



FEDERAL RESERVE

statistical release

G.12.3

For release at 9:30 a.m. (EST)
March 16, 1978

Industrial production increased by an estimated 0.5 per cent in February, following an 0.8 per cent decline in January. February output was restrained by severe weather in some regions of the country and by limitations on electric power use due to dwindling coal supplies in some states. These secondary effects of the coal strike are estimated to have reduced the February increase in total industrial production by roughly 0.2 percentage point. At 139.2 per cent of the 1967 average, the index is about the same as the average in the fourth quarter of 1977 and 4.5 per cent higher than in February 1977.

Products. Consumer durable goods output increased 2.7 per cent in February, but remained below the December level. Auto assemblies increased 3.8 per cent to an 8.2 million unit annual rate, after a very large drop in January. Production of home goods, such as appliances, carpeting, and furniture, recovered almost two-thirds of the January decline. Business equipment output, after a 0.5 per cent decline in January, advanced 0.9 per cent in February and is now 6 per cent above the pre-recession peak reached in the third quarter of 1974. Output of construction supplies continued to rise at a strong rate.

Materials. Output of materials was about unchanged in February. Increases in durable and nondurable materials production were offset by a decrease in production of energy materials of 1.8 per cent, mainly because of limitations on use of electric power for industrial purposes.

INDUSTRIAL PRODUCTION: SUMMARY (Seasonally Adjusted)

Indexes, 1967=100	1977		1978		Per cent changes		
	Nov.	Dec.	Jan. (p)	Feb. (e)	Month ago	Year ago	QIII to QIV
Total	139.3	139.6	138.5	139.2	.5	4.5	.7
Products, total	139.5	140.3	139.0	140.0	.7	4.8	.7
Final Products	137.0	137.7	135.8	136.9	.8	4.0	.4
Consumer Goods	145.2	145.8	142.5	144.0	1.1	2.5	.2
Durable Goods	155.2	156.4	147.0	150.9	2.7	3.3	.0
Nondurable Goods	141.2	141.6	140.6	141.3	.5	2.2	.4
Business Equipment	153.5	154.1	153.4	154.8	.9	7.9	1.3
Intermediate Products	148.4	150.0	150.9	151.7	.5	7.1	1.6
Construction Supplies	146.5	148.3	149.0	150.1	.7	10.7	3.2
Materials	139.0	138.6	137.7	137.8	.1	3.8	.5

p--preliminary e--estimated



FEDERAL RESERVE

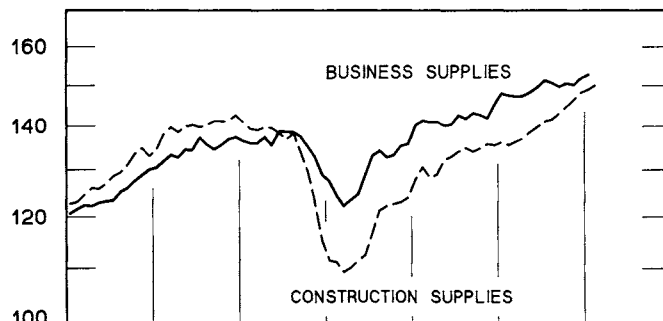
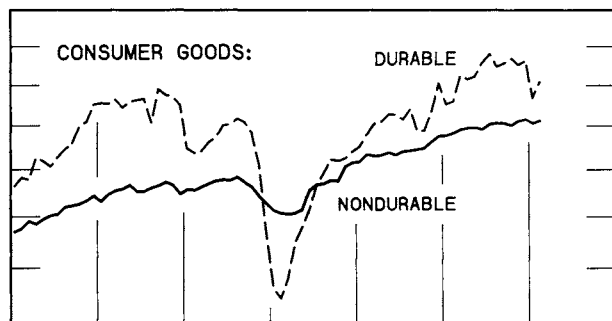
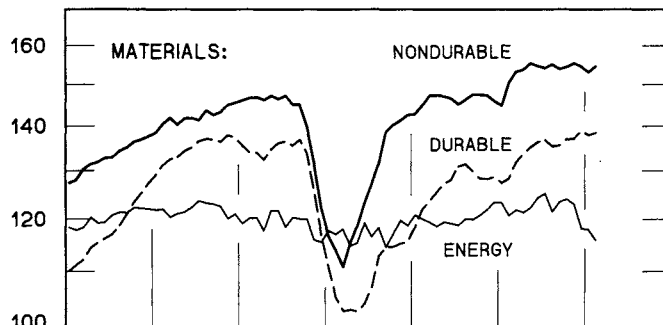
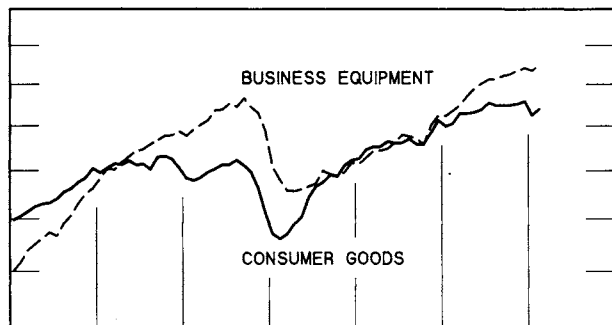
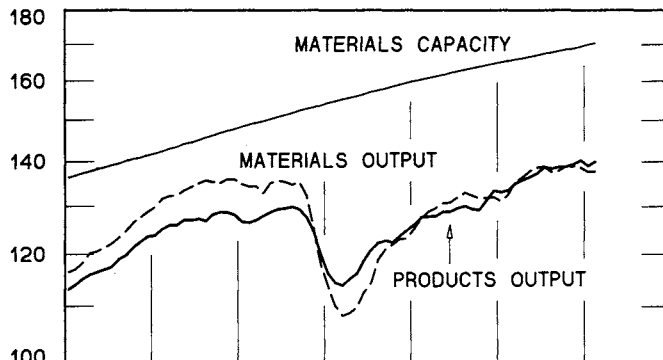
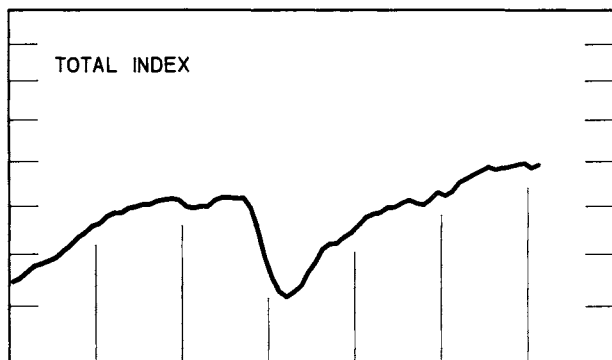
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INDUSTRIAL PRODUCTION

FEBRUARY DATA

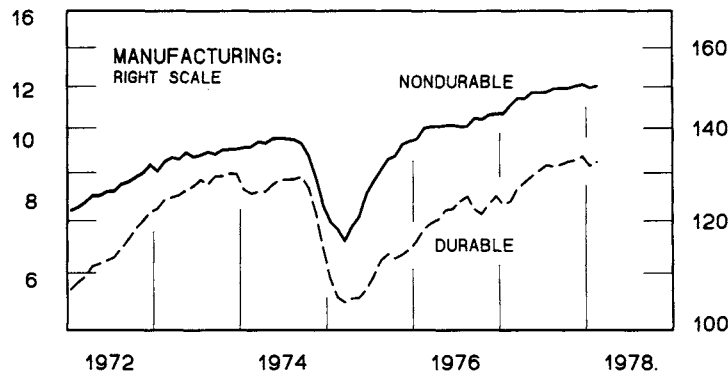
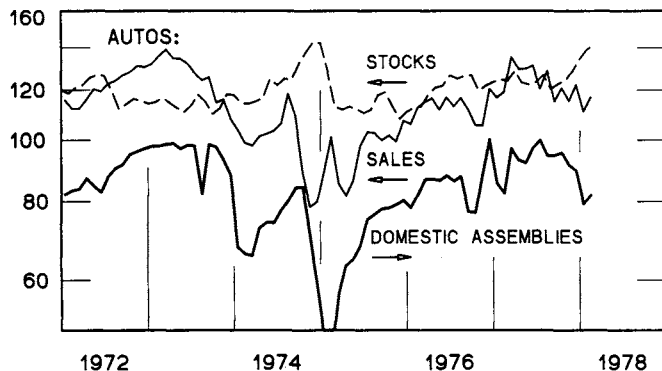
SEASONALLY ADJUSTED, RATIO SCALE, 1967=100



1969-70=100

ANNUAL RATE, MILLIONS OF UNITS

1967=100



AUTOS: SALES AND STOCKS INCLUDE IMPORTS

Table 5.
PRODUCTION BY INDUSTRY GROUPINGS

Not Seasonally Adjusted, 1967 = 100

MAJOR INDUSTRY GROUPINGS	SIC CODE	1967	1977												1978	
		PRD- PDR- TQDN	1977 AVG.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.
MINING AND UTILITIES																
MINING		12.05	136.1	138.1	135.0	132.4	132.6	136.9	140.6	138.8	137.3	134.1	132.9	134.1	137.3	135.6
UTILITIES		6.36	117.8	115.4	118.9	118.8	120.0	123.0	117.0	115.5	119.4	121.0	120.3	113.6	111.7	112.9
		5.69	156.4	163.4	152.9	147.7	146.7	152.3	166.9	164.5	157.2	148.7	146.9	156.9	165.7	160.9
MANUFACTURING																
NONDURABLE		87.95	137.1	132.8	135.7	136.5	137.8	141.9	133.2	138.2	142.8	144.1	140.3	134.8	133.9	139.7
DURABLE		35.97	148.1	143.2	146.0	146.3	147.8	152.8	144.1	154.1	156.2	155.8	151.0	142.6	142.7	148.1
		51.98	129.5	125.7	128.5	129.7	130.8	134.3	125.6	127.2	133.7	136.0	132.9	129.3	127.9	134.0
MINING																
METAL MINING	10	.51	105.4	121.4	126.3	124.8	130.4	132.2	99.4	74.1	77.4	82.1	82.1	97.3	109.4	
COAL	11,12	.69	118.0	106.0	130.4	125.4	127.8	133.4	104.8	112.4	137.4	141.3	137.4	67.6	53.3	59.4
OIL AND GAS EXTRACTION	13	4.40	118.0	116.5	116.1	116.0	116.4	119.6	119.5	118.8	119.7	120.2	120.0	120.5	120.1	120.5
STONE AND EARTH MINERALS	14	.75	124.9	113.3	119.8	124.7	126.8	127.0	125.4	127.5	129.9	133.6	132.4	126.7	117.7	
NONDURABLE MANUFACTURES																
FOODS	20	8.75	137.9	131.3	134.7	134.0	134.6	139.8	136.4	144.2	148.1	146.4	141.6	135.0	133.9	
TOBACCO PRODUCTS	21	.67	114.0	122.9	105.2	108.5	105.2	123.6	98.2	125.3	120.1	126.2	120.2	95.4		
TEXTILE MILL PRODUCTS	22	2.68	137.1	132.6	138.1	137.4	139.5	141.3	120.9	142.2	143.7	148.3	141.5	132.4	131.0	
APPAREL PRODUCTS	23	3.31	124.2	128.6	127.0	124.4	121.4	127.8	109.3	131.5	136.3	135.6	120.9	110.0		
PAPER AND PRODUCTS	26	3.21	137.3	140.5	140.4	140.5	142.2	142.5	127.9	140.2	137.4	143.0	138.5	125.6	134.3	142.6
PRINTING AND PUBLISHING	27	4.72	124.7	113.8	116.7	118.1	122.2	128.8	130.5	136.3	136.3	132.6	128.0	121.1	115.6	120.4
CHEMICALS AND PRODUCTS	28	7.74	180.6	170.7	178.2	181.5	184.3	189.2	183.2	185.7	187.5	185.9	182.9	175.0	173.4	
PETROLEUM PRODUCTS	29	1.79	141.0	140.1	136.6	137.2	139.3	143.1	145.0	145.5	145.0	141.8	143.5	138.5	135.8	133.2
RUBBER & PLASTICS PRODUCTS	30	2.24	132.2	129.3	233.0	229.2	231.7	239.4	213.9	233.6	242.4	243.1	244.0	235.1	232.8	
LEATHER AND PRODUCTS	31	.86	75.2	77.9	77.0	76.0	75.9	77.1	64.2	76.3	76.0	79.9	77.2	71.1	73.7	
DURABLE MANUFACTURES																
ORDNANCE, PVT & GOVT	19,91	3.64	74.1	73.0	73.4	74.6	74.7	74.9	74.2	73.9	74.3	73.4	73.7	75.6	75.1	74.0
LUMBER AND PRODUCTS	24	1.64	133.4	131.8	133.2	134.1	134.9	135.9	130.0	136.3	139.8	140.9	131.2	130.0	128.3	
FURNITURE AND FIXTURES	25	1.37	140.9	142.6	138.7	136.8	135.4	141.0	127.4	144.0	148.5	148.2	148.2	146.5	144.1	
CLAY, GLASS, STONE PROD	32	2.74	146.1	133.0	141.3	145.7	147.5	153.6	147.9	154.3	150.3	155.1	153.9	144.2	139.0	
PRIMARY METALS	33	6.57	110.2	105.4	116.5	120.9	124.1	120.4	103.2	104.1	105.0	112.3	106.1	103.8	106.6	112.2
IRON AND STEEL	33,1,2	4.21	103.4	96.2	105.9	113.3	118.6	113.2	102.0	101.6	99.4	105.8	98.0	96.5	99.8	
FABRICATED METAL PROD	34	5.93	130.9	128.3	129.3	127.9	128.7	132.0	126.8	131.7	135.2	137.0	137.2	134.6	132.8	139.9
NONELECTRICAL MACHINERY	35	9.15	144.8	141.2	139.7	142.0	141.6	147.7	144.1	145.2	153.3	151.7	150.2	146.2	145.2	153.0
ELECTRICAL MACHINERY	36	8.05	141.9	138.0	138.2	138.6	140.9	145.0	136.1	141.7	148.8	150.3	148.3	144.6	141.8	148.1
TRANSPORTATION EQUIP	37	9.27	121.1	117.3	124.4	123.8	125.3	130.8	115.4	107.4	123.9	130.1	123.1	117.3	116.3	122.6
MOTOR VEHICLES & PTS	37,1	4.50	159.6	153.3	168.0	164.9	167.3	177.4	148.5	132.0	161.8	179.2	164.0	150.4	148.4	161.2
AEROSPACE & MISC	37,2-9	4.77	84.7	83.3	83.3	85.1	85.6	86.9	84.2	84.2	88.2	83.9	84.6	86.2	86.1	86.2
INSTRUMENTS	38	2.11	159.1	155.0	154.4	154.8	156.5	161.2	158.0	159.6	165.0	165.0	165.4	164.5	158.0	162.4
MISCELLANEOUS MFRS	39	1.51	149.1	145.8	144.7	144.3	145.5	150.6	146.0	154.0	161.6	158.7	154.2	146.4	142.0	151.2
UTILITIES																
ELECTRIC		3.88		180.0												

Table 9.

**GROSS VALUES IN BILLIONS OF 1972
DOLLARS, ANNUAL RATES, BY QUARTER**

SUMMARY GROUPINGS	1976		1977				1976		1977			
	III	IV	I	II	III	IV	III	IV	I	II	III	IV
TOTAL INDEX	130.9	131.6	133.6	137.0	138.4	139.3	552.1	559.3	570.8	582.1	590.3	592.3
PRODUCTS, TOTAL	129.7	131.3	133.9	136.5	138.6	139.6	426.1	432.7	442.2	451.1	457.2	457.9
FINAL PRODUCTS	127.4	129.2	131.9	134.7	136.6	137.1	301.4	307.3	312.6	317.1	320.2	320.0
CONSUMER GOODS	136.3	138.5	141.1	143.3	145.0	145.3	86.4	88.7	90.9	94.7	97.0	96.1
DURABLE CONSUMER GOODS	141.5	144.4	148.0	153.2	156.1	156.1	43.9	46.4	48.1	50.5	51.6	50.0
AUTOMOTIVE PRODUCTS	153.6	162.7	168.1	175.5	179.7	175.6	42.6	42.4	42.8	44.1	45.4	46.0
HOME GOODS	134.6	134.0	136.7	140.6	142.9	145.2	215.0	218.6	221.7	222.4	223.3	223.9
NONDURABLE CONSUMER GOODS	134.2	136.2	138.4	139.3	140.5	141.0	31.2	32.0	31.8	32.6	32.3	32.9
CLOTHING	121.9	123.5	123.7	125.2	126.3	127.1	183.8	186.6	189.9	190.0	191.0	191.1
CONSUMER STAPLES	137.6	139.7	142.4	143.3	144.5	144.9	42.2	43.2	45.4	44.4	44.1	43.7
CONSUMER ENERGY (HOME GOODS AND CLOTHING)	143.4	147.9	155.6	151.2	150.8	149.8	73.7	74.4	74.6	76.7	77.7	78.8
EQUIPMENT	115.2	116.3	119.2	123.1	125.1	125.8	124.7	125.4	129.6	134.0	136.9	137.9
BUSINESS EQUIPMENT	137.5	139.4	143.5	148.7	151.5	153.4	92.0	92.8	96.7	100.5	103.0	104.7
INDUSTRIAL EQUIPMENT	128.8	131.0	133.0	138.2	140.8	142.6	42.2	42.9	43.3	44.9	45.8	46.4
COMMERCIAL, TRANSIT, FARM EQ.	147.7	149.1	155.7	160.9	163.7	165.8	49.9	49.9	53.4	55.6	57.3	58.3
DEFENSE AND SPACE EQUIPMENT	77.9	77.6	78.3	80.1	80.7	79.5	32.7	32.6	32.9	33.6	33.9	33.2
INTERMEDIATE PRODUCTS	138.5	139.4	141.9	143.5	146.3	148.7	126.1	126.5	128.6	131.1	133.1	134.5
CONSTRUCTION SUPPLIES	134.4	135.4	136.1	138.6	142.0	146.6	56.7	58.5	58.8	60.5	62.1	63.2
BUSINESS SUPPLIES	142.6	143.3	147.6	148.5	150.5	150.8	67.3	68.0	69.8	70.6	71.1	71.4
COMMERCIAL ENERGY PRODUCTS	158.1	158.1	164.5	164.9	165.3	162.0	17.4	17.2	18.0	18.1	18.2	17.7
MATERIALS	132.5	131.9	133.1	137.7	138.1	138.8						
DURABLE GOODS MATERIALS	130.8	128.4	129.2	135.1	136.0	137.7						
BASIC METAL MATERIALS	117.4	107.4	108.6	116.4	109.4	109.4						
NONDURABLE GOODS MATERIALS	146.3	146.9	149.5	154.6	154.4	154.8						
TEXTILE, PAPER AND CHEMICAL MAT	150.8	151.4	153.9	159.9	159.2	159.2						
TEXTILE MATERIALS	115.1	112.1	111.3	110.9	112.3	118.2						
PAPER MATERIALS	130.8	130.2	131.7	134.3	135.1	132.0						
CHEMICAL MATERIALS	174.4	177.3	181.6	191.8	189.5	188.2						
ENERGY MATERIALS	119.6	122.0	122.0	122.6	123.4	121.7						
MANUFACTURING	130.8	131.2	133.1	136.9	138.7	139.9						
DURABLE	123.8	123.3	124.7	129.3	131.5	132.9						
NONDURABLE	141.0	142.7	145.2	148.0	149.2	150.1						
MINING AND UTILITIES	131.1	133.9	136.9	137.2	136.3	134.9						
MINING	114.1	115.6	116.6	120.5	117.7	117.2						
UTILITIES	150.0	154.4	159.6	155.8	157.1	154.6						

Table 10.

GROSS VALUES IN BILLIONS OF 1972 DOLLARS, ANNUAL RATES, BY MONTH

MAJOR MARKET GROUPINGS	1972		1977												1978	
	DOLLS.	LARS	AVG.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.
PRODUCTS, TOTAL	507.4	583.9	569.4	578.2	578.3	582.2	585.9	590.5	590.2	590.1	591.3	591.3	591.3	594.2	584.4	592.9
FINAL PRODUCTS	390.9	452.1	441.1	449.0	446.5	451.0	453.7	457.8	456.9	456.8	457.8	457.3	458.6	448.4	454.8	
CONSUMER GOODS	277.5	317.5	312.2	316.8	316.1	316.3	318.9	321.5	320.0	319.1	319.5	320.0	320.5	312.3	316.9	
DURABLE CONSUMER GOODS	82.0	94.6	89.2	94.7	93.6	94.0	96.4	98.7	96.2	96.0	97.1	95.5	95.6	89.1	91.8	
AUTOMOTIVE PRODUCTS	41.1	50.0	46.0	51.6	50.2	49.6	51.7	53.4	50.7	50.6	51.5	49.4	49.2	44.2	46.0	
HOME GOODS	40.9	44.6	43.1	43.1	43.4	44.3	44.6	45.3	45.4	45.5	45.5	46.1	46.4	44.8	45.8	
NONDURABLE CONSUMER GDS	195.5	222.8	223.0	222.0	222.3	222.5	222.5	222.7	224.1	223.1	222.4	224.4	224.8	223.5	224.9	
CLOTHING	28.5	32.4	32.2	31.6	32.0	33.1	32.6	31.6	32.5	32.9	33.3	32.3	33.0			
CONSUMER STAPLES	167.0	190.5	190.9	190.4	190.4	189.6	190.0	191.0	191.5	190.3	189.2	192.1	191.9	191.7	192.5	
CONSUMER ENERGY PROD (HOME GOODS & CLOTHING)	39.2	44.4	46.1	44.8	44.9	44.3	44.1	45.1	43.7	43.6	43.5	44.0	43.6	44.1	44.1	
(HOME GOODS & CLOTHING)	69.4	77.0	75.2	74.7	75.4	77.4	77.3	76.9	77.9	78.3	78.9	78.4	79.3	76.6	78.2	
EQUIPMENT	113.4	134.6	128.9	132.1	132.6	134.6	134.9	136.2	137.0	137.6	138.1	137.3	138.4	135.9	137.9	
BUSINESS EQUIPMENT	80.6	101.2	95.8	99.1	99.2	101.1	101.2	102.5	103.1	103.6	105.1	104.1	104.9	101.7	104.2	
INDUSTRIAL EQUIPMENT	34.4	45.1	43.4	44.0	44.1	45.2	45.5	45.8	45.6	46.0	46.4	46.4	46.8	46.8	47.2	
COM'L, TRANSIT, FARM EQ	46.2	56.1	52.4	55.2	55.1	55.8	55.8	56.7	57.4	57.6	59.1	57.8	58.1	54.9	57.0	
DEFENSE & SPACE EQUIP.	32.7	33.4	33.0	33.0	33.5	33.6	33.7	33.8	33.9	34.0	33.0	33.2	33.6	34.2	33.8	
INTERMEDIATE PRODUCTS	116.6	131.8	128.4	129.1	130.1	131.4	131.8	132.8	133.1	133.5	133.8	134.1	135.6	136.2	137.9	
CONSTRUCTION SUPPLIES	57.8	61.1	58.7	59.2	60.1	60.4	61.0	61.7	62.2	62.3	62.8	62.8	63.8	64.2	65.0	
BUSINESS SUPPLIES	58.8	70.7	69.7	69.9	70.0	70.9	70.8	71.1	70.9	71.2	71.0	71.3	71.8	72.1		
COMMERCIAL ENERGY PROD	15.6	18.0	18.1	18.0	18.0	18.3	18.0	18.5	18.1	17.9	17.6	17.6	17.7	17.5		

Explanatory Note

Coverage. The industrial production index is a measure of the physical output of the Nation's factories, mines, and electric and gas utilities expressed as a percentage of production in a base period, currently 1967. The 235 individual series representing Standard Industrial Classification (SIC), 1967 edition, codes 10-14, 19-39, 49, and 91 (part) are calculated first as index series relatives. These relatives are aggregated into: (1) market groupings (such as consumer goods, equipment, intermediate products, and materials) from which the total is derived and (2) industry groupings (for example, SIC 2-digit industries) and major aggregates of these groupings, such as manufacturing, mining, and utilities.

Timing. A first estimate of output for a month is published about the 15th of the following month. This estimate may revise in each of the next 3 months as new data become available. After the fourth month, indexes are not further revised until an annual or a benchmark revision.

Source data. The monthly indexes of industrial production are built up from data of two types: (1) directly-measured physical product data, (2) estimates of physical product output derived from input data adjusted by conversion factors that relate these inputs to physical output. The directly measured physical product data (lbs., tons, etc.) are obtained from reports of the Bureau of the Census, Bureau of Mines, other Government agencies, and trade associations. Estimates of physical output based on input data are used when appropriate monthly physical product data are not available. The major input data are (1) hours worked by production workers as indicated by the monthly establishment survey of the Bureau of Labor Statistics, and (2) industrial electric power use as ascertained from utilities by the Federal Reserve Banks. The input conversion estimates are based mainly on their historical trends and recent developments.

Seasonal adjustment. Individual series are seasonally adjusted by the X-11 version of the Method II seasonal adjustment procedure developed by the Bureau of the Census. The seasonal adjustment factors for the basic aggregate series in the summary table and in Tables 1 and 3 are reviewed and edited monthly. The seasonal factors currently being used were developed from data only through 1974 in order to diminish the effect of the subsequent sharp recession and recovery on the seasonal factors.

Weights. The total index and various groupings of component series are combined on the basis of 1967 value-added weights (shown in the first column of the index tables). The gross-value-weighted product series are expressed in terms of 1972 dollars.

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

$$I_t = \sum \left(\frac{q_{67} p_{67}}{\sum q_{67} p_{67}} \right) \cdot \left(\frac{q_t}{q_{67}} \right) \cdot 100 = \frac{\sum q_t p_{67}}{\sum q_{67} p_{67}} \cdot 100$$

where q is quantity, p is Census value-added per unit of output, and t represents the t -th period.

Reliability. The median of the revisions in total IP, without regard to sign, between the first and fourth estimates is 0.25 per cent; that is, in about half of the cases, the absolute value of the revision from the first to the fourth estimate was less than 0.25 per cent. (Calculated on the basis of data for the August 1971 to July 1976 period.)

Rounding. Changes shown for index components may not aggregate to changes for totals due to independent rounding.