FEDERAL RESERVE statistical release



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Percent change

INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION

Industrial production increased 0.2 percent in June after having edged down 0.1 percent in May. For the second quarter as a whole, total industrial production increased at an annual rate of 0.8 percent. Manufacturing output was unchanged in June. In the second quarter, supply chain disruptions following the earthquake in Japan

(over)

Industrial Production and Capacity Utilization: Summary

Seasonally adjusted

	2011						2011						June '10 to
Industrial production	Jan. ^r	Feb.r	Mar. ^r	Apr.r	May	June ^p	Jan. ^r	Feb. ^r	Mar. ^r	Apr. ^r	May	June ^p	June '11
Total index	92.8	92.5	93.1	93.0	92.9	93.1	.2	3	.7	1	1	.2	3.4
Previous estimates	92.7	92.4	92.9	92.9	93.0		.1	3	.6	.0	.1		
361													
Major market groups		0.4.0			0.4.4								
Final Products	94.6	94.3	94.5	94.4	94.6	94.4	.8	3	.2	.0	.1	2	3.1
Consumer goods	93.7	93.0	93.3	93.2	93.0	93.0	.4	7	.3	1	3	.0	1.4
Business equipment	94.1	94.8	94.5	94.3	95.4	94.7	1.9	.8	3	3	1.2	7	7.7
Nonindustrial supplies	83.2	83.0	83.7	83.6	83.5	83.7	1	3	.8	1	1	.2	1.4
Construction	74.9	74.5	75.3	75.4	76.3	76.5	.7	6	1.2	.1	1.1	.3	4.0
Materials	94.5	94.1	95.1	94.9	94.6	95.1	2	4	1.1	2	3	.5	4.3
Main a industrial													
Major industry groups	00.4	00.5	00.1	00.7	00.7	00.0	_			-	1	0	2.7
Manufacturing (see note below)	89.4	89.5	90.1	89.7	89.7	89.8	.7	.1	.6	5	.1	.0	3.7
Previous estimates	89.3	89.4	89.9	89.4	89.8	1060	.6	.1	.6	5	.4	_	
Mining	104.0	102.6	104.4	104.7	105.4	106.0	6	-1.3	1.7	.3	.7	.5	6.1
Utilities	103.4	101.0	100.7	102.0	100.0	100.9	-1.7	-2.3	3	1.4	-2.0	.9	-1.5
													C
					Darga	nt of capa	oitu						Capacity growth
	Average	1988-	1990-	1994-	2008-	Tit of capa	acity						grown
	1972-	89	91	95	09	2010	2011						June '10 to
Capacity utilization	2010	high	low	high	low	June	Jan.	Feb. ^r	Mar. ^r	Apr. ^r	May	June ^p	June '11
Capacity utilization	2010	mgn	10 W	mgn	10 W	June	Jan.	1 00.	iviai.	ripi.	iviay	June	Julie 11
Total industry	80.4	85.2	78.8	85.1	67.3	74.5	76.9	76.6	77.0	76.8	76.7	76.7	.4
Previous estimates	00.1	03.2	70.0	05.1	07.5	, 1.5	76.8	76.5	76.8	76.7	76.7	70.7	
1 Tevrous estimates							70.0	70.5	70.0	70.7	70.7		
Manufacturing (see note below)	79.0	85.5	77.3	84.7	64.4	71.7	74.3	74.4	74.8	74.4	74.4	74.4	.0
Previous estimates	, , ,	05.5	77.5	0 1.7	0	, 1.,	74.2	74.3	74.7	74.2	74.5	,	.0
Mining	87.4	86.3	83.8	88.5	79.0	85.2	88.2	86.8	88.1	88.2	88.6	88.9	1.7
Utilities	86.6	92.9	84.3	93.3	79.2	83.2	82.1	80.0	79.6	80.6	78.8	79.5	3.2
Ctifics	00.0)2.)	04.5	75.5	17.2	03.2	02.1	00.0	77.0	00.0	70.0	17.5	3.2
Stage-of-process groups													
Crude	86.4	87.7	84.3	89.6	77.6	84.5	87.2	86.2	87.3	87.1	87.0	87.2	1.4
Primary and semifinished	81.3	86.5	77.9	87.9	64.9	72.3	74.3	73.7	74.1	73.9	73.7	74.1	4
,													
Finished	77.3	83.3	77.4	80.7	66.8	73.1	75.7	75.9	76.1	75.9	75.8	75.4	1.2

r Revised. p Preliminary.

Note. The statistics in this release cover output, capacity, and capacity utilization in the U.S. industrial sector, which is defined by the Federal Reserve to comprise manufacturing, mining, and electric and gas utilities. Mining is defined as all industries in sector 21 of the North American Industry Classification System (NAICS); electric and gas utilities are those in NAICS sectors 2211 and 2212. Manufacturing comprises NAICS manufacturing industries (sector 31-33) plus the logging industry and the newspaper, periodical, book, and directory publishing industries. Logging and publishing are classified elsewhere in NAICS (under agriculture and information respectively), but historically they were considered to be manufacturing and were included in the industrial sector under the Standard Industrial Classification (SIC) system. In December 2002 the Federal Reserve reclassified all its industrial output data from the SIC system to NAICS.

curtailed the production of motor vehicles and parts and restrained output in related industries; the production index for overall manufacturing was little changed for the quarter. The output of mines rose 0.5 percent in June, while the output of utilities climbed 0.9 percent. At 93.1 percent of its 2007 average, total industrial production in June was 3.4 percent above its year-earlier level. The capacity utilization rate for total industry remained unchanged at 76.7 percent in June, a rate 2.2 percentage points above the rate from a year earlier but 3.7 percentage points below its average from 1972 to 2010.

Market Groups

Production recorded a mix of gains and losses across the major market groups in June. Output for the second quarter as a whole moved up in most of the major market groups, although the production of consumer goods decreased at an annual rate of 1.2 percent. Declines in the output of consumer goods occurred for both durables and nondurables. In June, the production of consumer goods was unchanged, with a decline of 0.5 percent in durables offsetting an increase of 0.2 percent in nondurables. Among consumer durables, lower production of automotive products; appliances, furniture, and carpeting; and miscellaneous goods more than offset a small gain in home electronics. Within consumer nondurables, the output of non-energy nondurables was unchanged; increased output of chemical products was offset by declines elsewhere. The index for consumer energy products moved up 0.8 percent, with gains in the indexes for fuels and for residential utilities.

The production of business equipment declined 0.7 percent in June, with transit equipment and information processing equipment recording decreases of 1.9 percent and 1.4 percent, respectively, and industrial and other equipment being little changed. The output of business equipment increased at an annual rate of only 1.2 percent in the second quarter after gains averaging more than 12 percent over the previous five quarters. An increase of 7.0 percent in the production of transit equipment accounted for most of the rise in business equipment in the second quarter; the output of information processing equipment fell, and the output of industrial and other equipment was little changed.

In June, the index for defense and space equipment decreased 1.4 percent after having registered gains in each of the previous five months.

The output of construction supplies increased for the fourth consecutive month in June and climbed at an annual rate of 6.4 percent in the second quarter. The production of business supplies rose in June after having declined in both April and May and was little changed for the second quarter as a whole.

The output of materials to be further processed in the industrial sector increased 0.5 percent in June. The output of durable materials rose 0.7 percent. The indexes for all of its major categories advanced; the largest gain was an increase of 1.7 percent for consumer parts following two consecutive monthly declines. The index for nondurable materials edged down in June, while gains in both oil production and electricity generation helped boost the index for energy materials 0.8 percent. For the second quarter, materials output increased at an annual rate of 1.3 percent. The production of durable materials rose 1.1 percent, with gains in equipment parts and other durable materials more than offsetting a sizable decline in consumer parts. The output of nondurable materials moved down 3.9 percent; declines in chemical materials and paper materials more than offset a large increase for textile materials. The index for energy materials rose 5.2 percent.

Industry Groups

Manufacturing output was unchanged in June. For the second quarter as a whole, the manufacturing index edged up at an annual rate of 0.2 percent, a notably smaller gain than in any quarter since the recession ended in the second quarter of 2009. Capacity utilization for manufacturing was unchanged in June at

74.4 percent, a rate about 10 percentage points above its trough in June 2009 but 4.6 percentage points below its average from 1972 to 2010.

The production index for durable goods manufacturing was unchanged in June. Among its major categories, the largest increases were for primary metals and fabricated metal products, whereas the most significant decreases were for furniture and related products, motor vehicles and parts, and wood products. For the second quarter, durable manufacturing rose at an annual rate of 1.4 percent. Robust gains were recorded in aerospace and miscellaneous transportation equipment, nonmetallic mineral products, and fabricated metal products. However, these gains were mostly offset by a large drop for motor vehicles and parts along with decreases for electrical equipment, appliances, and components and for wood products.

The index for nondurable manufacturing increased 0.1 percent in June; higher output of textile and product mills, petroleum and coal products, and chemicals slightly more than offset lower output in other nondurable categories. For the second quarter, nondurables output decreased at an annual rate of 0.2 percent. Production in the non-NAICS manufacturing industries (logging and publishing) decreased 0.5 percent in June and dropped at an annual rate of 9.4 percent for the second quarter as a whole.

In June, the production index for utilities increased 0.9 percent; its operating rate rose to 79.5 percent, but that rate remained 7.1 percentage points below its 1972–2010 average. Mining output increased for the fourth consecutive month in June and rose at an annual rate of 6.7 percent for the second quarter, primarily as a result of gains in natural gas extraction. Capacity utilization in mining climbed to 88.9 percent in June, a rate 1.5 percentage points above its average from 1972 to 2010.

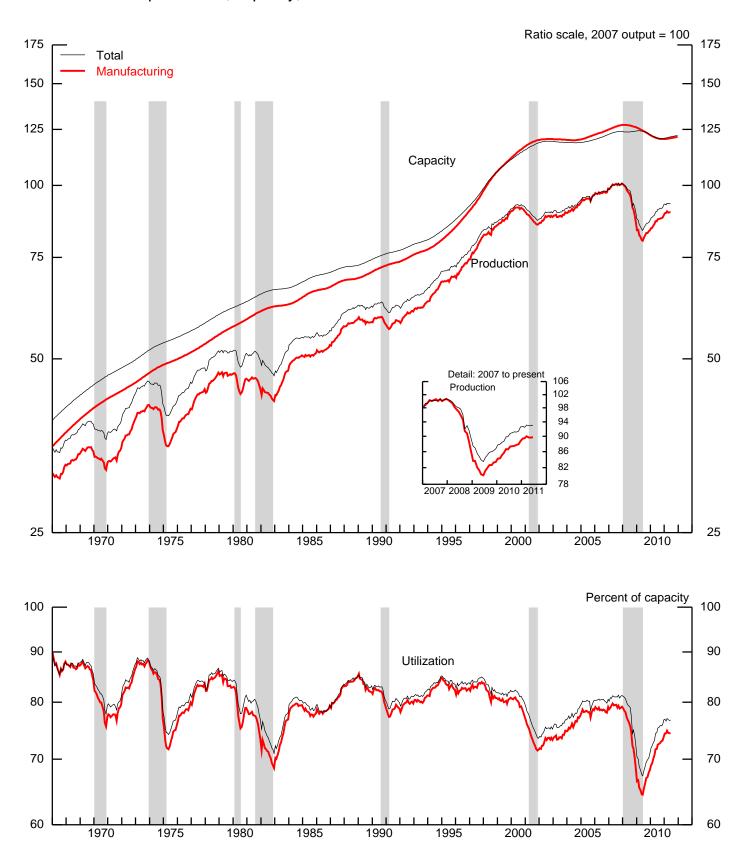
Capacity utilization rates in June at industries grouped by stage of process were as follows: At the crude stage, utilization increased 0.2 percentage point to 87.2 percent, a rate 0.8 percentage point above its long-run (1972–2010) average; at the primary and semifinished stages, utilization rose 0.4 percentage point to 74.1 percent, a rate 7.2 percentage points below its long-run average; and at the finished stage, utilization decreased 0.4 percentage point to 75.4 percent, a rate 1.9 percentage points below its long-run average.

Tables

- 1. Industrial Production: Market and Industry Group Summary; percent change
- 2. Industrial Production: Special Aggregates and Selected Detail; percent change
- 3. Motor Vehicle Assemblies
- 4. Industrial Production: Market and Industry Group Summary; indexes
- 5. Industrial Production: Special Aggregates and Selected Detail; indexes
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- 9. Gross Value of Products and Nonindustrial Supplies
- 10. Gross-Value-Weighted Industrial Production: Stage-of-Process Groups
- 11. Historical Statistics: Total Industry
- 12. Historical Statistics: Manufacturing
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- 14. Historical Statistics: Manufacturing Excluding Selected High-Technology Industries

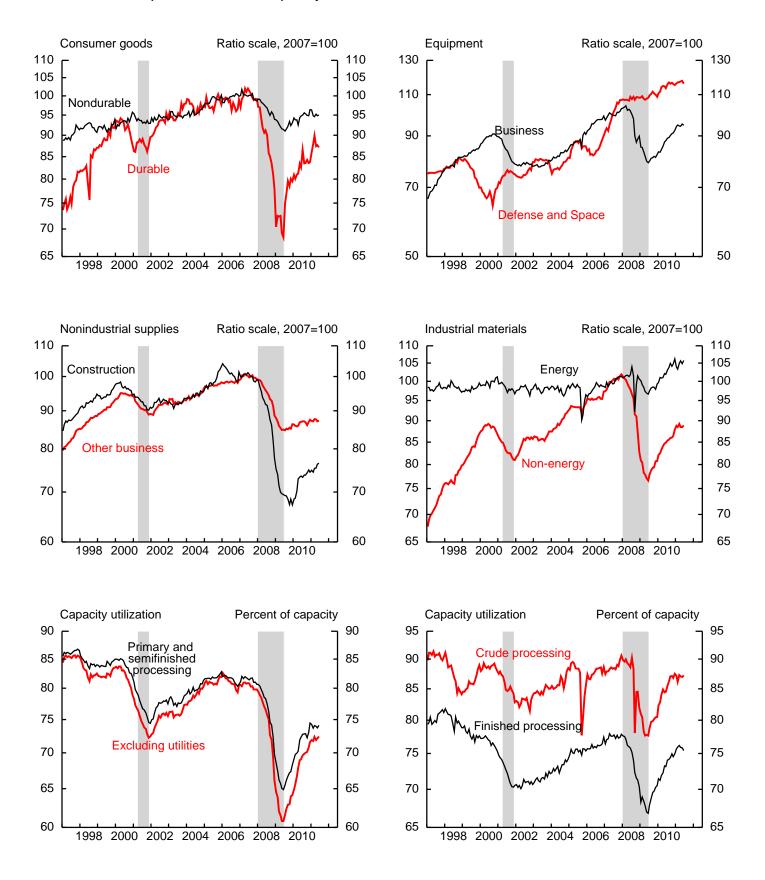
Further detail is available on the Board's website (www.federalreserve.gov/releases/G17/).

1. Industrial production, capacity, and utilization

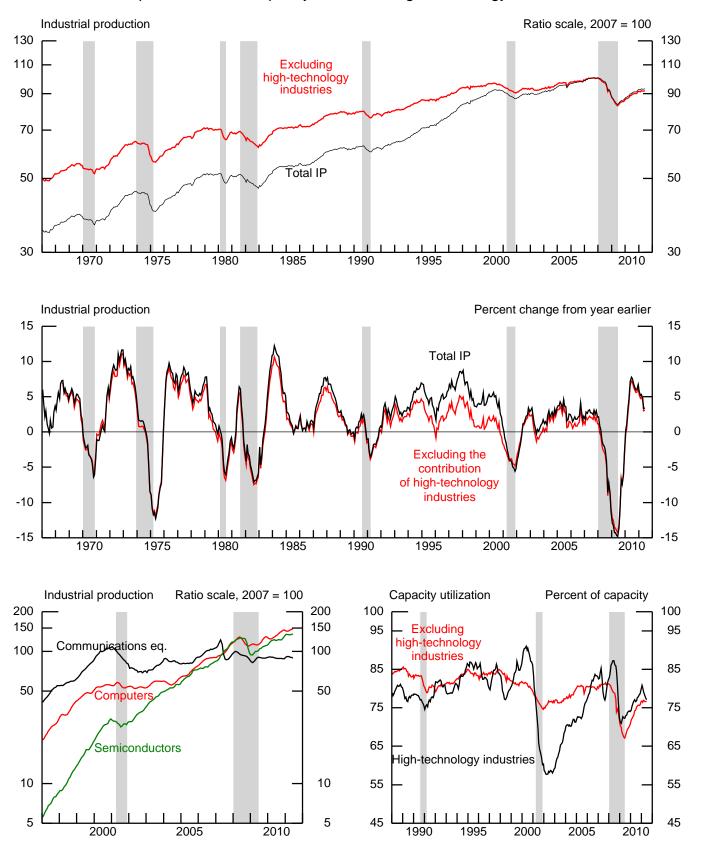


Note: The shaded areas are periods of business recession as defined by the National Bureau of Economic Research (NBER).

2. Industrial production and capacity utilization



3. Industrial production and capacity utilization, high-technology industries



Notes: High-technology industries are defined as semiconductors and related electronic components (NAICS 334412-9), computers (NAICS 3341), and communications equipment (NAICS 3342).

The shaded areas are periods of business recession as defined by the NBER.

Table 1 INDUSTRIAL PRODUCTION: MARKET AND INDUSTRY GROUP SUMMARY

Percent change, seasonally adjusted

Percent change, seasonally adjusted			1	th quarte		Δ	nnual rat	te.			Month	nly rate			June '10
Item		2010				2010	2011		2011			-			to
		proportion ¹	2008	2009	2010	Q4	Q1 ^r	Q2 ^p	Jan. ^r	Feb. ^r	Mar. ^r	Apr. ^r	May ^r	June ^p	June '11
Total IP		100.00	-9.1	-5.5	6.2	3.1	4.8	.8	.2	3	.7	1	1	.2	3.4
MARKET GROUPS															
Final products and nonindustrial supplied	es	55.24	-9.1	-5.5	5.3	1.6	5.0	.4	.6	3	.3	1	.1	1	2.7
Consumer goods		29.07	-7.5	-2.1	3.3	4	3.6	-1.2	.4	7	.3	1	3	.0	1.4
Durable		6.17	-18.5	-1.7	5.6	-3.1	21.0	-2.4	2.5	2.4	2.2	-2.8	.2	5	5.5
Automotive products		3.26	-22.2	9.1	6.1	-7.0	30.3	-5.8	4.4	2.9	3.1	-3.9	4	6	7.5
Home electronics		.23	-6.5	2.5	-6.8	-13.8	-10.8	4.2	-1.1	9	.1	.4	1.3	.2	-5.1
Appliances, furniture, carpeting		.82	-22.2	-15.0	3.2	1.1	11.4	.5	4	3.4	4.7	-4.1	.5	5	2.1
Miscellaneous goods		1.85	-12.7	-12.1	7.6	3.7	13.8	2.0	1.1	1.5	2	4	1.1	6	5.0
Nondurable		22.91 16.98	-3.9 -5.7	-2.2 -2.8	2.6 2.2	2.7	7 5	8 1.0	2 .3	-1.5 7	2 .0	.7 .8	4 4	.2	.3 1.0
Non-energy Foods and tobacco		9.43	-4.1	-1.2	4.8	2.7	6	-1.0	.6	7	3	.8	4	1	.6
Clothing		.21	-12.3	-23.8	7.6	7.2	4	-4.9	3	6	-3.4	1.2	.0	1	.1
Chemical products		5.26	-7.3	-3.5	6	3.1	1.1	6.7	2	4	-3.4	1.1	.0	9	2.5
Paper products		1.56	-7.3	-5.7	-3.2	1.9	-5.9	-7.0	2	-2.3	-1.0	6	.6	3	-3.3
Energy		5.92	1.9	-5.7	3.9	-6.0	-1.2	-6.0	-1.4	-3.6	-1.0	.3	4	3	-3.3
Energy		3.72	1.7	.1	3.7	-0.0	-1.2	-0.0	-1.4	-3.0	,	.5		.0	-1.7
Business equipment		9.06	-12.9	-7.9	12.2	9.5	13.4	1.2	1.9	.8	3	3	1.2	7	7.7
Transit		1.88	-35.4	11.9	10.5	-3.2	16.8	7.0	2.0	3.1	1.8	-1.0	1.7	-1.9	9.7
Information processing		2.51	-3.7	1.3	11.3	11.3	10.4	9	1.3	.7	.3	6	.5	-1.4	6.9
Industrial and other		4.67	-8.4	-18.0	13.3	14.1	13.7	.1	2.2	1	-1.6	.2	1.3	.1	7.3
Defense and space equipment		2.36	1.9	1.2	5.5	-1.0	2.5	1.4	.8	.4	.2	.4	.2	-1.4	2.1
Construction supplies		4.08	-17.0	-17.3	10.1	5.0	1.9	6.4	.7	6	1.2	.1	1.1	.3	4.0
Business supplies		10.06	-8.7	-5.8	1.4	9	2.4	3	4	1	.7	2	6	.2	.3
Materials		44.76	-9.1	-5.5	7.5	4.9	4.6	1.3	2	4	1.1	2	3	.5	4.3
Non-energy		27.26	-14.1	-7.7	8.0	5.4	10.1	-1.1	1.1	4	.8	8	.0	.4	4.7
Durable		15.40	-13.7	-12.9	11.5	7.1	14.8	1.1	2.3	1	.9	9	.6	.7	7.4
Consumer parts		2.02	-26.0	-14.7	9.0	-3.7	9.4	-11.8	.9	1.4	2.2	-4.7	-1.1	1.7	6
Equipment parts		5.71	-7.3	-10.7	11.8	11.3	18.6	4.4	2.1	.2	.9	4	1.0	.5	10.5
Other		7.67	-14.3	-14.0	12.0	7.0	13.4	2.1	2.9	7	.5	3	.8	.7	7.2
Nondurable		11.87	-14.8	.0	3.5	3.1	4.2	-3.9	5	7	.8	7	8	1	1.2
Textile		.47	-16.9	-4.6	9.5	7.0	1.9	16.0	-3.6	3.9	-3.9	4.4	.7	1.0	9.6
Paper		2.30	-11.0	-4.5	.5	-1.1	2.8	-7.2	.8	-1.3	1	1	-1.5	6	-3.1
Chemical		5.44	-21.1	2.9	4.9	3.7	8.1	-3.5	9	9	2.1	-1.3	-1.0	1	3.0
Energy		17.50	8	-1.9	6.5	4.2	-3.5	5.2	-2.1	6	1.5	.7	7	.8	3.7
INDUSTRY GROUPS Manufacturing		74.67	-11.8	-6.1	6.1	3.4	7.2	.2	.7	.1	.6	5	.1	.0	3.7
Manufacturing (NAICS)	31–33	71.48	-11.8	-5.9	6.6	3.8	7.8	.6	.7	.2	.7	4	.1	.0	4.1
Durable manufacturing	02 00	35.68	-13.3	-9.1	9.6	5.7	13.8	1.4	1.7	.8	.8	8	.6	.0	6.8
Wood products	321	.93	-22.5	-11.7	6.3	8.6	10.8	-6.9	1.1	6	2.3	-2.3	6	-1.2	.1
Nonmetallic mineral products	327	1.57	-19.4	-18.3	7.0	1.5	-8.9	13.6	-1.6	1.7	.6	1.1	2.0	4	2.8
Primary metals	331	2.19	-19.9	-8.3	12.5	16.7	25.2	.3	1.7	-1.0	2.5	-1.7	1	1.6	8.2
Fabricated metal products	332	5.14	-11.8	-19.3	14.0	7.8	8.3	13.1	.6	.1	1.1	1.0	1.2	1.4	11.3
Machinery	333	4.63	-9.0	-20.4	16.3	15.9	25.4	-1.8	3.8	2	-1.2	6	1.2	.6	10.2
Computer and electronic products	334	6.51	-5.7	1.4	10.8	9.6	15.1	1	1.8	.5	1	3	.6	7	7.4
Electrical equip., appliances,															
and components	335	1.74	-10.5	-17.5	9.6	9.2	1.0	-8.4	.4	.2	.3	-2.0	4	2	.8
Motor vehicles and parts	3361–3	4.50	-28.7	2.3	10.2	-11.1	29.2	-16.4	4.0	3.8	3.1	-6.6	3	-2.0	2.4
Aerospace and miscellaneous															
transportation equipment	3364-9	4.20	-13.7	.8	.9	5	3.1	16.4	.5	.4	1.2	2.4	.5	.5	6.9
Furniture and related products	337	1.04	-20.7	-21.3	6.5	4.5	8.4	7.0	.2	.7	3.5	-1.4	2.0	-2.1	3.9
Miscellaneous	339	3.22	-1.1	-5.3	4.1	6.4	11.5	2.5	1.3	1.9	-1.0	.1	.4	.9	6.5
Nondurable manufacturing		35.80	-10.1	-2.3	3.5	2.0	2.0	2	2	4	.6	.0	5	.1	1.4
Food, beverage, and tobacco products	311,2	11.70	-3.4	5	4.4	2.6	7	-1.3	.4	6	2	.7	9	2	.7
Textile and product mills	313,4	.74	-16.7	-10.5	6.8	3.0	3.2	11.2	-2.2	3.2	-2.1	2.5	.5	.7	6.4
Apparel and leather	315,6	.29	-18.6	-18.9	6.8	13.1	5.1	-1.1	.0	.4	-2.5	1.2	.5	7	4.7
Paper	322	2.75	-12.9	3	2.2	1.5	2.9	-8.0	.7	-1.8	.4	9	-1.1	3	-2.4
Printing and support	323	1.57	-10.3	-13.5	-3.0	-7.5	-2.8	7	6	1.1	5	.5	5	-1.0	-4.2
Petroleum and coal products	324	3.81	-4.0	9	4.3	.0	-7.0	.7	-3.0	6	2.3	-2.1	1.1	.8	.5
Chemicals Plastics and rubber products	325 326	11.88 3.06	-14.6 -15.5	5 -7.3	1.9 9.8	2.4	7.4 5.4	.9	3 .9	2 1	1.5	3 .9	7 .2	.3 1	3.0 4.1
Other manufacturing (non-NAICS)	1133,5111	3.19	-12.2	-10.0	-4.7	-6.2	-7.2	-9.4	3	-1.7	-1.3	8	1	5	-6.9
Mining Utilities	21 2211,2	13.94 11.39	4	-5.4 -1.3	10.0	8.3	-3.6 .6	6.7 -2.6	6 -1.7	-1.3 -2.3	1.7	.3	.7 -2.0	.5	6.1
Electric	2211,2	9.73	-1.5	-1.3	2.5	-4.8	4.7	-2.0	-1.7	-2.3	5 6	2.8	-3.3	1.2	-1.5
Natural gas	2211	1.66	5.1	-1.7 .9	6.8	20.3	-20.5	-16.2	-8.5	-1.8 -5.6	1.3	-7.2	-3.3 6.8	8	-1.4
rvatulai gas	2212	1.00	3.1	.9	0.0	20.3	-20.3	-10.2	-0.5	-3.0	1.3	-1.2	0.0	0	-1.0

r Revised. p Preliminary.

NOTE. Under the industry groups, the figures to the right of the series descriptions are 2002 North American Industry Classification System (NAICS) codes. The abbreviation pt denotes part of a NAICS code. Additional industry detail is available on the Board's web site (www.federalreserve.gov/releases/G17). Under market groups, in the products category, miscellaneous consumer nondurables, oil and gas drilling, and manufactured homes are not shown separately; in the nondurable materials category, containers and miscellaneous nondurable materials are not shown

^{1.} The proportion data are the relative weights for the rates of change for each series in the computation of the change in total industrial production in the following year.

Table 2
INDUSTRIAL PRODUCTION: SPECIAL AGGREGATES AND SELECTED DETAIL
Percent change, seasonally adjusted
Fourth quarter to

recent change, seasonany adjusted		2012		rth quarte urth quar			nnual ra	te			Month	nly rate			June '10
Item		2010 proportion	2008	2009	2010	2010 Q4	2011 Q1 ^r	$Q2^p$	2011 Jan. ^r	Feb.r	Mar. ^r	Apr.r	May ^r	June ^p	to June '11
Total industry		100.00	-9.1	-5.5	6.2	3.1	4.8	.8	.2	3	.7	1	1	.2	3.4
Energy		27.15	1	-2.4	6.0	1.5	-2.4	2.5	-1.9	-1.3	1.1	.5	6	.8	2.4
Consumer products		5.92	1.9	.1	3.9	-6.0	-1.2	-6.0	-1.4	-3.6	9	.3	4	.8	-1.7
Commercial products		3.17	6	2	1.7	-1.6	-1.9	7	-2.4	-1.1	2.8	-1.3	-1.2	1.3	5
Oil and gas well drilling	213111	.56	6.8	-42.4	44.7	16.6	20.7	28.0	3.0	.5	.3	3.7	3.2	.3	22.3
Converted fuel		4.37	-5.7	-1.3	3.4	-7.4	-1.0	3.7	-2.4	-2.7	.9	1.5	-1.3	1.8	6 5.2
Primary energy		13.12	.7	-2.1	7.6	8.2	-4.3	5.7	-2.0	.1	1.7	.4	5	.5	5.2
Non-energy		72.85	-12.1	-6.5	6.3	3.7	7.6	.2	1.1	.0	.5	4	.1	.0	3.8
Selected high-technology industries		3.56	-5.5	6.1	10.5	12.5	18.2	2.0	2.1	.3	4	.2	.5	.5	10.0
Computers and peripheral equipment	3341	.77	-1.5	15.7	12.1	23.3	-1.7	10.6	-1.4	4	.5	1.4	1.0	.5	13.0
Communications equipment	3342	.73	-3.1	.1	-1.4	-1.6	15.0	-6.0	3.0	1.3	3	9	9	8	.3
Semiconductors and related	224442	205				10.5	25.6	4.0					_	4.0	
electronic components	334412–9	2.06	-7.8	4.3	14.4	13.7	27.6	1.8	3.1	.2	8	.1	.7	1.0	12.3
Excluding selected high-technology industries		69.29	-12.6	-7.2	6.1	3.2	7.1	.1	1.0	.0	.6	4	.1	1	3.5
Motor vehicles and parts	3361-3	4.50	-28.7	2.3	10.2	-11.1	29.2	-16.4	4.0	3.8	3.1	-6.6	3	-2.0	2.4
Motor vehicles	3361	2.36	-32.0	10.9	15.4	-14.8	41.4	-21.5	5.2	5.7	4.9	-9.3	.0	-3.6	5.8
Motor vehicle parts	3363	1.84	-23.0	-7.3	2.8	-7.8	3.9	-14.9	.8	1.3	1.1	-4.2	-1.2	2	-5.4
Excluding motor vehicles and parts		64.79	-11.4	-7.8	5.8	4.3	5.7	1.4	.8	3	.4	.1	.1	.1	3.5
Consumer goods		20.21	-7.7	-4.8	2.8	2.4	1.3	1.6	.4	4	.2	.6	3	1	1.4
Business equipment		7.29	-13.0	-9.7	10.4	12.0	12.0	4.1	1.6	.4	8	.5	1.4	1	8.3
Construction supplies		4.06	-17.1	-17.4	10.2	5.1	1.8	6.5	.6	6	1.2	.1	1.2	.3	4.0
Business supplies Materials		6.64 24.22	-11.7 -13.4	-8.4 -8.5	.9 7.7	-1.2 5.6	3.6 9.0	1 2	.5 .9	.3 5	2 .9	.4 6	4 .1	3 .4	.2 4.8
Measures excluding selected high-technology industries											_				
Total industry		96.44	-9.3	-5.9	6.1	2.7	4.3	.8	.2	4	.7	2	1	.2	3.2
Manufacturing ¹		71.11	-12.3	-6.8	5.8	2.9	6.6	.1	.6	.1	.7	5	.0	.0	3.3
Durable		32.26	-14.3	-10.8	9.5	4.8	13.2	1.4	1.6	.9	.9	9	.6	.0	6.4
Measures excluding motor vehicles and parts		05.50	0.1	5.0	6.1	2.0	2.0	1.7		-	-	2		2	2.5
Total industry		95.50	-8.1	-5.8	6.1	3.8	3.8	1.7	.1	5	.5	.2	1	.3	3.5
Manufacturing ¹ Durable		70.17 31.31	-10.7 -11.1	-6.6 -10.6	5.8 9.5	4.4 8.2	5.9 11.6	1.4 4.3	.5 1.4	1 .4	.5 .4	.0 .0	.1 .7	.2 .3	3.7 7.4
Measures excluding selected high-technology industries															
and motor vehicles and parts Total industry		91.94	-8.2	-6.3	5.9	3.5	3.2	1.7		6	6	2	1	2	3.2
Manufacturing ¹		66.61	-11.1	-7.3	5.6	4.0	5.2	1.4	.4	1	.5	.0	.1	.1	3.4
Stage-of-process components of non-energy materials, measures of the input to Finished processors		10.49	-12.8	-10.0	8.7	5.4	12.5	9	1.3	.3	.7	-1.0	.0	.5	5.3
Primary and semifinished processors		16.77	-15.0	-6.1	7.6	5.4	8.6	-1.2	1.0	7	.9	8	.0	.3	4.4
		1	1			1			I						I

Table 3 MOTOR VEHICLE ASSEMBLIES Millions of units, seasonally adjusted annual rate

winners of units, seasonarry adjusted annual rate												
	2010	2010		2011		2011						
Item	average	Q3	Q4	Q1	Q2	Jan.	Feb.	Mar.	Apr.	May	June	
Total	7.74	8.15	7.79	8.42	7.87	7.99	8.47	8.81	7.86	7.93	7.81	
Autos	2.73	2.66	2.54	2.70	2.76	2.44	2.75	2.90	2.66	2.83	2.80	
Trucks	5.01	5.49	5.25	5.73	5.10	5.55	5.72	5.90	5.21	5.10	5.00	
Light	4.87	5.33	5.09	5.54	4.88	5.38	5.54	5.69	4.99	4.84	4.80	
Medium and heavy	.15	.16	.16	.19	.23	.17	.18	.21	.22	.26	.21	
Memo												
Autos and light trucks	7.60	8.00	7.63	8.23	7.64	7.82	8.29	8.60	7.65	7.68	7.60	

NOTE. Seasonal factors and underlying data for auto, light truck, and medium and heavy truck production are available on the Board's web site, www.federalreserve.gov/releases/G17/mvsf.htm

r Revised. p Preliminary.

1. Refer to note on cover page.

 Table 4

 INDUSTRIAL PRODUCTION INDEXES: MARKET AND INDUSTRY GROUP SUMMARY

 2007 = 100, seasonally adjusted

007 = 100, seasonally adjusted											
Item		2010 proportion	2010 Oct.	Nov.	Dec.	2011 Jan. ^r	Feb.r	Mar. ^r	Apr.r	May ^r	June ^p
Total IP		100.00	91.1	91.4	92.6	92.8	92.5	93.1	93.0	92.9	93.1
Market Groups											
Final products and nonindustrial supplies		55.24	89.9	90.0	90.9	91.4	91.2	91.5	91.4	91.5	91.4
Consumer goods		29.07	92.3	92.0	93.3	93.7	93.0	93.3	93.2	93.0	93.0
Durable		6.17	84.2	83.5	83.8	85.9	87.9	89.9	87.4	87.6	87.1
Automotive products		3.26	90.3	87.7	88.2	92.0	94.7	97.6	93.8	93.5	92.9
Home electronics		.23	99.3	98.4	97.1	96.1	95.2	95.2	95.6	96.8	97.0
Appliances, furniture, carpeting		.82	66.7	68.5	66.9	66.6	68.9	72.1	69.2	69.5	69.2
Miscellaneous goods Nondurable		1.85 22.91	80.2 94.9	81.3 94.8	82.3 96.4	83.2 96.3	84.4 94.8	84.3 94.6	83.9 95.2	84.8 94.8	84.3 95.0
Non-energy		16.98	92.7	94.8	90.4	90.3	94.8	92.2	93.2	94.8	93.0
Foods and tobacco		9.43	98.9	97.4	97.9	98.6	97.7	97.5	98.3	97.5	97.3
Clothing		.21	66.2	66.3	67.1	66.9	67.4	65.1	65.8	65.8	65.2
Chemical products		5.26	88.0	88.7	89.0	88.8	88.4	89.3	90.3	90.2	90.3
Paper products		1.56	78.6	79.8	80.1	79.8	78.0	77.2	76.7	77.1	76.9
Energy		5.92	102.6	103.7	109.3	107.8	103.9	102.9	103.3	102.9	103.7
Business equipment		9.06	91.0	91.3	92.4	94.1	94.8	94.5	94.3	95.4	94.7
Transit		1.88	85.0	83.4	83.3	84.9	87.6	89.2	88.3	89.8	88.0
Information processing		2.51	107.5	108.4	109.1	110.4	111.2	111.5	110.9	111.5	110.0
Industrial and other		4.67 2.36	85.2	85.9	87.7	89.6	89.6	88.1	88.3	89.5	89.6
Defense and space equipment		2.36	116.5	115.8	115.3	116.2	116.7	116.9	117.3	117.6	116.0
Construction supplies Business supplies		4.08 10.06	74.3 86.1	75.0 86.9	74.4 87.6	74.9 87.2	74.5 87.1	75.3 87.7	75.4 87.6	76.3 87.1	76.5 87.3
Materials		44.76	92.7	93.2	94.6	94.5	94.1	95.1	94.9	94.6	95.1
Non-energy		27.26	86.0	86.4	87.8	88.8	88.5	89.2	88.5	88.5	88.8
Durable		15.40	84.8	85.3	86.2	88.3	88.2	88.9	88.1	88.6	89.3
Consumer parts		2.02	67.0	66.9	66.6	67.2	68.2	69.7	66.4	65.6	66.7
Equipment parts		5.71	96.2	97.7	99.5	101.7	101.8	102.8	102.3	103.3	103.9
Other		7.67	82.6	82.8	83.5 90.2	85.9	85.3	85.7	85.4	86.1	86.7
Nondurable Textile		11.87	87.8 81.5	87.9 82.5	90.2 85.6	89.7 82.5	89.1 85.8	89.8 82.5	89.1 86.1	88.4 86.7	88.4 87.5
Paper		2.30	85.1	85.4	86.3	86.9	85.8	85.7	85.6	84.3	83.8
Chemical		5.44	84.7	85.0	88.5	87.7	86.9	88.7	87.6	86.7	86.6
Energy		17.50	104.1	104.7	106.2	104.0	103.4	104.9	105.6	104.9	105.7
INDUSTRY GROUPS											
Manufacturing		74.67	87.7	87.9	88.8	89.4	89.5	90.1	89.7	89.7	89.8
Manufacturing (NAICS)	31–33	71.48	88.5	88.7	89.6	90.3	90.5	91.1	90.7	90.8	90.8
Durable manufacturing	221	35.68	87.2	87.6	88.4	89.9	90.6	91.3	90.5	91.1	91.1
Wood products	321	.93	69.6	70.1	71.0	71.8	71.4	73.0	71.4	70.9	70.1
Nonmetallic mineral products Primary metals	327 331	1.57 2.19	69.7 82.4	69.9 84.9	67.7 88.6	66.6 90.1	67.7 89.2	68.1 91.5	68.8 89.9	70.2 89.8	69.9 91.3
Fabricated metal products	332	5.14	81.4	82.5	83.1	83.6	83.7	84.7	85.5	86.6	87.8
Machinery	333	4.63	83.2	84.4	87.0	90.3	90.1	89.1	88.6	89.6	90.1
Computer and electronic products	334	6.51	110.2	111.6	113.2	115.3	115.9	115.8	115.5	116.1	115.3
Electrical equip., appliances,											
and components	335	1.74	80.9	81.6	80.8	81.1	81.3	81.5	79.9	79.5	79.3
Motor vehicles and parts	3361–3	4.50	79.0	76.2	76.5	79.5	82.5	85.0	79.5	79.2	77.6
Aerospace and miscellaneous transportation equipment	3364–9	4.20	94.6	94.3	93.8	94.3	94.7	95.9	98.1	98.6	99.1
Furniture and related products	3304–9	1.04	66.4	67.2	67.0	67.1	67.6	70.0	69.0	70.3	68.8
Miscellaneous	339	3.22	97.2	98.0	98.3	99.6	101.5	100.5	100.5	101.0	101.9
Nondurable manufacturing		35.80	90.2	90.0	91.2	91.0	90.6	91.2	91.2	90.7	90.8
Food, beverage, and tobacco products	311,2	11.70	100.3	98.8	99.4	99.8	99.2	99.0	99.7	98.8	98.6
Textile and product mills	313,4	.74	75.7	75.8	77.5	75.8	78.3	76.7	78.5	78.9	79.5
Apparel and leather	315,6	.29	62.9	63.2	64.8	64.8	65.1	63.4	64.2	64.5	64.1
Paper	322	2.75	88.5	88.8	90.0	90.7	89.1	89.4	88.6	87.7	87.4
Printing and support	323	1.57	75.4	74.9	74.4	73.9	74.7	74.4	74.7	74.4	73.6
Petroleum and coal products	324	3.81	97.5	97.7	98.9	95.9	95.3	97.5	95.4	96.5	97.3
Chemicals Plastics and rubber products	325 326	11.88 3.06	86.0 84.9	86.6 85.1	88.5 85.7	88.3 86.5	88.1 86.4	89.4 86.2	89.1 86.9	88.5 87.2	88.7 87.1
Other manufacturing (non-NAICS)	1133,5111	3.19	72.5	72.8	72.7	72.4	71.2	70.3	69.7	69.7	69.3
- -		13.94	104.7	104.5	104.6	104.0	102.6	104.4	104.7	105.4	106.0
Mining				1114	1040	104.0	102.0	104.4	104./	105.4	100.0
	21 2211,2						101.0	100.7	102.0	100.0	100.9
Mining Utilities Electric	21 2211,2 2211	11.39 9.73	98.8 97.8	100.6	105.1 102.9	103.4 102.5	101.0 100.7	100.7 100.1	102.0 102.9	100.0 99.5	100.9 100.7

r Revised. p Preliminary. NOTE. Refer to notes on table 1.

 Table 5

 INDUSTRIAL PRODUCTION INDEXES: SPECIAL AGGREGATES

 2007 = 100, seasonally adjusted

Riem	007 = 100, seasonally adjusted											
Total industry	τ.					Б		F 1 I) f [A F	3.6 F	
Parery	Item		proportion	Oct.	Nov.	Dec.	Jan.'	Feb.	Mar.	Apr.'	May	June
Consumer products	Total industry		100.00	91.1	91.4	92.6	92.8	92.5	93.1	93.0	92.9	93.1
Semiconductors 3,17 99.4 101.3 103.1 100.6 99.5 102.3 101.0 99.8 101.1	Energy		27.15	102.7	103.6	106.0	104.0	102.7	103.8	104.2	103.6	104.5
Oil and gas well drilling 213111 56 86.5 86.7 88.4 91.1 91.5 91.8 95.1 98.2 98.4												
Converded fuel												
Primary energy 15.12 107.3 107.2 107.7 105.5 105.6 107.4 107.9 107.3 107.8		213111										
Non-centry 72.85 87.3 87.4 88.2 89.1 89.1 89.6 89.3 89.4 89.3 89.4 89.3 89.4 89.5 89.4 89.5 89.4 89.5 89.4 89.5 89.4 89.5 89.4 89.5 89.4 89.5 89.4 89.5 89.4 89.5 89.4 89.5 89.4 89.5 89.4 89.5												
Selected high-technology industries 3.56 117.8 120.2 122.7 125.3 125.7 125.1 125.4 126.0 126.7 126.0 126.7 126.0 126.7 126.0 126.7 126.0	Primary energy		13.12	107.3	107.2	107.7	105.5	105.6	107.4	107.9	107.3	107.8
A	Non-energy		72.85	87.3	87.4	88.2	89.1	89.1	89.6	89.3	89.4	89.3
Semiconductors and related electronic components 3342 7.3 88.2 87.9 87.8 90.4 91.6 91.3 90.5 89.7 89.0	Selected high-technology industries		3.56	117.8	120.2	122.7	125.3	125.7	125.1	125.4	126.0	126.7
Semiconductors and related electronic components 334412-9 2.06 122.4 125.8 130.2 134.3 134.5 133.4 133.6 134.6 135.9	Computers and peripheral equipment	3341	.77	141.3	144.0	144.9	142.9	142.4	143.1	145.2	146.7	147.4
Excluding selected high-technology industries	Communications equipment	3342	.73	88.2	87.9	87.8	90.4	91.6	91.3	90.5	89.7	89.0
Excluding selected high-technology industries 69.29 85.7 85.7 86.4 87.3 87.3 87.8 87.4 87.5 87.4 87.5 87.4 Motor vehicles and parts 3361-3 4.50 79.0 76.2 76.5 79.5 82.5 85.0 79.5 79.2 77.6 Motor vehicles and parts 3361-3 2.36 86.0 81.1 81.3 85.6 90.5 94.9 86.1 86.0 82.9 Motor vehicle parts 3363 184 71.8 70.8 70.2 70.8 71.7 72.5 69.4 68.6 68.5 82.9 Motor vehicles and parts Excluding motor vehicles and parts 64.79 86.2 86.5 87.2 87.9 87.6 88.0 88.0 88.2 88.2 Consumer goods 20.21 89.5 89.4 89.6 90.0 89.6 89.8 90.4 90.1 90.0 Business equipment 7.29 88.2 88.7 90.1 91.5 91.9 91.2 91.6 92.9 92.8 Excluding selected high-technology industries 66.64 80.4 80.8 80.9 81.3 81.6 81.4 81.7 81.4 81.1 Materials 824.22 85.1 85.5 86.9 87.7 87.3 88.1 87.5 87.9 87.9 87.9 87.9 87.9 87.9 Britanting in the second parts Measures excluding selected high-technology industries 71.111 86.2 86.2 87.1 87.6 87.7 88.3 87.9 87.9 87.9 87.9 87.9 87.9 Britanting in the second parts 71.111 86.2 86.2 87.1 87.6 87.7 88.3 87.9 87.9 87.9 87.9 87.9 Britanting in the second parts Total industry 96.44 90.1 90.3 91.4 91.6 91.2 91.9 91.7 91.7 91.8 83.9 87.9 87.9 87.9 87.9 87.9 87.9 87.9 87	Semiconductors and related											
Motor vehicles and parts 3361-3 4.50 79.0 76.2 76.5 79.5 82.5 85.0 79.5 79.2 77.6	electronic components	334412–9	2.06	122.4	125.8	130.2	134.3	134.5	133.4	133.6	134.6	135.9
Motor vehicles 3361 2.36 86.0 81.1 81.3 85.6 90.5 94.9 86.1 86.0 82.9			69.29	85.7	85.7	86.4	87.3	87.3	87.8	87.4	87.5	87.4
Motor vehicle parts 3363 1.84 71.8 70.8 70.2 70.8 71.7 72.5 69.4 68.6 68.5	Motor vehicles and parts	3361-3	4.50	79.0	76.2	76.5	79.5	82.5	85.0	79.5	79.2	77.6
Excluding motor vehicles and parts 64.79 86.2 86.5 87.2 87.9 87.6 88.0 88.0 88.2 88.2	Motor vehicles	3361	2.36	86.0	81.1	81.3	85.6	90.5	94.9	86.1	86.0	82.9
Consumer goods 20.21 89.5 89.4 89.6 90.0 89.6 89.8 90.4 90.1 90.0	Motor vehicle parts	3363	1.84	71.8	70.8	70.2	70.8	71.7	72.5	69.4	68.6	68.5
Business equipment 7.29 88.2 88.7 90.1 91.5 91.9 91.2 91.6 92.9 92.8	Excluding motor vehicles and parts		64.79	86.2	86.5	87.2	87.9	87.6	88.0	88.0	88.2	88.2
Construction supplies	Consumer goods		20.21	89.5	89.4	89.6	90.0	89.6	89.8	90.4	90.1	
Business supplies												
Materials Mate												
industries Total industry 96.44 90.1 90.3 91.4 91.6 91.2 91.9 91.7 91.7 91.8 Manufacturing¹ 71.11 86.2 86.2 87.1 87.6 87.7 88.3 87.9 87.9 87.9 Measures excluding motor vehicles and parts 83.9 84.1 84.8 86.1 86.9 87.7 86.9 87.4 87.4 Total industry 95.50 91.8 92.2 93.4 93.5 93.0 93.5 93.7 93.6 93.9 Manufacturing¹ 70.17 88.3 88.7 89.6 90.1 90.0 90.4 90.4 90.5 90.6 Durable 31.31 88.2 89.2 90.0 91.3 91.6 92.0 92.0 92.7 93.0 Measures excluding selected high-technology industries and motor vehicles and parts 91.94 90.7 91.1 92.2 92.2 91.7 92.2 92.4 92.3 92.6 Manufacturing¹												
Manufacturing Ti.11 86.2 86.2 87.1 87.6 87.7 88.3 87.9 87.9 87.9												
Durable 32.26 83.9 84.1 84.8 86.1 86.9 87.7 86.9 87.4 87.4	Total industry		96.44	90.1	90.3	91.4	91.6	91.2	91.9	91.7	91.7	91.8
Measures excluding motor vehicles and parts 95.50 91.8 92.2 93.4 93.5 93.0 93.5 93.7 93.6 93.9	Manufacturing ¹		71.11	86.2	86.2	87.1	87.6	87.7	88.3	87.9	87.9	87.9
Total industry 95.50 91.8 92.2 93.4 93.5 93.0 93.5 93.7 93.6 93.9			32.26	83.9	84.1	84.8	86.1	86.9	87.7	86.9	87.4	87.4
Manufacturing Tour Stage-of-process components of non-energy materials, measures of the input to Tour Stage-of-process components of non-energy materials, measures of the input to Tour Stage-of-process components Tour Tour	3											
Durable 31.31 88.2 89.2 90.0 91.3 91.6 92.0 92.0 92.7 93.0												
Measures excluding selected high-technology industries and motor vehicles and parts 91.94 90.7 91.1 92.2 92.2 91.7 92.2 92.4 92.3 92.6												
Total industry 91.94 90.7 91.1 92.2 92.2 91.7 92.2 92.4 92.3 92.6 Manufacturing 66.61 86.7 87.0 87.9 88.2 88.1 88.6 88.5 88.6 88.7 Stage-of-process components of non-energy materials, measures of the input to Finished processors 10.49 86.2 87.0 88.2 89.3 89.6 90.2 89.3 89.4 89.8	Measures excluding selected high-technology		31.31	00.2	09.2	90.0	91.3	91.0	92.0	92.0	94.1	93.0
Manufacturing¹ 66.61 86.7 87.0 87.9 88.2 88.1 88.6 88.5 88.6 88.7 Stage-of-process components of non-energy materials, measures of the input to Finished processors 10.49 86.2 87.0 88.2 89.3 89.6 90.2 89.3 89.4 89.8			01.04	90.7	01 1	02.2	92.2	01.7	92.2	92.4	02.3	02.6
materials, measures of the input to Finished processors 10.49 86.2 87.0 88.2 89.3 89.6 90.2 89.3 89.4 89.8												
	materials, measures of the input to		10.49	86.2	87.0	88.2	89.3	89.6	90.2	89.3	89.4	89.8
			16.77	85.8		87.6		87.8	88.6	87.9	87.9	

Table 6 DIFFUSION INDEXES OF INDUSTRIAL PRODUCTION

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
item	3411.	1 00.	iviai.	7 1 p1.	iviay	June	July	riug.	Бері.	Ост.	1101.	Dec.
One month earlier												
2009	34.3	43.6	33.0	40.4	41.3	42.0	59.9	63.5	59.6	52.9	60.3	53.2
2010	64.7	52.6	65.7	68.6	66.7	53.2	60.3	52.9	51.6	57.7	54.8	59.3
2011	61.2	52.2	57.7	47.8	51.1							
Three months earlier												
2009	17.6	23.4	32.4	37.5	33.3	37.8	46.2	58.7	63.5	60.3	62.2	58.3
2010	70.2	62.2	65.7	63.8	74.0	65.4	62.5	57.7	58.3	53.8	55.4	58.3
2011	64.1	61.2	59.0	53.5	55.1							
Six months earlier												
2009	15.7	18.9	22.8	21.2	22.4	29.5	36.2	42.0	51.6	53.8	59.0	66.0
2010	68.6	67.6	67.6	75.0	72.8	72.4	67.9	68.3	64.7	61.5	57.4	60.9
2011	60.3	60.9	64.4	57.1	59.6							

NOTE. The diffusion indexes are calculated as the percentage of series that increased over the indicated span (one, three, or six months) plus one-half the percentage that were unchanged.

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1. Refer to note on cover page.

Table 7 CAPACITY UTILIZATION

_				-
Percent	of	capacity.	seasonally	adjusted

			1972-	1994-	2008-									
Item		2010	2010	95	09	2010	2011		2011					
		proportion	ave.	high	low	Q4	Q1 ^r	Q2 ^p	Jan. ^r	Feb.r	Mar.r	Apr.r	May ^r	June ^p
Total industry		100.00	80.4	85.1	67.3	76.1	76.8	76.7	76.9	76.6	77.0	76.8	76.7	76.7
Manufacturing ¹		77.87	79.0	84.7	64.4	73.3	74.5	74.4	74.3	74.4	74.8	74.4	74.4	74.4
Manufacturing (NAICS)	31–33	74.31	78.8	84.8	64.2	73.6	75.0	74.9	74.7	74.8	75.3	74.9	74.9	74.9
D 11 6 4 1		20.60	77.0	02.0	50.0	70.6	72.0	72.0	72.2	72.0	72.2	72.6	72.0	72.0
Durable manufacturing	221	39.68	77.2	83.8	59.0	70.6	72.8	72.8	72.3	72.8	73.3	72.6	72.9	72.8
Wood products	321	1.19	77.8	87.1	50.9	60.8	62.8	62.1	62.5	62.2	63.8	62.5	62.3	61.7
Nonmetallic mineral products	327	2.39	75.9	82.7	45.6	51.8	51.0	53.0	50.2	51.2	51.6	52.2	53.4	53.3
Primary metals	331	2.37	79.4	94.0	49.4	68.7	72.3	72.3	72.3	71.5	73.2	72.0	71.9	73.1
Fabricated metal products	332	5.62	77.2	85.6	60.5	72.9	74.7	77.4	74.3	74.5	75.5	76.3	77.4	78.6
Machinery	333	4.99	78.1	87.1	61.1	74.2	78.6	78.3	79.0	78.9	78.0	77.5	78.4	78.8
Computer and electronic products	334	6.72	78.1	84.9	68.6	78.6	80.1	78.4	80.3	80.3	79.7	78.9	78.7	77.5
Electrical equip., appliances,														
and components	335	1.78	82.7	92.9	66.8	76.1	76.6	75.2	76.4	76.6	76.9	75.4	75.2	75.1
Motor vehicles and parts	3361-3	5.69	75.3	87.4	34.8	61.3	65.1	61.9	63.0	65.2	67.1	62.6	62.2	60.8
Aerospace and miscellaneous														
transportation equipment	3364-9	4.45	73.0	68.9	68.0	71.3	71.6	74.2	71.2	71.4	72.3	73.9	74.2	74.5
Furniture and related products	337	1.21	77.5	82.5	59.2	66.7	68.3	69.8	67.1	67.7	70.1	69.3	70.7	69.3
Miscellaneous	339	3.26	76.0	80.6	68.8	76.5	78.5	78.6	77.9	79.3	78.4	78.3	78.5	79.0
Non-Januari I and a second and a second		24.62	81.1	06.1	69.8	77.0	77.4	77.2	77.5	77.0	77.6	77.6	77.0	77.0
Nondurable manufacturing	211.2	34.63		86.1		77.0	77.4	77.3	77.5	77.2	77.6	77.6	77.2	77.2
Food, beverage, and tobacco products	311,2	11.15	81.2	86.1	74.5	79.0	78.5	77.9	79.0	78.4	78.1	78.5	77.7	77.4
Textile and product mills	313,4	.89	80.4	92.4	53.2	64.0	65.0	67.1	63.9	66.1	64.9	66.6	67.0	67.6
Apparel and leather	315,6	.33	78.2	87.3	62.7	69.1	70.3	70.3	70.6	71.0	69.3	70.2	70.6	70.1
Paper	322	2.48	87.1	92.6	71.7	83.2	83.9	82.3	84.8	83.3	83.7	83.0	82.1	81.9
Printing and support	323	1.85	82.2	85.8	63.4	64.0	63.8	63.9	63.4	64.1	63.9	64.2	64.0	63.4
Petroleum and coal products	324	3.03	85.8	90.9	73.7	85.5	84.2	84.2	83.9	83.4	85.3	83.5	84.3	84.9
Chemicals	325	11.59	78.0	81.8	65.8	76.3	77.7	77.8	77.4	77.3	78.4	78.1	77.5	77.8
Plastics and rubber products	326	3.32	82.3	92.5	57.5	71.6	73.1	74.1	73.0	73.1	73.0	73.9	74.2	74.3
Other manufacturing (non-NAICS)	1133,5111	3.56	83.4	83.2	69.0	66.6	65.4	64.0	66.4	65.4	64.5	64.1	64.1	63.8
Mining	21	11.73	87.4	88.5	79.0	89.1	87.7	88.6	88.2	86.8	88.1	88.2	88.6	88.9
Utilities	2211,2	10.40	86.6	93.3	79.2	81.1	80.6	79.6	82.1	80.0	79.6	80.6	78.8	79.5
Selected high-technology industries		3.74	78.3	86.9	70.9	78.9	80.0	77.7	80.8	80.2	79.1	78.3	77.7	77.1
Computers and peripheral equipment	3341	.74	78.5	87.3	79.5	83.4	79.1	79.2	80.0	78.8	78.5	79.0	79.3	79.4
Communications equipment	3342	.75	76.7	83.8	78.8	75.6	76.3	73.9	76.1	76.7	76.1	75.0	73.9	72.8
Semiconductors and related														
electronic components	334412-9	2.25	80.3	92.2	63.1	78.6	82.0	78.8	83.0	82.3	80.6	79.5	78.8	78.1
Measures excluding selected high-technology industries														
Total industry		96.26	80.5	85.0	67.1	76.0	76.7	76.7	76.7	76.4	76.9	76.7	76.6	76.7
Manufacturing ¹		74.13	79.0	84.5	64.0	73.0	74.2	74.2	74.0	74.1	74.6	74.2	74.2	74.2
STAGE-OF-PROCESS GROUPS														
Crude		15.38	86.4	89.6	77.6	87.1	86.9	87.1	87.2	86.2	87.3	87.1	87.0	87.2
Primary and semifinished		45.86	81.3	87.9	64.9	73.2	74.0	73.9	74.3	73.7	74.1	73.9	73.7	74.1
Finished		38.77	77.3	80.7	66.8	74.8	75.9	75.7	75.7	75.9	76.1	75.9	75.8	75.4
1 Infoned		36.77	''.5	00.7	00.0	/0	13.7	13.1	'3.7	13.7	70.1	13.7	75.0	15.4
		1												

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1. Refer to note on cover page.

Table 8 INDUSTRIAL CAPACITY

Percent change

													Monthly
	1	Average aı	nnual rate		Fourth	quarter to	o fourth q	uarter		Annu	al rate		rate
Item	1972-	1980-	1989-	1995-					2010		2011		2011
	79	88	94	2011	2008	2009	2010	2011	Q3	Q4	Q1	Q2	June
Total industry	3.1	1.9	2.2	2.3	.2	-1.1	-1.8	1.1	-1.4	1	.9	1.3	.1
Manufacturing ¹	3.3	2.2	2.5	2.5	6	-2.8	-2.0	.8	-1.7	6	.3	.8	.1
Mining Utilities	.7 4.2	.1 2.1	6 1.8	.0 2.2	2.6 2.4	3.4 .5	9 3.6	2.1 2.0	6 4.3	1.2 4.0	2.3 3.1	2.5 2.1	.2 .1
Selected high-technology industries	19.6	17.3	15.6	20.9	1	10.0	4.1	15.2	1.8	5.5	10.4	14.9	1.3
Manufacturing ¹ ex. selected high-technology industries	2.6	1.3	1.6	.9	7	-3.6	-2.3	.1	-1.8	9	2	.2	.0
STAGE-OF-PROCESS GROUPS Crude	1.6	.4	5	.1	2.3	.9	9	1.5	2	1.2	1.9	1.9	.1
Primary and semifinished	3.0	1.3	2.5	2.7	.0	-2.3	-2.1	.2	-1.8	8	1	.3	.0
Finished	3.9	3.3	2.6	2.4	8	-2.1	7	2.0	3	.7	1.4	1.9	.2

^{1.} Refer to note on cover page.

Table 9
GROSS VALUE OF FINAL PRODUCTS AND NONINDUSTRIAL SUPPLIES
Billions of 2005 dollars at annual rate, seasonally adjusted

illions of 2005 dollars at annual rate, seaso	many adjusted		2010	2011		2011					
			2010	2011		2011					
Item	2005	2010	Q4	Q1 ^r	Q2 ^p	Jan. ^r	Feb. ^r	Mar. ^r	Apr.r	May ^r	June ^p
Final products and nonindustrial											
supplies	3,336.9	3,159.9	3,209.4	3,247.1	3,240.5	3,239.9	3,239.1	3,262.2	3,237.6	3,242.1	3,241.9
Final products	2,477.7	2,428.8	2,472.1	2,505.2	2,497.0	2,499.7	2,502.1	2,513.7	2,493.6	2,500.5	2,496.8
Consumer goods	1,835.2	1,775.2	1,795.1	1,808.6	1,799.3	1,806.6	1,803.7	1,815.4	1,798.6	1,797.4	1,801.9
Durable	495.3	416.6	421.0	444.3	441.1	431.9	444.7	456.2	440.7	442.6	439.9
Automotive products	288.3	262.1	264.6	284.0	280.3	274.3	284.2	293.7	280.6	281.1	279.3
Other durable goods	207.0	154.9	156.9	160.8	161.3	158.1	161.1	163.2	160.6	162.1	161.2
Nondurable	1,339.9	1,351.8	1,367.2	1,361.4	1,355.0	1,369.4	1,356.3	1,358.4	1,354.6	1,352.0	1,358.4
Equipment, total	642.5	652.6	677.3	698.7	700.4	694.9	701.0	700.3	697.5	706.8	697.0
Business and defense	619.1	634.1	658.4	678.6	678.9	675.0	681.0	679.9	676.5	685.1	675.2
Business	539.2	524.5	547.7	568.1	567.7	564.7	570.5	569.1	564.9	573.3	564.9
Defense and space	79.9	107.0	108.4	108.7	109.3	108.4	108.8	109.0	109.6	109.9	108.5
Nonindustrial supplies	859.2	734.7	741.2	746.1	747.6	744.4	741.4	752.5	748.0	745.8	749.0
Construction supplies	270.2	200.2	205.6	207.3	209.6	207.5	205.9	208.6	208.7	209.7	210.3
Business supplies	589.1	534.7	535.8	538.9	538.2	537.1	535.7	544.1	539.5	536.3	538.9
Commercial energy products	210.9	213.0	213.2	212.7	212.5	211.7	209.2	217.1	212.2	210.9	214.3

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Table 10
GROSS-VALUE-WEIGHTED INDUSTRIAL PRODUCTION: STAGE-OF-PROCESS GROUPS

Percent change, seasonally adjusted														
		Fou	rth quarte	er to										
		fo	urth quar	ter		Annual ra	ate			Montl	nly rate			June '10
Item	2010				2010	2011		2011						to
	gross value ¹	2008	2009	2010	Q4	Q1 ^r	$Q2^p$	Jan. ^r	Feb.r	Mar.r	Apr.r	May ^r	June ^p	June '11
Finished	1882.5	-10.5	-3.0	7.1	3.9	9.6	.2	1.3	.7	.6	7	.4	5	4.8
Semifinished	1522.1	-11.4	-9.3	6.0	5	6.4	2.8	.9	4	.2	.8	4	.5	3.0
Primary	1305.0	-8.6	-3.4	5.4	3.4	4	-4.8	-2.5	-1.1	1.6	-2.1	1	.9	.7
Crude	623.9	-10.0	4	5.0	2.6	4.4	-1.1	.3	-1.3	1.6	7	4	.4	3.0

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^{1.} Billions of 2005 dollars.

Table 11 HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Total Industry

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
change) ¹																	
1989	.3	4	.3	.0	7	.1	-1.0	.9	3	1	.3	.6	1.7	-1.4	-2.6	1.6	.9
1990	6	.9	.5	1	.2	.3	1	.2	.2	8	-1.2	7	2.9	3.0	1.7	-6.2	1.0
1991	4	7	5	.2	1.0	1.0	.0	.1	.9	2	1	3	-7.4	2.5	5.5	.8	-1.5
1992 1993	6 .5	.8 .4	.8	.7	.3 4	.0	.9	5 .0	.2	.7	.4	.0	4 3.6	7.2 1.0	2.9	4.1 6.1	2.8 3.3
1993	.5	.4	.0	.3	4			.0	.5	./	.4	.5	3.0	1.0	2.0	0.1	3.3
1994 1995	.4	.0	1.0	.5 1	.5 .2	.7	.2 4	.6 1.3	.2	.8 2	.6 .2	1.1	5.2 5.1	7.4 1.2	5.1 3.7	8.2 3.0	5.3 4.7
1996	6	1.6	1	.8	.7	.9	4 1	.6	.5	.0	.8	.6	3.0	8.5	5.4	5.4	4.7
1997	.1	1.2	.8	.0	.7	.5	.6	1.3	.9	.7	.9	.4	7.8	6.5	9.6	10.1	7.2
1998	.5	.1	.1	.4	.7	6	4	2.2	3	.8	1	.3	4.4	2.9	3.0	5.7	5.8
1999	.4	.4	.2	.2	.8	1	.7	.4	3	1.3	.5	.8	3.8	3.9	4.1	7.5	4.3
2000	.1	.4	.4	.6	.1	.1	3	2	.5	4	.0	3	4.7	4.5	6	-1.1	4.0
2001	7	6	3	2	7	6	5	3	4	5	5	.0	-5.5	-5.2	-5.7	-4.7	-3.4
2002	.6	.0	.8	.4	.6	.9	3	.2	.1	4	.5	5	2.8	6.7	2.6	4	.2
2003	.8	.3	2	8	.0	.0	.3	1	.6	.0	.8	.0	3.0	-3.1	2.0	3.4	1.3
2004	.3	.6	6	.4	.7	9	.7	.3	.0	1.0	.2	.7	2.8	1.7	2.1	5.8	2.3
2005 2006	.5 .2	.7 .1	1 .2	.0 .4	.2 2	.4 .4	2 .2	.1 .2	-2.0 1	1.2	1.0 1	.6 1.1	6.1 4.0	1.7 2.4	-1.7 1.8	3.1 1.0	3.2 2.2
2007	3	1.1	.0	.8	1	.0	.1	.0	.5	6	.4	.2	4.5	4.5	1.1	.1	2.7
2008	3	2	4	9	6	3	4	-1.7	-4.1	.9	-1.3	-2.6	-1.2	-6.6	-12.2	-15.7	-3.7
2009	-2.1	5	-1.7	9	-1.1	4	1.1	.9	.7	.3	.2	.6	-18.9	-11.5	5.3	5.6	-11.2
2010	1.2	.2	.5	.4	1.3	.1	.9	.2	.3	1	.3	1.3	8.1	7.1	6.7	3.1	5.3
2011	.2	3	.7	1	1	.2							4.8	.8			
IP (2007=100)																	
2009	87.5	87.0	85.5	84.8	83.9	83.5	84.4	85.2	85.8	86.0	86.2	86.7	86.7	84.1	85.2	86.3	85.5
2010 2011	87.7 92.8	87.9 92.5	88.4 93.1	88.7 93.0	89.9 92.9	90.0 93.1	90.8	91.0	91.2	91.1	91.4	92.6	88.0 92.8	89.5 93.0	91.0	91.7	90.1
Capacity (percent of 2007 output) 2009 2010 2011	124.2 122.1 120.7	124.3 121.8 120.8	124.3 121.5 120.9	124.3 121.2 121.0	124.2 121.0 121.2	124.1 120.8 121.3	123.9 120.6	123.6 120.5	123.4 120.5	123.1 120.5	122.8 120.5	122.4 120.6	124.3 121.8 120.8	124.2 121.0 121.2	123.6 120.6	122.8 120.5	123.7 121.0
	120.7	120.0	120.7	121.0	121.2	121.5							120.0	121.2			
Utilization (percent)																	
1989	85.2	84.7	84.8	84.7	84.0	83.9	82.9	83.4	83.0	82.7	82.8	83.1	84.9	84.2	83.1	82.9	83.8
1990	82.5	83.0	83.3	83.0	83.0	83.1	82.9	82.9	83.0	82.2	81.1	80.4	82.9	83.0	82.9	81.2	82.5
1991	79.9	79.3	78.8	78.8	79.5	80.2	80.1	80.1	80.7	80.5	80.3	79.9	79.3	79.5	80.3	80.2	79.8
1992 1993	79.3 81.3	79.8 81.4	80.3 81.3	80.7 81.4	80.8 81.0	80.7 81.1	81.2 81.3	80.6 81.1	80.6 81.4	81.0 81.9	81.2 82.0	81.0 82.3	79.8 81.3	80.7 81.2	80.8 81.3	81.1 82.1	80.6
1993	01.3	01.4	01.3	01.4	01.0	01.1	01.3	01.1	01.4	01.9	02.0	02.3	81.3	01.2	01.5	02.1	81.5
1994	82.5	82.3	83.0	83.2	83.4	83.7	83.6	83.8	83.8	84.2	84.4	85.1	82.6	83.5	83.7	84.6	83.6
1995	85.0	84.7	84.6	84.2	84.1	84.1	83.4	84.2	84.2	83.7	83.5	83.5	84.8	84.1	83.9	83.6	84.1
1996 1997	82.6 83.4	83.6 84.0	83.1 84.2	83.5 83.8	83.6 84.0	84.0 83.9	83.5 83.9	83.7 84.5	83.7 84.7	83.3 84.7	83.6 84.9	83.7 84.7	83.1 83.9	83.7 83.9	83.6 84.4	83.6 84.8	83.5 84.2
1998	84.5	84.0	83.5	83.3	83.3	82.3	81.5	82.8	82.1	82.4	81.9	81.8	84.0	83.0	82.2	82.1	82.8
1999	81.8	81.8	81.6	81.5	81.7	81.3	81.6	81.6	81.1	81.8	81.9	82.2	81.7	81.5	81.4	82.0	81.7
2000	82.0	82.0	82.1	82.3	82.1	81.9	81.5	81.0	81.2	80.6	80.4	79.8	82.1	82.1	81.2	80.3	81.4
2001	79.1	78.4	77.9	77.5	76.8	76.1	75.6	75.1	74.7	74.2	73.6	73.5	78.5	76.8	75.1	73.8	76.0
2002	73.8	73.7	74.2	74.4	74.8	75.4	75.2	75.3	75.4	75.1	75.5	75.1	73.9	74.9	75.3	75.2	74.8
2003	75.7	76.0	75.9	75.4	75.4	75.5	75.7	75.7	76.2	76.2	76.8	76.8	75.9	75.4	75.9	76.6	75.9
2004	77.0	77.4	77.0	77.3	77.9	77.2	77.8	78.0	77.9	78.7	78.8	79.4	77.1	77.5	77.9	79.0	77.9
2005	79.8	80.3	80.1	80.1	80.2	80.4	80.2	80.2	78.5	79.4	80.0	80.4	80.1	80.2	79.6	79.9	79.9
2006	80.4	80.3	80.4	80.6	80.3	80.5	80.5	80.5	80.3	80.1	79.9	80.5	80.4	80.5	80.4	80.2	80.4
2007 2008	80.2 81.1	80.9 81.0	80.8 80.6	81.2 80.0	81.1 79.5	81.0 79.3	81.0 79.0	81.0 77.6	81.3 74.3	80.8 74.9	81.1 73.9	81.3 71.9	80.6 80.9	81.1 79.6	81.1 77.0	81.1 73.6	81.0 77.8
2009	70.4	70.0	68.8	68.2	67.5	67.3	68.2	68.9	69.5	69.9	70.2	70.8	69.7	67.7	68.9	70.3	69.2
2010	71.9 76.9	72.2	72.8	73.2	74.3	74.5	75.3	75.5	75.7	75.7	75.8	76.8	72.3	74.0 76.7	75.5	76.1	74.5
2011	76.9	76.6	77.0	76.8	76.7	76.7							76.8	76.7			

^{1.} Quarterly changes are at annual rates. Annual changes are calculated from annual averages.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annua
IP (percent																	
change) ²																	
1989	.8	9	1	.2	8	.2	-1.1	.8	2	2	.2	.1	2.0	-2.7	-3.2	.3	
1990	1	1.4	.5	3	.2	.3	1	.2	.0	8	-1.1	8	4.3	2.9	1.1	-6.8	
1991 1992	8 6	6 .9	7 1.0	.3	.7	1.1	.2	.2 4	1.1	2 .6	2 .4	1	-8.8	1.9 8.2	7.2 4.0	1.5 2.9	-2.
1992	1.0	.2	2	.5	.6 1	1	.3	4	.6	.8	.4	2 .5	.6 4.5	1.5	1.1	6.9	3.
1994	.2	.1	1.3	.8	.7	.3	.4	.8	.3	1.0	.8	1.2	5.1	9.4	6.0	9.9	5.
1994	.3	1	.3	2	.1	.5	6	1.1	.8	1	.0	.4	5.5	.6	3.0	3.8	5.
1996	7	1.6	2	1.1	.7	1.1	.3	.6	.7	1	.8	.9	2.2	9.7	7.8	5.6	4.
1997	.1	1.4	1.2	2	.9	.7	.5	1.6	.8	.6	1.1	.4	9.2	7.7	10.8	10.9	8
1998	.8	.1	1	.5	.6	7	5	2.6	3	1.0	.2	.5	6.0	2.4	3.3	7.8	6
1999	.2	.7	1	.4	.9	3	.5	.7	3	1.5	.6	.7	4.4	4.5	3.8	9.0	5
2000 2001	.2 6	.3 6	.6 3	.6 2	2 8	.2 7	.0	6 7	.5 2	4 7	3 3	7 .3	5.3	4.2 -5.4	8 -6.3	-2.7 -4.5	4 -4
2001	6	0	3	.2	o .7	1.1	4	7	2	7	5 .5	5	3.3	6.1	3.4	-4.5	-4
2003	.6	.2	.2	9	.1	.4	.1	3	.7	.0	1.0	2	2.3	-2.2	1.5	3.9	1
2004	.0	.7	3	.4	.7	8	.8	.7	1	1.1	1	.7	2.6	2.9	3.5	5.7	2.
2005	.8	.8	5	.2	.4	.1	1	.2	-1.1	1.5	.8	.0	6.7	2.0	5	5.5	4.
2006	.9	1	1	.6	4	.3	1	.4	.1	3	.1	1.6	4.0	1.0	1.1	1.8	2
2007	3	.5	.7	.7	2	.3	.3	5	.5	5	.3	.3	5.4	5.2	.8	2	2
2008	3	5	4	-1.2	6	6	-1.1	-1.4	-3.4	6	-2.4	-3.1	-2.0	-8.9	-13.9	-21.4	-5
2009	-2.7	.1	-2.0	8	-1.2	3	1.3	1.0	.8	.0	.8	.2	-22.2	-11.4	6.6	5.9	-13.
2010	1.0	.1	.9	.7	1.1	1	.8	.1	.2	.2	.2	1.0	7.1	8.7	5.1	3.4	5
2011	.7	.1	.6	5	.1	.0							7.2	.2			
IP (2007=100)	02.5	02.5	02.0	01.4	00.4	00.4	01.2	01.0	02.5	02.5	02.2	02.4	02.1	00.5	0.1.0	02.1	0.2
2009	83.6 84.2	83.7 84.3	82.0	81.4	80.4	80.1	81.2 87.3	81.9 87.4	82.6	82.6	83.3	83.4	83.1	80.6	81.9 87.4	83.1	82
2010 2011	89.4	84.3 89.5	85.1 90.1	85.7 89.7	86.7 89.7	86.6 89.8	87.3	87.4	87.5	87.7	87.9	88.8	84.5 89.7	86.3 89.7	87.4	88.1	86
Capacity (percent of 2007 output) 2009	125.8	125.6	125.3	125.0	124.7	124.4	124.1	123.7	123.4	123.0	122.7	122.4	125.6	124.7	123.7	122.7	124.
2010	122.0	121.7	121.4	121.2	120.9	120.7	120.6	120.4	120.3	120.3	120.2	120.2	121.7	120.9	120.4	120.3	120.
2011	120.3	120.3	120.4	120.5	120.6	120.7							120.3	120.6			
Utilization																	
(percent)	05.5	84.6	94.4	04.2	92 5	92.5	92.2	92.9	92.4	02.1	92.0	91.0	84.8	02.0	92.5	92.0	02
1989 1990	85.5 81.6	82.5	84.4 82.7	84.3 82.3	83.5 82.3	83.5 82.3	82.3 82.1	82.8 82.1	82.4 81.9	82.1 81.1	82.0 80.0	81.9 79.3	82.3	83.8 82.3	82.5 82.0	82.0 80.1	83
1991	78.5	77.9	77.3	77.4	77.8	78.6	78.7	78.8	79.5	79.3	79.0	78.8	77.9	78.0	79.0	79.0	78
1992	78.2	78.8	79.4	79.6	79.9	79.9	80.4	79.9	79.7	80.0	80.1	79.8	78.8	79.8	80.0	80.0	79
1993	80.4	80.4	80.1	80.4	80.2	80.0	80.1	79.9	80.3	80.8	81.0	81.3	80.3	80.2	80.1	81.0	80
1994	81.3	81.2	82.1	82.5	82.8	82.8	82.8	83.2	83.2	83.7	84.0	84.7	81.5	82.7	83.1	84.1	82
1995	84.6	84.2	84.1	83.6	83.3	83.3	82.5	83.1	83.4	82.9	82.5	82.4	84.3	83.4	83.0	82.6	83
1996	81.4	82.3	81.7	82.2	82.3	82.8	82.6	82.6	82.7	82.2	82.4	82.6	81.8	82.4	82.6	82.4	82
1997 1998	82.2 83.7	82.9 83.1	83.4 82.4	82.7 82.2	82.9 82.0	82.9 80.9	82.8 80.0	83.6 81.5	83.7 80.8	83.6 81.1	83.9 80.8	83.6 80.8	82.8 83.0	82.9 81.7	83.3 80.8	83.7 80.9	83
1999 2000	80.6 80.7	80.7 80.6	80.3 80.8	80.2 80.9	80.6 80.4	80.0 80.2	80.1 79.9	80.3 79.1	79.7 79.2	80.5 78.7	80.7 78.1	80.9 77.4	80.5 80.7	80.3 80.5	80.0 79.4	80.7 78.1	80
2000	76.7	76.0	75.5	75.1	74.3	73.7	73.2	72.6	72.3	71.7	71.4	71.5	76.0	74.4	79.4	71.6	73
2002	71.8	71.7	72.2	72.3	72.8	73.6	73.2	73.5	73.6	73.3	73.6	73.2	71.9	72.9	73.5	73.4	72
2003	73.7	73.8	74.0	73.3	73.4	73.7	73.7	73.5	74.1	74.1	74.9	74.7	73.8	73.4	73.8	74.6	73
	74.8	75.4	75.2	75.5	76.1	75.5	76.1	76.6	76.4	77.2	77.1	77.6	75.1	75.7	76.3	77.3	76
2004	78.1	78.6	78.2	78.2	78.4	78.4	78.1	78.2	77.2	78.2	78.7	78.5	78.3	78.3	77.8	78.5	78
2005	79.1	78.9	78.6	79.0	78.5	78.6	78.4	78.6	78.5	78.1	78.0	79.1	78.9	78.7	78.5	78.4	78
2005 2006	70.7	79.0	79.3	79.7 77.2	79.4 76.8	79.5 76.3	79.5 75.6	79.0 74.6	79.3 72.2	78.8 71.8	79.0 70.2	79.2 68.2	79.0 78.5	79.5 76.8	79.3 74.1	79.0 70.1	79
2005 2006 2007	78.7 78.9	78.5	78.1										1				I
2004 2005 2006 2007 2008	78.9	78.5				C 4 4	CE 4	<i>((</i>)	C7.0	(7.1	(7.0	CO 2		64.6	<i>((</i>)	<i>(</i> 7.7.7.	
2005 2006 2007			65.5 70.0	65.1	64.4 71.7	64.4 71.7	65.4 72.4	66.2 72.6	67.0 72.7	67.1 73.0	67.9 73.1	68.2 73.8	66.2 69.4	64.6 71.4	66.2 72.6	67.7 73.3	66

Refer to note on cover page.
 Quarterly changes are at annual rates. Annual changes are calculated from annual averages.

Table 13
HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Total Industry Excluding Selected High-Technology Industries¹
Seasonally adjusted

Seasonally adjusted Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
change) ²																	
1989	.3	4	.3	.0	7	.0	-1.1	.8	3	2	.2	.6	2.0	-1.6	-3.5	.8	.6
1990	7	.9	.5	2	.1	.3	1	.2	.2	8	-1.3	8	2.2	2.5	1.3	-6.7	.3
1991	4	8	6	.2	1.0	1.0	.0	.0	.9	2	2	5	-8.0	2.0	5.3	.3	-2.0
1992 1993	8 .5	.8	.8 1	.6	.2 4	1 .2	.8	6 1	.1	.6 .7	.3	.0	-1.9 3.1	6.2	1.8 1.4	2.9 5.1	1.9 2.5
1994 1995	.4	.0 2	.9 1	.3 3	.3	.6	.0 6	.4 1.1	.0	.6 5	.4	.9 .1	4.5	5.3	3.2 1.5	5.7	4.0
1996	-1.0	1.3	3	3	.5	.7	5	.4	.3	3	.8	.5	4	6.4	2.1	3.0	1.7
1997	1	.9	.5	3	.3	.2	.3	1.0	.7	.6	.6	.1	5.1	2.4	6.2	7.8	4.2
1998	.2	.0	1	.2	.6	9	8	2.0	7	.6	3	.1	1.9	.8	3	2.4	3.1
1999	.2	.1	1	1	.6	4	.3	.4	4	1.2	.2	.5	.6	.3	1.1	5.4	1.1
2000	3	.0	.1	.4	2	1	6	4	.4	5	2	5	.5	1.5	-3.0	-2.7	1.0
2001	7	5	3	1	7	5	3	3	4	5	4	1	-5.9	-4.4	-4.6	-4.8	-4.0
2002	.7	1	.8	.4	.5	.9	4	.1	.0	4	.4	6	3.0	6.4	1.8	-1.1	.3
2003	.7	.2	3	9	1	1	.2	1	.6	2	.7	1	1.7	-4.6	.9	2.6	.2
2004	.2	.6	6	.5	.7	9	.7	.2	1	1.0	.2	.7	2.2	1.8	1.6	5.4	1.7
2005	.4	.6	2	.0	.1	.3	3	.0	-2.2	1.2	1.0	.5	5.3	.9	-3.0	2.0	2.5
2006	.1	.0	.2 2	.4	3	.3	.2	.2	2	.0	2 .2	1.0	3.4	1.7	1.2	.3	1.4
2007 2008	3 3	1.0 3	2 5	.6 9	.0 6	.1 3	.1 3	1 -1.7	.4 -4.3	8 1.1	-1.1	.1 -2.5	3.7	3.6 -7.4	1.1 -12.2	-1.5 -14.7	1.9 -4.4
2009 2010	-2.1 1.2	6 .1	-1.8 .5	-1.0 .3	-1.1 1.4	5 .1	1.0	.9	.6	.2 1	.2	.6 1.2	-18.7 7.9	-12.5 6.9	4.8 6.8	5.2 2.7	-11.2 5.0
2010	.2	4	.7	2	1	.2	.9	.2	.5	1	.2	1.2	4.3	.8	0.8	2.1	3.0
ID (2007, 100)																	
IP (2007=100) 2009	87.0	86.6	85.0	84.1	83.2	82.8	83.7	84.4	85.0	85.1	85.3	85.8	86.2	83.4	84.3	85.4	84.8
2010	86.8	86.9	87.4	87.7	88.9	89.0	89.8	90.0	90.2	90.1	90.3	91.4	87.1	88.5	90.0	90.6	89.0
2011	91.6	91.2	91.9	91.7	91.7	91.8							91.6	91.7			
Capacity (percent of 2007 output)																	
2009	123.7	123.7	123.7	123.6	123.5	123.3	123.1	122.8	122.4	122.1	121.7	121.3	123.7	123.5	122.8	121.7	122.9
2010 2011	121.0 119.3	120.6 119.4	120.3 119.5	120.0 119.6	119.8 119.7	119.6 119.8	119.4	119.3	119.3	119.2	119.2	119.3	120.6 119.4	119.8 119.7	119.3	119.3	119.8
Utilization (percent)																	
1989	85.5	85.1	85.3	85.1	84.4	84.3	83.2	83.8	83.3	83.0	83.1	83.4	85.3	84.6	83.4	83.2	84.1
1990	82.7	83.3	83.6	83.3	83.3	83.4	83.2	83.3	83.3	82.5	81.4	80.7	83.2	83.3	83.3	81.5	82.8
1991	80.2	79.5	78.9	79.0	79.7	80.4	80.3	80.3	80.9	80.6	80.4	79.9	79.6	79.7	80.5	80.3	80.0
1992 1993	79.2 81.4	79.7 81.6	80.2 81.5	80.6 81.6	80.8 81.2	80.6 81.2	81.1 81.4	80.6 81.2	80.6 81.5	81.0 81.9	81.2 82.1	81.1 82.4	79.7 81.5	80.7 81.3	80.8 81.4	81.1 82.1	80.6 81.6
1993	01.4	61.0	61.5	61.0	01.2	01.2	01.4	01.2	61.5	61.9	02.1	02.4	61.5	61.5	01.4	02.1	01.0
1994	82.6	82.5	83.1	83.2	83.4	83.8	83.7	83.9	83.7	84.1	84.4	85.0	82.7	83.5	83.8	84.5	83.6
1995	84.9	84.6	84.4	84.0	83.9	83.9	83.3	84.1	84.0	83.5	83.4	83.4	84.6	83.9	83.8	83.4	83.9
1996 1997	82.4 83.8	83.4 84.3	83.0 84.4	83.5 83.9	83.8 83.9	84.2 83.8	83.6 83.8	83.8 84.3	83.9 84.6	83.4 84.8	83.9 85.0	84.1 84.7	82.9 84.1	83.8 83.9	83.7 84.2	83.8 84.8	83.6 84.3
1998	84.6	84.2	83.9	83.7	83.9	82.8	81.9	83.3	82.5	82.7	82.1	82.0	84.2	83.5	82.5	82.3	83.1
1000	01.0	01.0	01.5	01.2	01.5	01.0	01.0	01.2	90.7	01.5	01.6	01.0	01.7	01.2	01.0	01.7	01.4
1999 2000	81.9 81.5	81.8 81.4	81.5 81.4	81.2 81.6	81.5 81.4	81.0 81.3	81.0 80.7	81.2 80.3	80.7 80.6	81.5 80.0	81.6 79.8	81.9 79.3	81.7 81.4	81.2 81.4	81.0 80.5	81.7 79.7	81.4 80.8
2001	78.7	78.2	77.9	77.7	77.1	76.6	76.3	76.0	75.6	75.1	74.7	74.6	78.3	77.2	76.0	74.8	76.6
2002	75.1	75.0	75.5	75.8	76.1	76.8	76.5	76.6	76.7	76.4	76.8	76.3	75.2	76.2	76.6	76.5	76.1
2003	76.9	77.1	76.9	76.3	76.3	76.2	76.4	76.4	76.8	76.7	77.3	77.3	77.0	76.3	76.5	77.1	76.7
2004	77.4	77.9	77.4	77.8	78.4	77.7	78.2	78.4	78.3	79.1	79.3	79.9	77.5	77.9	78.3	79.4	78.3
2005	80.2	80.7	80.6	80.5	80.6	80.8	80.6	80.5	78.7	79.5	80.2	80.6	80.5	80.6	79.9	80.1	80.3
2006	80.5	80.4	80.5	80.7	80.3	80.4	80.4	80.4	80.1	80.0	79.7	80.4	80.5	80.5	80.3	80.0	80.3
2007	80.1	80.8	80.6	81.0	81.0	81.1	81.2	81.1	81.5	80.9	81.1	81.3	80.5	81.0	81.3	81.1	81.0
2008	81.0	80.8	80.4	79.7	79.2	79.0	78.7	77.3	73.9	74.7	73.8	71.9	80.8	79.3	76.6	73.5	77.5
2009	70.3	70.0	68.7	68.1	67.3	67.1	68.0	68.8	69.4	69.7	70.1	70.7	69.7	67.5	68.7	70.2	69.0
2010	71.8	72.1	72.6	73.0	74.2	74.4	75.2	75.4	75.6	75.6	75.7	76.6	72.2	73.9	75.4	76.0	74.4
2011	76.7	76.4	76.9	76.7	76.6	76.7							76.7	76.7			
1 Selected high-tech	<u> </u>	4											1				L

^{1.} Selected high-technology industries are computers, communications equipment, and semiconductors and related electronic components.
2. Quarterly changes are at annual rates. Annual changes are calculated from annual averages.

Table 14
HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Manufacturing Excluding Selected High-Technology Industries Seasonally adjusted

Year Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent change) ³		1.0															
1989 1990	.9 3	-1.0 1.5	.0	.1 3	9 .1	.2	-1.4 2	.8	3 1	3 9	.1 -1.2	.0 8	2.3	-3.1 2.3	-4.3 .6	7 -7.6	.4
1990	8	8	8	3	.7	1.1	.3	.2	1.1	2	-1.2	3	-9.7	1.4	7.0	1.0	-2.6
1992	9	.9	.9	.4	.5	.1	.8	5	1	.5	.3	2	-1.1	7.1	2.7	1.4	2.6
1993	1.1	.1	3	.5	2	2	.2	2	.5	.7	.3	.5	4.0	.7	.4	5.7	2.5
1994 1995	.1 .1	.1 3	1.2 1	.5 4	.4 1	.2	.2 8	.6 .9	.1	.8 4	.5 1	.9 .0	4.2 2.8	7.0 -2.2	3.7	7.0	4.4 2.5
1996	-1.2	1.3	4	1.0	.5	.8	1	.3	.4	4	.7	.7	-1.8	7.3	4.0	2.8	1.5
1997	2	1.0	.9	7	.5	.4	.1	1.3	.6	.5	.8	.2	6.1	2.9	6.8	8.2	4.9
1998	.5	1	3	.2	.4	-1.1	9	2.4	8	.7	1	.2	3.1	2	5	4.1	3.5
1999 2000	1 3	.4 2	4 .3	.0 .4	.7 6	7 .0	.0 4	.6 8	4 .4	1.4 5	.3 6	.3 9	.7	.3 .6	.2 -3.7	6.6 -4.7	1.4
2001	6	5	3	1	7	5	1	7	3	7	2	.2	-6.9	-4.3	-4.9	-4.6	-4.8
2002	.7	1	.8	.1	.7	1.0	5	.3	.1 .7	5	.4	7	3.7	5.7	2.4	-1.4	.4
2003	.5	.0	.1	-1.1	1	.3	1	4		2	.9	3	.7	-3.9	.1	2.9	.0
2004 2005	1 .7	.8	3 6	.5	.7	9 .1	.8 3	.6 .1	3 -1.3	1.1 1.4	1 .7	.6 1	1.8	3.1	3.1 -2.1	5.2 4.2	2.0
2006	.8	2	2	.5	6	.2	1	.3	.0	4	.0	1.6	3.3	.0	.2	.9	1.5
2007 2008	4 4	.4 7	.5 6	.5 -1.3	2 7	.4 6	.3 -1.0	6 -1.4	.4 -3.5	8 4	.1 -2.2	.2 -3.0	4.5 -3.6	4.0 -10.0	.8 -14.1	-2.3 -20.4	2.0
2009	-2.8	.1	-2.2	-1.0	-1.3	4	1.3	.9	.8	1	.8	.2	-22.2	-12.9	5.9	5.4	-13.7
2010	1.0	.0	.9	.7	1.2	1	.9	.0	.1	.2	.1	1.0	6.8	8.6	5.1	2.9	4.9
2011	.6	.1	.7	5	.0	.0							6.6	.1			
IP (2007=100) 2009	82.9	82.9	81.1	80.3	79.3	79.0	80.0	80.7	81.3	81.2	81.9	82.0	82.3	79.5	80.7	81.7	81.1
2010	82.9	82.8	83.6	84.2	85.2	85.1	85.8	85.8	86.0	86.2	86.2	87.1	83.1	84.8	85.9	86.5	85.1
2011	87.6	87.7	88.3	87.9	87.9	87.9							87.9	87.9			
Capacity (percent of 2007 output)																	
2009	125.2	124.9	124.5	124.2	123.8	123.4	122.9	122.5	122.1	121.6	121.2	120.8	124.9	123.8	122.5	121.2	123.1
2010 2011	120.5 118.4	120.1 118.4	119.8 118.4	119.5 118.4	119.3 118.5	119.1 118.5	118.9	118.7	118.6	118.5	118.5	118.4	120.1 118.4	119.3 118.5	118.7	118.5	119.2
Utilization																	
(percent)	050	0.5.0	0.1.0	0.1.0	0.4.0	0.1.0	02.5	00.0	02.0	02.4	02.2	00.0	05.0	0.1.2	02.0	02.2	02.5
1989 1990	86.0 81.8	85.0 82.9	84.9 83.0	84.8 82.6	84.0 82.6	84.0 82.6	82.7 82.4	83.2 82.5	82.8 82.3	82.4 81.4	82.3 80.3	82.2 79.5	85.3 82.6	84.3 82.6	82.9 82.4	82.3 80.4	83.7 82.0
1991	78.8	78.1	77.4	77.5	78.0	78.7	78.9	78.9	79.7	79.4	79.1	78.7	78.1	78.1	79.1	79.1	78.6
1992	77.9	78.6	79.2	79.5	79.8	79.8	80.3	79.8	79.7	79.9	80.1	79.8	78.6	79.7	79.9	79.9	79.5
1993	80.6	80.5	80.2	80.5	80.3	80.1	80.2	79.9	80.3	80.8	81.0	81.3	80.4	80.3	80.1	81.0	80.5
1994	81.3	81.3	82.1	82.5	82.7	82.7	82.8	83.2	83.1	83.6	83.9	84.5	81.6	82.6	83.0	84.0	82.8
1995 1996	84.5 81.0	84.0 81.9	83.8 81.4	83.3 82.1	83.0 82.3	83.1 82.8	82.2 82.5	82.8 82.6	83.1 82.8	82.5 82.2	82.3 82.6	82.1 82.9	84.1 81.4	83.1 82.4	82.7 82.6	82.3 82.5	83.1 82.3
1997	82.5	83.1	83.5	82.7	82.7	82.7	82.5	83.3	83.4	83.5	83.8	83.6	83.0	82.7	83.1	83.6	83.1
1998	83.7	83.2	82.7	82.5	82.5	81.3	80.3	81.9	81.0	81.3	80.9	80.8	83.2	82.1	81.1	81.0	81.8
1999	80.6	80.7	80.1	79.9	80.2	79.5	79.3	79.6	79.1	80.0	80.2	80.3	80.4	79.9	79.4	80.2	80.0
2000 2001	79.9 76.0	79.7 75.6	79.8 75.3	79.9 75.1	79.4 74.5	79.3 74.1	78.9 74.0	78.1 73.4	78.3 73.2	77.8 72.7	77.3 72.5	76.5 72.6	79.8 75.6	79.5 74.6	78.4 73.5	77.2 72.6	78.7 74.1
2002	73.1	73.0	73.6	73.7	74.2	75.0	74.6	74.9	75.0	74.6	74.9	74.4	73.2	74.3	74.8	74.7	74.2
2003	74.9	74.9	75.0	74.2	74.2	74.4	74.4	74.1	74.7	74.6	75.4	75.2	74.9	74.3	74.4	75.1	74.7
2004	75.1	75.7	75.5	76.0	76.5	75.9	76.5	77.0	76.8	77.6	77.5	78.0	75.5	76.1	76.7	77.7	76.5
2005 2006	78.5 79.2	79.1 78.9	78.6 78.6	78.6 78.9	78.8 78.3	78.8 78.4	78.5 78.2	78.5 78.3	77.3 78.2	78.3 77.8	78.8 77.7	78.6 78.9	78.7 78.9	78.8 78.5	78.1 78.3	78.6 78.1	78.5 78.5
2007	78.5	78.8	79.1	79.4	79.2	79.5	79.6	79.1	79.4	78.8	78.9	79.0	78.8	79.4	79.4	78.9	79.1
2008	78.6	78.1	77.7	76.7	76.2	75.7	75.0	74.0	71.5	71.3	69.9	68.0	78.2	76.2	73.5	69.7	74.4
2009	66.2	66.4	65.1	64.7	64.0	64.0	65.1	65.9	66.6	66.8	67.6	67.9	65.9	64.3	65.9	67.4	65.9
2010	68.8	69.0	69.8	70.4	71.4	71.5	72.2	72.3	72.5	72.7	72.8	73.5	69.2	71.1	72.3	73.0	71.4
2011	74.0	74.1	74.6	74.2	74.2	74.2							74.2	74.2			

^{1.} Refer to note on cover page.
2. Selected high-technology industries are computers, communications equipment, and semiconductors and related electronic components.
3. Quarterly changes are at annual rates. Annual changes are calculated from annual averages.

 $\frac{I_m^A}{I_{m-1}^A} = \sqrt{\frac{\sum I_m p_{m-1}}{\sum I_{m-1} p_{m-1}} \times \frac{\sum I_m p_m}{\sum I_{m-1} p_m}}$

value added divided by the average annual IP index.

The Industrial Production and Capacity Utilization statistical release, which is published around the middle of the month, reports measures of output, capacity, and capacity utilization in manufacturing, mining, and the electric and gas utilities industries. More detailed descriptions of industrial production and capacity utilization are available on the Board's website at www.federalreserve.gov/releases/G17. In addition, the website includes files containing data shown in the release, more detailed series that are published in a monthly supplement to the G.17, and historical data. Instructions on searching for and downloading specific series are provided as well.

The IP proportions (typically shown in the first column of the relevant tables in the G.17 release) are estimates of the industries' relative contributions to overall growth in the following year. For example, the relative importance weight of the motor vehicles and parts industry is about 4 percent. If output in this industry increased 10 percent in a month, then this gain would boost growth in total IP by 4/10 percentage point $(0.04 \times 10\% = 0.4\%)$. To assist users with calculations, the Federal Reserve's web site provides supplemental monthly statistics that represent the exact proportionate contribution of a monthly change in a component index to the monthly change in the total index (www.federalreserve.gov/releases/G17/ipdisk/IPWeightsSa.txt).

INDUSTRIAL PRODUCTION

Coverage. The industrial production (IP) index measures the real output of the manufacturing, mining, and electric and gas utilities industries; the reference period for the index is 2007. Manufacturing consists of those industries included in the North American Industry Classification System (NAICS) definition of manufacturing plus those industries— newspaper, periodical, book, and directory publishing plus logging—that have traditionally been considered to be manufacturing. For the period since 1997, the total IP index has been constructed from 312 individual series based on the 2002 NAICS codes. These individual series are classified in two ways: (1) market groups, and (2) industry groups. Market groups consist of products and materials. Total products are the aggregate of final products, such as consumer goods and equipment, and nonindustrial supplies (which are inputs to nonindustrial sectors). Materials are inputs in the manufacture of products. Major industry groups include three-digit NAICS industries and aggregates of these industries—for example, durable and nondurable manufacturing, mining, and utilities. A complete description of the market and industry structures, including details regarding series classification, relative importance weights, and data sources, is available on the Board's web site (www.federalreserve.gov/releases/G17/About.htm).

Timing. The first estimate of output for a month is published around the 15th of the following month. The estimate is preliminary (denoted by the superscript "p" in tables) and subject to revision in each of the subsequent five months as new source data become available. (Revised estimates are denoted by the superscript "r" in tables.) For the first estimate of output for a given month, about 67 percent of the source data (in value-added terms) are available; the fraction of available source data increases to 81 percent for estimates in the second month that the estimate is published, 93 percent in the third month, 96 percent in the fourth month, 99 percent in the fifth month, and 99 percent in the sixth month. Data availability by data type in early 2011 is summarized in the table below:

Source data. On a monthly basis, the individual indexes of industrial production are constructed from two main types of source data: (1) output measured in physical units and (2) data on inputs to the production process, from which output is inferred. Data on physical products, such as tons of steel or barrels of oil, are obtained from private trade associations and from government agencies; data of this type are used to estimate monthly IP wherever possible and appropriate. Production indexes for a few industries are derived by dividing estimated nominal output (calculated using unit production and unit values or sales) by a corresponding Fisher price index; the most notable of these fall within the high-technology grouping and include computers, communications equipment, and semiconductors. When suitable direct measures of product are not available, estimates of output are based on production-worker hours by industry. Data on hours worked by production workers are collected in the monthly establishment survey conducted by the Bureau of Labor Statistics. The factors used to convert inputs into estimates of production are based on historical relationships between the inputs and the comprehensive annual data used to benchmark the IP indexes; these factors also may be influenced by technological or cyclical developments. The annual data used in benchmarking the individual IP indexes are constructed from a variety of source data, such as the quinquennial Censuses of Manufactures and Mineral Industries and the Annual Survey of Manufactures, prepared by the Bureau of the Census; the *Minerals Yearbook*, prepared by the United States Geological Survey of the Department of the Interior; and publications of the Department of Energy.

Availability of Monthly IP Data in Publication Window (Percent of value added in 2011)

	Month of estimate										
Type of data	1st	2nd	3rd	4th	5th	6th					
Physical product	27	41	53	55	58	58					
Production-worker hours	41	41	41	41	41	41					
IP data received	67	81	93	96	99	99					
IP data estimated	33	19	7	4	1	1					

Aggregation Methodology and Weights. The aggregation method for the IP index is a version of the Fisher-ideal index formula. (For a detailed discussion of the aggregation method, see the *Federal Reserve Bulletins* of February 1997 and March 2001.) In the IP index, series that measure the output of an individual industry are combined using weights derived from their proportion in the total value-added output of all industries. The IP index, which extends back to 1919, is built as a chain-type index since 1972. The current formula for the growth in monthly IP (or any of the sub-aggregates) since 1972 is shown below. An output index for month m is denoted by I_m^A for aggregate A and I_m for each of its components. The monthly price measure in the formula (p_m) is interpolated from an annual series of

The physical product group includes series based on either monthly or quarterly data. As can be seen in the first row of the table, in the first month, a physical product indicator is available for about half of the series (in terms of value added) that ultimately are based on physical product data (27 percent out of a total of 58 percent). Of the 27 percent, about two-thirds (19 percent of total IP) include series that are derived from weekly physical product data and for which actual monthly data may lag up to several months. On average, quarterly product data are received for the fourth estimate of industrial production. Specifically, quarterly data are available for the third estimate of the last month of a quarter, the fourth estimate of the second month of a quarter, and the fifth estimate of the first month of a quarter.

Seasonal adjustment. Individual series are seasonally adjusted using Census X-12 ARIMA. For series based on production-worker hours, the current seasonal factors were estimated with data through January 2011; for other series, the factors were estimated with data through at least December 2010. Series are pre-adjusted for the effects of holidays or business cycles when appropriate. For the data since 1972, all seasonally adjusted aggregate indexes are calculated by aggregating the seasonally adjusted indexes of the individual series.

Reliability. The average revision to the *level* of the total IP index, without regard to sign, between the first and the fourth estimates was 0.27 percent during the 1987–2010 period. The average revision to the *percent change* in total IP, without regard to sign, from the first to the fourth estimates was 0.21 percentage point during the 1987–2010

period. In most cases (about 85 percent), the direction of the change in output indicated by the first estimate for a given month is the same as that shown by the fourth estimate.

Rounding. The published percent changes are calculated from unrounded indexes, and may not be the same as percent changes calculated from the rounded indexes shown in the release.

CAPACITY UTILIZATION

Overview. The Federal Reserve Board constructs estimates of capacity and capacity utilization for industries in manufacturing, mining, and electric and gas utilities. For a given industry, the capacity utilization rate is equal to an output index (seasonally adjusted) divided by a capacity index. The Federal Reserve Board's capacity indexes attempt to capture the concept of *sustainable maximum output*—the greatest level of output a plant can maintain within the framework of a realistic work schedule, after factoring in normal downtime and assuming sufficient availability of inputs to operate the capital in place.

Coverage. Capacity indexes are constructed for 89 detailed industries (71 in manufacturing, 16 in mining, and 2 in utilities), which mostly correspond to industries at the three- and four-digit NAICS level. Estimates of capacity and utilization are available for a variety of groups, including durable and nondurable manufacturing, total manufacturing, mining, utilities, and total industry. Manufacturing consists of those industries included in the North American Industry Classification System (NAICS) definition of manufacturing *plus* those industries— newspaper, periodical, book, and directory publishing plus logging—that have traditionally been considered to be manufacturing. Also, special aggregates are available, such as high-technology industries and manufacturing excluding high-technology industries.

Source Data. The monthly rates of capacity utilization are designed to be consistent with both the monthly data on production and the periodically available data on capacity and utilization. Because there is no direct monthly information on overall industrial capacity or utilization rates, the Federal Reserve first estimates annual capacity indexes from the source data. Capacity data reported in physical units from government sources (primarily from the U.S. Geological Survey and the Department of Energy's Energy Information Administration) and trade sources are available for portions of several industries in manufacturing (e.g., paper, industrial chemicals, petroleum refining, motor vehicles), as well as for electric utilities and mining; these industries represent about 25 percent of total industrial capacity. When physical product data are unavailable for manufacturing industries, capacity indexes are based on responses to the Bureau of the Census's Quarterly Survey of Plant Capacity (QSPC); these industries account for a bit less than 70 percent of total industry capacity. In the absence of utilization data for a few mining and petroleum series, capacity is based on trends through peaks in production (roughly 5 percent of total industry capacity). A detailed description of the methodology used to construct the capacity indexes is available on the Board's web site (www.federalreserve.gov/releases/G17/CapNotes.htm).

Aggregation Methodology. Monthly capacity aggregates are calculated in three steps: (1) utilization aggregates are calculated on an annual basis through the most recent full year as capacity-weighted aggregates of individual utilization rates; (2) the annual aggregate capacity is derived from the corresponding production and utilization aggregates; (3) the monthly capacity aggregate is obtained by interpolating the annual capacity aggregate with a Fisher index of its constituent monthly capacity series. Utilization rates for the individual series and aggregates are calculated by dividing the pertinent monthly production index by the related capacity index.

Consistency. A major aim is that the Federal Reserve utilization rates be consistent over time so that, for example, a rate of 85 percent means about the same degree of tightness that it meant in the past. A major task for the Federal Reserve in developing reasonable and consistent time series of capacity and utilization is dealing with inconsistencies between the movements of the industrial production index and the survey-based utilization rates. The McGraw-Hill/DRI Survey, now discontinued, was the primary source of manufacturing

utilization rates for many years. This was a survey of large companies that reported, on average, higher utilization rates than those reported by establishments covered by the Census Bureau's annual Survey of Plant Capacity (the predecessor to the QSPC) for the fourteen years they overlapped. Adjustments have been made to keep the industry utilization rates currently reported by the Federal Reserve roughly in line with rates formerly reported by McGraw-Hill. As a consequence, the rates reported by the Federal Reserve tend to be higher than the rates reported in the QSPC.

Perspective. Over the 1972–2010 period, the average total industry utilization rate is 80.4 percent; for manufacturing, the average factory operating rate has been 79.0 percent. Industrial plants usually operate at capacity utilization rates that are well below 100 percent: none of the broad aggregates has ever reached 100 percent. For total industry and total manufacturing, utilization rates have exceeded 90 percent only in wartime. The highs and lows in capacity utilization shown in table 7 are specific to each series and do not all occur in the same month.

REFERENCES AND RELEASE DATES

References. The release for the annual revision that was published on March 25, 2011 is available on the Board's website (www.federal reserve.gov/releases/g17/revisions/Current/DefaultRev.htm). A summary of the annual revision that incorporated back to 1972 production and capacity indexes reclassified according to the North American Industry Classification System is available in an article in the Federal Reserve Bulletin, vol. 89 (April 2003), pp. 151–176. A description of the aggregation methods for industrial production and capacity utilization is included in an article in the Federal Reserve Bulletin, vol. 83 (February 1997), pp. 67–92. The Federal Reserve methodology for constructing industry-level measures of capital is detailed in "Capital Stock Estimates for Manufacturing Industries: Methods and Data" by Mike Mohr and Charles Gilbert (1996), which can be obtained at:

www.federalreserve.gov/releases/g17/CapitalStockDocLatest.pdf.

Industrial Production—1986 Edition contains a more detailed description of the other methods used to compile the industrial production index, plus a history of its development, a glossary of terms, and a bibliography. The major revisions to the IP indexes and capacity utilization since 1990 have been described in the Federal Reserve Bulletin (April 1990, June 1990, June 1993, March 1994, January 1995, January 1996, February 1997, February 1998, January 1999, March 2000, March 2001, March 2002, April 2003, Winter 2004, Winter 2005, March 2006, May 2007, August 2008, August 2009).

Release Schedule

At 9:15 a.m. on

2011: January 14, February 16, March 17, April 15, May 17, June 15, July 15, August 16, September 15, October 17, November 16, and December 15.