5	103.2	99.7	98.2	98.4	94.1	96.8	
		5.96	111.9	115.1	115.6	103.7	105.7	117.3	121.5	117.9	106.7	103.4	98.9	111.0	115.3	114.9	
<b>MANUFACTURING</b>																	
<b>NONDURABLE</b>																	
NONDURABLE		84.21	126.4	129.6	131.8	129.8	127.4	123.4	128.7	127.5	126.6	128.1	127.9	131.4	126.5	131.9	
DURABLE		35.11	125.1	131.2	133.6	130.5	126.7	121.9	122.8	126.4	125.4	127.9	128.8	134.3	130.4	137.7	
		49.10	127.3	128.5	130.6	129.3	127.9	124.5	126.1	128.3	127.5	128.2	127.2	129.3	123.7	127.8	
<b>MINING</b>																	
Metal mining	10	.50	75.0	73.8	72.7	75.2	74.3	67.5	69.9	77.8	77.8	79.4	79.5				
Coal	11,12	1.60	126.8	135.2	131.6	130.4	123.5	119.2	120.8	129.2	131.8	124.4	121.9	128.0	109.0		
Oil & gas extraction	13	7.07	106.2	104.2	104.5	104.7	106.4	108.6	108.3	103.3	98.3	94.1	92.7	91.3	90.4	89.7	
Stone & earth minerals	14	.66	118.3	121.1	125.2	125.5	123.6	112.4	102.3	107.8	105.0	115.3	114.7	117.8	112.7		
<b>NONDURABLE MANUFACTURES</b>																	
Foods	20	7.96	130.2	138.5	141.0	136.9	131.6	128.4	125.7	126.6	126.6	128.7	130.9	137.3	136.1		
Tobacco products	21	.62	100.2	103.9	103.4	113.7	106.9	76.9	94.6	102.5	95.1	99.2	94.9	108.6			
Textile mill products	22	2.29	103.2	109.3	111.6	114.1	110.8	96.5	102.0	111.0	109.5	112.2	114.4	117.4	102.5		
Apparel products	23	2.79	100.9	104.1	106.1	104.4	103.2	102.3	101.4	100.8	102.5	101.5	101.9	104.7	99.2		
Paper & products	26	3.15	127.6	126.7	129.4	131.0	127.1	122.7	133.6	136.8	136.7	137.6	133.2	139.5	128.4		
Printing & publishing	27	4.54	153.9	171.9	169.4	161.6	156.0	150.0	146.6	149.6	150.0	154.8	156.4	166.0	171.7	182.8	
Chemicals & products	28	8.05	127.1	129.4	135.8	129.5	126.9	123.7	125.2	129.7	127.8	132.6	132.1	137.2	135.6		
Petroleum products	29	2.40	86.8	92.4	88.6	89.0	90.1	89.9	88.4	84.8	82.9	88.2	95.6	96.0	94.9	97.0	
Rubber & plastics prod.	30	2.80	146.9	149.5	155.2	153.3	147.6	140.3	142.0	156.5	152.7	149.5	150.8	155.9	143.1		
Leather & products	31	.53	68.5	72.2	71.3	71.9	69.0	62.1	64.1	67.0	64.8	62.1	60.7	58.7	52.1		
<b>DURABLE MANUFACTURES</b>																	
Lumber & products	24	2.30	113.4	121.3	122.8	122.7	112.6	104.8	112.4	116.6	120.1	122.5	122.5	126.8			
Furniture & fixtures	25	1.27	139.7	145.8	148.5	144.3	143.7	138.8	138.5	149.7	143.5	143.2	141.2	147.2	137.4		
Clay, glass, stone prod.	32	2.72	115.5	121.9	120.9	122.1	118.5	112.2	111.5	113.3	116.6	121.8	121.4	124.7	120.1		
Primary metals	33	5.33	80.5	78.2	79.1	80.1	77.6	75.0	79.7	82.3	81.7	84.4	80.4	76.7	68.2	69.6	
Iron & steel	33,12	3.49	70.4	68.3	68.3	69.1	67.2	63.8	68.8	70.4	69.3	72.6	66.9	64.2	58.7		
Fabricated metal prod.	34	6.46	107.3	108.9	109.8	109.1	108.0	106.6	104.6	108.3	107.4	107.7	106.2	108.4	104.3	108.0	
Nonelectrical machinery	35	9.54	145.3	151.3	152.2	143.8	143.3	140.5	139.9	142.3	140.4	136.8	138.4	143.8	144.4	146.2	
Electrical machinery	36	7.15	168.4	165.8	167.5	167.9	166.5	166.5	165.0	164.1	164.8	166.2	164.6	163.3	161.7	167.8	
Transportation equip.	37	9.13	121.4	116.1	123.4	126.5	126.4	120.3	127.9	129.5	126.6	129.3	127.4	130.3	114.2	117.4	
Motor vehicles & pts.	37,1	5.25	111.5	103.0	112.2	117.2	114.0	101.5	115.3	119.9	113.9	117.9	114.5	120.0	94.7	98.4	
Aerospace & misc.	37,2-6,9	3.87	134.9	133.9	138.6	139.2	143.2	145.8	145.1	142.6	143.9	144.7	144.9	144.3	140.8	143.3	
Instruments	38	2.66	139.1	143.6	143.7	139.8	139.7	139.6	138.0	139.2	140.4	139.8	138.6	142.6	139.8	142.6	
Miscellaneous mfrs.	39	1.46	96.1	103.0	103.0	99.1	93.8	90.9	93.2	100.3	97.6	96.3	99.2	100.3	97.4		
<b>UTILITIES</b>																	
Electric		4.17	119.7	127.7	127.0	110.4	112.1	123.3	127.0	127.4	114.1	112.6	109.2	125.7	132.0		

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
<b>INDEX</b>																	
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
<b>CHANGE*</b>																	
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	1.3	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	-0.7	-0.8	0.1	-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

\*CHANGE IS THE PERCENT CHANGE FROM THE PRECEDING LIKE PERIOD.

Table 4A

## INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Seasonally adjusted, 1977 = 100

Series	SIC Code	1977	1985	1985						1986						
		Pro- por- tion	Avg.	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
METAL MINING	10	.50	75.01	62.1	74.9	73.8	76.0	78.3	77.3	73.5	77.2	75.9	76.0	72.0		
Iron ore	101	.15	87.71	56.4	94.2	96.7	94.7	102.4	74.2	76.7	83.8	82.0	82.7	84.3		
Nonferrous ores	102-6,8,9	.35	69.61	65.5	63.4	65.0	68.2	69.2	76.4	74.3	74.5	72.6	71.5	68.9		
Copper ore	102	.15	79.41	81.0	78.2	74.4	76.9	77.1	88.3	84.5	81.6	80.5	80.6			
Lead and zinc ores	103	.05	66.01	64.9	60.9	59.2	66.0	62.2	65.6	73.4	69.3	67.9				
Gold and silver ores	104	-.02	142.81	135.7	139.7	150.3	149.8	157.0	149.6	160.7	171.8	156.9				
Ferroalloy ores	106	-.04	91.61	52.7	51.3	80.8	90.2	97.2	101.1	87.1	96.8	89.4	71.3	75.5	80.3	
ANTHRACITE	11	-.02	66.61	63.2	59.5	62.5	62.7	61.4	61.4	68.8	72.8	65.6	75.3	62.6	63.8	55.0
BITUMINOUS	12	1.58	127.41	124.7	125.7	127.6	122.7	127.9	129.8	132.9	127.2	124.2	124.3	122.5	128.7	121.0
OIL AND GAS EXTRACTION	13	7.07	106.21	106.0	105.7	105.4	104.4	103.6	104.2	104.9	101.1	99.2	96.2	95.1	93.7	92.4
Crude oil & natural gas	131	5.62	99.51	98.7	98.5	98.6	98.7	98.9	99.8	100.5	98.7	99.4	98.0	99.0	98.3	97.6
Crude oil, total		3.46	108.11	108.1	108.0	107.3	107.8	107.9	108.6	108.9	107.6	108.2	106.8	107.5	107.0	107.0
Texas crude		1.34	77.71	77.8	78.4	76.8	77.9	77.9	78.4	79.2	76.3	77.0	75.4	76.2	76.3	76.4
Alaska, Calif. crude		.57	207.71	207.0	208.9	208.5	211.1	210.6	213.3	208.6	209.1	209.7	212.9	214.1	212.1	211.1
La. and other crude		1.54	97.41	97.8	96.2	96.3	95.5	95.8	96.0	97.5	97.2	97.5	94.6	95.1	98.8	95.0
Natural gas		2.16	85.71	83.6	83.2	84.7	84.1	84.5	85.7	87.2	84.3	85.4	83.9	85.3	84.4	
Natural gas liquids	132	-.47	98.91	97.7	97.5	96.4	97.2	98.7	99.4	104.6	101.7	99.3	97.3	101.1	97.7	
Propane		.05	102.61	102.2	102.5	101.4	103.6	103.8	107.4	106.8	105.0	102.3	98.0	98.6	97.3	
Liquefied petroleum		-.42	98.41	97.2	96.9	95.9	96.5	98.2	98.5	104.3	103.6	98.9	97.2	101.3	97.7	
Oil & gas well drilling	138	-.99	147.51	151.7	150.9	149.6	141.2	136.7	131.8	130.5	113.2	96.4	76.5	67.8	60.9	58.4
FOODS	20	7.96	130.21	130.5	131.5	132.2	129.4	131.5	132.1	132.0	132.9	132.2	133.1	133.7	134.0	134.1
Meat products	201	1.06	119.51	121.5	120.2	120.2	117.1	120.8	120.2	121.2	122.7	119.4	127.7	121.5	121.9	120.9
Beef		.43	95.31	97.4	96.2	95.6	90.4	103.8	91.2	95.8	93.5	94.1	106.4	100.1	95.4	101.6
Pork		.25	112.81	114.8	116.7	115.1	110.4	108.9	108.7	110.9	114.3	108.2	113.4	108.4	104.3	106.5
Poultry		.20	142.21	144.2	141.2	142.1	144.6	138.7	151.5	147.0	154.5	145.5	152.7	146.6	151.4	
Misc. meats		.18	161.91	164.1	159.9	162.6	160.2	159.1	171.9	168.7	169.4	167.2	171.8	163.6	168.1	166.1
Dairy products	202	-.80	127.81	131.2	134.7	133.9	133.5	132.5	131.9	133.9	133.9	132.8	132.6	132.0	130.0	129.7
Butter	2021	-.01	115.81	123.8	126.1	133.7	123.7	122.9	124.6	117.6	120.7	121.7	116.4	111.6	108.9	106.5
Cheese	2022	-.13	149.11	153.4	158.5	156.3	156.6	154.0	153.9	156.9	158.2	157.6	156.1	155.9	150.3	157.0
Concentrated milk	2023	-.11	139.61	146.3	161.1	154.2	152.7	150.8	147.0	152.3	153.1	148.3	145.1	142.4	137.5	130.4
Frozen desserts	2024	-.09	137.91	141.5	140.1	138.8	139.6	136.8	140.9	144.7	145.1	142.5	147.9	149.5	146.2	144.8
Canned and frozen food	203	1.09	147.11	145.9	148.0	149.7	146.4	146.5	147.4	147.7	143.4	145.0	147.4	150.2	146.2	153.3
Grain mill products	204	-.94	131.31	132.5	132.1	132.0	131.9	132.0	133.2	132.2	133.9	130.5	134.3	135.0	135.9	133.8
Flour	2041	-.12	113.01	105.2	113.6	114.9	115.3	130.4	112.9	115.2	122.5	111.6	116.3	117.0	121.8	119.9
Bakery products	205	1.00	127.91	125.0	129.2	125.9	127.9	130.4	130.0	137.3	133.0	131.3	133.2	129.9	131.1	131.0
Beverages	208	1.41	126.31	126.3	126.9	129.2	122.5	125.2	125.6	122.1	129.3	126.6	127.7	130.5	132.1	130.8
Beer and ale	2082,3	-.38	113.21	109.6	113.1	110.3	105.4	112.9	115.2	116.0	119.8	115.6	115.4	115.0	117.1	
Wine and brandy	2084	-.07	164.41	183.9	178.5	175.6	168.3	163.7	161.9	159.8	176.2	164.7	191.8	207.1		
Soft drinks	2086,7	-.79	136.11	133.5	133.4	139.6	135.9	135.7	136.4	129.3	138.5	138.2	137.4	140.2	146.5	141.2
Liquor	2085	-.16	92.81	105.8	105.5	103.1	77.6	86.5	81.8	84.7	86.6	80.3	81.0	86.2		
Fats and oils	207	-.27	120.91	122.4	118.4	123.0	124.0	119.2	119.7	121.7	116.7	119.8	125.3	117.8	121.5	124.6
Coffee & misc. foods	209	-.79	139.81	139.8	138.8	137.3	139.4	142.5	146.2	147.1	147.3	145.0	142.4	142.7	142.7	140.9
TOBACCO PRODUCTS	21	-.64	100.21	98.8	98.3	98.9	103.2	102.8	100.3	93.8	97.0	93.6	100.3	101.6	97.6	
Cigarettes	211	-.54	100.61	99.4	98.2	99.2	107.7	103.7	103.5	90.9	99.4	92.2	106.5	104.3	97.3	
Cigars	212	-.02	74.81	87.2	76.5	70.0	69.1	65.3	66.2	64.9	63.6	61.0	75.8	87.0	72.7	
TEXTILE MILL PRODUCTS	22	2.29	103.21	104.3	104.2	107.0	107.7	110.0	107.7	107.9	109.9	108.0	111.4	111.3	112.6	112.8
Fabrics	221-4	-.77	98.31	99.0	99.8	102.0	104.9	109.1	105.8	106.9	108.2	106.5	108.5	107.7	109.4	108.7
Cotton fabrics	221	-.28	108.41	109.9	113.1	114.6	117.5	122.2	118.6	123.5	124.4	124.0	127.2	126.0	129.1	125.2
Man-made fabrics	222	-.40	93.81	94.8	94.1	96.8	100.2	104.6	100.9	99.6	100.3	97.9	100.3	100.1	101.0	102.6
Knit goods	225	-.55	101.01	98.7	102.1	103.7	104.7	107.3	103.1	103.7	106.4	101.6	109.6	107.2	106.9	106.6
Hosiery	2251,2	-.12	145.01	130.0	149.3	148.3	155.1	159.9	139.0	153.6	152.8	144.6	167.0	150.5	150.8	
Knit garments	2253,4,7-9	-.43	88.41	89.7	88.6	91.0	90.2	92.2	92.8	89.5	93.1	89.3	93.1	94.8	94.3	94.4
Fabric finishing	226	-.20	81.51	78.6	79.7	81.5	87.6	90.9	88.5	88.1	89.3	84.7	84.6	86.5	83.1	89.3
Carpeting	227	-.22	139.81	147.5	145.0	141.5	141.2	146.0	145.4	157.7	141.2	134.1	136.6	137.3	140.8	147.4
Yarns & misc. text.	228,9	-.55	105.71	105.5	106.9	110.9	105.7	112.7	113.0	110.3	116.5	112.5	111.7	116.1	121.1	121.6
APPAREL PRODUCTS	23	2.79	100.91	99.9	100.0	101.8	102.1	103.8	104.5	105.5	102.8	102.8	103.1	102.6	101.7	102.1
LUMBER AND PRODUCTS	24	2.30	113.41	113.8	115.3	116.0	116.2	115.0	116.1	120.5	120.3	120.7	121.3	121.6	120.9	
Logging and lumber	241,2	1.05	101.31	100.3	104.5	104.3	102.7	103.5	103.1	106.7	108.6	110.2	104.7	110.2	107.3	108.2
Lumber products	243-5,9	1.25	123.61	126.6	125.2	126.7	126.8	125.7	125.8	133.0	128.3	129.4	135.5	131.5	131.4	
Millwork & plywood	243	-.67	140.71	146.3	143.3	146.1	146.1	144.9	144.4	158.1	151.3	153.7	164.5	159.1	160.6	
Manufactured homes	245	-.25	101.11	100.3	101.9	100.2	102.1	102.3	100.2	98.6	96.0	90.4	89.9	86.9	83.5	85.0
FURNITURE AND FIXTURES	25	1.27	139.71	145.7	140.9	142.8	140.0	142.2	140.5	141.2	143.2	142.9	145.9	146.2	147.1	148.9
Household furniture	251	-.74	114.01	115.5	113.6	115.7	115.8	118.4	115.9	118.6	118.8	115.6	117.4	119.3	117.2	121.1
Fixt., office furn.	252,4,9	-.47	182.11	186.5	184.5	183.7	180.1	185.0	183.9	185.3	184.5	188.3	194.8	192.1	198.4	191.5
PAPER AND PRODUCTS	26	3.15	127.61	128.6	126.5	128.0	127.7	128.9	131.3	133.6	132.6	132.4	134.1	133.2	136.0	138.3
Pulp and paper	261-3	3.33	119.71	120.5	117.8	121.5	116.4	119.7	128.7	124.0	122.3	122.6	124.2	122.9	127.6	1













Table 5

**INDUSTRIAL PRODUCTION: INDEXES; 1977 = 100**

Quarterly averages, seasonally adjusted

SERIES	Quarterly Averages of Monthly Indexes									
	1984 Q1	Q2	Q3	Q4	1985 Q1	Q2	Q3	Q4	1986 Q1	Q2
Industrial production	119.3	121.1	122.7	122.5	123.1	123.5	124.0	124.7	125.0	124.3
Products, total	124.0	126.0	128.0	128.7	129.1	130.4	131.6	132.3	132.7	132.4
Final products	124.5	126.6	128.7	129.3	129.7	130.6	131.7	132.4	132.5	131.5
Consumer goods	117.1	117.9	118.1	118.8	118.8	119.5	120.5	122.1	123.0	124.3
Durable consumer goods	112.4	111.8	112.5	112.6	112.4	112.1	113.0	114.3	115.0	114.7
Automotive products	110.6	109.5	109.5	109.0	113.7	112.4	115.9	114.2	114.7	114.4
Home goods	113.7	113.5	114.7	115.3	111.4	111.8	110.8	114.4	115.2	114.8
Nondurable consumer goods	118.9	120.2	120.2	121.1	121.2	122.2	123.2	125.0	125.9	127.9
Equipment, total	134.3	138.1	142.6	143.4	144.0	145.3	146.5	146.1	145.0	141.1
Business & defense equipment	133.3	137.2	141.5	142.6	144.0	145.8	146.9	147.3	147.5	145.8
Business equipment	129.0	132.6	137.1	137.8	138.8	140.0	140.3	139.7	139.9	137.5
Defense and space equipment	150.2	155.3	158.8	161.3	164.5	168.4	172.9	176.8	177.1	178.1
Intermediate products	122.1	124.0	125.8	126.5	127.2	129.9	131.2	131.7	133.7	135.4
Construction supplies	112.7	113.5	114.5	115.0	115.3	117.9	119.8	120.2	123.1	123.7
Business supplies	130.2	133.0	135.4	136.3	137.4	140.2	140.9	141.5	142.7	145.4
Commercial energy products	115.4	118.2	119.3	120.6	121.5	122.3	123.1	125.1	125.0	129.5
Materials	112.8	114.4	115.5	114.1	114.9	114.0	113.8	114.3	114.5	113.4
Durable goods materials	118.7	121.0	123.1	123.1	123.0	121.4	120.4	121.1	120.9	118.8
Basic metal materials	87.4	87.8	85.5	84.3	84.1	84.3	84.0	87.1	82.6	79.6
Nondurable goods materials	111.5	111.7	111.7	110.7	110.7	111.0	113.4	113.9	115.7	116.8
Textile, paper, & chem materials	111.8	112.2	112.4	110.5	111.2	110.6	113.3	114.0	114.2	117.0
Textile materials	106.8	104.3	102.3	95.0	93.2	95.2	101.7	105.0	105.8	108.2
Pulp and paper materials	124.9	127.6	128.0	125.7	126.6	121.6	123.8	124.8	128.8	130.2
Chemical materials	108.9	109.5	110.4	110.6	112.0	112.1	113.6	113.4	115.3	115.4
Energy materials	103.7	105.2	105.4	101.1	104.4	103.7	102.5	102.6	102.2	100.8
Manufacturing	120.9	123.0	124.7	124.9	125.3	126.1	126.8	127.4	128.4	128.3
Durable	120.9	123.5	125.9	126.4	126.8	127.3	127.5	127.9	128.3	127.1
Nondurable	120.9	122.3	122.9	122.9	123.3	124.6	125.9	126.8	128.6	130.0
Mining and Utilities	110.3	111.7	112.2	109.5	111.6	109.8	109.1	109.3	107.3	103.6
Mining	109.9	112.1	113.7	108.6	110.1	109.9	107.9	107.1	105.4	100.1
Utilities	111.0	111.1	109.7	110.8	114.1	109.6	111.1	112.8	110.5	109.5

Table 6

**INDUSTRIAL PRODUCTION: GROSS VALUE OF PRODUCTS**

Billions of 1982 dollars at annual rates, seasonally adjusted

SERIES	Billions of 1982 Dollars at Annual Rates													
	1982 Dollars	1985 Ann. Avg.	Quarters				Months							
			1985 Q1	Q2	Q3	Q4	1986 Q1	Q2	1986 MAR	APR	MAY	JUN	JUL	AUG
Products, total	1376.8	1650.9	1631.8	1648.5	1652.6	1671.9	1683.1	1682.8	1660.8	1686.3	1687.6	1674.4	1664.9	1675.9
Final products	1084.5	1282.3	1271.9	1279.7	1281.4	1297.3	1304.7	1298.6	1282.5	1307.0	1301.1	1287.7	1280.1	1289.1
Consumer goods	703.7	820.7	813.2	817.2	818.9	834.0	842.7	849.1	832.0	852.3	852.4	842.7	840.5	846.3
Durable consumer goods	133.3	195.7	194.3	193.7	197.7	197.6	199.6	198.6	192.9	201.3	196.8	197.9	201.2	199.0
Automotive products	65.9	108.0	107.3	106.1	110.9	108.2	109.6	108.8	103.8	111.0	107.3	108.0	110.6	108.2
Home goods	67.4	87.8	87.0	87.6	86.7	89.4	90.0	89.9	89.2	90.3	89.4	89.9	90.6	90.8
Nondurable consumer goods	570.4	625.0	618.8	623.5	621.3	636.3	643.1	650.5	639.1	651.0	655.7	644.7	639.3	647.3
Equipment, total	380.8	461.7	458.7	462.5	462.5	463.4	462.0	449.5	450.4	454.7	448.7	445.0	439.6	442.8
Business & defense equipment	345.4	430.4	426.2	431.2	430.8	434.0	437.0	432.6	428.6	436.3	431.9	429.6	424.6	427.6
Business equipment	278.0	343.7	342.6	345.8	343.4	343.5	345.9	341.6	338.0	345.2	341.0	338.6	333.5	335.4
Defense and space equipment	67.4	86.7	83.6	85.4	87.4	90.4	91.0	91.0	90.6	91.1	90.9	91.0	91.0	92.2
Intermediate products	292.2	368.6	359.9	368.8	371.2	374.6	378.4	384.2	378.3	379.3	386.4	386.8	384.8	386.8
Construction supplies	108.3	144.8	140.7	144.4	146.9	147.1	150.3	151.1	149.8	150.4	151.2	151.8	152.0	152.8
Business supplies	183.9	223.8	219.3	224.4	224.2	227.5	228.1	233.0	228.5	228.9	235.2	235.0	232.7	
Commercial energy products	63.4	72.6	70.1	73.0	72.5	75.3	73.8	77.6	75.2	74.6	80.7	77.4		

Table 7

**INDUSTRIAL PRODUCTION: DIFFUSION INDEXES**

Percent of component series higher than in earlier months

	ONE MONTH EARLIER	THREE MONTHS EARLIER	SIX MONTHS EARLIER
<b>1977-85</b>			
AVERAGE	53.7	56.1	57.6
HIGH	76.6	79.4	88.3
LOW	26.4	23.2	23.0
<b>1984</b>			
JULY	58.3	56.2	57.9
AUGUST	46.0	52.0	59.1
SEPTEMBER	48.2	48.8	57.3
OCTOBER	51.0	47.4	51.8
NOVEMBER	53.0	49.6	52.8
DECEMBER	53.2	51.4	53.2
<b>1985</b>			
JANUARY	51.8	55.8	48.2
FEBRUARY	55.8	55.6	47.6
MARCH	54.8	56.0	54.8
APRIL	51.0	55.6	53.6
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
<b>1986</b>			
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	44.6	54.4	47.4
JULY	55.4	47.2	46.4

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

	1985 Ann- Avg.	Millions of Units													
		1985					1986								
		AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
Autos, total	8.2	8.3	8.1	7.8	7.8	7.7	8.6	8.7	7.6	8.1	7.6	8.0	7.6	7.0	





Table 9B  
**ELECTRIC POWER USE BY INDUSTRIES**  
 Not seasonally adjusted, 1977 = 100

Series	SIC code	1977 (bil. kWh)	Indexes								Percentage change from				Indexes	
			1985 Avg.	1985 Q2	1985 Q3	1985 Q4	1986 Q1	1986 Q2	previous quarter		year ago		1985 JPN	1986 JUL		
									1985 Q3	1986 Q4	1986 Q1	1986 Q2				
<b>TOTAL</b>	10-14,20-39	785.8	100.4	102.2	101.8	98.2	98.1	99.2	-0.4	-3.5	-0.1	1.1	-2.9	101.1	98.1	
<b>MAJOR INDUSTRY DIVISIONS</b>																
<b>MINING</b>	10-14	59.4	122.2	126.9	118.7	118.8	125.5	113.0	-6.5	.1	5.6	-10.0	-11.0	109.5	102.9	
<b>MANUFACTURING</b>	20-39	726.4	98.9	100.6	100.7	96.9	96.3	98.3	.1	-3.8	-0.6	2.1	-2.3	100.5	97.8	
<b>DURABLE</b>	24,25,32-39	344.3	97.3	97.6	98.4	95.7	96.1	97.0	.8	-2.7	.4	.9	-0.6	97.0	93.5	
<b>NONDURABLE</b>	20-23,26-31	382.1	100.5	103.3	102.8	97.9	96.5	99.6	-0.5	-4.8	-1.5	1.2	-3.7	103.6	101.6	
<b>INDUSTRY GROUPS AND SERIES</b>																
<b>METAL MINING</b>	10	15.1	106.6	123.4	101.9	94.4	108.8	101.9	-17.4	-7.3	15.2	-6.3	-17.4	95.0	88.4	
Iron ore	101	6.1	108.5	134.4	104.0	89.3	107.8	103.3	-22.6	-14.1	20.7	-4.2	-23.1	90.1	82.8	
Copper ore	102	5.9	110.2	114.9	109.6	105.9	113.8	102.7	-4.6	-3.4	7.5	-9.8	-10.6	104.6	104.6	
<b>COAL</b>	11,12	10.3	131.2	130.1	118.8	127.9	160.0	133.4	-8.7	7.7	25.1	-19.6	2.5	126.1	105.6	
<b>OIL AND GAS EXTRACTION</b>	13	23.0	135.0	133.7	136.7	137.8	136.1	120.5	2.2	.8	-1.2	-11.5	-9.9	120.4	120.0	
Crude oil and natural gas	131	18.2	139.8	138.2	140.9	142.4	140.5	122.5	2.0	1.1	-1.3	-12.9	-11.4	121.9	120.0	
Natural gas liquids	132	3.4	104.9	105.9	108.9	107.6	104.9	104.7	2.3	-1.2	-2.5	-0.2	-1.2	105.6	107.0	
<b>STONE AND EARTH MINERALS</b>	14	11.0	109.3	114.8	106.7	106.7	91.6	92.2	-7.1	.0	-14.2	.7	-19.7	90.8	86.4	
Crushed stone	142	2.4	145.2	145.9	151.5	147.7	126.8	146.0	3.8	-2.5	-14.1	15.1	.0	107.0	147.3	
Sand and gravel	144	2.0	91.3	91.5	98.6	99.0	78.9	97.0	7.7	.5	-20.3	22.8	6.0	141.1	102.8	
Chemical & fertilizer mat.	147	5.0	100.7	109.7	92.8	93.1	80.2	70.8	-15.4	.3	-13.9	-11.6	-35.4	67.2	59.9	
<b>FOODS</b>	20	42.4	119.0	115.8	128.2	120.9	112.7	118.2	10.7	-5.7	-6.7	4.8	2.0	125.7	128.5	
Meat products	201	6.9	109.9	107.2	119.6	109.8	104.0	111.0	11.6	-8.2	-5.3	6.7	3.6	117.3	122.7	
Dairy products	202	5.3	117.5	117.0	131.1	116.4	113.6	125.9	12.0	-11.2	-2.5	10.9	7.6	133.4	137.6	
Canned and frozen foods	203	5.7	133.5	127.5	148.9	134.7	121.3	126.5	16.8	-9.5	-9.9	4.3	-0.8	132.4	139.8	
Grain mill products	204	7.4	111.6	108.2	113.3	114.6	108.6	105.6	4.8	1.1	-5.2	-2.0	-2.4	110.0	111.4	
Bakery products	205	2.5	135.3	133.9	150.0	135.7	130.9	138.5	12.1	-9.5	-3.6	5.9	3.5	148.7	153.3	
Sugar and confectionery	206	3.3	167.0	153.6	164.2	189.9	168.5	160.1	6.9	15.7	-11.2	-5.0	4.2	167.8	165.9	
Fats and oils	207	3.4	109.8	103.6	111.3	117.0	114.9	107.7	7.5	5.1	-1.8	-6.3	3.9	110.0	106.5	
Beverages	208	4.8	122.8	122.7	136.1	119.6	110.6	125.8	10.9	-12.1	-7.5	13.8	2.5	139.1	138.9	
Misc. food preparations	209	3.1	115.8	113.7	125.9	115.6	107.8	114.3	10.7	-8.2	-6.8	6.1	.5	120.9	124.7	
<b>TOBACCO PRODUCTS</b>	21	1.3	104.4	99.8	106.9	112.7	91.5	96.7	7.0	5.5	-16.8	5.7	-3.1	107.2	98.9	
<b>TEXTILE MILL PRODUCTS</b>	22	28.3	94.8	95.7	102.4	98.3	87.7	101.1	7.0	-4.0	-10.8	15.2	5.6	107.3	96.7	
Fabrics	221-4	12.1	90.2	91.5	97.1	92.3	82.0	95.0	6.1	-4.9	-11.1	15.8	3.8	100.4	90.0	
Knit goods	225	3.7	79.1	80.0	89.1	79.7	72.3	86.4	11.4	-10.5	-9.4	19.6	8.0	94.4	86.4	
Fabric finishing	226	2.2	117.1	117.2	121.7	122.8	113.7	120.4	3.9	.9	-7.4	5.9	2.7	127.8	123.8	
Yarn and thread	228	6.7	104.8	105.0	114.9	113.1	96.9	114.6	9.4	-1.6	-14.2	18.2	9.1	121.4	108.0	
Miscellaneous textiles	229	2.1	95.4	97.0	99.4	96.2	90.6	100.3	2.4	-3.3	-5.8	10.7	3.4	106.2	92.6	
<b>APPAREL PRODUCTS</b>	23	6.6	117.3	114.7	133.5	115.3	108.6	117.8	16.4	-13.6	-5.9	8.5	2.7	129.3	131.4	
Men's outerwear	231,2	2.1	113.5	113.2	132.1	110.9	100.9	114.7	16.7	-16.1	-9.0	13.7	1.3	128.4	127.6	
Women's outerwear	233	1.9	109.0	106.5	126.6	105.0	103.0	108.6	18.9	-17.1	-1.9	5.5	2.0	119.7	121.4	
<b>LUMBER AND PRODUCTS</b>	24	16.4	119.1	118.2	116.6	121.6	125.5	127.9	-1.3	4.3	3.2	2.0	8.2	125.1	122.7	
Lumber	242	6.9	100.0	99.6	97.4	102.2	102.2	107.8	-2.3	4.9	3.9	1.6	8.2	104.4	99.3	
Millwork and plywood	243	4.4	129.0	127.8	125.8	134.0	136.5	139.4	-1.5	6.5	1.9	2.2	9.1	136.2	133.8	
<b>FURNITURE AND FIXTURES</b>	25	4.2	122.6	120.1	125.0	124.1	126.4	126.1	4.0	-0.7	1.8	-0.3	5.0	129.5	121.1	
Home furniture	251	2.8	114.6	113.3	114.5	116.3	118.1	117.2	1.1	1.6	1.5	-0.8	3.4	119.3	107.7	
<b>PAPER AND PRODUCTS</b>	26	71.9	119.0	119.4	119.5	118.1	117.9	120.9	.1	-1.2	-0.1	2.5	1.3	122.4	119.8	
Wood pulp	261	5.9	129.5	128.3	131.6	125.4	124.2	120.2	2.6	-4.6	-1.0	-3.2	-6.3	128.7	127.6	
Paper	262	34.4	125.5	126.5	124.5	124.6	127.0	131.2	-1.6	.1	1.9	3.3	3.7	131.6	129.0	
Paperboard	263	22.1	106.7	106.4	108.8	105.6	100.7	103.7	2.2	-2.9	-4.7	3.0	-2.6	105.0	96.6	
Converted paper	264	5.0	116.7	119.5	120.0	111.9	106.2	109.9	.4	-6.8	-5.1	3.5	-8.1	113.5	114.3	
Paperboard containers	265	3.4	110.2	107.7	111.2	112.9	109.6	114.4	3.3	1.6	-2.9	4.4	6.3	116.0	116.7	
Building paper and board	266	1.1	150.5	150.7	153.2	151.5	154.5	156.3	1.7	-1.2	2.0	1.2	3.7	161.1	149.5	
<b>PRINTING AND PUBLISHING</b>	27	10.6	141.1	138.3	158.6	140.1	133.5	144.7	14.7	-11.7	-4.7	8.4	4.6	155.4	164.5	
Newspapers	271	2.6	120.1	118.7	134.1	119.6	112.9	125.8	13.1	-10.8	-5.6	11.4	6.0	134.8	139.4	
Commercial Printing	275	4.8	154.7	150.2	173.3	156.5	149.2	162.4	15.4	-9.7	-4.7	8.8	8.1	174.9	188.6	
<b>CHEMICALS AND PRODUCTS</b>	28	162.1	86.3	92.7	85.6	80.5	81.5	82.3	-7.6	-6.1	1.3	.9	-11.2	84.7	84.6	
Basic chemicals	281	85.6	74.9	84.5	72.7	66.7	68.5	67.9	-14.0	-8.2	2.6	-0.6	-19.6	68.8	69.1	
Alkalies and chlorine	2812	13.3	92.6	100.5	97.4	81.4	87.9	94.5	-3.1	-16.5	8.1	7.4	-6.0	97.5	102.1	
Inorganic chemicals, nec	2819	58.1	62.2	75.2	57.9	51.7	51.6	50.7	-23.0	-10.7	-0.1	-1.8	-32.5	50.9	51.1	
Acid and fertilizer mat.		13.0	80.9	87.0	80.1	70.8	73.8	68.5	-7.9	-11.6	4.2	-7.2	-21.3	69.3	67.9	
Nuclear mats., nondefense		44.6	54.4	70.2	48.5	43.7	42.4	43.3	-30.8	-10.0	-3.0	2.1	-38.4	43.1	44.1	
Synthetic materials	282	19.3	113.1	114.0	117.3	112.9	114.0	113.3	2.9	-3.7	.9	-0.6	-0.6	123.1	123.4	
Plastics materials	2821	9.2	133.8	131.5	138.1	136.4	142.0	137.3	5.0	-1.2	4.1	-3.3	4.4	161.8	163.7	
Drugs	283	4.1	140.8	140.5	156.6	138.5	129.5	147.9	11.5	-11.6	-6.5	14.3	5.3	157.4	163.4	
Soaps and toiletries	284	2.1	117.7	114.5	124.1	119.5	120.6	125.8	8.4	-3.7	.9	4.2	9.8	130.5	138.0	
Industrial organic chem.	286	35.8	92.0	90.7	90.4	90.7	93.8	96.2	-0.3	.4	3.4	2.5	6.0	98.5	95.0	
Farm chemicals	287	10.5	95.1	98.4	95.2	91.5	85.8	93.0	-3.3	-3.8	-6.3	8.4	-5.5	90.8	88.5	

Table 9A—continued

**ELECTRIC POWER USE BY INDUSTRIES**

Seasonally adjusted indexes, 1977 = 100

Series	SIC code	Indexes								Percentage change from				Indexes	
		1977	1985	1985			1986		previous quarter		year ago		1985	1986	
		(bil. kWh)	Avg.	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q2	JUN	JUL
PETROLEUM PRODUCTS	29	34.7	112.9	113.0	113.6	113.5	115.0	117.1	-6	-0.2	1.3	1.9	3.7	121.2	110.9
RUBBER & PLASTICS PRODUCTS	30	23.1	126.3	125.5	125.6	128.7	128.7	127.2	-1	2.5	.0	-1.1	1.4	130.4	133.5
Tires	301	5.4	77.4	78.5	75.0	76.6	71.2	67.3	-4.5	2.1	-7.0	-5.5	-14.3	69.5	72.4
Rubber products, nec	306	2.2	94.0	94.4	90.3	95.5	97.1	93.0	-4.3	5.8	1.7	-4.2	-1.4	96.0	98.8
Plastics products, nec	307	14.2	164.1	161.9	164.9	168.5	170.3	171.2	1.9	2.2	1.0	.6	5.8	174.9	177.1
LEATHER AND PRODUCTS	31	1.4	88.4	88.9	89.0	88.0	87.4	83.6	-1	-1.2	-0.6	-4.4	-6.0	81.5	83.0
Shoes	314	.7	79.4	79.6	79.2	78.0	82.3	77.1	-0.4	-1.5	5.5	-6.3	-3.1	74.0	74.4
CLAY, GLASS, AND STONE	32	31.4	104.9	104.7	104.8	105.3	106.7	105.7	-1	.4	1.3	-1.0	.9	105.4	102.0
Flat glass	321	1.3	101.0	96.5	99.2	106.2	107.1	107.6	2.7	7.0	.9	.4	11.4	106.8	110.6
Pressed and blown glass	322	6.8	102.4	101.7	102.5	102.3	104.8	106.2	.8	-0.2	2.5	1.3	4.5	106.8	100.2
Cement	324	10.2	98.3	98.9	98.4	97.4	100.7	97.4	-0.6	-1.0	3.4	-3.4	-1.6	97.5	93.8
Structural clay products	325	1.5	100.0	100.7	100.8	98.5	102.9	100.3	-1	-2.3	4.5	-2.6	-0.4	97.8	101.9
Concrete products	327	3.6	109.4	110.8	110.1	111.7	113.5	111.8	-0.6	1.4	1.7	-1.5	.9	111.3	105.9
PRIMARY METALS	33	171.3	80.2	78.5	79.8	79.3	78.4	75.4	1.6	-0.5	-1.2	-3.9	-4.0	74.2	70.4
Basic steel and mill prod.	331	65.7	74.6	70.3	75.9	76.9	73.9	70.4	7.9	1.4	-3.9	-4.8	.1	72.7	70.7
Iron and steel foundries	332	12.0	78.6	80.0	76.6	76.9	71.6	69.1	-4.2	.3	-6.8	-3.5	-13.5	68.7	63.2
Primary nonferrous metals	333	78.1	89.2	82.3	94.9	86.3	84.2	85.5	15.2	-9.1	-2.4	1.6	3.9	80.9	83.7
Aluminum	3334	70.3	78.5	78.7	74.4	76.2	80.2	73.2	-5.5	2.4	5.3	-8.7	-7.0	68.4	60.9
Nonferrous foundries	336	2.1	115.4	118.1	115.6	110.0	115.6	115.3	-2.1	-4.9	5.1	-0.3	-2.4	114.9	113.0
FABRICATED METAL PRODUCTS	34	26.4	114.4	114.8	114.5	114.7	114.9	115.5	-0.3	.2	.2	.6	.6	115.6	115.1
Metal cans	341	2.2	112.3	110.8	113.9	116.1	115.8	120.5	2.8	1.9	-0.3	4.1	8.8	119.9	117.2
Hardware	342	2.3	102.7	103.6	101.0	102.0	100.7	103.2	-2.5	1.0	-1.3	2.5	-0.4	105.4	107.1
Structural metal products	344	.8	112.2	114.0	114.0	111.8	107.9	110.8	.0	-1.9	-3.5	2.7	-2.8	112.3	110.4
Fasteners	345	1.6	102.7	105.3	101.1	99.1	102.9	104.3	-4.0	-2.0	3.8	1.3	-1.0	105.7	110.2
Metal stampings	346	6.2	113.2	113.5	110.8	114.9	116.4	110.5	-2.3	3.7	1.3	-5.1	-2.6	108.3	104.0
NOELECTRICAL MACHINERY	35	28.6	115.1	115.0	114.3	116.1	115.8	113.9	-0.6	1.6	-0.3	-1.6	-1.0	113.8	115.1
Engines and turbines	351	2.4	70.2	70.6	68.5	65.6	63.5	63.3	-3.0	-4.2	-3.1	-0.4	-10.3	64.8	62.6
Farm equipment	352	2.1	57.6	59.7	56.9	54.2	52.0	49.8	-4.6	-4.8	-4.0	-4.2	-16.5	50.7	53.1
Construction equipment	353	5.1	86.4	85.6	86.0	87.3	82.2	78.7	.5	1.4	-5.8	-4.3	-8.0	80.6	77.0
Metalworking machinery	354	3.8	110.5	109.7	111.1	112.9	114.2	114.7	1.3	1.6	1.1	.5	4.6	117.1	114.9
Special industry machinery	355	2.0	101.2	100.2	102.1	100.1	101.9	99.9	1.9	-2.0	1.8	-1.9	-0.3	96.2	103.2
General industrial mach.	356	4.6	109.5	109.9	110.8	108.7	108.2	108.7	.8	-1.9	-0.5	.5	-1.1	106.4	112.8
Office and computing mach.	357	2.8	203.4	205.9	202.6	204.4	207.9	195.6	-1.6	.9	1.7	-5.9	-5.0	195.4	203.2
Service industry machinery	358	2.8	95.3	95.7	94.5	94.2	95.5	98.7	-1.3	-0.3	1.4	3.3	3.1	99.2	105.8
ELECTRICAL MACHINERY	36	25.0	123.8	124.8	123.2	123.3	124.1	127.0	-1.2	.0	.7	2.3	1.8	125.7	128.1
Elect. distribution equip.	361	1.5	100.1	99.2	102.0	101.9	98.6	99.8	2.8	-0.1	-3.3	1.2	.5	102.1	100.1
Elect. indust. apparatus	362	4.3	80.6	80.8	79.9	75.7	78.0	79.0	-1.1	-5.2	3.1	1.2	-2.2	78.5	83.3
Household appliances	363	2.7	93.8	94.8	94.4	92.2	89.0	94.0	-0.4	-2.4	-3.5	5.7	-0.8	93.6	93.7
Lighting and wiring prod.	364	2.3	100.2	100.2	99.1	99.6	101.6	101.3	-1.1	.6	2.0	-0.4	1.1	104.0	104.2
Radio and TV sets	365	.9	115.7	115.0	114.5	116.5	122.7	117.7	-0.4	1.7	5.3	-0.4	2.4	119.7	114.5
Communication equipment	366	4.6	166.1	168.1	164.6	167.2	169.5	167.4	-2.1	1.6	1.3	-1.2	-0.4	163.5	164.9
Electronic components	367	6.0	168.3	168.8	165.5	169.5	176.2	180.0	-1.9	2.4	3.9	2.2	6.6	173.5	182.5
TRANSPORTATION EQUIPMENT	37	31.4	110.5	110.2	110.2	112.1	114.5	112.2	.0	1.8	2.2	-2.1	1.8	112.2	113.4
Motor vehicles and parts	371	19.3	98.3	97.9	97.2	99.3	103.2	98.9	-0.7	2.2	3.9	-4.1	1.1	98.4	98.4
Aircraft and parts	372	6.9	137.6	135.1	140.6	140.9	143.7	149.0	4.1	.2	2.0	3.7	10.3	149.4	152.5
Ships and boats	373	2.1	118.7	120.6	115.3	116.6	113.0	106.2	-4.4	1.1	-3.0	-6.1	-12.0	100.2	122.6
INSTRUMENTS	38	5.5	141.9	141.9	141.4	146.5	149.2	149.5	-0.4	3.6	1.9	.1	5.3	149.4	149.0
Copiers and related equip.	386	1.4	123.9	122.8	121.6	128.9	136.9	134.0	-1.0	6.0	6.2	-2.1	9.2	138.6	135.8
MISCELLANEOUS MANUFACTURES	39	4.1	100.1	101.1	99.8	99.6	102.4	102.9	-1.3	-0.3	2.8	.5	1.7	101.3	100.9
<b>SUPPLEMENTARY GROUPINGS</b>															
TOTAL, LESS NUCLEAR NONDEFENSE		740.7	104.2	103.8	104.3	104.0	104.7	102.8	.5	-0.3	.6	-1.8	-1.0	103.3	102.7
UTILITY SALES TO INDUSTRY		715.7	101.4	102.0	101.0	100.6	100.7	98.8	-0.9	-0.4	.1	-1.9	-3.1	99.2	98.7
INDUSTRIAL GENERATION		70.1	83.4	82.3	81.9	84.9	86.2	83.2	-0.4	3.7	1.5	-3.5	1.1	86.6	82.4

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 disproportionately 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						Percentage change from				Indexes		
			1985 Avg.	1985 Q2	Q3	Q4	1986 Q1	Q2	previous quarter		year ago		1986 JUN	JUL	
									1985 Q3	1986 Q4	1985 Q2	1986 Q1			
PETROLEUM PRODUCTS	291	34.7	112.9	111.4	118.7	112.8	112.2	115.6	6.5	-4.9	-0.5	3.1	3.7	124.0	115.6
RUBBER & PLASTICS PRODUCTS	301	23.1	126.3	126.9	127.4	127.8	126.0	128.7	.4	.3	-1.4	2.2	1.4	133.5	128.8
Tires	3011	5.4	77.4	79.3	76.8	76.3	68.8	68.0	-3.2	-0.7	-9.9	-1.0	-14.2	71.5	69.9
Rubber products, nec	3061	2.2	94.0	95.7	90.6	94.9	96.2	94.4	-5.4	4.7	1.4	-1.9	-1.4	98.9	93.7
Plastics products, nec	3071	14.2	164.1	163.7	167.3	167.1	167.1	173.2	2.2	-0.1	-0.1	3.7	5.8	178.7	172.6
LEATHER AND PRODUCTS	311	1.4	88.4	89.0	91.6	86.0	86.8	83.5	2.9	-6.1	.9	-3.7	-6.1	85.1	77.3
Shoes	314	.7	79.4	78.6	83.2	75.2	82.1	76.1	5.9	-9.6	9.1	-7.3	-3.2	77.2	71.3
CLAY, GLASS, AND STONE	321	31.4	104.9	105.8	109.0	107.0	99.5	106.7	3.1	-1.9	-6.9	7.2	.9	108.4	104.4
Flat glass	3211	1.3	101.0	96.2	101.7	105.8	104.9	107.2	5.7	4.1	-0.8	2.1	11.5	108.2	112.2
Pressed and blown glass	3221	6.8	102.4	101.5	105.6	102.7	101.3	106.1	4.0	-2.7	-1.4	4.7	4.5	108.7	100.6
Cement	3241	10.2	98.3	101.6	106.7	102.3	84.4	99.9	5.0	-4.1	-17.5	18.3	-1.7	102.2	101.9
Structural clay products	3251	1.5	100.0	101.2	101.9	100.8	100.7	100.7	.7	-1.1	-2.0	1.9	-0.5	100.7	101.2
Concrete products	3271	3.6	109.4	112.3	112.8	112.2	98.6	113.3	-4	-0.5	-3.2	4.3	.9	113.3	107.8
PRIMARY METALS	331	171.3	80.2	80.6	78.5	77.5	79.3	77.4	-2.7	-1.1	2.2	-2.3	-4.0	74.9	69.2
Basic steel and mill prod.	3311	65.7	74.6	74.8	73.2	72.7	75.7	74.9	-2.2	-0.6	4.1	-1.1	.0	73.9	68.5
Iron and steel foundries	3321	12.0	78.6	83.1	75.4	75.1	71.4	71.8	-9.2	-0.5	-4.9	.6	-13.5	71.7	60.0
Primary nonferrous metals	3331	78.1	89.2	82.7	93.0	88.8	82.9	85.8	12.4	-4.5	-6.7	3.5	3.7	83.9	81.1
Aluminum	3334	70.3	78.5	79.5	75.7	75.2	78.4	74.0	-4.7	-0.7	4.2	-5.6	-7.0	68.7	63.4
Nonferrous foundries	3361	2.1	115.4	118.3	113.9	110.7	116.2	115.5	-3.7	-2.7	4.9	-0.6	-2.4	115.6	106.3
FABRICATED METAL PRODUCTS	341	26.4	114.4	114.8	116.5	113.0	114.4	115.5	1.6	-3.0	1.2	1.0	.6	117.4	114.2
Metal cans	3411	2.2	112.3	112.4	120.0	112.1	111.7	122.3	6.7	-6.6	-0.3	9.5	8.8	125.7	121.2
Hardware	3421	2.3	102.7	103.3	102.6	101.0	100.2	102.9	-0.7	-1.6	-0.8	2.7	-0.4	107.2	104.7
Structural metal products	3441	.8	112.2	111.9	113.8	110.8	110.8	108.8	1.6	-2.6	.1	-1.8	-2.8	110.8	108.4
Fasteners	3451	1.6	102.7	105.0	102.2	97.3	103.7	103.9	-2.6	-4.8	6.6	.2	-1.0	105.8	106.5
Metal stampings	3461	6.2	113.2	115.0	111.2	112.5	116.7	112.0	-3.3	1.1	3.7	-4.0	-2.6	109.8	101.7
NONELECTRICAL MACHINERY	351	28.6	115.1	114.5	119.8	113.7	112.9	113.4	4.6	-5.1	-0.7	.4	-1.0	116.7	117.3
Engines and turbines	3511	2.4	70.2	69.5	70.8	64.6	63.1	62.3	1.9	-8.6	-2.3	-1.3	-10.3	64.9	63.1
Farm equipment	3521	2.1	57.6	60.0	55.8	52.1	54.4	50.1	-7.1	-6.6	4.4	-7.9	-16.5	51.0	49.6
Construction equipment	3531	5.1	86.4	84.7	89.3	86.1	81.0	77.9	5.4	-3.5	-5.9	-3.8	-8.0	82.0	79.2
Metalworking machinery	3541	3.8	110.5	108.9	114.3	110.1	114.5	113.9	5.0	-3.6	3.9	-0.5	4.6	117.4	115.5
Special industry machinery	3551	2.0	101.2	100.1	104.2	98.8	101.1	99.8	4.1	-5.2	2.3	-1.3	-0.3	98.4	101.0
General industrial mach.	3561	4.6	109.5	110.7	113.9	106.3	106.6	109.5	2.8	-6.6	.3	2.7	-1.1	110.3	111.6
Office and computing mach.	3571	2.8	203.4	201.9	218.0	202.6	197.3	191.9	8.0	-7.1	-2.6	-2.7	-4.9	200.9	212.9
Service industry machinery	3581	2.8	95.3	96.3	99.5	91.3	92.6	99.3	3.4	-8.3	1.4	7.2	3.1	103.8	112.8
ELECTRICAL MACHINERY	361	25.0	123.8	124.1	129.2	121.6	120.3	126.3	4.1	-5.8	-1.1	5.0	1.8	129.4	131.4
Elect. distribution equip.	3611	1.5	100.1	98.8	105.3	100.9	96.8	99.3	6.6	-4.2	-4.1	2.6	.5	105.3	98.6
Elect. indust. apparatus	3621	4.3	80.6	82.3	80.7	74.2	77.2	80.4	-1.9	-8.0	4.1	4.2	-2.2	80.3	82.5
Household appliances	3631	2.7	93.8	96.3	94.1	90.0	89.8	95.5	-2.3	-4.4	-0.3	6.4	-0.8	98.4	91.8
Lighting and wiring prod.	3641	2.3	100.2	100.1	99.6	99.6	101.0	101.2	-0.4	.0	1.3	.3	1.2	105.2	100.7
Radio and TV sets	3651	.9	115.7	113.4	124.5	113.7	116.4	116.1	9.8	-8.7	2.3	-0.2	2.4	123.0	120.2
Communication equipment	3661	4.6	166.1	165.7	180.4	164.3	158.4	165.0	8.8	-8.9	-3.6	4.2	-0.4	169.9	178.3
Electronic components	3671	6.0	168.3	167.6	176.1	168.4	167.3	178.5	5.1	-4.3	-0.7	6.7	6.5	180.1	191.8
TRANSPORTATION EQUIPMENT	371	31.4	110.5	111.4	115.1	109.3	110.7	113.4	3.4	-5.1	1.3	2.4	1.8	117.3	115.9
Motor vehicles and parts	3711	19.3	98.3	100.3	101.0	96.5	99.1	101.4	.7	-4.5	2.7	2.4	1.1	104.7	99.1
Aircraft and parts	3721	6.5	137.6	134.2	147.4	141.0	137.5	148.1	9.8	-4.3	-2.5	7.7	10.3	154.0	160.2
Ships and boats	3731	2.1	118.7	118.0	115.4	112.9	118.7	104.1	-2.2	-2.2	5.1	-12.3	-11.8	98.3	120.1
INSTRUMENTS	381	5.5	141.9	140.6	151.6	143.1	143.1	148.1	7.8	-5.6	.0	3.5	5.3	156.1	156.7
Copiers and related equip.	3861	1.4	123.9	122.6	126.6	127.7	132.8	133.9	3.3	.8	4.0	.9	9.2	144.2	138.8
MISCELLANEOUS MANUFACTURES	391	4.1	100.1	99.6	104.6	98.2	100.3	101.3	5.0	-6.1	2.0	1.0	1.7	102.8	101.3
SUPPLEMENTARY GROUPINGS															
TOTAL, LESS NUCLEAR NONDEFENSE		740.7	104.2	104.9	106.3	102.8	102.8	103.9	1.3	-3.3	.0	1.1	-1.0	105.9	102.6
UTILITY SALES TO INDUSTRY		715.7	101.4	103.4	103.0	99.1	98.7	100.2	-0.4	-3.7	-0.4	1.5	-3.1	101.9	98.9
INDUSTRIAL GENERATION		70.1	83.4	82.7	82.3	82.6	87.7	83.5	-0.5	.4	6.1	-4.8	1.0	86.5	83.5

## 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 revisions 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 sum-

mary 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 expressed 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

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

where  $q$  is quantity,  $p$  is Census value added per unit of output,  $t$  represents the  $t$ th 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.** *The Handbook of the Industrial Production Index* 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 *Handbook* is scheduled to be published in late 1986. Selected data on industrial production are also published monthly in the Financial and Business Statistics section of the *Federal Reserve Bulletin*.