FEDERAL RESERVE statistical release



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INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION

Industrial production increased 1.1 percent in November after having fallen 0.7 percent in October. The gain in November is estimated to have largely resulted from a recovery in production for industries that had been negatively affected by Hurricane Sandy, which hit the Northeast region in late October. In November,

(over)

Industrial Production and Capacity Utilization: Summary

Seasonally adjusted

			2007=	100						Percent	change		
	2012						2012						Nov. '11 to
Industrial production	June ^r	July ^r	Aug."	Sept. ^r	Oct."	Nov. ^p	June ^r	July ^r	Aug. ^r	Sept. ^r	Oct."	Nov. ^p	Nov. '12
Total index	97.3	97.9	97.0	97.1	96.5	97.5	.0	.7	-1.0	.2	7	1.1	2.5
Previous estimates	97.3	97.9	96.8	97.0	96.6	71.5	0.	.7	-1.1	.2	4	1.1	2.5
Trevious estimates	71.5	<i><i></i></i>	20.0	27.0	20.0		.0	• /	1.1	.2			
Major market groups													
Final Products	97.0	97.4	96.5	96.7	95.5	96.6	.4	.4	9	.2	-1.3	1.1	2.5
Consumer goods	93.4	93.8	92.9	93.3	92.1	93.3	2	.4	-1.0	.4	-1.2	1.2	1.2
Business equipment	104.8	104.9	104.0	103.7	102.4	103.7	1.9	.1	9	3	-1.3	1.2	7.4
Nonindustrial supplies	87.2	87.2	86.7	86.7	86.1	86.9	3	.0	6	.0	7	.9	2.1
Construction	79.7	79.1	78.9	79.3	79.0	80.1	9	8	2	.5	3	1.4	2.9
Materials	101.1	102.2	101.0	101.2	101.1	102.1	2	1.1	-1.2	.2	1	1.0	2.7
Major industry groups													
Manufacturing (see note below)	94.3	94.6	93.8	93.8	92.9	94.0	.4	.3	8	.1	-1.0	1.1	2.7
Previous estimates	94.3	94.6	93.7	93.8	93.0		.3	.3	9	.1	9		
Mining	111.6	113.0	112.0	113.8	114.1	115.1	.1	1.3	9	1.6	.3	.8	3.0
Utilities	99.9	102.8	100.6	99.8	99.8	100.9	-2.7	3.0	-2.2	8	.0	1.0	.7
													Capacity
					Perce	ent of cap	acity						growth
	Average	1988-	1990-	1994-									
~	1972-	89	91	95	2009	2011	2012						Nov. '11 to
Capacity utilization	2011	high	low	high	low	Nov.	June ^r	July ^r	Aug."	Sept. ^r	Oct."	Nov. ^p	Nov. '12
Tetel to deseture	00.2	85.2	78.8	85.0	66.8	77.7	70.0	70.2	70.2	70.2	77.7	78.4	1.5
Total industry	80.3	85.2	/8.8	85.0	00.8	//./	78.8	79.2 79.2	78.3 78.2	78.3 78.2	77.8	/8.4	1.5
Previous estimates							78.8	19.2	18.2	78.2	//.8		
Manufacturing (see note below)	78.8	85.6	77.3	84.6	63.8	75.7	77.4	77.5	76.8	76.7	75.9	76.6	1.5
Previous estimates	/0.0	05.0	11.5	04.0	05.8	13.1	77.4	77.5	76.7	76.7	75.9	70.0	1.5
Mining	87.3	86.3	83.9	88.6	78.5	90.4	89.2	90.2	89.2	90.5	90.6	91.1	2.2
Utilities	87.3	92.9	84.3	93.3	78.3	76.6	75.4	77.5	75.6	74.8	74.7	75.3	2.2
Oundes	80.5	92.9	04.5	95.5	/9.1	70.0	75.4	11.5	75.0	74.0	/4./	15.5	2.4
Stage-of-process groups													
Crude	86.3	87.7	84.4	89.7	76.4	87.7	87.0	87.9	87.3	88.2	88.0	88.5	1.6
Primary and semifinished	81.1	86.5	78.0	87.9	64.2	74.7	75.9	76.5	75.6	75.3	74.9	75.8	.1
Finished	77.2	83.4	77.3	80.6	66.8	76.8	78.3	78.3	77.4	77.4	76.3	76.8	3.5
r Revised p Preliminary				•									

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.

manufacturing output increased 1.1 percent after having decreased 1.0 percent in October; in addition to the storm-related rebound, a sizable rise in the production of motor vehicles and parts boosted factory output in November. The output of utilities advanced 1.0 percent, and production at mines rose 0.8 percent. At 97.5 percent of its 2007 average, total industrial production in November was 2.5 percent above its year-earlier level. Capacity utilization for total industry increased 0.7 percentage point to 78.4 percent, a rate 1.9 percentage points below its long-run (1972–2011) average.

Market Groups

The production of consumer goods rose 1.2 percent in November, reversing a decline of the same magnitude in October. The output of durable consumer goods increased 2.8 percent in November. Among durable consumer goods categories, the index for automotive products rose 3.4 percent, its first increase in five months; the indexes for home electronics; for appliances, furniture, and carpeting; and for miscellaneous goods all posted smaller increases. The production of nondurable consumer goods advanced 0.7 percent. The index for consumer energy products rose 0.9 percent after having fallen 0.7 percent in October, and the index for non-energy nondurables increased 0.7 percent in November following a decline of 1.9 percent in October. Among non-energy nondurables, the output of foods and tobacco, of clothing, and of paper products all registered sizable gains in November, while the output of chemical products edged down.

The output of business equipment moved up 1.2 percent in November and was 7.4 percent above its year-earlier level. The production of transit equipment increased 2.5 percent, and the production of industrial and other equipment rose 1.3 percent; output in both categories stepped down noticeably in October. The index for information processing equipment fell 0.4 percent in November, but it remained 4.0 percent above its year-earlier level.

The output of defense and space equipment was unchanged in November after decreasing 1.9 percent in October; however, the index stood 0.8 percent above its year-earlier level.

Among nonindustrial supplies, the output of construction supplies increased 1.4 percent in November, its largest monthly gain since February. The production of business supplies rose 0.7 percent in November following three consecutive months of declines.

The output of materials to be processed further in the industrial sector advanced 1.0 percent in November after having edged down 0.1 percent in October. The indexes for energy materials and for durable materials posted sizable gains in November, while the index for nondurable materials rose moderately. The output of durable materials increased 1.6 percent after three months of decreases. The index for consumer parts rose substantially, boosted in particular by motor vehicle-related production, and stood 17.8 percent above its year-earlier level; the output of equipment parts increased 0.3 percent in November after having moved down 0.5 percent in October. In November, the index for nondurable materials gained 0.4 percent; the indexes for textiles and for paper moved up, while the production of chemicals was unchanged. The output of energy materials rose 0.9 percent.

Industry Groups

Manufacturing output rose 1.1 percent in November following a decrease of 1.0 percent in October. Nearly all the decline in factory output in October is estimated to have been related to Hurricane Sandy, and the increase in November reflects a post-hurricane rebound in production as well as the solid advance in the output of motor vehicles and parts. Within manufacturing, increases were widespread in November across both durable and nondurable goods industries. The factory operating rate rose to 76.6 percent, a rate 2.2 percentage points below its long-run average.

The production of durable goods rose 1.6 percent in November. Output increased in all major categories of durables other than computer and electronic products, and aerospace and miscellaneous transportation equipment, which both decreased. Gains of more than 2 percent were recorded in the indexes for wood products; for primary metals; for electrical equipment, appliances, and components; for motor vehicles and parts; and for miscellaneous manufacturing. Capacity utilization for durable goods manufacturing was 76.7 percent, a rate 0.4 percentage point below its long-run average.

The output of nondurables rose 0.5 percent in November, and it was 0.6 percent above its year-earlier level. For November, most major categories of nondurables moved up, although the indexes for petroleum and coal products and for chemicals edged down. Capacity utilization for nondurable manufacturing was 77.9 percent, a rate 3.0 percentage points below its long-run average.

Production in the non-NAICS manufacturing industries (logging and publishing) rose 1.3 percent in November after having fallen 4.0 percent in October when the hurricane held down the output of publishers.

In November, mining output advanced 0.8 percent. Capacity utilization at mines moved up 0.5 percentage point to 91.1 percent, a rate 3.8 percentage points above its long-run average. The output of utilities rose 1.0 percent in November, and gains were posted for both the electric and the natural gas categories. The operating rate for utilities increased 0.6 percentage point to 75.3 percent, a rate 11.0 percentage points below its long-run average.

Capacity utilization rates in November for industries grouped by stage of process were as follows: At the crude stage, utilization increased 0.5 percentage point to 88.5 percent, a rate 2.2 percentage points above its long-run average; at the primary and semifinished stages, utilization rose 0.9 percentage point to 75.8 percent, a rate 5.3 percentage points below its long-run average; and at the finished stage, utilization moved up 0.5 percentage point to 76.8 percent, a rate 0.4 percentage point lower than 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
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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
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- 14. Historical Statistics: Manufacturing Excluding Selected High-Technology Industries

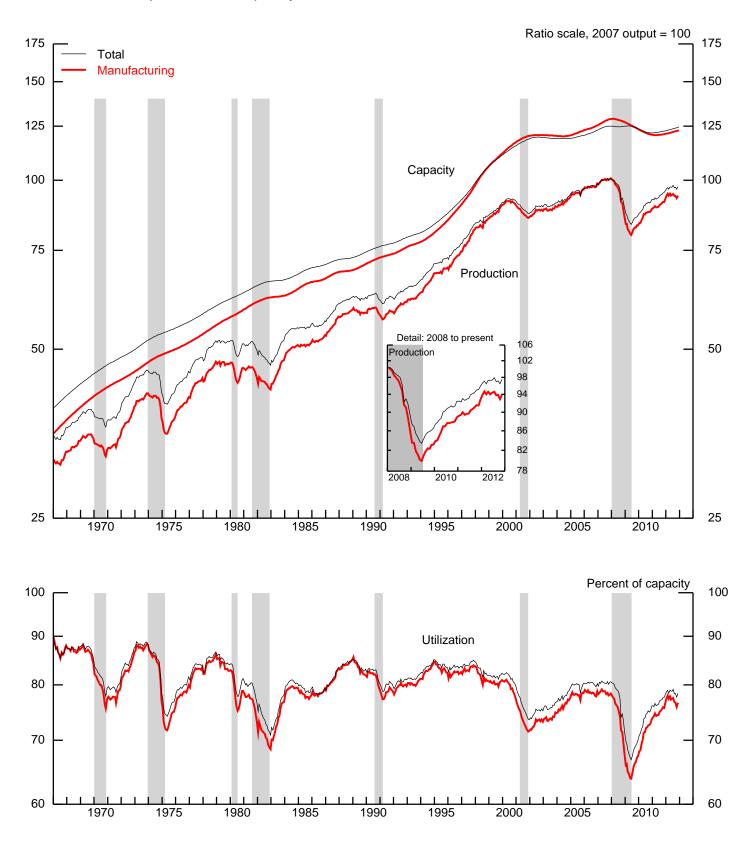
Further detail is available on the Board's website (www.federalreserve.gov/releases/G17/).

Revision of Industrial Production and Capacity Utilization

The Federal Reserve Board plans to issue its annual revision to the index of industrial production (IP) and the related measures of capacity utilization at the end of March 2013. The revised IP indexes will incorporate detailed data from the 2011 Annual Survey of Manufactures, conducted by the U.S. Census Bureau. Annual data from the U.S. Geological Survey regarding metallic and nonmetallic minerals (except fuels) for 2011 will also be incorporated. The update will include revisions to the monthly indicator (either product data or input data) and to seasonal factors for each industry. In addition, the estimation methods for some series may be changed. Any modifications to the methods for estimating the output of an industry will affect the index from 1972 to the present.

Capacity and capacity utilization will be revised to incorporate data through the fourth quarter of 2012 from the Census Bureau's Quarterly Survey of Plant Capacity, which covers manufacturing, along with new data on capacity from the U.S. Geological Survey, the U.S. Department of Energy, and other organizations.

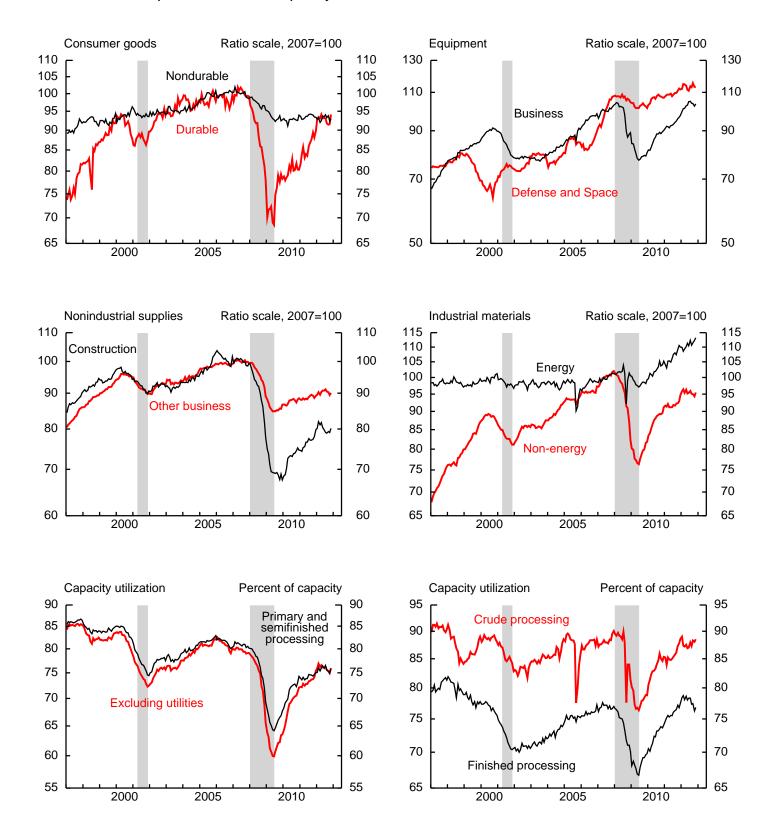
Once the revision is published, it will be available on the Board's website at www.federalreserve.gov/releases/G17. The 2013 release schedule, however, is available now on the website.



1. Industrial production, capacity, and utilization

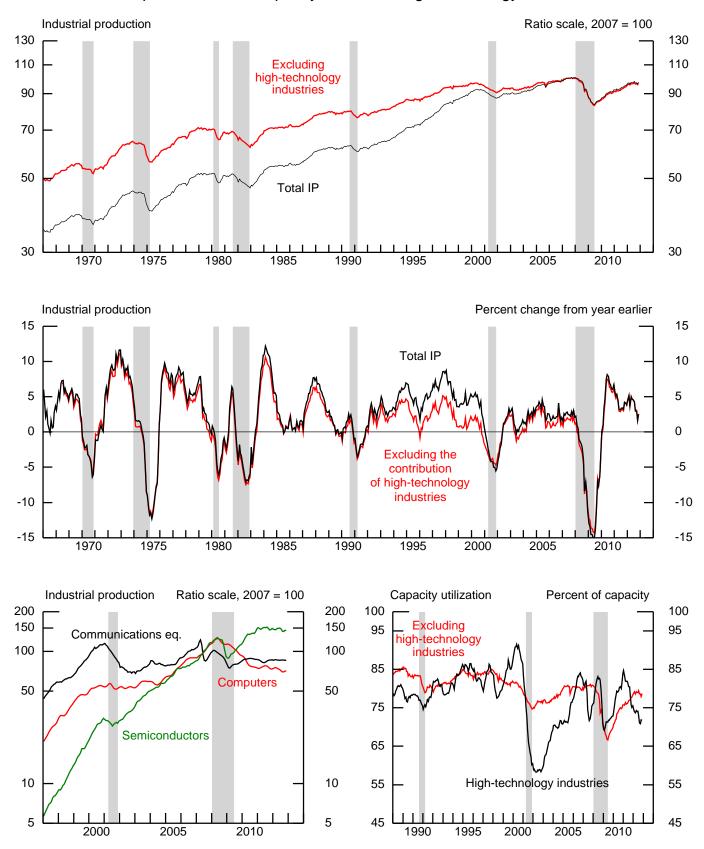
Note: The shaded areas are periods of business recession as defined by the National Bureau of Economic Research (NBER).

2. Industrial production and capacity utilization



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

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

			1	th quarte irth quar		Aı	nnual rat	e			Month	nly rate			Nov. '1
Item		2011 proportion ¹	2009	2010	2011	2012 Q1	Q2 ^r	Q3 ^r	2012 June ^r	July ^r	Aug. ^r	Sept. ^r	Oct.r	Nov. ^p	to Nov. '1
Total IP		100.00	-5.7	6.3	4.1	5.9	2.4	.3	.0	.7	-1.0	.2	7	1.1	2.5
MARKET GROUPS															
Final products and nonindustrial supplies		53.84	-6.6	4.2	3.8	5.7	3.5	.1	.2	.3	8	.2	-1.1	1.1	2.4
Consumer goods		27.68	-3.3	.8	2.8	1.2	2.3	.1	2	.4	-1.0	.4	-1.2	1.2	1.2
Durable		6.30	-3.1	3.1	10.3	19.2	1.7	-5.9	.1	1	-1.5	4	.2	2.8	6.8
Automotive products		3.50	7.6	1.6	16.6	27.5	1	-11.5	.3	-1.3	-1.9	.0	1	3.4	7.7
Home electronics		.16	-16.8	-21.4	2.2	2.2	-8.5	-15.5	-1.3	-2.0	9	8	1.1	.7	-4.3
Appliances, furniture, carpeting		.76	-15.9	2.3	2.5	11.5	-5.2	9	8	1.0	8	7	.5	1.0	2.5
Miscellaneous goods		1.88	-10.9	9.2	3.4	8.3	9.3	4.7	.0	1.9	-1.0	-1.0	.6	2.4	7.8
Nondurable		21.38	-3.3	.1	.6	-3.9	2.5	2.1	2	.6	8	.6	-1.6	.7	5
Non-energy		15.99	-4.2	6	1.0	2.1	-1.6	5	1	.2	7	1.0	-1.9	.7	3
Foods and tobacco		9.22	-1.2	1.3	1.2	4.4	.8	4.4	.6	.6	5	1.7	-2.9	.9	1.6
Clothing		.20	-27.9	10.3	-6.7	17.1	-11.0	-14.5	-1.8	-1.1	-2.6	1.0	-2.5	2.4	-3.4
Chemical products		4.72	-7.4	-3.5	2.1	9	-3.5	-7.7	-1.1	2	-1.3	.0	.5	2	-2.1
Paper products		1.35	-7.1	-4.3	-3.9	-7.1	-15.5	-7.2	-1.8	2	.0	3	-4.1	1.6	-10.0
Energy		5.39	5	2.1	4	-20.2	16.8	10.3	6	1.7	-1.2	6	7	.9	-1.2
Business equipment		9.57	-9.9	12.7	8.0	17.3	12.0	2.9	1.9	.1	9	3	-1.3	1.2	7.4
Transit		2.31	11.5	13.2	17.6	28.4	25.9	12.5	2.7	3.3	-3.0	-1.0	-1.3	2.5	15.1
Information processing		2.22	-8.0	6.0	6.2	14.8	3.5	2.6	1.4	.6	8	.2	8	4	4.0
Industrial and other		5.04	-17.0	15.8	4.6	13.3	9.2	-1.6	1.7	-1.8	.3	2	-1.5	1.3	5.1
Defense and space equipment		2.18	-3.2	5.0	4.1	8.1	-5.7	6.7	4	2.2	4	2.1	-1.9	.0	.8
Construction supplies Business supplies		4.12 9.56	-17.0 -6.1	9.8 2.4	4.9 1.2	14.6 3.4	-2.2 4.0	-7.5 .0	9 .0	8 .4	2 7	.5 2	3 9	1.4 .7	2.9 1.7
Motoriala		1616	1.0	0.0	4.2	6.1	1.0	5	2	1.1	1.0	2	1	1.0	2.7
Materials		46.16	-4.6	9.0	4.3	6.1	1.0	.5	2	1.1	-1.2	.2	1	1.0	2.7
Non-energy Durable		28.75 17.14	-6.5	10.9	3.7	11.7 15.9	-1.2 2.5	-1.1 -3.9	.2	.7	-1.0 -1.9	1	7	1.1	2.8 3.5
				16.4	6.6		2.5		.4	.4 4.8	-1.9	6	6	1.6	17.8
Consumer parts		2.45	-11.5	27.2	6.7 8.0	34.1	5.7	9.0	2.0	-2.3		-1.1	1	3.9	
Equipment parts Other		6.28 8.42	-9.5 -12.5	17.5 12.5	8.0 5.6	15.4 11.4	-4.4	-13.1 7	1.0 5	-2.5	-2.5 5	.2 -1.0	5 8	.3 1.7	.9 1.3
Nondurable		11.61	-12.5	3.6	5	5.4	-4.4	3.5	2	1.1	5	-1.0	8	.4	1.5
Textile		.45	-5.1	5.0	5	18.4	-0.7	-3.8	2.3	-1.1	 9	.0	0 9	2.4	3.9
Paper		2.01	-4.7	1	-2.9	3.7	-4.7	-3.8	-2.1	-1.1	9	-1.0	9	2.4 .7	-2.1
Chemical		5.68	4.9	6.6	-2.9	7.3	-4.9	7.9	-2.1	1.7	1	-1.0	-1.1	.0	3.2
Energy		17.40	-1.7	5.7	5.3	-2.4	5.0	3.2	8	1.7	-1.5	.7	-1.1	.0	2.4
Internet Charles															
INDUSTRY GROUPS Manufacturing		75.34	-6.5	6.5	4.2	9.8	.8	-1.1	.4	.3	8	.1	-1.0	1.1	2.7
Manufacturing (NAICS)	31–33	72.60	-6.3	7.1	4.5	10.2	1.3	8	.4	.3	9	.1	9	1.1	3.1
Durable manufacturing	51-55	37.96	-9.3	11.7	7.2	16.3	5.4	-2.2	.4	.2	-1.3	4	7	1.6	5.3
Wood products	321	.90	-12.8	5.0	2.6	14.4	-4.5	-4.0	-1.6	.2	5	.0	.7	3.4	5.5
Nonmetallic mineral products	327	1.55	-18.1	10.5	.3	7.2	-3.4	-8.0	.6	-1.8	2	.2	.2	.5	2
Primary metals	331	2.94	-2.8	11.9	8.6	9.1	-9.8	-9.6	-3.4	2.4	3	-5.0	8	3.7	-3.8
Fabricated metal products	332	5.41	-19.0	14.4	7.7	13.4	7.0	2.8	.7	.4	6	.3	8	.9	5.7
Machinery	333	5.41	-18.6	20.2	7.3	22.1	8.8	-10.2	2.5	-3.3	-1.1	.0	-2.0	1.0	3.7
Computer and electronic products	334	6.25	-3.1	12.2	5.7	9.3	4.1	-3.8	1.1	2	-1.9	.1	.2	4	1.8
Electrical equip., appliances,															
and components	335	1.76	-18.1	12.5	.2	9.9	5.4	2.2	8	1.0	-1.2	2.3	-1.7	2.3	6.5
Motor vehicles and parts	3361-3	5.33	2.3	15.8	14.6	40.4	15.8	-2.5	1.9	1.4	-3.5	-1.6	.0	4.5	16.5
Aerospace and miscellaneous															
transportation equipment	3364-9	4.30	1	2.5	10.5	10.9	1.0	5.6	.3	1.1	5	1.4	-1.2	3	2.8
Furniture and related products	337	.98	-22.3	5.8	3.5	16.3	-3.3	-2.0	-1.2	1.7	-1.1	-1.1	7	.9	1.7
Miscellaneous	339	3.12	-4.0	4.2	2.4	9.9	13.0	5.6	.5	1.5	8	6	1	3.4	9.8
Nondurable manufacturing		24 64	-2.9	22	1 4	27	2.4	0	2	4	4	۷	1 1	5	c
Nondurable manufacturing Food, beverage, and tobacco products	211.0	34.64 11.43	-2.9	2.3 1.0	1.6	3.7 4.0	-3.4	.8 5.0	.2 .6	.4 .8	4 5	.6	-1.1 -2.6	.5 .7	.6
Textile and product mills	311,2 313,4		5	5.3	1.7 .8	4.0 9.4	1 -4.2	-3.0	2.2	-1.0	5 8	1.5		1.8	1.5 1.9
Apparel and leather		.74 .28	-10.4	5.3 9.5		9.4	-4.2 -8.9	-3.0 -14.9	-1.3	-1.0	8 -2.9	.4 1.6	6 -2.8		-4.5
Apparel and leather Paper	315,6 322	.28 2.43	-20.0	9.5 .3	-2.6 -1.8	3	-8.9 -5.5	-14.9	-1.3	-1.5	-2.9	1.6 4	-2.8 .9	2.5 .2	-4.5
Printing and support	322	1.43	-1.2	1.0	-1.8	5	-5.5	-7.6	-2.4	2	.3 7	-2.3	-1.1	.2	-2.3
Printing and support Petroleum and coal products	323	3.69	-12.4	2.6	-3.9	0.8 .4	.2 -8.9	-2.7	 4	-1.4	7	-2.5	-1.1	2	-3.9
Chemicals	324 325	11.53	-2.0	2.0 1.9	.4	.4 3.7	-8.9 -5.4	-5.9	4	-1.4 .4	.2 1	0 .8	1 6	2	-5.9
Plastics and rubber products	325	3.11	-1.5	10.6	.4 6.4	6.2	-5.4	.8 3.8	.1	2.0	-1.7	.8 1	0	2	4.8
Other manufacturing (non-NAICS)	1133,5111	2.74	-11.5	-6.0	-3.1	2	-12.1	-8.5	-1.4	9	.5	7	-4.0	1.3	-8.0
			1												
Vining	21	14 38	-5.1	83	70	5	- 5	51	1	13	_ 9	1.6	3	8	3.0
Mining Utilities	21 2211,2	14.38 10.28	-5.1 -1.1	8.3 2.7	7.9 -2.2	.5 -13.8	5 21.1	5.1 4.3	.1 -2.7	1.3 3.0	9 -2.2	1.6 8	.3	.8 1.0	3.0 .7

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 separately.

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

Item 2011 2012 2012																Percent change, seasonally adjusted
proportio 2009 2010 Q11 Q1 Q2' Q3'' Jun' July Aug.' Sept.' Out.' No.' I Total industry 100.00 5.7 6.3 4.1 5.9 2.4 3.0 0.7 7.10 7.2 0.4 7.7 1.0 7.4 1.0 4.4 7.0 7.3 3.0 1.0 7.7 7.10 7.7 7.10 7.7 7.10 7.7 7.0 7.7 7.0 7.7 7.0	Nov. '11			ly rate	Month			e	nnual rat				1			
Image of the section of the sectin section of the sectin section of the section of the	to Nov. '12	Nov. ^p	Oct.r	Sept. ^r	Aug. ^r	July ^r		Q3 ^r	Q2 ^r		2011	2010	2009			Item
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2.5	1.1	7	.2	-1.0	.7	.0	.3	2.4	5.9	4.1	6.3	-5.7	100.00		Total industry
Commercial products 2.93 -1.4 1.9 4 4.5.3 13.2 1.7 7 1.0 7 1.5 5 0.0 Oriand gas well 211.11 .68 +2.3 4.2 3.0 1.2 3.0 1.8.6 -7.1 -3.1 1.8 -4.1 4 8.5 5 Primary energy 73.60 6.6 6.7 4.1 10.6 6 1.0 3 3 8 1.0 8.2 9 Non-energy 73.60 6.6 6.7 4.1 10.6 6 1.0 2.3 3 8 2 1.4	1.4	.7	.4	.1	-1.4	1.6	7	4.0	7.8	-6.3	3.9	5.1	-2.5	26.40		Energy
Oil and gas well drilling 213111 .68 -4.2 4.0 2.1 4.1 -3.5 -1.2 -2.1 1.9 -2.3 1.2 Clip and	-1.2												1			
	1.6														010111	
Primary energy 13.43 -22 6.7 7.3 -3.9 1.3 6.4 -2 1.8 .8 1.0 .8 .9 Non-energy 73.60 -6.8 6.7 4.1 10.6 .6 -10 .3 .3 .8 .2 -1.0 1.2 Selected high-technology industries 334 .46 -166 20.0 -2.5 6.7 -4 -8 -2.5 -3 1.0 0.1 .2 1.4 .2.2 .1 1.0 .9 Communications equipment 3344 .63 4.4 5.2 -1.0 -4 -8 -2 -5 3 1.0 0.0 -1.6 -3.9 -3 2.0 -5 5 Excluding selected high-technology 70.21 -7.2 6.4 4.2 11.0 .4 -5 3.3 4.4 -8 2.7 -1.1 1.2 1.0 .4 -3.5 1.6 0.0 4.5 Motor vehicles and parts 3361 2.86 89 1.7 2.1 5.7 4.2 2.0 <	-7.4														213111	
Normality Signed high-technology industries 3.38 3 12.9 1.8 6 4.1 -12.1 2 1.4 -2.2 1.4 -2.2 1.4 -2.2 1.4 -2.2 1.4 -2.2 1.4 -2.2 2.3 -1.1 0.0 -1.0 2.9 Computers and peripheral equipment 3342 -6.3 -4.4 5.2 -1.0 -4 -8 -2 -5 3 .1 0.0 -1 2.2 Semiconductors and related electronic components 334412-9 2.29 9.3 27.0 3.6 -4 7.9 -1.4 .7 -1.6 -3.9 -3 2.0 -5 Excluding selected high-technology industries 70.21 -7.2 6.4 4.2 11.0 .4 -5 .3 .4 8 2.0 1 1.2 Motor vehicles and parts 3361 2.86 8.9 1.7 21.3 47.9 1.3.4 2.0 .7 4.2 -2.0 .7	2.0 2.6												1			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2.9	1.2	-1.0	.2	8	.3	.3	-1.0	.6	10.6	4.1	6.7	-6.8	73.60		Non-energy
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	-1.5	2	1.4	2	28	1.4	2	12.1	4.1	6	1.9	12.0	2	2.28		Selected high technology industries
Communications equipment 3342 63 4.4 5.2 -1.0 4 8 2 5 3 .1 0 1 .2 Semiconductors and related electronic components 334412-9 2.29 9.3 27.0 3.6 4 7.9 -14.4 .7 -1.6 -3.9 3 2.0 5 Excluding selected high-technology industries 70.21 -7.2 6.4 4.2 11.0 .4 5 .3 .4 8 .2 -1.1 1.2 Motor vehicles and parts 3361 2.26 8.8 1.7 2.1 47.9 13.5 8.1 0.0 1.4 -3.5 1.6 0.0 4.5 Motor vehicles and parts 3363 2.15 -4.5 21.4 5.0 33.3 21.6 7.4 1.8 2.7 -2.3 -1.5 5.5 3.2 Excluding motor vehicles and parts 64.88 -7.8 5.6 3.4 4.8 9 3 .1 .3 5 4 -1.2 .9 Business equipment	-2.9												1		3341	
Semiconductors and related electronic components 334412-9 2.29 9.3 27.0 3.6 4 7.9 -1.4.4 7.7 -1.6 -3.9 3 2.0 5 Excluding selected high-technology industries 70.21 -7.2 6.4 4.2 11.0 .4 5 .3 .4 8 2.2 .1.1 1.2 Motor vehicles and parts 3361 2.36 1.53 2.3 1.4 4.0 15.8 -2.5 1.9 1.4 -3.5 1.6 0.0 4.5 Motor vehicles and parts 3363 2.16 4.4 2.0 7.4 1.8 2.7 -2.3 1.5 5.5 3.2 Excluding motor vehicles and parts 3363 2.16 7.4 1.8 2.7 7.2 6.4 4.1 2.9 Consumer goods 2.00 7.7 1.4 4.6 3.3 2.6 7.7 1.4 4.6 2.5 4.6 4.1 2.9 3.3 1.4 3.6 1.6 3.8 .1 1.1 3 1.4 3.6 1.4	1												1			
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industries 70.21 -7.2 6.4 4.2 11.0 .4 5 .3 .4 8 .2 1.1 1.2 Motor vehicles and parts 3361-3 5.33 2.3 15.8 14.6 40.4 15.8 -2.5 1.9 1.4 -3.5 -1.6 .0 4.5 Motor vehicles and parts 3361 2.86 8.9 11.7 21.3 47.9 13.5 -8.1 2.0 .7 4.2 -2.0 .7 6.0 Motor vehicle parts 3363 2.15 -4.5 21.4 5.0 33.3 21.6 7.4 1.8 2.7 -2.3 -1.5 .5 3.2 .7 1.6 .9 .9 .3 .1 .3 -5 .4 -1.6 .9 .9 .9 .3 .1 .3 .5 .4 .1.6 .9 .7 .1.6 .9 .7 .1.6 .9 .7 .1.6 .9 .7 .1 .9 .7 .1 .2 .2 .3 .1.4 .6 .2 .3	-1.7	5	2.0	3	-3.9	-1.6	.7	-14.4	7.9	4	3.6	27.0	9.3	2.29	334412–9	
Motor vehicles 3361 2.86 8.9 11.7 21.3 47.9 13.5 -8.1 2.0 .7 -4.2 -2.0 7 6.0 Motor vehicle parts 3363 2.15 -4.5 21.4 5.0 33.3 21.6 7.4 1.8 2.7 -2.3 -1.5 5.5 3.2 Excluding motor vehicles and parts 64.88 -7.8 5.6 3.4 8.8 9 3 1.1 .3 5 .4 -1.2 .9 Construction supplies 10.0 -7.8 4.0 1.2.5 7.7 1.3 4.9 2.5 1.6 8 .1 .3 1 .5 8 .7 1 .6 0 0.5 0.5 .3 1.4 .6 0.5 .3 1.4 .6 0.5 .3 1.4 .6 0.5 .3 1.4 .6 0.5 .6 .3 1.4 .6 0.5 .3 .1 .1 .3 .1 .1 .5 .3 .1 .1 .6 .5 .3	3.2	1.2	-1.1	.2	8	.4	.3	5	.4	11.0	4.2	6.4	-7.2	70.21		
Motor vehicles 3361 2.86 8.9 11.7 21.3 47.9 13.5 -8.1 2.0 .7 -4.2 -2.0 7 6.0 Motor vehicle parts 3363 2.15 -4.5 21.4 5.0 33.3 21.6 7.4 1.8 2.7 -2.3 -1.5 5.5 3.2 Excluding motor vehicles and parts 64.88 -7.8 5.6 3.4 8.8 9 3 1.1 .3 5 .4 -1.2 .9 Construction supplies 10.0 -7.8 4.0 1.2.5 7.7 1.3 4.9 2.5 1.6 8 .1 .3 1 .5 8 .7 1 .6 0 0.5 0.5 .3 1.4 .6 0.5 .3 1.4 .6 0.5 .3 1.4 .6 0.5 .3 1.4 .6 0.5 .6 .3 1.4 .6 0.5 .3 .1 .1 .3 .1 .1 .5 .3 .1 .1 .6 .5 .3	16.5	4.5	.0	-1.6	-3.5	1.4	1.9	-2.5	15.8	40.4	14.6	15.8	2.3	5.33	3361-3	Motor vehicles and parts
Motor vehicle parts 3363 2.15 -4.5 21.4 5.0 33.3 21.6 7.4 1.8 2.7 -2.3 -1.5 5.5 3.2 Excluding motor vehicles and parts 64.88 -7.8 5.6 3.4 8.8 9 3 1.1 .3 5 4 -1.2 9 Construction supplies 7.84 -9.3 12.5 7.7 13.4 9.6 2.5 1.6 8 1 .5 8 .7 -1.6 .9 Business supplies 4.10 17.7 9.8 4.9 17.7 1.9 7.7 .1 2 3 .2 6 .4 -1.7 1.1 Materials 25.30 -7.7 8.5 3.5 10.6 -3.7 -8 .0 .6 .1 .3 .2 .5 .3 1.4 .9 1.1 .3 .4 .1 .1 .1 .1 .1 .1 .1 .1 <th< td=""><td>16.8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	16.8															
Consumer goods Business equipment19.09 7.84 -5.9 7.84 $4.$ 1.6 13.4 3.8 9.6 2.5 1.6 1.6 -1 13.4 5 9.6 2.5 1.6 1.6 -3.8 1.6 1.1 3.3 -1.6 9 9 9.6 Construction supplies 4.10 7.71 1.9 9.8 4.9 14.7 -2.2 -7.5 	18.0															
Business equipment 7.84 -9.3 12.5 7.7 13.4 9.6 2.5 1.6 8 .1 .3 -1.4 .6 Construction supplies 4.10 -17.1 9.8 4.9 14.7 -2.2 -7.5 9 8 2 5.5 3 1.4 Business supplies 6.33 -8.7 1.7 1.9 7.7 1.1 2 3 .2 6 .4 -1.7 1.1 Materials 25.30 -7.4 8.5 3.5 10.6 -3.7 8 .0 .6 .1 9 1.0 Measures excluding selected high-technology industries 96.62 -5.9 6.0 4.1 6.1 2.3 .7 .0 .7 9 .2 7 1.1 Manufacturing ¹ 71.95 -6.9 6.2 4.3 10.2 .6 6 4 3 8 1.1 -1.0 1.2 Durable 34.70 -1.04 11.6 7.7 17.8 5.6 -1.1 .6 8 <th< td=""><td>2.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	2.0															
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Business supplies Materials6.35 25.30 -8.7 1.7 1.9 25.30 7.7 $.1$ 2 	5.8															
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high-technology industries Image: constraint of the second se	2.0 1.8															
Manufacturing ¹ Durable 71.95 34.70 -6.9 -10.4 6.2 11.6 4.3 7.7 10.2 17.8 6.6 6 13 .4 .3 8 .1 -1.0 1.2 Measures excluding motor vehicles and parts Manufacturing ¹ Total industry 94.67 -6.1 5.8 3.5 4.1 1.6 .5 1 .6 8 .3 7 .8 1.8 1.8 Manufacturing ¹ Durable 94.67 -6.1 5.8 3.5 4.1 1.6 .5 1 .6 8 .3 7 .8 Manufacturing ¹ Durable 94.67 -6.1 5.8 3.5 7.6 4 -10 .2 .2 6 .2 1 .8 .3 7 .8 Manufacturing ¹ Durable 70.01 -7.1 5.9 3.5 7.6 4 -1.0 .2 .2 6 .2 1 .8 1.1 .4 .3 .4 .3 .4 .3 .4 .3 .4 .3 .4 .3 .4 .3 .4 .3 .4	26	1.1	7	2	0	7	0	7	2.2	(1	4.1	60	5.0	06.62		high-technology industries
Durable 34.70 -10.4 11.6 7.7 17.8 5.6 -1.3 .7 .3 -1.2 4 8 1.8 Measures excluding motor vehicles and parts 94.67 -6.1 5.8 3.5 4.1 1.6 .5 1 .6 8 .3 7 .8 Manufacturing ¹ Durable 70.01 -7.1 5.9 3.5 7.6 4 -1.0 .2 .2 .6 .2 -1.0 .8 Measures excluding selected high-technology industries and motor vehicles and parts 32.75 -10.8 11.0 6.1 12.5 3.7 -2.1 .4 .0 9 1 .8 1.1 Measures excluding selected high-technology industries and motor vehicles and parts 91.29 -6.3 5.5 3.6 4.2 1.5 .9 1 .7 8 .3 8 .9	2.6															
and parts	2.9 5.9															e
Manufacturing ¹ Durable 70.01 32.75 -7.1 5.9 3.5 7.6 4 -1.0 .2 .2 6 .2 -1.0 .8 Measures excluding selected high-technology industries and motor vehicles and parts 91.29 -6.3 5.5 3.6 4.2 1.5 .9 1 .7 8 .1																
Durable 32.75 -10.8 11.0 6.1 12.5 3.7 -2.1 .4 .0 9 1 8 1.1 Measures excluding selected high-technology industries and motor vehicles and parts 91.29 -6.3 5.5 3.6 4.2 1.5 .9 1 .7 8 .3 8 .9	1.7	.8	7	.3	8	.6	1	.5	1.6	4.1	3.5	5.8	-6.1	94.67		Total industry
high-technology industries and motor vehicles and parts 91.29 -6.3 5.5 3.6 4.2 1.5 .9 1 .7 8 .3 8 .9	1.6 3.4												1			e
Total industry 91.29 -6.3 5.5 3.6 4.2 1.5 .9 1 .7 8 .3 8 .9																high-technology industries
	1.0					_										
	1.8 1.8															
Stage-of-process components of non-energy materials, measures of the input to			-	-		-	-	_		15.5	<i>_</i> .					of non-energy materials, measures of the input to
Finished processors 11.19 -8.8 15.1 5.4 17.3 6.2 -7.1 .8 2 -2.6 3 1.4 Drimmer and amiliar bulk a	4.2															
Primary and semifinished processors 17.57 -4.9 8.1 2.6 8.1 -5.8 3.0 2 1.3 .1 .1 9 1.0	1.9	1.0	9	.1	.1	1.5	2	3.0	-5.8	8.1	2.6	8.1	-4.9	17.57		Primary and seminnished processors

r Revised. p Preliminary. 1. Refer to note on cover page.

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

Aillions of units, seasonally adjusted annua											
	2011	2011	2012			2012					
Item	average	Q4	Q1	Q2	Q3	June	July	Aug.	Sept.	Oct.	Nov.
T-4-1	9.66	0.00	10.11	10.44	10.21	10.51	10.00	10.04	0.00	0.02	10.46
Total	8.66	9.22	10.11	10.44	10.31	10.51	10.89	10.24	9.80	9.83	10.46
Autos	2.98	3.40	3.86	4.17	4.26	4.22	4.65	4.10	4.03	3.95	4.23
Trucks	5.68	5.82	6.25	6.27	6.05	6.29	6.23	6.14	5.77	5.88	6.23
Light	5.44	5.55	5.97	5.97	5.78	6.00	5.96	5.89	5.50	5.67	6.00
Medium and heavy	.24	.27	.28	.30	.26	.29	.28	.25	.27	.21	.23
Memo											
Autos and light trucks	8.41	8.95	9.83	10.15	10.04	10.22	10.61	9.99	9.53	9.62	10.23

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

Table 4 INDUSTRIAL PRODUCTION INDEXES: MARKET AND INDUSTRY GROUP SUMMARY 2007 = 100, seasonally adjusted

007 = 100, seasonally adjusted											
Item		2011 proportion	2012 Mar.	Apr.	May	June ^r	July ^r	Aug. ^r	Sept. ^r	Oct. ^r	Nov. ^p
Total IP		100.00	96.5	97.3	97.3	97.3	97.9	97.0	97.1	96.5	97.5
MARKET GROUPS											
Final products and nonindustrial supplies		53.84	93.1	93.9	94.1	94.3	94.6	93.8	94.0	92.9	93.9
Consumer goods		27.68	92.3	92.9	93.6	93.4	93.8	92.9	93.3	92.1	93.3
Durable		6.30	93.1	94.2	93.2	93.2	93.2	91.8	91.4	91.6	94.2
Automotive products		3.50	104.5	105.8	103.5	103.8	102.5	100.6	100.6	100.5	103.9
Home electronics		.16	70.0	69.4	68.6	67.6	66.3	65.7	65.1	65.8	66.3
Appliances, furniture, carpeting		.76	68.4	68.6	68.7	68.1	68.8	68.3	67.8	68.2	68.9
Miscellaneous goods		1.88	88.1	89.4	89.9	90.0	91.7	90.8	89.9	90.5	92.6
Nondurable		21.38	92.0	92.6	93.7	93.5	94.1	93.3	93.9	92.3	93.0
Non-energy		15.99	90.9	91.4	91.0	90.9	91.1	90.5	91.4	89.6	90.2
Foods and tobacco		9.22	97.4	98.3	98.0	98.6	99.1	98.6	100.3	97.4	98.3
Clothing Chemical products		.20 4.72	59.7 85.0	59.4 85.1	59.2 84.7	58.1 83.7	57.5 83.5	56.0 82.5	56.6 82.5	55.2 82.9	56.5 82.7
Paper products		1.35	75.8	75.3	74.3	73.0	72.9	72.9	72.7	69.7	70.8
Energy		5.39	95.8	96.6	103.1	102.5	104.3	103.0	102.4	101.7	102.6
Energy		5.57	/ ///	20.0	105.1	102.5	101.5	105.0	102.1	101.7	102.0
Business equipment		9.57	101.2	102.6	102.9	104.8	104.9	104.0	103.7	102.4	103.7
Transit		2.31	109.1	111.6	112.8	115.8	119.6	116.0	114.8	113.4	116.2
Information processing		2.22	101.8	103.3	102.2	103.6	104.2	103.3	103.5	102.7	102.3
Industrial and other		5.04	96.5	97.3	97.8	99.5	97.6	98.0	97.8	96.4	97.6
Defense and space equipment		2.18	114.7	114.0	111.4	111.0	113.5	113.1	115.4	113.2	113.2
Construction supplies		4.12	81.1	81.7	80.4	79.7	79.1	78.9	79.3	79.0	80.1
Business supplies		9.56	89.6	90.4	90.8	90.8	91.2	90.5	90.3	89.5	90.2
Matariala		16.16	100.9	101 6	101.2	101.1	102.2	101.0	101.2	101.1	102.1
Materials Non-energy		46.16 28.75	100.8 95.4	101.6 96.3	101.3 95.1	101.1 95.3	102.2 95.9	101.0 95.0	101.2 95.0	101.1 94.3	95.4
Durable		17.14	99.6	100.9	100.1	100.6	101.0	99.1	98.5	98.0	99.5
Consumer parts		2.45	91.1	94.7	93.7	95.5	101.0	95.5	94.4	94.3	98.0
Equipment parts		6.28	115.8	116.8	116.1	117.2	114.5	111.7	111.9	111.3	111.7
Other		8.42	91.3	92.0	91.3	90.9	91.8	91.4	90.5	89.8	91.3
Nondurable		11.61	89.4	89.8	88.1	87.9	88.8	89.3	90.0	89.2	89.6
Textile		.45	82.9	83.8	81.5	83.4	82.5	81.7	82.1	81.4	83.3
Paper		2.01	82.3	82.6	82.5	80.8	80.4	80.3	79.6	79.8	80.4
Chemical		5.68	89.1	89.2	86.8	86.8	88.3	89.0	90.6	89.6	89.6
Energy		17.40	109.3	110.0	111.3	110.4	112.3	110.6	111.4	112.2	113.2
INDUSTRY GROUPS											
Manufacturing	24.22	75.34	94.0	94.6	94.0	94.3	94.6	93.8	93.8	92.9	94.0
Manufacturing (NAICS)	31–33	72.60 37.96	95.1 99.0	95.8 100.2	95.2 99.7	95.6 100.3	95.9 100.5	95.0 99.2	95.1 98.8	94.3 98.2	95.3 99.8
Durable manufacturing Wood products	321	.90	72.2	72.1	72.3	71.1	71.4	71.0	98.8	98.2	73.9
Nonmetallic mineral products	321	1.55	72.2	72.1	72.3	71.6	70.3	70.1	70.3	70.4	73.9
Primary metals	331	2.94	100.1	102.3	100.2	96.8	99.1	98.8	93.9	93.1	96.6
Fabricated metal products	332	5.41	92.6	93.2	93.7	94.3	94.7	94.1	94.4	93.7	94.5
Machinery	333	5.41	102.2	102.5	102.1	104.6	101.1	100.0	99.9	97.9	98.9
Computer and electronic products	334	6.25	114.7	116.4	115.4	116.7	116.5	114.3	114.4	114.5	114.0
Electrical equip., appliances,											
and components	335	1.76	85.0	85.6	85.9	85.2	86.1	85.1	87.0	85.5	87.5
Motor vehicles and parts	3361-3	5.33	101.1	104.2	102.9	104.9	106.4	102.7	101.0	101.0	105.6
Aerospace and miscellaneous											
transportation equipment	3364–9	4.30	106.7	106.2	105.7	106.0	107.2	106.7	108.3	107.0	106.7
Furniture and related products	337	.98	69.9	70.6	69.8	68.9	70.2	69.4	68.7	68.2	68.7
Miscellaneous	339	3.12	104.3	106.6	107.5	108.0	109.7	108.8	108.1	108.0	111.7
Nondurable manufacturing		34.64	91.0	91.2	90.5	90.6	91.0	90.6	91.2	90.2	90.7
Food, beverage, and tobacco products		11.43	99.0	99.9	99.4	100.0	100.8	100.3	101.8	99.2	100.0
	311.2			////	//						77.3
	311,2 313,4			77.6	75.8	77.4	76.7	76.1	/6.4	75.9	
Textile and product mills Apparel and leather	311,2 313,4 315,6	.74	77.2	77.6 61.8	75.8 61.4	77.4 60.6	76.7 59.7	76.1 57.9	76.4 58.9	75.9 57.2	58.6
Textile and product mills	313,4	.74	77.2								
Textile and product mills Apparel and leather	313,4 315,6	.74 .28	77.2 61.8	61.8	61.4	60.6	59.7	57.9	58.9	57.2	58.6
Textile and product mills Apparel and leather Paper Printing and support Petroleum and coal products	313,4 315,6 322 323 324	.74 .28 2.43 1.43 3.69	77.2 61.8 84.4 74.1 101.9	61.8 85.1 74.6 99.4	61.4 84.6 75.0 100.2	60.6 82.5 75.3 99.8	59.7 82.3 75.4 98.4	57.9 82.6 74.8 98.5	58.9 82.3 73.1 98.0	57.2 83.0 72.4 97.9	58.6 83.2 73.6 97.8
Textile and product mills Apparel and leather Paper Printing and support Petroleum and coal products Chemicals	313,4 315,6 322 323 324 325	.74 .28 2.43 1.43 3.69 11.53	77.2 61.8 84.4 74.1 101.9 87.0	61.8 85.1 74.6 99.4 87.2	61.4 84.6 75.0 100.2 85.9	60.6 82.5 75.3 99.8 86.0	59.7 82.3 75.4 98.4 86.3	57.9 82.6 74.8 98.5 86.2	58.9 82.3 73.1 98.0 87.0	57.2 83.0 72.4 97.9 86.5	58.6 83.2 73.6 97.8 86.3
Textile and product mills Apparel and leather Paper Printing and support Petroleum and coal products	313,4 315,6 322 323 324	.74 .28 2.43 1.43 3.69	77.2 61.8 84.4 74.1 101.9	61.8 85.1 74.6 99.4	61.4 84.6 75.0 100.2	60.6 82.5 75.3 99.8	59.7 82.3 75.4 98.4	57.9 82.6 74.8 98.5	58.9 82.3 73.1 98.0	57.2 83.0 72.4 97.9	58.6 83.2 73.6 97.8
Textile and product mills Apparel and leather Paper Printing and support Petroleum and coal products Chemicals	313,4 315,6 322 323 324 325	.74 .28 2.43 1.43 3.69 11.53	77.2 61.8 84.4 74.1 101.9 87.0	61.8 85.1 74.6 99.4 87.2	61.4 84.6 75.0 100.2 85.9	60.6 82.5 75.3 99.8 86.0	59.7 82.3 75.4 98.4 86.3	57.9 82.6 74.8 98.5 86.2	58.9 82.3 73.1 98.0 87.0	57.2 83.0 72.4 97.9 86.5	58.6 83.2 73.6 97.8 86.3
Textile and product mills Apparel and leather Paper Printing and support Petroleum and coal products Chemicals Plastics and rubber products Other manufacturing (non-NAICS)	313,4 315,6 322 323 324 325 326 1133,5111	.74 .28 2.43 1.43 3.69 11.53 3.11 2.74	77.2 61.8 84.4 74.1 101.9 87.0 91.9 71.7	61.8 85.1 74.6 99.4 87.2 92.4 71.1	61.4 84.6 75.0 100.2 85.9 91.4 70.1	60.6 82.5 75.3 99.8 86.0 92.1 69.1	59.7 82.3 75.4 98.4 86.3 94.0 68.5	57.9 82.6 74.8 98.5 86.2 92.4 68.8	58.9 82.3 73.1 98.0 87.0 92.2 68.4	57.2 83.0 72.4 97.9 86.5 92.4 65.6	58.6 83.2 73.6 97.8 86.3 94.4 66.4
Textile and product mills Apparel and leather Paper Printing and support Petroleum and coal products Chemicals Plastics and rubber products	313,4 315,6 322 323 324 325 326	.74 .28 2.43 1.43 3.69 11.53 3.11	77.2 61.8 84.4 74.1 101.9 87.0 91.9	61.8 85.1 74.6 99.4 87.2 92.4	61.4 84.6 75.0 100.2 85.9 91.4	60.6 82.5 75.3 99.8 86.0 92.1	59.7 82.3 75.4 98.4 86.3 94.0	57.9 82.6 74.8 98.5 86.2 92.4	58.9 82.3 73.1 98.0 87.0 92.2	57.2 83.0 72.4 97.9 86.5 92.4	58.6 83.2 73.6 97.8 86.3 94.4
Textile and product mills Apparel and leather Paper Printing and support Petroleum and coal products Chemicals Plastics and rubber products Other manufacturing (non-NAICS) Mining	313,4 315,6 322 323 324 325 326 1133,5111 21	.74 .28 2.43 1.43 3.69 11.53 3.11 2.74 14.38	77.2 61.8 84.4 74.1 101.9 87.0 91.9 71.7 110.8	61.8 85.1 74.6 99.4 87.2 92.4 71.1 111.6	61.4 84.6 75.0 100.2 85.9 91.4 70.1 111.4	60.6 82.5 75.3 99.8 86.0 92.1 69.1 111.6	59.7 82.3 75.4 98.4 86.3 94.0 68.5 113.0	57.9 82.6 74.8 98.5 86.2 92.4 68.8 112.0	58.9 82.3 73.1 98.0 87.0 92.2 68.4 113.8	57.2 83.0 72.4 97.9 86.5 92.4 65.6 114.1	58.6 83.2 73.6 97.8 86.3 94.4 66.4 115.1

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

Table 5 INDUSTRIAL PRODUCTION INDEXES: SPECIAL AGGREGATES 2007 = 100, seasonally adjusted

		2011	2012	A	M	T	T 1 F	A . T	C	0.45	NT. D
Item		proportion	Mar.	Apr.	May	June ^r	July ^r	Aug. ^r	Sept. ^r	Oct."	Nov. ^p
Total industry		100.00	96.5	97.3	97.3	97.3	97.9	97.0	97.1	96.5	97.5
Energy		26.40	105.1	106.0	108.4	107.6	109.4	107.9	108.0	108.4	109.2
Consumer products		5.39	95.8	96.6	103.1	102.5	104.3	103.0	102.4	101.7	102.6
Commercial products		2.93	97.9	100.2	102.7	102.0	103.0	102.3	100.7	101.3	101.3
Oil and gas well drilling	213111	.68	107.3	105.6	106.5	107.1	105.8	103.6	101.6	99.3	98.1
Converted fuel		3.98	98.7	100.1	104.5	101.2	103.0	98.8	98.4	99.2	99.7
Primary energy		13.43	112.7	113.2	113.5	113.3	115.3	114.4	115.6	116.4	117.5
Non-energy		73.60	93.5	94.3	93.6	93.8	94.1	93.3	93.5	92.6	93.7
Selected high-technology industries		3.38	115.6	116.8	116.6	116.9	115.3	112.1	111.9	113.4	113.2
Computers and peripheral equipment	3341	.46	75.1	74.3	73.7	72.6	70.9	70.0	70.0	70.7	71.3
Communications equipment	3342	.63	86.2	86.1	85.9	85.5	85.7	85.8	85.8	85.7	85.8
Semiconductors and related											
electronic components	334412–9	2.29	146.3	148.9	149.0	150.0	147.6	141.8	141.4	144.2	143.5
Excluding selected high-technology											
industries		70.21	92.3	93.0	92.3	92.5	92.9	92.2	92.4	91.4	92.5
Motor vehicles and parts	3361-3	5.33	101.1	104.2	102.9	104.9	106.4	102.7	101.0	101.0	105.6
Motor vehicles	3361	2.86	106.2	109.8	107.8	110.0	110.8	106.1	104.0	103.2	109.5
Motor vehicle parts	3363	2.15	96.0	98.9	98.6	100.4	103.1	100.8	99.3	99.8	102.9
Excluding motor vehicles and parts		64.88	91.4	92.0	91.2	91.4	91.6	91.2	91.6	90.4	91.3
Consumer goods		19.09	89.3	89.8	89.4	89.4	89.8	89.1	89.7	88.3	89.1
Business equipment		7.84	101.1	102.2	102.7	104.3	103.5	103.6	103.9	102.5	103.1
Construction supplies		4.10	81.0	81.6	80.3	79.6	79.0	78.8	79.2	78.9	80.0
Business supplies Materials		6.35 25.30	85.1 92.4	85.4 93.1	84.9 91.8	85.2 91.8	85.3 92.4	84.9 91.8	85.2 91.9	83.8 91.1	84.7 92.0
Measures excluding selected high-technology											
industries Total industry		96.62	95.7	96.4	96.4	96.5	97.2	96.2	96.4	95.7	96.8
Manufacturing ¹		71.95	93.7	96.4 93.4	96.4	96.5	97.2 93.4	96.2	96.4	93.7 91.8	96.8
Durable		34.70	92.8	93.4 97.9	92.8 97.4	93.1 98.1	93.4 98.4	92.7 97.2	92.7 96.8	91.8 96.0	92.8 97.7
Measures excluding motor vehicles and parts		34.70	90.7	71.7	71.4	70.1	70.4	71.2	70.0	50.0	91.1
Total industry		94.67	96.0	96.7	96.7	96.6	97.2	96.4	96.7	96.0	96.8
Manufacturing ¹		70.01	93.3	93.7	93.1	93.4	93.5	92.9	93.1	90.0	90.8
Durable		32.75	93.3	93.7	98.5	93.4 99.0	93.3	92.9 98.0	93.1 97.9	92.1 97.1	92.9
Measures excluding selected high-technology		52.75	50.1	<i>J</i> 0. <i>J</i>	20.5	<i>))</i> .0	<i>J</i> 0. <i>J</i>	90.0)1.)	<i>)</i> /.1	90.2
industries and motor vehicles and parts Total industry		91.29	95.1	95.8	95.9	95.8	96.4	95.7	96.0	95.2	96.1
Manufacturing ¹		66.63	95.1	93.8 92.4	93.9 91.8	95.8 92.0	90.4 92.2	95.7 91.7	96.0 91.9	95.2 90.9	96.1 91.6
Stage-of-process components of non-energy materials, measures of the input to											
Finished processors		11.19	101.6	103.2	102.4	103.2	102.9	100.3	100.0	99.7	101.1
Primary and semifinished processors		17.57	91.4	92.0	90.6	90.4	91.6	91.7	91.8	90.9	91.8

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1. Refer to note on cover page.

Table 6 DIFFUSION INDEXES OF INDUSTRIAL PRODUCTION Percent

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
One month earlier												
2010	64.4	56.4	65.7	67.0	66.0	52.6	61.9	52.6	52.2	55.1	52.9	60.9
2011	57.7	54.2	56.1	46.8	53.2	49.7	57.1	52.9	51.9	58.0	52.2	65.7
2012	59.0	62.8	42.6	63.3	52.2	55.8	52.6	37.8	52.2	44.1		
Three months earlier												
2010	68.6	62.2	69.2	67.0	69.9	66.7	60.9	58.0	58.3	55.8	54.2	57.4
2011	62.5	62.5	61.9	51.9	54.8	53.5	56.4	51.0	57.1	55.8	59.3	65.1
2012	68.3	73.1	61.9	57.1	48.4	58.7	50.3	49.7	43.9	37.5		
Six months earlier												
2010	69.6	64.1	65.7	72.1	72.4	72.1	69.9	68.6	64.1	63.5	57.1	63.8
2011	59.0	61.2	63.1	59.6	59.3	57.1	57.4	53.2	51.9	58.7	57.4	62.8
2012	67.9	72.8	62.8	69.6	64.7	59.6	57.4	48.4	53.8	42.3		

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.

Item		2011	1972- 2011	1994- 95	2009	2012			2012					
item		proportion	ave.	high	low	Q1	Q2 ^r	Q3 ^r	Juner	July ^r	Aug. ^r	Sept. ^r	Oct.r	Nov
Total industry		100.00	80.3	85.0	66.8	78.7	78.9	78.6	78.8	79.2	78.3	78.3	77.7	78
Manufacturing ¹		76.96	78.8	84.6	63.8	77.6	77.5	77.0	77.4	77.5	76.8	76.7	75.9	76.
Manufacturing (NAICS)	31–33	73.67	78.7	84.7	63.6	78.2	78.1	77.6	78.0	78.2	77.3	77.3	76.5	77.
Durable manufacturing		39.73	77.1	83.7	58.2	77.5	78.0	77.1	78.0	78.0	76.8	76.3	75.7	76
Wood products	321	1.10	77.6	86.6	51.7	66.9	66.6	66.3	66.1	66.4	66.2	66.3	66.9	69
Nonmetallic mineral products	327	2.21	75.2	82.7	44.2	56.4	56.4	55.6	56.4	55.6	55.6	55.8	56.1	56
Primary metals	331	3.08	79.2	94.1	48.6	77.0	75.1	73.4	72.9	74.7	74.5	70.8	70.3	72
Fabricated metal products	332	5.28	77.3	85.9	60.9	82.4	83.6	83.9	84.0	84.3	83.6	83.8	83.1	83
Machinery	333	5.18	78.1	87.7	60.3	84.9	86.1	83.1	87.1	84.0	82.8	82.6	80.6	81
Computer and electronic products	334	6.22	78.2	84.5	68.7	78.1	77.6	75.8	77.6	77.1	75.3	75.1	74.9	74
Electrical equip., appliances,														
and components	335	1.71	82.6	92.7	66.3	81.8	82.9	83.4	82.6	83.4	82.4	84.3	82.8	84
Motor vehicles and parts	3361-3	6.24	75.0	87.4	34.7	75.1	77.1	75.7	77.5	78.2	75.2	73.7	73.4	76
Aerospace and miscellaneous														
transportation equipment	3364–9	4.49	73.1	69.1	69.7	78.1	77.7	78.2	77.6	78.2	77.7	78.6	77.4	77
Furniture and related products	337	1.12	77.1	82.4	57.5	70.9	70.6	70.4	69.8	71.1	70.4	69.7	69.3	70
Miscellaneous	339	3.09	76.1	80.6	68.2	78.3	79.6	79.5	79.7	80.5	79.5	78.6	78.1	80
Nondurable manufacturing		33.94	80.9	86.1	69.3	78.9	78.1	78.2	78.0	78.3	77.9	78.4	77.5	77
Food, beverage, and tobacco products	311,2	11.05	81.1	86.1	75.7	79.7	79.4	80.1	79.5	80.1	79.6	80.7	78.6	79
Textile and product mills	313,4	.85	80.3	91.9	53.8	69.9	69.6	69.4	70.1	69.6	69.1	69.6	69.3	70
Apparel and leather	315,6	.31	78.0	87.5	59.0	71.2	69.9	67.5	69.3	68.3	66.5	67.6	65.8	67
Paper	322	2.27	86.9	92.6	71.8	81.8	81.1	80.1	79.8	79.8	80.3	80.2	81.1	81
Printing and support	323	1.70	81.6	84.7	60.4	65.5	65.4	64.9	65.7	65.7	65.2	63.7	63.0	64
Petroleum and coal products	324	3.32	85.7	90.9	76.0	86.3	84.8	84.3	85.0	84.1	84.5	84.4	84.6	84
Chemicals	325	11.33	77.7	81.9	65.0	78.2	76.9	76.7	76.4	76.7	76.5	77.0	76.5	76
Plastics and rubber products	326	3.11	82.2	92.5	58.0	78.5	78.2	78.5	78.2	79.6	78.1	77.8	77.8	79
Other manufacturing (non-NAICS)	1133,5111	3.29	82.7	83.3	68.4	65.4	63.8	62.8	63.0	62.6	63.1	62.8	60.4	61
Mining	21	12.77	87.3	88.6	78.5	89.9	89.3	90.0	89.2	90.2	89.2	90.5	90.6	91.
Utilities	2211,2	10.27	86.3	93.3	79.1	72.5	75.6	76.0	75.4	77.5	75.6	74.8	74.7	75.
Selected high-technology industries		3.45	78.2	86.5	69.1	74.1	74.1	71.7	74.1	73.1	71.0	70.9	71.9	71
Computers and peripheral equipment	3341	.44	78.4	86.8	75.8	81.0	79.2	75.8	78.2	76.4	75.5	75.5	76.3	77
Communications equipment	3342	.66	76.6	84.1	75.8	76.4	76.2	76.2	75.8	76.1	76.2	76.2	76.1	76
Semiconductors and related														
electronic components	334412-9	2.36	80.2	92.1	62.7	72.3	72.9	70.0	73.1	71.9	69.1	68.9	70.3	69
Measures excluding selected high-technology industries														
		96.55	80.4	84.9	66.6	78.9	79.0	78.9	78.9	79.4	78.6	78.6	77.9	78
Total industry		73.50	78.9	84.5	63.5	77.8	77.7	77.3	77.6	77.7	77.0	77.0	76.1	76
Total industry Manufacturing ¹		/5.50	/0./											
Manufacturing ¹		75.50	10.9											
Total industry Manufacturing ¹ STAGE-OF-PROCESS GROUPS Crude					76.4	87.8	87.1	87.8	87.0	87.9	87.3	88.2	88.0	88
Manufacturing ¹ STAGE-OF-PROCESS GROUPS		16.85 45.82	86.3	89.7 87.9	76.4 64.2	87.8 75.5	87.1 76.1	87.8 75.8	87.0 75.9	87.9 76.5	87.3 75.6	88.2 75.3	88.0 74.9	88 75

Table 7 CAPACITY UTILIZATION Percent of capacity, seasonally adjusted

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Table 8 INDUSTRIAL CAPACITY Percent change

		Average a	nnual rate		Fourth	quarter to	o fourth c	uarter		Annual	l rate		Monthly rate
Item	1972-	1980-	1989-	1995-		<u>^</u>		·	2012				2012
	79	88	94	2012	2009	2010	2011	2012	Q1	Q2	Q3	Q4	Nov.
Total industry	3.1	1.9	2.3	2.3	7	-1.9	.8	1.5	1.4	1.5	1.6	1.7	.1
Manufacturing ¹	3.3	2.2	2.5	2.4	-2.8	-2.4	.1	1.4	1.3	1.5	1.5	1.5	.1
Mining	.7	.1	7	.3	5.0	2	2.7	2.2	2.0	2.0	2.2	2.5	.2
Utilities	4.2	2.1	1.8	2.3	1.2	4.5	3.2	2.4	2.1	2.3	2.5	2.6	.2
Selected high-technology industries	19.6	17.3	15.6	18.8	3.0	.3	10.4	3.1	8.3	3.7	.7	.1	.0
Manufacturing ¹ ex. selected	17.0	17.5	15.0	10.0	5.0		10.1	5.1	0.5	5.1	.,	.1	.0
high-technology industries	2.6	1.3	1.6	1.0	-3.1	-2.6	4	1.3	1.0	1.3	1.5	1.5	.1
STAGE-OF-PROCESS GROUPS													
Crude	1.6	.4	5	.4	3.1	4	2.0	1.6	1.4	1.5	1.7	1.9	.2
Primary and semifinished	3.0	1.4	2.5	2.7	-1.0	-1.2	.3	.1	.3	.1	.0	.0	.0
Finished	3.9	3.3	2.7	2.3	-3.5	-2.3	.9	3.5	3.0	3.5	3.7	3.7	.3

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

sinions of 2005 donais at annual rate, seaso											
			2012			2012					
Item	2005	2011	Q1	Q2 ^r	Q3 ^r	June ^r	July ^r	Aug. ^r	Sept. ^r	Oct.r	Nov. ^p
Final products and nonindustrial supplies	3,332.3	3,218.3	3,312.0	3,339.8	3,342.1	3,353.7	3,359.4	3,334.0	3,333.0	3,299.0	3,331.4
Final products	2,474.8	2,468.3	2,545.2	2,568.3	2,574.7	2,582.6	2,588.0	2,567.0	2,569.1	2,536.8	2,565.9
Consumer goods	1,834.1	1,777.6	1,806.4	1,813.6	1,815.4	1,821.0	1,823.1	1,810.3	1,812.6	1,793.5	1,812.8
Durable	495.3	433.1	476.6	479.4	471.6	478.2	478.0	469.0	467.8	468.3	482.1
Automotive products	288.4	277.5	317.2	318.5	310.0	317.4	314.9	307.4	307.7	307.1	317.9
Other durable goods	206.9	156.1	160.1	161.6	162.2	161.5	163.7	162.1	160.8	161.8	164.9
Nondurable	1,338.8	1,339.8	1,331.6	1,336.2	1,344.2	1,344.2	1,346.4	1,341.6	1,344.7	1,326.1	1,333.2
Equipment, total	640.8	692.6	745.3	762.9	768.1	770.4	773.9	765.4	765.0	751.1	761.2
Business and defense	617.4	670.7	721.4	739.7	745.6	747.0	751.1	742.8	743.0	729.6	740.0
Business	537.5	566.6	613.8	634.3	638.1	643.0	644.1	636.1	634.1	622.7	633.5
Defense and space	79.9	102.9	106.8	105.1	107.0	104.0	106.6	106.3	108.2	106.2	106.0
Nonindustrial supplies	857.4	753.1	770.3	775.1	771.1	774.9	775.1	770.7	767.6	765.6	769.1
Construction supplies	270.0	212.6	226.5	224.8	220.2	221.6	220.2	219.9	220.3	219.6	223.5
Business supplies	587.4	540.6	543.9	550.4	551.1	553.4	555.1	550.9	547.5	546.2	545.8
Commercial energy products	210.9	212.3	207.7	213.7	214.6	216.2	217.3	215.9	210.6	213.8	210.8

r Revised. p Preliminary.

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

Percent change, seasonally adjusted

			rth quarte urth quar			Annual r	ate			Mont	nly rate			Nov. '11
Item	2011	10	urur quu		2012	innuur i	ute	2012		Monu	ing fute			to
	gross value ¹	2009	2010	2011	Q1	Q2 ^r	Q3 ^r	June ^r	July ^r	Aug. ^r	Sept. ^r	Oct.r	Nov. ^p	Nov. '12
Finished	1921.4	-4.9	4.8	6.9	11.6	4.4	1	.6	.3	9	.2	-1.2	1.3	4.3
Semifinished	1627.7	-8.4	9.0	3.2	10.4	5.1	-2.9	2	.5	-2.0	.1	6	1.4	3.3
Primary	1331.9	-3.5	4.4	2.4	-2.7	6	-1.1	2	.0	1	-1.1	5	.5	-1.8
Crude	653.9	1.2	6.6	2.6	.5	-5.0	5.0	.1	1.1	.0	1.3	4	.6	1.6

r Revised. p Preliminary.

1. Billions of 2005 dollars.

Seasonally adjusted Year	Ion	Feb.	Mar.	Ann	Mou	Iuno	Inter	4.11.0	Cont	Oat	Nov.	Dec.	01	- 02	02	04	Annual
rear	Jan.	Feb.	war.	Apr.	May	June	July	Aug.	Sept.	Oct.	INOV.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
$change)^1$	6	0	~	1	2	2		2	2	0	1.0	7	2.0	2.0	1.7	()	1.0
1990 1991	6 4	.9 6	.5 5	1 .2	.2 1.0	.3 1.0	1	.2	.2 .9	8 2	-1.2	7 3	2.8	3.0 2.5	1.7 5.5	-6.2 .8	1.0
1992	6	.8	.8	.2	.4	.0	.0	5	.2	.8	.4	.0	5	7.3	2.9	4.1	2.8
1993	.5	.4	.0	.3	4	.2	.3	.0	.5	.7	.4	.5	3.5	1.1	2.0	6.1	3.3
1994	.4	.0	1.0	.5	.6	.7	.2	.6	.2	.8	.6	1.1	5.1	7.5	5.1	8.1	5.3
1995	.3	.0	.2	1	.2	.3	4	1.3	.4	2	.2	.3	5.0	1.2	3.8	3.2	4.7
1996	7	1.6	1	.9	.7	.9	1	.6	.5	.0	.8	.6	2.6	8.7	5.5	5.3	4.4
1997	.1	1.2	.8	.0	.7	.5	.6	1.3	.9	.7	.9	.4	7.7	6.5	9.8	10.1	7.2
1998	.5	.1	.1	.4	.7	6	4	2.1	3	.8	1	.3	4.4	2.9	2.9	5.4	5.8
1999	.4	.4	.2	.2	.7	2	.7	.4	3	1.3	.5	.8	4.1	3.9	4.0	7.5	4.3
2000	.1	.4	.4	.6	.1	.1	2	3	.5	4	.0	3	4.7	4.6	6	-1.3	4.0
2001	7	6	3	3	7	6	5	3	3	5	5	.0	-5.6	-5.3	-5.5	-4.6	-3.4
2002 2003	.6 .8	.0 .4	.8 2	.4 8	.6 .0	.9 .0	3 .3	.2	.1 .6	4 1	.5 .8	5 .0	2.7	6.5 -3.2	2.4 1.9	4 3.3	.2 1.2
2003	.3	.6	6	.4	.0	9	.7	.3	.0	1.0	.2	.7	2.8	1.7	2.2	5.8	2.3
2005	.5	.6	1	.0	.2	.4	1	1	-2.0	1.3	.9	6	5.9	1.8	-1.6	3.2	3.3
2005	.1	.0	1	.0	2	.4	1	.1	-2.0	1	1	.6 1.0	4.0	2.5	-1.0	.6	2.2
2007	4	1.2	.0	.8	1	.0	.1	.0	.5	6	.5	.1	4.1	4.6	1.0	.6	2.5
2008	3	2	4	8	5	3	5	-1.7	-4.1	.8	-1.2	-2.7	-1.2	-5.9	-12.5	-15.9	-3.5
2009	-2.2	6	-1.7	9	-1.1	4	1.0	1.0	.6	.2	.4	.5	-19.6	-11.4	5.0	5.6	-11.4
2010	1.0	.4	.6	.4	1.6	.2	.7	.2	.4	4	.3	1.1	7.9	8.6	6.6	2.2	5.4
2011	.1	2	.8	5	.3	.1	.9	.3	.2	.6	.2	.9	4.4	1.2	5.6	5.1	4.1
2012	.7	.5	6	.8	.0	.0	.7	-1.0	.2	7	1.1		5.9	2.4	.3		
IP (2007=100)																	
2010	87.4	87.8	88.3	88.7	90.1	90.2	90.9	91.1	91.4	91.1	91.4	92.4	87.8	89.7	91.1	91.6	90.1
2011	92.5	92.3	93.1	92.6	92.9	93.1	93.9	94.2	94.4	94.9	95.1	95.9	92.6	92.9	94.2	95.3	93.7
2012	96.6	97.1	96.5	97.3	97.3	97.3	97.9	97.0	97.1	96.5	97.5		96.7	97.3	97.3		
Capacity																	
(percent of																	
2007 output)	102.4	102.1	100.0	100 6	100.2	100.1	121.0	101.0	101.6	101.6	101 5	1015	102.1	100.2	101.0	101 5	100.0
2010 2011	123.4 121.5	123.1 121.6	122.8 121.6	122.6 121.7	122.3 121.8	122.1 121.9	121.9 122.0	121.8 122.1	121.6 122.2	121.6 122.3	121.5 122.5	121.5 122.6	123.1 121.6	122.3 121.8	121.8 122.1	121.5 122.5	122.2 122.0
2012	122.7	122.9	123.0	123.2	123.3	123.5	123.7	123.8	124.0	124.2	124.3	12210	122.9	123.3	123.8	12210	12210
TZ , 1																	
Utilization (percent)																	
(<i>percent</i>) 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	79.3	79.8	80.3	80.7	80.8	80.7	81.2	80.6	80.6	81.0	81.2	81.0	79.8	80.7	80.8	81.1	80.6
1993	81.3	81.4	81.3	81.4	81.0	81.1	81.2	81.1	81.4	81.8	82.0	82.3	81.3	81.2	81.2	82.1	81.4
1994	82.5	82.3	83.0	83.2	83.4	83.7	83.6	83.8	83.8	84.2	84.4	85.0	82.6	83.5	83.7	84.6	83.6
1995	85.0	84.6	84.5	84.1	84.0	84.0	83.4	84.1	84.1	83.6	83.5	83.4	84.7	84.0	83.9	83.5	84.0
1996	82.5	83.5	83.0	83.4	83.6	84.0	83.5	83.6	83.7	83.3	83.6	83.7	83.0	83.6	83.6	83.5	83.4
1997	83.4	83.9	84.2	83.8	83.9	83.8	83.9	84.5	84.7	84.7	84.9	84.7	83.8	83.8	84.3	84.8	84.2
1998 1999	84.5 81.8	84.0 81.8	83.5 81.6	83.3 81.5	83.3 81.8	82.4 81.4	81.5 81.6	82.8 81.7	82.1 81.1	82.4 81.9	81.9 82.0	81.8 82.3	84.0 81.8	83.0 81.6	82.2 81.5	82.0 82.0	82.8 81.7
1)))	01.0	01.0	01.0	01.5	01.0	01.4	01.0	01.7	01.1	01.9	02.0	02.5	01.0	01.0	01.5	02.0	01.7
2000	82.1	82.1	82.2	82.4	82.2	82.0	81.6	81.1	81.2	80.6	80.4	79.9	82.1	82.2	81.3	80.3	81.5
2001	79.1	78.4	77.9	77.5	76.8	76.1	75.6	75.2	74.8	74.2	73.7	73.6	78.5	76.8	75.2	73.8	76.1
2002 2003	73.9 75.8	73.8 76.1	74.2 76.0	74.5 75.4	74.8 75.5	75.5 75.5	75.2 75.8	75.3 75.7	75.4 76.2	75.1 76.2	75.5 76.8	75.2 76.8	74.0	74.9 75.5	75.3 75.9	75.3 76.6	74.9
2003	77.0	77.4	77.0	77.3	77.9	77.2	77.8	78.0	78.0	78.7	78.9	79.4	77.1	77.5	77.9	79.0	77.9
2005	79.7	80.2	00.1	80.0	00.1	00.2	00.1	00.1	70 /	70.2	70.0	80.2	80.0	00.1	70 5	70.0	70.0
2005 2006	79.7 80.3	80.2 80.3	80.1 80.4	80.0 80.6	80.1 80.4	80.3 80.5	80.1 80.5	80.1 80.5	78.4 80.2	79.3 79.9	79.9 79.7	80.3 80.3	80.0 80.3	80.1 80.5	79.5 80.4	79.9 80.0	79.9 80.3
2000	79.8	80.5	80.4	80.8	80.4 80.6	80.4	80.4	80.3	80.6	80.1	80.5	80.5	80.2	80.6	80.4	80.4	80.4
2008	80.4	80.3	80.1	79.5	79.1	78.9	78.6	77.2	74.0	74.6	73.6	71.6	80.3	79.2	76.6	73.2	77.3
2009	69.9	69.5	68.3	67.7	67.1	66.8	67.5	68.3	68.9	69.1	69.5	70.0	69.3	67.2	68.2	69.5	68.6
2010	70.8	71.3	71.9	72.4	73.7	73.9	74.5	74.8	75.2	74.9	75.2	76.0	71.4	73.3	74.8	75.4	73.7
2011	76.1	75.9	76.5	76.1	76.3	76.3	77.0	77.1	77.2	77.6	77.7	78.3	76.2	76.3	77.1	77.9	76.8
2012	78.7	79.0	78.4	79.0	78.9	78.8	79.2	78.3	78.3	77.7	78.4		78.7	78.9	78.6		
1 Quarterly changes	one of one	1101 motoo	Annual ala		alaulatad		1 01 00 0 0										

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

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

Seasonally adjusted	Tom	Esh	Mar	A	Mari	T	Tester	A	Cant	Ort	New	Dee	01		02	- 04	A
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
change) ²								-		-						-	
1990	1	1.4	.5	3	.2	.3	1	.3	.0	8	-1.1	8	4.3	2.9	1.1	-6.8	.8
1991 1992	8 6	6 .9	7 1.0	.3 .6	.8 .6	1.1 .3	.2 .9	.2 4	1.1 .0	2 .6	2 .4	1 2	-8.8 .5	1.9 8.3	7.2 4.0	1.5 2.9	-2.0 3.6
1992	1.0	.2	2	.5	1	1	.3	4	.6	.0	.4	2	4.4	1.5	1.2	6.9	3.5
1994	.2	.1	1.3		.7	.3	.5	.8	.0	1.0	.8	1.1	5.0	9.5	6.0	9.9	5.9
1995	.3	1	.3	2	.1	.5	6	1.2	.9	1	.0	.3	5.3	.6	3.2	4.0	5.2
1996 1997	8 .0	1.6 1.4	2 1.2	1.1 2	.7 .9	1.1 .7	.3 .5	.6 1.6	.6 .9	1 .6	.8 1.1	.9 .5	1.8 9.1	9.9 7.6	8.0 10.9	5.5 10.9	4.8 8.4
1997	.0	.1	1	2	.9	7	.5 5	2.5	.9 4	1.0	.2	.5	6.0	2.4	3.3	7.5	6.6
1999	.3	.7	.0	.4	.9	3	.5	.7	3	1.5	.6	.7	4.7	4.5	3.7	9.0	5.0
2000	-	2	7		2	2	0		-	4	2		5.0	4.2	0	2.0	1.2
2000 2001	.2 6	.3 6	.7 3	.6 2	2 8	.2 7	.0 4	6 6	.5 2	4 7	3 3	6 .3	5.3 -6.5	4.3 -5.5	8 -6.0	-2.9 -4.3	4.2
2001	.5	.0	.7	.1	3	1.1	5	0	.1	4	5	5	3.2	5.9	3.1	-4.5	.3
2003	.6	.2	.2	-1.0	.1	.4	.0	3	.7	1	1.0	2	2.5	-2.3	1.4	3.7	1.2
2004	.0	.7	3	.4	.7	8	.8	.7	1	1.1	1	.7	2.6	2.9	3.8	5.6	2.7
2005	.8	.8	5	.2	.4	.1	1	.3	-1.1	1.5	.7	.1	6.5	2.0	3	5.6	4.0
2006	.9	1	1	.6	5	.3	1	.4	.1	4	.0	1.6	4.1	1.1	.7	1.1	2.5
2007	5	.6	.6	.8	2	.3	.2	5	.5	5	.4	.3	4.7	5.3	.8	.4	2.7
2008	4	4	4	-1.1	6	6	-1.1	-1.4	-3.4	7	-2.3	-3.3	-2.2	-8.2	-14.0	-21.6	-4.8
2009	-2.9	.0	-2.1	8	-1.2	3	1.2	1.0	.7	1	.9	.1	-23.3	-11.6	6.4	5.8	-13.8
2010	.9	.1	1.1	1.0	1.4	.0	.8	.0	.2	.1	.2	1.0	7.1	11.2	5.2	2.6	5.7
2011	.4	.2	.6 7	6	.2 7	.0	.8	.3	.4	.5	.0	1.5	6.0	.2	5.1	5.6	4.3
2012	1.0	.9	/	.7	/	.4	.3	8	.1	-1.0	1.1		9.8	.8	-1.1		
IP (2007=100)																	
2010	83.9	84.0	84.9	85.8	87.0	87.0	87.6	87.6	87.8	87.9	88.0	88.9	84.3	86.6	87.7	88.2	86.7
2011 2012	89.2 93.8	89.4 94.6	90.0 94.0	89.5 94.6	89.7 94.0	89.7 94.3	90.4 94.6	90.7 93.8	91.1 93.8	91.5 92.9	91.5 94.0	92.9	89.6 94.1	89.6 94.3	90.7 94.1	92.0	90.5
Capacity (percent of 2007 output)		100 0			100.0	101 5				120.0	100 0	100 6	100.0			100 0	101.5
2010	123.1	122.8	122.5 120.5	122.3	122.0	121.7	121.5	121.3	121.1	120.9	120.8	120.6	122.8	122.0	121.3	120.8	121.7
2011 2012	120.6 121.1	120.5 121.3	120.5	120.5 121.6	120.5 121.7	120.5 121.9	120.6 122.0	120.6 122.2	120.7 122.3	120.8 122.5	120.9 122.6	121.0	120.5 121.3	120.5 121.7	120.6 122.2	120.9	120.6
Utilization																	
(percent) 1990	81.6	82.5	82.7	82.3	82.3	82.3	82.1	82.1	81.9	81.1	80.0	79.3	82.3	82.3	82.0	80.1	81.7
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	77.9	79.0	79.0	78.5
1992	78.2	78.7	79.3	79.6	79.9	79.9	80.4	79.9	79.7	80.0	80.1	79.8	78.8	79.8	80.0	79.9	79.6
1993	80.4	80.4	80.1	80.4	80.2	80.0	80.1	79.9	80.2	80.8	81.0	81.2	80.3	80.2	80.1	81.0	80.4
1994	81.2	81.1	82.0	82.4	82.8	82.8	82.8	83.2	83.2	83.7	84.0	84.6	81.5	82.7	83.1	84.1	82.8
1995	84.6	84.1	84.0	83.5	83.2	83.3	82.4	83.0	83.3	82.8	82.5	82.3	84.2	83.3	82.9	82.5	83.2
1996	81.3	82.2	81.6	82.0	82.2	82.7	82.5	82.6	82.7	82.1	82.3	82.6	81.7	82.3	82.6	82.3	82.2
1997	82.1	82.8	83.3	82.6	82.9	82.9	82.8	83.5	83.7	83.6	83.9	83.6	82.8	82.8	83.3	83.7	83.1
1998 1999	83.7 80.6	83.1 80.8	82.4 80.4	82.2 80.3	82.1 80.7	80.9 80.1	80.0 80.1	81.6 80.3	80.8 79.7	81.1 80.6	80.8 80.7	80.8 80.9	83.0 80.6	81.7 80.4	80.8 80.1	80.9 80.7	81.6 80.4
1)))	00.0	00.0	00.4	00.5	00.7	00.1	00.1	00.5	1).1	00.0	00.7	00.7	00.0	00.4	00.1	00.7	00.4
2000	80.8	80.6	80.8	81.0	80.5	80.3	80.0	79.2	79.3	78.7	78.2	77.4	80.7	80.6	79.5	78.1	79.8
2001	76.7	76.0	75.5	75.1	74.3	73.7	73.2	72.7	72.4	71.8	71.5	71.6	76.1	74.4	72.8	71.6	73.7
2002 2003	71.9 73.7	71.8 73.9	72.3 74.0	72.3 73.3	72.8 73.4	73.6 73.7	73.3 73.8	73.5 73.6	73.6 74.1	73.3 74.1	73.6 74.9	73.2 74.8	72.0	72.9 73.5	73.5 73.8	73.4 74.6	72.9 73.9
2003	74.8	75.4	75.2	75.6	76.1	75.5	76.1	76.6	76.5	77.3	77.1	77.6	75.1	75.7	76.4	77.3	76.2
2005	70.1	70.6	70.1	70.0	70.2		70.0	70.1	77 1	70.1	70.6	70 5	70.2	70.0	77 7	70.4	79.0
2005 2006	78.1 79.1	78.6 78.8	78.1 78.6	78.2 79.0	78.3 78.5	78.3 78.6	78.0 78.4	78.1 78.5	77.1 78.4	78.1 78.0	78.6 77.8	78.5 78.8	78.3 78.8	78.2 78.7	77.7 78.5	78.4 78.2	78.2 78.5
2000	78.3	78.5	78.8	79.0	78.8	78.8	78.4	78.2	78.5	78.0	78.2	78.4	78.5	78.9	78.5	78.2	78.5
2008	78.0	77.6	77.4	76.5	76.2	75.8	75.1	74.1	71.7	71.4	69.9	67.7	77.7	76.2	73.6	69.7	74.3
2009	65.9	66.0	64.8	64.5	63.9	63.8	64.8	65.6	66.2	66.4	67.2	67.4	65.6	64.1	65.5	67.0	65.5
2010	68.2	68.4	69.3	70.2	71.3	71.4	72.1	72.3	72.5	72.7	72.9	73.7	68.6	71.0	72.3	73.1	71.2
2010	74.0	74.2	74.7	74.3	74.4	74.4	75.0	75.2	75.5	75.8	75.7	76.8	74.3	74.4	75.2	76.1	75.0
2012	77.5	78.0	77.4	77.8	77.2	77.4	77.5	76.8	76.7	75.9	76.6		77.6	77.5	77.0		
	over page																

Table 12 HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Manufacturing¹ Seasonally adjusted New June July Aug Sept. Oct. Nov. Dec. Q1 Q2

 I. Refer to note on cover page.

 2. 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	Annual
IP $(percent change)^2$																	
1990	7	.9	.5	2	.1	.3	1	.2	.2	8	-1.3	8	2.2	2.5	1.3	-6.8	.3
1991	4	8	6	.2	1.0	1.0	.0	.1	.9	2	2	5	-8.0	2.0	5.3	.3	-2.0
1992	8	.7	.8	.6	.3	1	.8	6	.1	.6	.3	.0	-1.9	6.2	1.8	2.9	1.9
1993	.5	.3	1	.3	4	.2	.3	1	.4	.6	.3	.5	3.1	.3	1.4	5.1	2.5
1994	.4	.0	.9	.3	.4	.6	.0	.4	.0	.6	.4	.9	4.5	5.4	3.2	5.7	4.0
1995	.1	2	1	3	.1	.2	5	1.1	.1	5	.1	.1	2.9	-1.2	1.5	.2	2.5
1995	-1.0	1.3	3	3	.1	.2	5	.4	.3	3	.1	.1	3	-1.2	2.1	3.0	1.7
1997	1	.9	.5	3	.3	.2	.3	1.0	.7	.6	.6	.1	5.1	2.4	6.3	7.7	4.2
1998	.2	.0	.0	.1	.6	9	8	2.0	7	.6	3	.1	1.9	.7	3	2.3	3.1
1999	.2	.1	1	1	.6	5	.3	.4	4	1.2	.2	.5	.7	.3	1.1	5.5	1.1
2000	3	.0	.1	.4	2	1	5	4	.4	5	2	5	.6	1.5	-3.0	-2.7	1.0
2000	7	5	3	2	2 7	1	5 3	4	.4 4	5	2	5	-5.9	-4.5	-4.3	-4.6	-4.0
2002	.7	1	.8	.4	.5	.9	4	.1	.0	4	.4	6	2.8	6.3	1.7	-1.0	.3
2003	.7	.2	3	9	1	1	.2	1	.6	2	.7	1	1.8	-4.6	.8	2.5	.2
2004	.2	.6	6	.5	.8	9	.7	.2	1	1.0	.2	.7	2.2	1.9	1.7	5.3	1.7
2005	.4	.6	1	.0	.1	.3	3	.0	-2.3	1.2	1.0	.6	5.2	1.0	-3.0	2.0	2.5
2005	.4	0.	1	.0	3	.3	5	.0	-2.3	1	2	1.0	3.6	1.0	-3.0	.0	1.4
2000	5	1.1	2	.6	.0	.1	.1	.0	.4	8	.3	.0	3.3	3.7	1.0	-1.1	1.4
2008	4	3	5	8	6	3	4	-1.7	-4.2	1.1	-1.0	-2.6	-2.2	-6.6	-12.5	-14.7	-4.2
2009	-2.2	6	-1.8	-1.0	-1.1	5	.9	1.1	.6	.2	.3	.4	-19.1	-12.2	4.7	5.3	-11.3
2010	1.0	2	c	4	1 4	2	.7	.2	4	A	2	1.0	7.7	8.2	6.8	2.0	5.0
2010	1.0	.3 2	.6 .9	.4 5	1.6 .3	.2	1.0	.2	.4 .3	4 .7	.2 .2	1.0	7.3	8.2	5.7	2.0 5.6	5.0 4.0
2011	.0	2	.9 6		.0	.0	.7	9	.3	7	1.1	.0	6.1	2.3	.7	5.0	4.0
			10	10			.,	.,	.2	• •				2.0	.,		
IP (2007=100)	06.0	07.0	07.5	07.0	00.2	00.4	00.1	00.2	00 6	00.2	00.5	01.5	07.1	00.0	00.2	00.0	00.2
2010	86.8	87.0	87.5	87.8	89.2	89.4	90.1	90.2	90.6	90.3	90.5	91.5	87.1	88.8	90.3	90.8	89.3
2011 2012	91.5 95.8	91.3 96.3	92.2 95.7	91.7 96.4	92.0 96.4	92.1 96.5	93.0 97.2	93.2 96.2	93.5 96.4	94.1 95.7	94.3 96.8	95.1	91.7 95.9	91.9 96.4	93.2 96.6	94.5	92.8
Capacity (percent of 2007 output) 2010	122.7	122.4	122.1	121.8	121.5	121.3	121.1	121.0	120.9	120.8	120.8	120.7	122.4	121.6	121.0	120.8	121.4
2010	122.7	122.4	122.1	121.8	121.5	121.5	121.1	121.0	120.9	120.8	120.8	120.7	122.4	121.0	121.0	120.8	121.4
2011	120.7	120.7	120.3	120.8	120.9	120.9	121.0	121.0	121.1	121.2	123.0	121.5	120.7	120.9		121.2	121.0
Utilization (percent)															122.5		
(percent)															122.5		
	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
1990	82.7 80.2	83.3 79.5	83.6 78.9	83.3 79.0	83.3 79.7	83.4 80.4	83.2 80.3	83.3 80.2	83.3 80.9	82.5 80.6	81.4 80.4	80.7 79.9	83.2 79.6	83.3 79.7		81.5 80.3	82.8 80.0
1990 1991															83.3		
1990 1991 1992 1993	80.2	79.5 79.6 81.6	78.9	79.0 80.6 81.6	79.7	80.4	80.3	80.2	80.9	80.6	80.4	79.9	79.6 79.7 81.5	79.7 80.6 81.3	83.3 80.5 80.8 81.3	80.3 81.1 82.1	80.0 80.5
1990 1991 1992 1993	80.2 79.1	79.5 79.6	78.9 80.2	79.0 80.6	79.7 80.7	80.4 80.5	80.3 81.1	80.2 80.6	80.9 80.6	80.6 81.0	80.4 81.2	79.9 81.1	79.6 79.7	79.7 80.6	83.3 80.5 80.8	80.3 81.1	80.0 80.5
1990 1991 1992 1993 1994	80.2 79.1 81.4 82.6	79.5 79.6 81.6	78.9 80.2 81.4	79.0 80.6 81.6	79.7 80.7 81.1 83.4	80.4 80.5 81.2 83.8	80.3 81.1 81.4 83.6	80.2 80.6 81.2 83.8	80.9 80.6 81.4 83.7	80.6 81.0 81.9 84.1	80.4 81.2 82.1 84.3	79.9 81.1 82.4	79.6 79.7 81.5	79.7 80.6 81.3	83.3 80.5 80.8 81.3	80.3 81.1 82.1 84.5	80.0 80.5 81.6 83.6
1990 1991 1992 1993 1994	80.2 79.1 81.4	79.5 79.6 81.6 82.5	78.9 80.2 81.4 83.1	79.0 80.6 81.6 83.2	79.7 80.7 81.1	80.4 80.5 81.2	80.3 81.1 81.4	80.2 80.6 81.2	80.9 80.6 81.4	80.6 81.0 81.9	80.4 81.2 82.1	79.9 81.1 82.4 84.9	79.6 79.7 81.5 82.7	79.7 80.6 81.3 83.5	83.3 80.5 80.8 81.3 83.7	80.3 81.1 82.1	80.0 80.5 81.6 83.6 83.9
1990 1991 1992 1993 1994 1995 1996	80.2 79.1 81.4 82.6 84.9	79.5 79.6 81.6 82.5 84.6	78.9 80.2 81.4 83.1 84.4	79.0 80.6 81.6 83.2 84.0	79.7 80.7 81.1 83.4 83.9	80.4 80.5 81.2 83.8 83.9	80.3 81.1 81.4 83.6 83.3	80.2 80.6 81.2 83.8 84.0	80.9 80.6 81.4 83.7 84.0	80.6 81.0 81.9 84.1 83.4	80.4 81.2 82.1 84.3 83.4	79.9 81.1 82.4 84.9 83.3	79.6 79.7 81.5 82.7 84.6	79.7 80.6 81.3 83.5 83.9	83.3 80.5 80.8 81.3 83.7 83.8	80.3 81.1 82.1 84.5 83.4	80.0 80.5 81.6 83.6 83.9
1990 1991 1992 1993 1994 1995 1996 1997	80.2 79.1 81.4 82.6 84.9 82.4	79.5 79.6 81.6 82.5 84.6 83.4	78.9 80.2 81.4 83.1 84.4 82.9	79.0 80.6 81.6 83.2 84.0 83.4	79.7 80.7 81.1 83.4 83.9 83.7	80.4 80.5 81.2 83.8 83.9 84.1	80.3 81.1 81.4 83.6 83.3 83.6	80.2 80.6 81.2 83.8 84.0 83.7	80.9 80.6 81.4 83.7 84.0 83.8	80.6 81.0 81.9 84.1 83.4 83.4	80.4 81.2 82.1 84.3 83.4 83.8	79.9 81.1 82.4 84.9 83.3 84.0	79.6 79.7 81.5 82.7 84.6 82.9	79.7 80.6 81.3 83.5 83.9 83.8	83.3 80.5 80.8 81.3 83.7 83.8 83.7	80.3 81.1 82.1 84.5 83.4 83.7	80.0 80.5 81.6 83.6 83.9 83.9
1990 1991 1992 1993 1994 1995 1996 1997 1998	80.2 79.1 81.4 82.6 84.9 82.4 83.7	79.5 79.6 81.6 82.5 84.6 83.4 84.2	78.9 80.2 81.4 83.1 84.4 82.9 84.4	79.0 80.6 81.6 83.2 84.0 83.4 83.9	79.7 80.7 81.1 83.4 83.9 83.7 83.9	80.4 80.5 81.2 83.8 83.9 84.1 83.8	80.3 81.1 81.4 83.6 83.3 83.6 83.8	80.2 80.6 81.2 83.8 84.0 83.7 84.3	80.9 80.6 81.4 83.7 84.0 83.8 84.6	80.6 81.0 81.9 84.1 83.4 83.4 83.4 84.7	80.4 81.2 82.1 84.3 83.4 83.8 85.0	79.9 81.1 82.4 84.9 83.3 84.0 84.7	79.6 79.7 81.5 82.7 84.6 82.9 84.1	79.7 80.6 81.3 83.5 83.9 83.8 83.8	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2	80.3 81.1 82.1 84.5 83.4 83.7 84.8	80.0 80.5 81.6 83.6 83.9 83.5 84.2 83.1
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9	79.5 79.6 81.6 82.5 84.6 83.4 84.2 84.2 84.2 81.8	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5	79.0 80.6 81.6 83.2 84.0 83.4 83.9 83.7 81.2	79.7 80.7 81.1 83.4 83.9 83.7 83.9 83.9 83.9 83.9 81.5	80.4 80.5 81.2 83.8 83.9 84.1 83.8 82.8 81.0	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7	80.6 81.0 81.9 84.1 83.4 83.4 84.7 82.7 81.6	80.4 81.2 82.1 84.3 83.4 83.8 85.0 82.1 81.6	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7	79.7 80.6 81.3 83.5 83.9 83.8 83.8 83.8 83.5 81.3	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7	80.0 80.5 81.6 83.6 83.9 83.5 84.2 83.1 81.4
1990 1991 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6	79.5 79.6 81.6 82.5 84.6 83.4 84.2 84.2 84.2 81.8 81.5	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5 81.4	79.0 80.6 81.6 83.2 84.0 83.4 83.9 83.7 81.2 81.7	79.7 80.7 81.1 83.4 83.9 83.7 83.9 83.9 83.9 81.5 81.4	80.4 80.5 81.2 83.8 83.9 84.1 83.8 82.8 81.0 81.3	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6	80.6 81.0 81.9 84.1 83.4 83.4 84.7 82.7 81.6 80.1	80.4 81.2 82.1 84.3 83.4 83.8 85.0 82.1 81.6 79.8	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9 79.4	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5	79.7 80.6 81.3 83.5 83.9 83.8 83.8 83.8 83.5 81.3 81.5	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8	80.0 80.5 81.6 83.6 83.9 83.5 84.2 83.1 81.4 80.8
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6 78.7	79.5 79.6 81.6 82.5 84.6 83.4 84.2 84.2 84.2 81.8 81.5 78.2	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5 81.4 77.9	79.0 80.6 81.6 83.2 84.0 83.4 83.9 83.7 81.2 81.7 77.7	79.7 80.7 81.1 83.4 83.9 83.7 83.9 83.9 81.5 81.4 77.1	80.4 80.5 81.2 83.8 83.9 84.1 83.8 82.8 81.0 81.3 76.6	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8 76.3	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4 76.1	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6 75.7	80.6 81.0 81.9 84.1 83.4 83.4 84.7 82.7 81.6 80.1 75.2	80.4 81.2 82.1 84.3 83.4 83.4 85.0 82.1 81.6 79.8 74.8	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9 79.4 74.6	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5 78.3	79.7 80.6 81.3 83.5 83.9 83.8 83.8 83.5 81.3 81.5 77.1	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6 76.0	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8 74.9	80.0 80.5 81.6 83.6 83.9 83.5 84.2 83.1 81.4 80.8 76.6
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6 78.7 75.1	79.5 79.6 81.6 82.5 84.6 83.4 84.2 84.2 81.8 81.5 78.2 75.0	78.9 80.2 81.4 83.1 84.4 83.9 84.4 83.9 81.5 81.5 81.4 77.9 75.5	79.0 80.6 81.6 83.2 84.0 83.4 83.9 83.7 81.2 81.7 77.7 75.8	79.7 80.7 81.1 83.4 83.9 83.7 83.9 81.5 81.5 81.4 77.1 76.1	80.4 80.5 81.2 83.8 83.9 84.1 83.8 81.0 81.3 76.6 76.8	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8 76.3 76.5	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4 76.1 76.6	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6 75.7 76.6	80.6 81.0 81.9 84.1 83.4 83.4 84.7 82.7 81.6 80.1 75.2 76.4	80.4 81.2 82.1 84.3 83.4 83.8 85.0 82.1 81.6 79.8 74.8 76.7	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9 79.4 74.6 76.3	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5 78.3 75.2	79.7 80.6 81.3 83.5 83.9 83.8 83.8 83.5 81.3 81.5 77.1 76.2	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6 76.0 76.6	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8 74.9 76.5	80.0 80.5 81.6 83.6 83.9 83.5 84.2 83.1 81.4 80.8 76.6 76.1
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6 78.7	79.5 79.6 81.6 82.5 84.6 83.4 84.2 84.2 84.2 81.8 81.5 78.2	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5 81.4 77.9	79.0 80.6 81.6 83.2 84.0 83.4 83.9 83.7 81.2 81.7 77.7	79.7 80.7 81.1 83.4 83.9 83.7 83.9 83.9 81.5 81.4 77.1	80.4 80.5 81.2 83.8 83.9 84.1 83.8 82.8 81.0 81.3 76.6	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8 76.3	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4 76.1	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6 75.7	80.6 81.0 81.9 84.1 83.4 83.4 84.7 82.7 81.6 80.1 75.2	80.4 81.2 82.1 84.3 83.4 83.4 85.0 82.1 81.6 79.8 74.8	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9 79.4 74.6	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5 78.3	79.7 80.6 81.3 83.5 83.9 83.8 83.8 83.5 81.3 81.5 77.1	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6 76.0	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8 74.9	80.0 80.5 81.6 83.6 83.9 83.5 84.2 83.1 81.4 80.8 76.6
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6 78.7 75.1 76.9 77.4	79.5 79.6 81.6 82.5 84.6 83.4 84.2 81.8 81.5 78.2 75.0 77.1 77.9	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5 81.4 77.9 75.5 76.9 77.4	79.0 80.6 81.6 83.2 84.0 83.4 83.7 81.2 81.7 77.7 75.8 76.3 77.8	79.7 80.7 81.1 83.4 83.9 83.7 83.9 81.5 81.4 77.1 76.1 76.2 78.4	80.4 80.5 81.2 83.8 83.9 84.1 83.8 81.0 81.3 76.6 76.8 76.2 77.7	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8 76.3 76.5 76.4 78.3	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4 76.1 76.6 76.3 78.5	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6 75.7 76.6 76.8 78.4	80.6 81.0 81.9 84.1 83.4 83.4 83.4 83.4 84.7 82.7 81.6 80.1 75.2 76.4 76.7 79.2	80.4 81.2 82.1 84.3 83.4 83.8 85.0 82.1 81.6 79.8 74.8 76.7 77.3 79.3	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9 79.4 74.6 76.3 77.2 79.9	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5 78.3 75.2 77.0 77.6	79.7 80.6 81.3 83.5 83.9 83.8 83.8 83.5 81.3 81.5 77.1 76.2 76.2 78.0	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6 76.6 76.5 78.4	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8 74.9 76.5 77.1 79.5	80.0 80.5 81.6 83.9 83.5 84.2 83.1 81.4 80.8 76.6 76.1 76.7 78.3
1990 1991 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6 78.7 75.1 76.9 77.4 80.2	79.5 79.6 81.6 82.5 84.6 83.4 84.2 81.8 81.5 78.2 75.0 77.1 77.9 80.7	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5 81.4 77.9 75.5 76.9 77.4 80.6	79.0 80.6 81.6 83.2 84.0 83.4 83.9 83.7 81.2 81.7 77.7 75.8 76.3 77.8 80.5	79.7 80.7 81.1 83.4 83.9 83.7 83.9 81.5 81.4 77.1 76.1 76.2 78.4 80.6	80.4 80.5 81.2 83.8 83.9 84.1 83.8 82.8 81.0 81.3 76.6 76.8 76.2 77.7 80.8	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8 76.3 76.5 76.4 78.3 80.5	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4 76.1 76.6 76.3 78.5 80.5	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6 75.7 76.6 76.8 78.4 78.6	80.6 81.0 81.9 84.1 83.4 83.4 84.7 82.7 81.6 80.1 75.2 76.4 76.7 79.2 79.4	80.4 81.2 82.1 84.3 83.4 83.8 85.0 82.1 81.6 79.8 74.8 76.7 77.3 79.3 80.1	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9 79.4 74.6 76.3 77.2 79.9 80.5	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5 78.3 75.2 77.0 77.6 80.5	79.7 80.6 81.3 83.5 83.9 83.8 83.8 83.8 83.5 81.3 81.5 77.1 76.2 76.2 78.0 80.6	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6 76.0 76.6 76.5 78.4 79.9	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8 74.9 76.5 77.1 79.5 80.0	80.0 80.5 81.6 83.9 83.5 84.2 83.1 81.4 80.8 76.6 76.1 76.7 78.3 80.3
1990 1991 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6 78.7 75.1 76.9 77.4 80.2 80.5	79.5 79.6 81.6 82.5 84.6 83.4 84.2 81.8 81.5 78.2 75.0 77.1 77.9 80.7 80.4	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5 81.4 77.9 75.5 76.9 77.4 80.6 80.4	79.0 80.6 81.6 83.2 84.0 83.4 83.9 83.7 81.2 81.7 77.7 75.8 76.3 77.8 80.5 80.6	79.7 80.7 81.1 83.4 83.9 83.7 83.9 81.5 81.4 77.1 76.1 76.2 78.4 80.6 80.3	80.4 80.5 81.2 83.8 83.9 84.1 83.8 82.8 81.0 81.3 76.6 76.8 76.2 77.7 80.8 80.4	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8 76.3 76.5 76.4 78.3 80.5 80.3	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4 76.1 76.6 76.3 78.5 80.5 80.5 80.3	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6 75.7 76.6 75.8 78.4 78.6 80.0	80.6 81.0 81.9 84.1 83.4 83.4 83.4 84.7 82.7 81.6 80.1 75.2 76.4 76.7 79.2 79.4 79.8	80.4 81.2 82.1 84.3 83.4 83.8 85.0 82.1 81.6 79.8 74.8 76.7 77.3 79.3 80.1 79.5	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9 79.4 74.6 76.3 77.2 79.9 80.5 80.2	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5 78.3 75.2 77.0 77.6 80.5 80.4	79.7 80.6 81.3 83.5 83.9 83.8 83.8 83.8 83.5 81.3 81.5 77.1 76.2 76.2 78.0 80.6 80.4	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6 76.0 76.6 76.5 78.4 79.9 80.2	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8 74.9 76.5 77.1 79.5 80.0 79.8	80.0 80.5 81.6 83.6 83.9 83.5 84.2 83.1 81.4 80.8 76.6 76.1 76.7 78.3 80.3 80.3
1990 1991 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6 78.7 75.1 76.9 77.4 80.2 80.5 79.7	79.5 79.6 81.6 82.5 84.6 83.4 84.2 84.2 81.8 81.5 78.2 75.0 77.1 77.9 80.7 80.4 80.5	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5 81.4 77.9 75.5 76.9 77.4 80.6 80.4 80.3	79.0 80.6 81.6 83.2 84.0 83.4 83.9 83.7 81.2 81.7 77.7 75.8 76.3 77.8 80.5 80.6 80.7	79.7 80.7 81.1 83.4 83.9 83.7 83.9 83.9 81.5 81.4 77.1 76.1 76.2 78.4 80.6 80.3 80.7	80.4 80.5 81.2 83.8 83.9 84.1 83.8 82.8 81.0 81.3 76.6 76.8 76.2 77.7 80.8 80.4 80.4 80.7	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8 76.3 76.5 76.4 78.3 80.5 80.3 80.8	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4 76.1 76.6 76.3 78.5 80.5 80.3 80.7	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6 75.7 76.6 76.8 78.4 78.6 80.0 81.1	80.6 81.0 81.9 84.1 83.4 83.4 84.7 82.7 81.6 80.1 75.2 76.4 76.7 79.2 79.4 79.8 80.5	80.4 81.2 82.1 84.3 83.4 83.8 85.0 82.1 81.6 79.8 74.8 76.7 77.3 79.3 80.1 79.5 80.8	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9 79.4 74.6 76.3 77.2 79.9 80.5 80.2 80.9	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5 78.3 75.2 77.0 77.6 80.5 80.4 80.2	79.7 80.6 81.3 83.5 83.9 83.8 83.8 83.5 81.3 81.5 77.1 76.2 76.2 78.0 80.6 80.4 80.7	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6 76.0 76.6 76.5 78.4 79.9 80.2 80.9	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8 74.9 76.5 77.1 79.5 80.0 79.8 80.0	80.0 80.5 81.6 83.6 83.9 83.5 84.2 83.1 81.4 80.8 76.6 76.1 76.7 78.3 80.3 80.2 80.6
1990 1991 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6 78.7 75.1 76.9 77.4 80.2 80.5 79.7 80.6	79.5 79.6 81.6 82.5 84.6 83.4 84.2 84.2 84.2 81.8 81.5 78.2 75.0 77.1 77.9 80.7 80.4 80.5 80.4	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5 81.4 77.9 75.5 76.9 77.4 80.6 80.4 80.4 80.3 80.1	79.0 80.6 81.6 83.2 84.0 83.4 83.9 83.7 81.2 81.7 77.7 75.8 76.3 77.8 80.5 80.6 80.7 79.4	79.7 80.7 81.1 83.4 83.9 83.9 83.9 81.5 81.4 77.1 76.1 76.2 78.4 80.6 80.3 80.7 79.0	80.4 80.5 81.2 83.8 83.9 84.1 83.8 82.8 81.0 81.3 76.6 76.8 76.2 77.7 80.8 80.4 80.4 80.7 78.8	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8 76.3 76.5 76.4 78.3 80.5 80.3 80.8 80.8 80.8 80.3	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4 76.1 76.6 76.3 78.5 80.5 80.5 80.3 80.7 77.0	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6 75.7 76.6 76.8 78.4 78.6 80.0 81.1 73.7	80.6 81.0 81.9 84.1 83.4 83.4 84.7 82.7 81.6 80.1 75.2 76.4 76.7 79.2 79.4 79.8 80.5 74.4	80.4 81.2 82.1 84.3 83.4 83.8 85.0 82.1 81.6 79.8 74.8 76.7 77.3 79.3 80.1 79.5 80.8 73.6	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9 79.4 74.6 76.3 77.2 79.9 80.5 80.2 80.9 71.6	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5 78.3 75.2 77.0 77.6 80.5 80.4 80.2 80.4	79.7 80.6 81.3 83.5 83.9 83.8 83.8 83.5 81.3 81.5 77.1 76.2 76.2 78.0 80.6 80.4 80.7 79.1	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6 76.0 76.6 76.5 78.4 79.9 80.2 80.9 76.3	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8 74.9 76.5 77.1 79.5 80.0 79.8 80.7 73.2	80.0 80.5 81.6 83.6 83.9 83.5 84.2 83.1 81.4 80.8 76.6 76.1 76.7 78.3 80.3 80.3 80.2 80.6 77.2
1990 1991 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6 78.7 75.1 76.9 77.4 80.2 80.5 79.7 80.6 69.9	79.5 79.6 81.6 82.5 84.6 83.4 84.2 81.8 81.5 75.0 77.1 77.9 80.7 80.4 80.5 80.4 69.5	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5 81.4 77.9 75.5 76.9 77.4 80.6 80.4 80.3 80.1 68.3	79.0 80.6 81.6 83.2 84.0 83.4 83.7 81.2 81.7 77.7 75.8 76.3 77.8 80.5 80.6 80.7 79.4 67.6	79.7 80.7 81.1 83.4 83.9 83.7 83.9 81.5 81.4 77.1 76.1 76.2 78.4 80.6 80.3 80.7 79.0 66.9	80.4 80.5 81.2 83.8 83.9 84.1 83.8 81.0 81.3 76.6 76.2 77.7 80.8 80.4 80.7 78.8 66.6	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8 76.5 76.4 78.3 80.5 80.3 80.5 80.3 80.8 78.4 67.3	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4 76.1 76.6 76.3 78.5 80.5 80.3 80.7 77.0 68.2	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6 75.7 76.6 76.8 78.4 78.6 80.0 81.1 73.7 68.7	80.6 81.0 81.9 84.1 83.4 83.4 83.4 84.7 82.7 81.6 80.1 75.2 76.4 76.7 79.2 79.4 79.8 80.5 74.4 69.0	80.4 81.2 82.1 84.3 83.4 83.8 85.0 82.1 81.6 79.8 74.8 76.7 77.3 79.3 80.1 79.5 80.8 73.6 69.4	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9 79.4 74.6 76.3 77.2 79.9 80.5 80.2 80.9 71.6 69.9	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5 78.3 75.2 77.0 77.6 80.5 80.4 80.2 80.4 69.2	79.7 80.6 81.3 83.5 83.9 83.8 83.5 81.3 81.5 77.1 76.2 76.2 78.0 80.6 80.4 80.7 79.1 67.0	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6 76.0 76.3 68.1	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8 74.9 76.5 77.1 79.5 80.0 79.8 80.7 73.2 69.4	80.0 80.5 81.6 83.9 83.5 84.2 83.1 81.4 80.8 76.6 76.1 76.7 78.3 80.3 80.2 80.6 77.2 68.4
1990 1991 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6 78.7 75.1 76.9 77.4 80.2 80.5 79.7 80.6 69.9 70.7	79.5 79.6 81.6 82.5 84.6 83.4 84.2 81.8 81.5 78.2 75.0 77.1 77.9 80.7 80.4 80.5 80.4 69.5 71.1	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5 81.4 77.9 75.5 76.9 77.4 80.6 80.4 80.3 80.1 68.3 71.7	79.0 80.6 81.6 83.2 84.0 83.4 83.9 83.7 81.2 81.7 77.7 75.8 76.3 77.8 80.5 80.6 80.7 79.4 67.6 72.1	79.7 80.7 81.1 83.4 83.9 83.7 83.9 81.5 81.4 77.1 76.1 76.2 78.4 80.6 80.3 80.7 79.0 66.9 73.4	80.4 80.5 81.2 83.8 83.9 84.1 83.8 82.8 81.0 81.3 76.6 76.8 76.2 77.7 80.8 80.4 80.4 80.7 78.8 66.6 73.7	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8 76.3 76.5 76.4 78.3 80.5 80.3 80.8 78.4 67.3 74.4	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4 76.1 76.6 76.3 78.5 80.5 80.3 80.7 77.0 68.2 74.6	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6 75.7 76.6 76.8 78.4 78.6 80.0 81.1 73.7 68.7 75.0	80.6 81.0 81.9 84.1 83.4 83.4 83.4 83.4 83.4 83.4 83.4 83.4 83.4 83.4 83.4 83.4 83.4 84.1 83.4 83.4 80.1 75.2 76.4 76.7 79.2 79.4 79.8 80.5 74.4 69.0 74.7	80.4 81.2 82.1 84.3 83.4 83.8 85.0 82.1 81.6 79.8 74.8 76.7 77.3 79.3 80.1 79.5 80.8 73.6 69.4 75.0	79.9 81.1 82.4 84.9 83.3 84.0 81.7 82.0 81.9 79.4 74.6 76.3 77.2 79.9 80.5 80.2 80.9 71.6 69.9 75.8	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5 78.3 75.2 77.0 77.6 80.5 80.4 80.2 80.4 69.2 71.2	79.7 80.6 81.3 83.5 83.9 83.8 83.8 83.5 81.3 81.5 77.1 76.2 76.2 78.0 80.6 80.4 80.7 79.1 67.0 73.1	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6 76.0 76.3 68.1 74.6	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8 74.9 76.5 77.1 79.5 80.0 79.8 80.7 73.2 69.4 75.2	80.0 80.5 81.6 83.9 83.5 84.2 83.1 81.4 80.8 76.6 76.1 76.7 78.3 80.3 80.2 80.6 77.2 68.4 73.5
1990 1991 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	80.2 79.1 81.4 82.6 84.9 82.4 83.7 84.6 81.9 81.6 78.7 75.1 76.9 77.4 80.2 80.5 79.7 80.6 69.9	79.5 79.6 81.6 82.5 84.6 83.4 84.2 81.8 81.5 75.0 77.1 77.9 80.7 80.4 80.5 80.4 69.5	78.9 80.2 81.4 83.1 84.4 82.9 84.4 83.9 81.5 81.4 77.9 75.5 76.9 77.4 80.6 80.4 80.3 80.1 68.3	79.0 80.6 81.6 83.2 84.0 83.4 83.7 81.2 81.7 77.7 75.8 76.3 77.8 80.5 80.6 80.7 79.4 67.6	79.7 80.7 81.1 83.4 83.9 83.7 83.9 81.5 81.4 77.1 76.1 76.2 78.4 80.6 80.3 80.7 79.0 66.9	80.4 80.5 81.2 83.8 83.9 84.1 83.8 81.0 81.3 76.6 76.2 77.7 80.8 80.4 80.7 78.8 66.6	80.3 81.1 81.4 83.6 83.3 83.6 83.8 81.9 81.1 80.8 76.5 76.4 78.3 80.5 80.3 80.5 80.3 80.8 78.4 67.3	80.2 80.6 81.2 83.8 84.0 83.7 84.3 83.3 81.2 80.4 76.1 76.6 76.3 78.5 80.5 80.3 80.7 77.0 68.2	80.9 80.6 81.4 83.7 84.0 83.8 84.6 82.4 80.7 80.6 75.7 76.6 76.8 78.4 78.6 80.0 81.1 73.7 68.7	80.6 81.0 81.9 84.1 83.4 83.4 83.4 84.7 82.7 81.6 80.1 75.2 76.4 76.7 79.2 79.4 79.8 80.5 74.4 69.0	80.4 81.2 82.1 84.3 83.4 83.8 85.0 82.1 81.6 79.8 74.8 76.7 77.3 79.3 80.1 79.5 80.8 73.6 69.4	79.9 81.1 82.4 84.9 83.3 84.0 84.7 82.0 81.9 79.4 74.6 76.3 77.2 79.9 80.5 80.2 80.9 71.6 69.9	79.6 79.7 81.5 82.7 84.6 82.9 84.1 84.2 81.7 81.5 78.3 75.2 77.0 77.6 80.5 80.4 80.2 80.4 69.2	79.7 80.6 81.3 83.5 83.9 83.8 83.5 81.3 81.5 77.1 76.2 76.2 78.0 80.6 80.4 80.7 79.1 67.0	83.3 80.5 80.8 81.3 83.7 83.8 83.7 84.2 82.5 81.0 80.6 76.0 76.3 68.1	80.3 81.1 82.1 84.5 83.4 83.7 84.8 82.2 81.7 79.8 74.9 76.5 77.1 79.5 80.0 79.8 80.0 79.8 80.7 73.2 69.4	80.0 80.5 81.6 83.6 83.9 83.5 84.2 83.1 81.4 80.8 76.6 76.1 76.7 78.3 80.3 80.2 80.6 77.2 68.4

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

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

Yarr Jan Be Mar Age May Jane Spit Out Nov Dec. Q1 Q2 Q3 Q4 Annual Conservation	Seasonally adjusted	- 6,																
change?	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
change?	IP (percent																	
1990 -8 -8 8 3 -7 1.1 -3 -2 -3 -3 4 1.3 7.0 1.0 2.6 1990 11 1 -3 2 -1 -2 2 3 -5 4 7 3 3 9 2 1.1 1.1 1.3 1.0 1.3 1.0	ч																	
1992 1.9 9.9 9.4 5.4 7.1 2.3 7.1 7.3 7.1 <td></td>																		
1993 1.1 1.1 1.3 3.3 5.4 7.7 3.3 5.4 9.42 7.1 3.3 7.5 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td></th<>														1				
194 1<																		
1995 1.1 -3.3 1 -3.3 8 .9 5. 4 1 0 2.8 3 .4 0.5 1.1 0.5 1.3 0.5 3.8 0.1 0.5																		
1096 -1.1 1.3 -5 1.0 5 8 -1 3 4.4 4.7 7 7 1.8 7.3 4.0 2.7 1.5 4.1 2.1 3 4.5 5 2 6.2 6.2 6.3 2.4 6.8 7 -1 2 3.3 2 6.7 4.13 3.4 4 5 7 -1 2 2.3 2.4 6.4 -3.8 4.4 -4.5 -3.8 4.5 2.4 -4.6 -4.8 4.4 -5.7 -5 2.4 -7.7 -7.5 -7.7 -5 -7.7																		
1997 -2 1.0 9 -7 5 4.4 2 1.1 .0 5 8. 2 2.2 2.2 2.5 4.5 4.4 1999 -1 4 -4 -1 7 -7 7 2.4 2.4 1.3 3 4 8 3 2 6.7 5.4 1.1 7.1 7.7																		
1998 5 -1 -3 -2 5 -1 -7<																		
1999 -1. 3.																		
2001 -6 -5 -3 -1 -7 -5 -3 -6 -2 -7 -2 20 4 -5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 6 5 1 1 4 1 <																		
2001 -6 -5 -3 -1 -7 -5 -3 -6 -2 -7 -2 20 4 -5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 6 5 1 1 4 1 <																		
2002 .6 -2 .8 .1 .7 1.1 -5 .3 .0 -5 .4 .7 .3 .8 .3 .9 .2 .3 .8 .3 .9 .2 .3 .8 .3 .3 .2 .7 .2 .3 .3 .3 .2 .2 .2 .2 .2 .3 .3 .3 .2 .2 .2 .3 .3 .3 .3 .2 .2 .3 .1 .4 .4 .4 .7 .2 .2 .3 .4 .2 .4 .4 .4 .4 .7 .2 .2 .4 .4 .3 .4 .20 .4 .4 .3 .3 .3 .4 .2 .1 .4 .3 .4 .20 .1 .22 .4 .4 .3 .3 .4 .20 .3 .3 .4 .20 .3 .3 .1 .10 .1 .3 .3 .10 .10 .11 .3 .3 .3 .10 .10<																		
2003 5 0 1 3 -1 -1 3 -1 -3 1 2 9 3 -1 -3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 <th1< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th1<>																		
2004 -1 3 -5 3 -9 3 6 -5 1.1 -1 6 1.9 3.1 3.2 5.0 2.0 2005 7 7 -5 1 3 3 1 -2 3 1 1.4 1.4 1.4 1.4 1.4 1.4 2.0 3.8 4.2 3 4.4 -4 3 4.4 -7 2.2 3.8 4.2 3 4.4 -3 -4 2.0 3.8 4.2 3 4.4 -3 -4 1.3 3 -9.4 -4 1.4 -7 -2 2.0 3.4 -2.0 -3 1.4 -3.5 -3 1.4 -2.2 -3 -3 -3 -1.0 1.2 -2.0 -3 -3 -3 -1.0 1.2 -2.0 -3 -3 -3 -1.0 1.0 -2 -2.0 -3 -3 -3 -3.0 -3 -3 -3																		
2006 9 -2 -2 -6 -6 -2 -4 -5 -1 1.6 3.6 -0 -1 4 15 2007 -5 5 6 -6 -12 -6 -4 -7 2 2 2.0 3.8 4.2 -6 4 -7 2 2 3.8 4.2 -6 4 -7 2 2.0 3.8 4.2 -6 4 -7 -7 -8 9 1.8 -7 -	2004	1	.8	3	.5	.8	9	.8	.6	3	1.1	1	.6	1.9	3.1	3.2	5.0	2.0
2006 9 -2 -2 -6 -6 -2 -4 -5 -1 1.6 3.6 -0 -1 4 15 2007 -5 5 6 -6 -12 -6 -4 -7 2 2 2.0 3.8 4.2 -6 4 -7 2 2 3.8 4.2 -6 4 -7 2 2.0 3.8 4.2 -6 4 -7 -7 -8 9 1.8 -7 -	2005	7	7	5	1	2	1	2	1	1 /	1.4	7	0	57	1 1	2.1	4.2	2.1
2007 -5 5 4 -6 -7 2 2 2 38 4.2 9 -18 18 2008 -5 -6 -6 -11 1.4 -35 -9 1.4 -45 37.7 -9 1.8 6.0 5.4 -15.8 2010 -9 0 1.0 1.0 1.4 0.8 0.2 1.7 -1 1.8 6.0 1.5 5.7 1.5 5.7 1.5 5.7 1.5 5.7 1.5 5.7 1.5 5.7 1.5 5.7 1.5 5.7 1.5 5.7 1.5 5.7 1.5 7.7 7.8 7.8 7.7 7.1																		
2009 -2.9 0.0 -2.2 9 -1.3 4 1.2 1.1 .7 1 .9 1.1 -2.2.9 -1.2.8 6.0 5.4 -1.3.8 2010 4 3 7 7 2 0 9 2 5 7 -1 1.5 5.7 5.7 5.7 <	2007	5	.5	.4	.6	2		.2	6	.4	7	.2	.2	3.8	4.2	.9	-1.8	1.8
2010 9 0 1.0 1.4 0 8 0 2 1. 1. 8 6.3 1.08 5.4 2.3 5.3 2012 1.1 9 -7 7 2 0.0 9 2.2 5 7.1 1.5 5.7 5.7																		
2011 1.4 3 7.7 7.7 2 0 9 2.2 5 7.7 1.1 1.5 5.7 1.1 5.7 1.5 1.5	2009	-2.9	.0	-2.2	9	-1.3	4	1.2	1.1	.7	1	.9	.1	-22.9	-12.8	6.0	5.4	-13.8
2011 1.4 3 7.7 7.7 2 0 9 2.2 5 7.7 1.1 1.5 5.7 1.1 5.7 1.5 1.5	2010	.9	.0	1.0	1.0	1.4	.0	.8	.0	.2	.1	.1	.8	6.3	10.8	5.4	2.3	5.3
IP (2007=100) R2.9 R3.7 R4.5 R5.7													1.5				6.4	4.2
2010 82.9 82.9 82.7 84.7 84.5 85.7 86.4 86.6 86.6 86.7 87.5 83.2 83.2 83.2 88.2 <th< td=""><td>2012</td><td>1.1</td><td>.9</td><td>7</td><td>.7</td><td>7</td><td>.4</td><td>.3</td><td>8</td><td>.1</td><td>-1.0</td><td>1.2</td><td></td><td>10.2</td><td>.6</td><td>6</td><td></td><td></td></th<>	2012	1.1	.9	7	.7	7	.4	.3	8	.1	-1.0	1.2		10.2	.6	6		
2010 82.9 82.9 82.7 84.7 84.5 85.7 86.4 86.6 86.6 86.7 87.5 83.2 83.2 83.2 88.2 <th< td=""><td>IP $(2007 = 100)$</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	IP $(2007 = 100)$																	
2012 92.6 93.4 98.7 93.1 93.4 93.7 92.7 91.8 92.8 91.6 88.2 88.2 89.3 90.7 89.1 2012 92.6 93.4 92.8 93.4 92.8 93.1 92.9 92.9 93.1 92.9 92.0 93.1 92.9 92.0 92.0 92.0 92.0 10.0 12.1 121.8 121.5 121.2 120.2 120.0 120.0 120.0 119.4 119.5 119.3 119.1 119.1 119.1 120.1 120.5 120.6 120.0 120.8 119.2 119.3 119.1	· · · · · ·	82.9	82.9	83.7	84.5	85.7	85.7	86.4	86.4	86.6	86.6	86.7	87.5	83.2	85.3	86.4	86.9	85.5
Capacity Quercent of 2007 output) 122.1 121.8 121.5 121.2 120.9 120.6 120.4 120.2 10.0 119.5 119.5 119.5 119.5 119.5 119.5 121.8 120.9 120.2 19.7 120.6 2011 119.4 119.3 119.2 119.7 119.8 120.1 119.5 1													91.6				90.7	
Constrained 2007 output) Sectors Sector	2012	92.6	93.4	92.8	93.4	92.8	93.1	93.4	92.7	92.7	91.8	92.8		92.9	93.1	92.9		
Constrained 2007 output) Sectors Sector	Capacity																	
2010 122.1 121.8 121.5 121.2 120.9 120.6 120.4 120.2 120.0 119.8 119.6 119.5 119.2 119.1 119.2 119.2 119.3 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.2 119.2 119.3 119.1 119.1 119.2 119.2 119.3 119.1 119.1 119.2 119.2 119.3 119.1 119.1 119.2 119.2 119.3 119.1 119.2 119.2 119.3 119.1 119.2 119.2 119.3 119.1 119.2 119.2 119.2 119.2 119.2 119.2 119.2 119.2 119.2 119.2 119.2 119.2 119.2 119.2																		
2011 119.4 119.4 119.2 119.1 119.1 119.1 119.1 119.1 119.2 119.2 119.3 119.1 119.1 119.1 119.5 119.2 119.5 119.3 119.1 119.1 119.1 119.2 119.5																		
2012 119.3 119.4 119.6 119.7 119.8 120.0 120.1 120.3 120.5 120.6 120.8 119.5 119.8 120.3 Utilization (percent) 7 7 7 7 7 7 7 7 82.6 82.4 82.5 82.3 81.4 80.3 79.5 82.6 82.4 80.2 7																		
Utilization (percent) No. Solution													119.2	1			119.2	119.2
(percent) (percent) <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>																		
1990 81.8 82.9 83.1 82.6 82.6 82.4 82.5 82.3 81.4 80.3 79.5 82.6 82.6 82.4 80.3 79.5 78.1 78.1 79.1 79.0 78.7 78.1 79.4 79.0 78.7 78.1 79.6 79.9 79.5 79.6 79.9 79.8 78.5 79.6 79.9 80.0 79.8 78.5 78.1 78.1 78.1 79.1 79.0 78.6 79.9 80.0 79.8 78.5 79.6 79.9 80.0 79.8 78.5 79.6 79.9 80.0 79.8 78.5 79.6 79.9 80.0 79.8 78.5 78.6 79.9 79.9 80.1 80.4 80.3 80.1 80.2 80.7 80.1 80.4 80.3 80.1 80.2 80.7 80.1 81.5 82.6 82.3 83.0 82.3 83.0 83.1 83.1 83.1 83.1 83.6 83.0 83.1 83.1 83.6 83.0 83.1 83.1 83.1 83.6 83.2																		
1991 78.8 78.1 77.4 77.5 77.9 78.7 78.8 78.9 79.6 79.4 79.0 78.7 78.1 78.1 78.1 79.1 79.0 78.7 1992 77.9 78.5 79.2 79.4 79.7 79.8 80.3 79.9 79.9 80.0 79.8 78.7 78.7 78.5 79.9 79.2 80.2 80.1 80.4 80.4 82.3 82.6 82.5 82.6 82.7 82.1 82.1 82.1 82.0 82.2 82.3		01.0	82.0	92.1	826	876	07 C	82.4	82.5	02.2	Q1 /	80.2	70.5	826	07 C	82.4	80.4	82.0
1992 77.9 78.5 79.2 79.4 79.7 79.8 80.3 79.6 79.9 80.0 79.8 78.5 79.6 79.9 79.9 79.8 80.7 80.9 81.2 80.4 80.3 80.1 80.2 79.9 80.2 80.7 80.9 81.2 80.4 80.3 80.1 80.2 80.7 80.9 81.2 80.4 80.3 80.1 80.1 80.4 80.3 80.1 80.2 80.7 80.9 81.5 81.5 82.6 83.0 83.6 83.9 84.5 81.5 82.6 83.0 83.6 83.0 83.1 82.2 82.8 83.0 82.5 82.1 82.1 82.4 83.1 82.2 82.1 82.4 83.1 83.2 82.3 83.6 83.3 83.6 83.0 83.7 83.3 83.6 83.0 83.7 83.1 83.6 83.0 82.7 83.1 83.6 83.0 83.7 83.1 83.6 83.0 83.7 83.1 83.6 83.0 83.7 83.1 83.6 83.0																		
1994 81.2 81.2 82.1 82.4 82.7 82.7 82.8 83.1 83.1 83.6 83.9 84.5 81.5 82.6 83.0 84.0 82.8 1995 84.5 84.0 83.8 83.3 83.0 83.1 82.2 82.8 83.0 82.5 82.2 82.1 84.1 83.1 82.7 82.2 82.1 84.1 83.1 82.7 82.2 82.1 82.5 82.2 82.1 82.5 82.2 82.1 82.5 82.8 81.4 82.3 82.6 82.7 82.1 82.5 82.8 81.4 82.3 82.6 82.5 82.5 82.5 82.5 83.1 83.3 83.6 83.0 83.7 83.2 82.6 82.7 82.7 82.4 83.0 82.7 82.4 83.0 83.7 83.2 82.6 82.7 82.7 82.4 83.0 82.7 83.1 83.6 83.8 83.6 83.0 82.7 83.1 83.0 83.7 83.1 83.6 83.0 83.7 83.1 83.6																		
1995 84.5 84.0 83.3 83.0 83.1 82.2 82.8 83.0 82.2 82.1 82.2 82.1 82.4 83.0 82.7 82.7 82.5 82.6 82.7 82.1 82.4 83.0 82.7 82.7 82.7 82.7 82.7 82.5 83.4 83.5 83.8 83.0 82.7 82.1 82.4 83.0 82.7 82.1 82.4 83.0 82.7 82.5 83.2 83.4 83.5 83.8 83.0 82.7 83.1 83.6 83.0 82.7 83.1 83.6 83.7 83.2 82.6 82.5 83.2 83.4 83.5 83.8 83.0 82.7 83.1 83.0 82.7 83.1 83.0 82.7 83.1 83.0																		
1996 81.0 81.9 81.3 82.0 82.2 82.7 82.5 82.6 82.7 82.1 82.5 82.8 81.4 82.3 82.6 82.5 82.1 1997 82.4 83.0 83.5 82.6 82.7 82.7 82.5 83.2 83.4 83.5 83.8 83.6 83.0 82.7 83.1 83.6 83.1 83.0 82.7 83.1 83.6 83.1 83.0 82.7 83.1 83.6 83.1 83.0 82.7 83.1 83.6 83.0 82.7 83.1 83.6 83.0 82.7 83.1 83.6 83.0 82.7 83.1 83.0 83.1 83.0 83.7 83.1 83.6 83.0 83.2 82.1 81.0 81.0 81.8 81.8 83.0 83.0 79.7 79.8 80.0 79.4 79.3 78.2 78.4 77.9 77.3 76.6 73.6 73.7 74.2 74.1 74.0 73.2 73.3 74.3 74.4 74.1 74.6 75.3 75.2 74.9	1994	81.2	81.2	82.1	82.4	82.7	82.7	82.8	83.1	83.1	83.6	83.9	84.5	81.5	82.6	83.0	84.0	82.8
1996 81.0 81.9 81.3 82.0 82.2 82.7 82.5 82.6 82.7 82.1 82.5 82.8 81.4 82.3 82.6 82.5 82.1 1997 82.4 83.0 83.5 82.6 82.7 82.7 82.5 83.2 83.4 83.5 83.8 83.6 83.0 82.7 83.1 83.6 83.1 83.0 82.7 83.1 83.6 83.1 83.0 82.7 83.1 83.6 83.1 83.0 82.7 83.1 83.6 83.0 82.7 83.1 83.6 83.0 82.7 83.1 83.6 83.0 82.7 83.1 83.0 83.1 83.0 83.7 83.1 83.6 83.0 83.2 82.1 81.0 81.0 81.8 81.8 83.0 83.0 79.7 79.8 80.0 79.4 79.3 78.2 78.4 77.9 77.3 76.6 73.6 73.7 74.2 74.1 74.0 73.2 73.3 74.3 74.4 74.1 74.6 75.3 75.2 74.9	1995	84.5	84.0	83.8	83.3	83.0	83.1	82.2	82.8	83.0	82.5	82.2	82.1	84.1	83.1	82.7	82.3	83.0
1998 83.7 83.2 82.6 82.5 81.3 80.3 81.9 81.0 81.3 80.9 80.8 83.2 82.1 81.0 81.0 81.3 1999 80.6 80.7 80.1 79.9 80.3 79.5 79.4 79.7 79.2 80.1 80.2 80.3 80.4 79.9 79.4 80.2 80.0 2000 80.0 79.7 79.8 80.0 79.4 79.3 78.9 78.2 78.4 77.9 77.3 76.6 79.9 79.6 78.5 77.3 74.4 74.4 74.1 74.0 73.5 73.3 72.8 72.6 72.7 74.6 74.6 74.9 74.4 74.3 74.4 74.4 74.1 74.7 74.6 75.3 75.5 76.2 76.8 77.8 74.4 74.4 74.1 74.7 74.6 75.3 75.5 76.2 76.8 77.8 74.4 74.4 74.1 74.7 74.6 75.3 75.5 76.2 76.8 77.8 76.6 77.8 77.8 <	1996	81.0	81.9	81.3	82.0	82.2	82.7	82.5	82.6	82.7	82.1	82.5	82.8	81.4	82.3	82.6	82.5	82.2
1999 80.6 80.7 80.1 79.9 80.3 79.5 79.4 79.7 79.2 80.1 80.2 80.3 80.4 79.9 79.4 80.2 80.0 2000 80.0 79.7 79.8 80.0 79.7 79.8 78.9 78.2 78.4 77.9 77.3 76.6 79.9 79.6 78.5 77.3 76.6 72.7 75.6 74.6 74.1 74.0 73.5 73.3 72.8 72.6 72.7 75.6 74.6 74.2 74.6 74.4 74.6 74.9 74.4 73.3 74.4 74.4 74.6 74.9 74.4 73.3 74.3 74.4 74.6 74.9 74.4 74.4 74.1 74.6 75.3 75.2 74.8 74.9 74.6 74.7 74.6 75.3 75.2 74.8 74.2 74.4 74.4 74.1 74.7 74.6 75.3 75.2 74.8 74.4 75.0 76.6 76														1				
2000 80.0 79.7 79.8 80.0 79.4 79.3 78.9 78.2 78.4 77.9 77.3 76.6 79.9 79.6 78.5 77.3 78.8 2001 76.0 75.6 75.3 75.1 74.5 74.1 74.0 73.5 73.3 72.8 72.6 72.7 75.6 74.6 73.6 72.7 74.8 74.4 74.4 74.4 74.4 73.3 74.3 74.4 74.6 74.8 74.9 74.4 73.3 74.3 74.8 74.6 74.8 74.7 74.6 75.3 75.2 75.8 75.6 76.0 76.6 77.1 76.9 77.7 77.6 78.1 74.3 74.4 74.4 74.1 74.7 74.6 75.2 74.9 74.3 74.4 75.0 76.6 77.1 76.9 77.7 77.6 78.1 78.7 78.7 78.1 78.6 78.5 78.7 78.7 78.1 77.8 78														1				
2001 76.0 75.6 75.3 75.1 74.5 74.1 74.0 73.5 73.3 72.8 72.6 72.7 75.6 74.6 73.6 72.7 74.6 73.3 74.4 74.6 74.6 74.4 74.4 74.6 74.6 74.9 74.4 73.3 74.3 74.4 74.6 74.6 74.7 74.6 75.3 75.2 74.3 74.4 74.6 74.7 74.6 75.3 75.2 74.9 74.4 74.6 75.3 75.2 74.9 74.4 74.6 75.3 75.2 74.8 74.4 74.6 75.9 77.7 77.6 78.1 74.3 74.4 74.6 75.3 75.2 74.4 74.6 75.3 75.2 74.3 74.4 74.6 75.9 77.7 77.6 78.1 74.3 74.4 74.6 75.3 75.2 76.8 77.8 76.6 76.7 76.6 76.6 76.6 76.6 77.1 76.9 77.7 77.6 78.1 78.7 78.1 78.5 78.8 78.7 78.6	1///	00.0	00.7	00.1	19.9	00.5	17.5	77.4	19.1	19.2	00.1	00.2	00.5	00.4	19.9	77.4	00.2	00.0
2002 73.1 73.0 73.6 73.7 74.2 75.0 74.6 74.9 74.6 74.9 74.4 73.3 74.3 74.3 74.8 74.6 74.2 2003 74.8 74.9 75.0 74.2 74.2 74.4 74.4 74.1 74.7 74.6 75.3 75.2 74.9 74.3 74.4 75.0 74.6 75.3 75.2 74.9 74.3 74.4 75.0 74.6 75.3 75.2 74.9 74.4 74.4 74.1 74.7 74.6 75.3 75.2 74.9 74.4 75.0 74.6 75.0 76.6 76.0 76.6 77.1 76.9 77.7 77.6 78.1 78.7 78.7 78.1 78.5 76.6 76.6 76.0 76.6 77.1 76.9 77.7 77.6 78.1 78.7 78.1 78.5 76.6 76.6 76.8 77.8 78.1 78.7 78.1 78.5 78.1 77.9 78.4 78.1 78.5 78.1 77.9 78.4 78.1 78.7														1				
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Table 14 HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Manufacturing' Excluding Selected High-Technology Industries² Seasonally adjusted

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

EXPLANATORY NOTE

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, files containing data shown in the release, more detailed series that were published in the G.17 prior to December 2000, and historical data are available from the Data Download Program on the Board's website. Instructions for searching for and downloading specific series are provided as well.

INDUSTRIAL PRODUCTION

Coverage. The industrial production (IP) index measures the real output of all manufacturing, mining, and electric and gas utility establishments located in the United States, regardless of their ownership, but not those located in U.S. territories; 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 industriesnewspaper, 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 2007 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).

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.

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 value added divided by the average annual IP index.

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

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 x 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).

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 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. Data availability by data type in early 2011 is summarized in the table below:

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		

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 2012; for other series, the factors were estimated with data through at least December 2011. 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. The capacity indexes cover all facilities located in the United States, regardless of their ownership, but not those located in U.S. territories. 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 1972–2011 period, the average total industry utilization rate is 80.3 percent; for manufacturing, the average factory operating rate has been 78.8 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 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 30, 2012 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) or in an on-line staff study (www.federalreserve.gov/releases/g17/articles/rev2010/industrial10.pdf).

Release Schedule

At 9:15 a.m. on

2012: January 18, February 15, March 16, April 17, May 16, June 15, July 17, August 15, September 14, October 16, November 16, and December 14.

2013: January 16, February 15, March 15, April 16, May 15, June 14, July 16, August 15, September 16, October 17, November 15, and December 16.