FEDERAL RESERVE statistical release



For release at 9:15 a.m. (EDT)

October 16, 2014

G.17 (419)

INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION

Industrial production increased 1.0 percent in September and advanced at an annual rate of 3.2 percent in the third quarter of 2014, roughly its average quarterly increase since the end of 2010. In September, manufacturing output moved up 0.5 percent, while the indexes for mining and for utilities climbed 1.8 percent

(over)

Industrial Production and Capacity Utilization: Summary

Seasonally adjusted

Total index103.210Previous estimates103.210Major market groups100.210Final Products100.210Consumer goods97.49Business equipment106.310Nonindustrial supplies90.49	May ^r 03.7 03.7 00.2 97.0 07.2	June ^r 104.0 104.0 99.9	July ^r 104.2 104.2 100.5	Aug. ^r 104.0 104.1	Sept. ^p 105.1	2014 Apr. ^r .1 .1	May ^r .5 .5	June ^r .3 .3	July ^r .2 .2	Aug."	Sept. ^p	Sept. '13 to Sept. '14 4.3
Total index103.210Previous estimates103.210Major market groups100.210Final Products100.210Consumer goods97.49Business equipment106.310Nonindustrial supplies90.49	03.7 03.7 00.2 97.0	104.0 104.0 99.9	104.2 104.2	104.0		.1	.5	.3	.2	2		
Previous estimates103.210Major market groups100.210Final Products100.210Consumer goods97.49Business equipment106.310Nonindustrial supplies90.49	03.7 00.2 97.0	104.0 99.9	104.2		105.1			.3	.2		1.0	4.3
Previous estimates103.210Major market groups100.210Final Products100.210Consumer goods97.49Business equipment106.310Nonindustrial supplies90.49	03.7 00.2 97.0	104.0 99.9	104.2		105.1			.5 3	.2		1.0	
Final Products100.210Consumer goods97.49Business equipment106.310Nonindustrial supplies90.49	97.0		100.5						.2	1		
Final Products100.210Consumer goods97.49Business equipment106.310Nonindustrial supplies90.49	97.0		100.5									
Consumer goods97.4Business equipment106.3Nonindustrial supplies90.4	97.0		100.5									
Business equipment106.310Nonindustrial supplies90.49		067		100.0	100.6	2	.0	3	.6	5	.5	2.9
Nonindustrial supplies 90.4 9	07.2	96.7	97.1	96.5	97.0	6	4	3	.4	7	.5	2.2
		106.9	108.1	107.9	108.2	.4	.8	3	1.2	2	.3	4.6
Construction 82.9	90.9	90.9	91.2	91.5	92.4	4	.6	.0	.3	.3	1.1	3.4
	84.0	84.5	85.7	85.7	86.1	8	1.3	.6	1.4	.0	.4	4.9
Materials 110.4 11	11.3	112.2	112.1	112.1	113.6	.5	.8	.8	1	.0	1.4	5.7
Major industry groups												
	99.5	99.8	100.5	100.0	100.5	.3	.4	.3	.7	5	.5	3.7
	99.5	99.8	100.5	100.0	100.5	.3	.4	.3	.7	4		5.7
	29.0	130.9	130.8	131.3	133.7	2.1	1.0	1.5	.7	4	1.8	9.1
	01.2	99.3	96.3	97.5	101.2	-5.1	.2	-2.0	-3.0	1.2	3.9	.9
	01.2	<i>))</i> .5	70.5	<i>)</i> 1.5	101.2	-5.1	.2	-2.0	-5.0	1.2	5.7	.)
					2							Capacity
		1000	1001	Perce	nt of cap	acity						growth
	988-	1990-	1994-									<i>a</i> 1 1 1
1972-	89	91	95	2009	2013	2014		. .			<i>a</i>	Sept. '13 to
Capacity utilization 2013 h	high	low	high	low	Sept.	Apr. ^r	May ^r	June ^r	July ^r	Aug."	Sept. ^p	Sept. '14
Total industry 80.1 8	85.3	78.7	85.0	66.9	78.3	79.0	79.1	79.1	79.1	78.7	79.3	2.9
Previous estimates						78.9	79.1	79.1	79.1	78.8		
Manufacturing (see note below) 78.7 8	85.6	77.3	84.6	63.9	76.2	77.0	77.1	77.2	77.6	77.1	77.3	2.1
Previous estimates						77.0	77.1	77.2	77.6	77.2		
	86.3	83.8	88.5	78.8	89.5	89.6	89.8	90.4	89.6	89.2	90.1	8.3
8	92.9	84.3	93.3	78.5	79.2	79.4	79.5	77.8	75.4	76.3	79.2	1.0
		01.5	20.0	, 0.5	, ,	, , , , ,	, ,	,,	10.1	, 0.5	, , 2	1.0
Stage-of-process groups												
Crude 86.3 8	87.7	84.4	89.6	76.8	87.4	87.4	87.5	87.7	87.1	86.8	87.6	6.6
	86.5	77.9	87.7	64.2	76.4	77.1	77.4	77.4	77.0	77.0	77.7	1.8
	83.4	77.4	80.6	66.8	76.2	77.0	77.1	77.0	77.6	76.9	77.1	2.5

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.

and 3.9 percent, respectively. For the third quarter as a whole, manufacturing production rose at an annual rate of 3.5 percent and mining output increased at an annual rate of 8.7 percent. The output of utilities fell at an annual rate of 8.5 percent for a second consecutive quarterly decline. At 105.1 percent of its 2007 average, total industrial production in September was 4.3 percent above its level of a year earlier. The capacity utilization rate for total industry moved up 0.6 percentage point in September to 79.3 percent, a rate that is 1.0 percentage point above its level of 12 months earlier but 0.8 percentage point below its long-run (1972–2013) average.

Market Groups

The production of consumer goods rose 0.5 percent in September but decreased at an annual rate of 0.6 percent in the third quarter. After having dropped 3.6 percent in August, the output of consumer durables declined 0.3 percent further in September. Within consumer durables, losses in the indexes for automotive products and for home electronics slightly outweighed gains elsewhere. The production of non-energy nondurables moved up 0.3 percent, while the output of consumer energy products gained 2.2 percent. Within non-energy nondurables, gains in the indexes for clothing and for chemical products were partly offset by a decrease in the production of paper products.

The production of business equipment increased 0.3 percent in September; the indexes for transit equipment and for information processing equipment each moved up 0.5 percent or more, while the output of industrial and other equipment was unchanged. For the third quarter, the index for overall business equipment advanced at an annual rate of 4.9 percent, with gains in all three of its major categories.

The production of defense and space equipment rose 1.4 percent in September. The index increased 3.2 percent at an annual rate in the third quarter after having gained 4.6 percent in the second quarter.

Among nonindustrial supplies, the production of construction supplies rose 0.4 percent in September and moved up at an annual rate of 10.2 percent in the third quarter; nevertheless, output in September was more than 10 percent below its level just prior to the most recent recession. The index for business supplies gained 1.4 percent in September and increased at an annual rate of 1.8 percent in the third quarter.

The output of materials rose 1.4 percent in September and advanced at an annual rate of 4.6 percent in the third quarter. Durable materials recorded an increase of 0.7 percent in September; among its components, the indexes for equipment parts and for other durable materials moved up and the output of consumer parts fell. The output of nondurable materials rose 0.7 percent, with increases in all of its major components. The output of energy materials jumped 2.3 percent in September and rose at an annual rate of 4.4 percent in the third quarter; the index has increased in each quarter since the second quarter of 2011.

Industry Groups

In September, manufacturing production moved up 0.5 percent with widespread gains across its components. Output increased at an annual rate of 3.5 percent in the third quarter; on average, it has advanced at a pace of about 4 percent over the past four quarters. The factory operating rate rose 0.2 percentage point in September to 77.3 percent, a rate 1.4 percentage points below its long-run average.

The production of durable goods increased 0.4 percent in September and rose at an annual rate of 6.6 percent in the third quarter; it has increased in each quarter since the third quarter of 2009. In September, the indexes for aerospace and miscellaneous transportation equipment, for furniture and related products, and for miscellaneous manufacturing all posted increases of more than $1\frac{1}{2}$ percent; decreases of more than $3\frac{1}{4}$ percent were registered both by wood products and by motor vehicles and parts. Capacity utilization for durable goods

manufacturing increased 0.1 percentage point to 77.6 percent, a rate 0.6 percentage point above its long-run average.

The production of nondurable goods moved up 0.5 percent in September and increased at an annual rate of 1.2 percent in the third quarter. With the exception of petroleum and coal products, each of the major components of nondurables posted gains in September. The largest increases were recorded by apparel and leather and by plastics and rubber products. The operating rate for nondurable manufacturing increased 0.3 percentage point to 78.6 percent, a rate 2.1 percentage points below its long-run average.

The output of non-NAICS manufacturing industries (publishing and logging) was unchanged in September following a decrease of 0.6 percent in August. The index dropped at an annual rate of 12.5 percent in the third quarter. As a result of continuing declines in the index for publishing, the output of non-NAICS manufacturing industries has trended downward over the past 15 years.

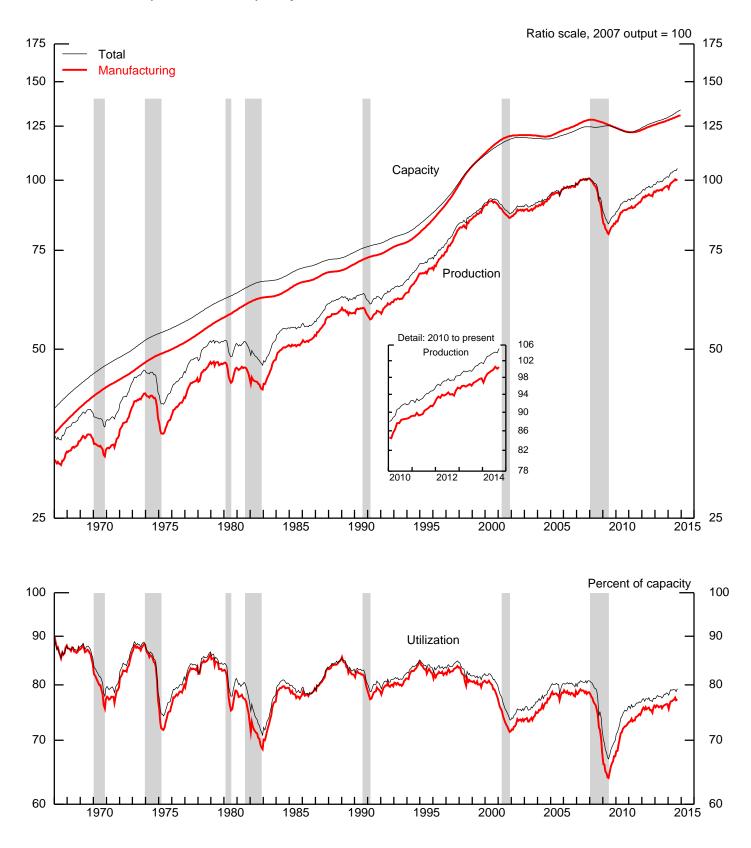
Mining output rose 1.8 percent in September and has advanced 9.1 percent in the past 12 months. Capacity utilization at mines moved up 0.9 percentage point in September to 90.1 percent, a rate 2.8 percentage points above its long-run average. The output of utilities jumped 3.9 percent, an increase that likely reflected unseasonably high demand for air conditioning as temperatures swung from below normal in August to above normal in September. The operating rate for utilities in September increased 2.9 percentage points to 79.2 percent, a rate 6.9 percentage points below its long-run average.

Capacity utilization rates in September for industries grouped by stage of process were as follows: At the crude stage, utilization increased 0.8 percentage point to 87.6 percent, a rate 1.3 percentage points above its long-run average; at the primary and semifinished stages, utilization moved up 0.7 percentage point to 77.7 percent, a rate 3.1 percentage points below its long-run average; and at the finished stage, utilization increased 0.2 percentage point to 77.1 percent, a rate equal to its long-run average.

Tables

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

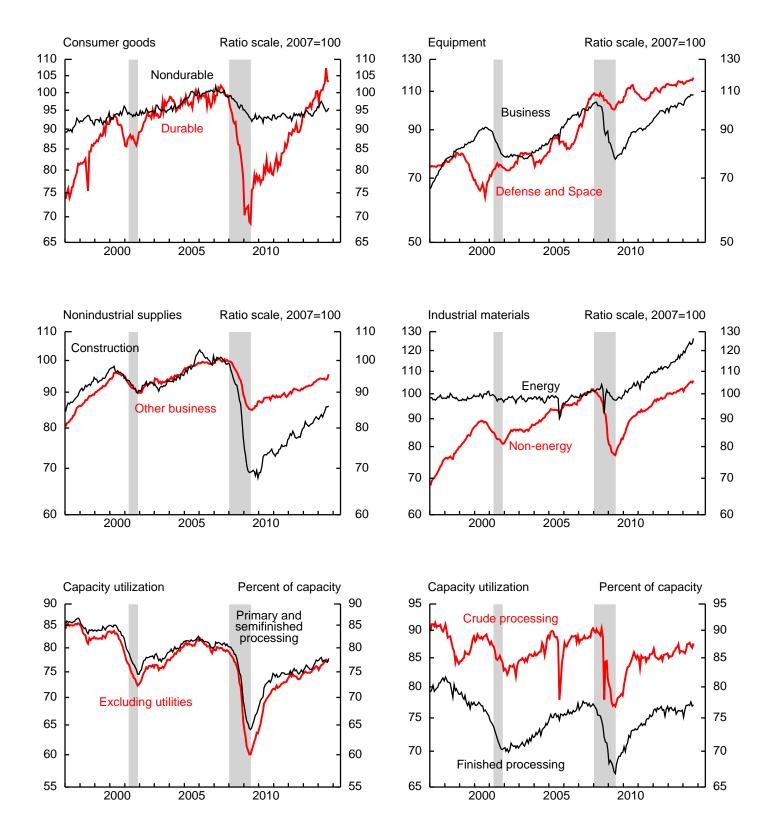
Further detail is available on the Board's website (www.federalreserve.gov/releases/G17/).



1. Industrial production, capacity, and utilization

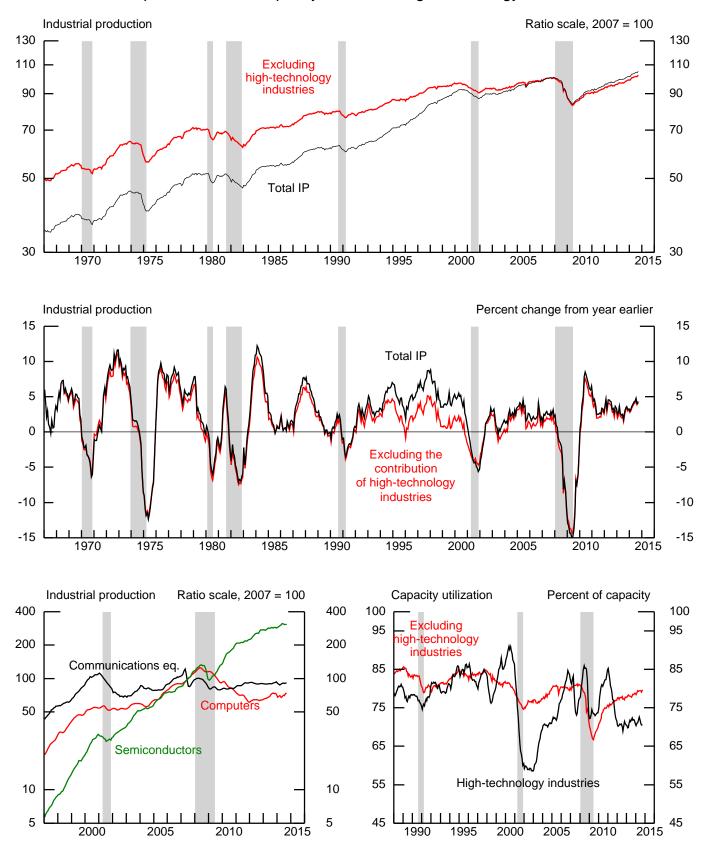
Note: The shaded areas are periods of business recession as defined by the National Bureau of Economic Research (NBER).

2. Industrial production and capacity utilization



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 quart irth quar		Aı	nual rat	e			Montl	nly rate			Sept. '13
Item		2013 proportion ¹	2011	2012	2013	2014 Q1	Q2 ^r	O3 ^p	2014 Apr. ^r	May ^r	Juner	July ^r	Aug. ^r	Sept. ^p	to Sept. '14
Fotal IP		100.00	3.2	3.2	3.3	3.9	5.5	3.2	.1	.5	.3	.2	2	1.0	4.3
MARKET GROUPS															
Final products and nonindustrial supplies		52.70	2.3	2.7	3.2	3.7	2.4	2.0	3	.1	2	.5	3	.7	3.0
Consumer goods		26.78	2.0	1.6	3.2	4.4	.2	6	6	4	3	.4	7	.5	2.2
Durable		5.88	8.0	6.2	9.1	-2.0	11.0	11.2	.0	1.4	.6	4.4	-3.6	3	5.2
Automotive products		3.01	15.1	6.6	11.2	-2.2	14.9	19.1	6	2.2	.6	7.6	-5.4	-1.1	6.6
Home electronics		.13	5.2	-2.5	4.7	-6.7	18.3	8.4	2.0	2.4	2.0	-2.3	4.0	-1.3	7.6
Appliances, furniture, carpeting		.78	1.3	3.7	7.4	-5.5	19.1	12.7	2.4	1.2	1.0	3.3	-2.9	2.1	9.8
Miscellaneous goods Nondurable		1.97 20.90	.8	7.5	6.7 1.6	.0 6.3	1.9 -2.7	8 -3.9	1 8	.2 9	.5 6	.1 7	-1.3	.3	1.1 1.4
Non-energy		15.62	1.1	.4	.3	1.7	-2.7	-1.4	8	9	0	7	.1	.8	1.4
Foods and tobacco		9.00	.9	3.1	.8	3.1	3.7	-5.3	.7	-1.2	2	7	2	.0	.9
Clothing		.19	-7.8	-1.5	6.3	.3	1.0	-3.0	3	8	9	1.7	-3.2	1.6	5
Chemical products		4.65	2.6	-3.8	3	1.5	7.1	7.3	.0	6	1.8	.0	.8	.7	4.8
Paper products		1.29	3	-6.3	-2.9	-6.4	-3.2	-8.2	.7	.7	.3	-2.3	2	4	-6.7
Energy		5.27	-1.2	1.0	5.7	20.8	-20.4	-10.8	-4.1	-1.2	-3.6	-1.2	.7	2.2	.8
Business equipment		9.47	4.6	6.6	3.4	5.1	9.5	4.9	.4	.8	3	1.2	2	.3	4.6
Transit		2.25	7.1	14.6	3.2	-1.9	19.3	9.0	1.4	1.1	.9	3.3	-3.4	.8	5.0
Information processing		2.02	.9	6.3	3.9	-1.5	4	5.8	7	.1	1	.0	1.9	.5	1.8
Industrial and other		5.20	5.3	3.7	3.3	10.9	9.4	2.8	.4	1.0	9	.7	.4	.0	5.6
Defense and space equipment		2.26	5	4.6	1.7	-2.0	4.6	3.2	.4	.0	.3	.2	1	1.4	1.8
Construction supplies Business supplies		4.14 9.27	2.5 .5	3.8 2.1	5.0 2.9	1.1 2.7	4.0 2	10.2 1.8	8 2	1.3 .2	.6 3	1.4 2	.0 .4	.4 1.4	4.9 2.7
Matariala		47.30	4.1	3.8	3.5	4.1	8.9	4.6	5	.8	0	1	0	1.4	5.7
Materials Non-energy		28.50	3.7	4.5	2.6	4.1	8.9 7.4	4.0	.5	.0	.8 .6	1 .5	.0 3	.7	4.5
Durable		17.33	7.1	6.1	4.2	2.8	10.9	7.0	.3	1.3	1.0	.7	5	.7	6.5
Consumer parts		2.49	5.2	8.6	6.5	2	12.6	15.3	.0	1.9	1.3	4.4	-2.8	8	6.8
Equipment parts		6.40	11.8	8.2	4.1	5.8	9.6	5.9	.0	1.8	.0	.0	.5	1.4	6.8
Other		8.45	4.1	3.8	3.5	1.5	11.5	5.5	.7	.7	1.6	.2	5	.6	6.2
Nondurable		11.16	-1.1	2.1	.1	-1.4	2.0	1.1	.2	2	.0	.2	.0	.7	1.2
Textile		.41	-2.4	-1.6	1.7	-9.1	8.2	6.9	.1	-3.2 -1.5	1.7	2.3	-1.7	1.6	2.9
Paper Chemical		1.88 5.68	-1.3	-2.3 4.5	5 .2	-6.2 5	3.6 1.6	-2.3 4.8	2.0	-1.5	.5	-1.0 .7	.6 .3	.5 .7	5 2.1
Energy		18.81	4.7	2.6	4.9	8.7	11.1	4.4	.7	1.0	1.1	9	.5	2.3	7.5
INDUSTRY GROUPS Manufacturing		74.32	3.1	3.5	2.9	1.4	6.8	3.5	.3	.4	.3	.7	5	.5	3.7
Manufacturing (NAICS)	31-33	71.79	3.3	3.9	3.2	1.4	7.1	4.1	.3	.4	.3	.8	5	.5	4.1
Durable manufacturing		37.96	6.0	6.2	4.9	1.8	9.9	6.6	.3	1.2	.4	1.4	-1.0	.4	5.4
Wood products	321	.91	1.0	7.8	9.0	-11.2	11.7	8.9	1.3	.4	.3	2.2	2	8	3.1
Nonmetallic mineral products	327	1.51	1	2.2	3.9	4.2	10.7	13.6	.8	1.0	1.3	1.9	.3	2	7.2
Primary metals	331	3.12	8.5	-1.4	4.0	-4.5	15.5	9.1	1.9	.8	1.9	1.0	7	.3	7.1
Fabricated metal products Machinery	332 333	5.61 5.60	6.4 8.1	5.4 1.8	4.8 4.9	1.6 11.7	7.2 4.7	2.6 5.1	.3	.7 1.4	1.3 8	.3 .7	-1.5 1.1	.8 1	4.5 5.6
Computer and electronic products	334	6.07	6.7	12.9	4.9	3.4	7.9	2.4	0	1.4	3	5	1.1	1	4.4
Electrical equip., appliances,	554	0.07	0.7	12.)	T.2	5.7	1.7	2.7		1.0	5	5	1.0	.0	7.7
and components	335	1.81	2.2	4.1	2.5	2.6	4.4	4.6	9	1.3	.7	2	.6	.1	4.5
Motor vehicles and parts	3361–3	4.52	11.3	11.5	8.9	-2.5	17.5	19.7	.2	2.2	.0	9.4	-7.0	-1.4	5.7
Aerospace and miscellaneous					_										
transportation equipment	3364-9	4.61	6.4	5.0	2.3	.9	12.1	5.6	.3	1.4	.8	1	2	1.7	5.7
Furniture and related products Miscellaneous	337 339	1.00 3.20	1	4.3 7.4	4.6 6.7	3.5 -1.4	14.4 9.7	7.9 2.3	.5	.3 1.4	1.1	1.1 1	-1.2 8	2.4	9.7 4.7
miscentalicous	339	5.20	5	7.4	0.7	-1.4	9.1	2.5	.1	1.4		1	0	1.0	4.7
Nondurable manufacturing		33.82	.4	1.3	1.2	1.4	4.0	1.2	.4	5	.2	.1	.1	.5	2.7
Food, beverage, and tobacco products	311,2	10.94	.7	3.3	1.0	3.1	3.4	-5.3	.5	9	5	6	3	.2	1.2
Textile and product mills	313,4	.66	6	-1.0	.8	-9.2	8.4	8.2	.5	-1.3	1.1	2.1	8	.4	2.5
Apparel and leather	315,6	.25	-5.1	-1.9	5.9	-1.3	1.7	-3.9	1	9	9	1.7	-3.4	1.5	-1.5
Paper Printing and support	322 323	2.32	4	-2.1 -2.7	-1.4 3.1	-7.1 1.5	4.5 9	-2.6 2.4	3.0	-1.9 .1	.1	5 .3	.6 7	.2	-1.3 3.8
Petroleum and coal products	323	3.81	3.0	-2.7	5.1 1.7	4.5	9 1.9	2.4	-1.5	-2.0	-1.3	 2.2	/	1	2.1
Chemicals	325	11.59	.1	1.0	.7	.0	3.2	5.7	.0	-2.0	-1.5	.3	.6	1	3.6
Plastics and rubber products	326	2.95	.8	4.9	4.4	5.9	13.4	8.1	8	2.4	1.9	8	.5	1.2	8.5
Flastics and fubber products		0.50	2	-6.2	-3.4	-5.3	-3.0	-12.5	.4	4	4	-2.5	6	.0	-8.8
Other manufacturing (non-NAICS)	1133,5111	2.53	2												
Other manufacturing (non-NAICS) Mining	21	15.88	7.4	4.2	4.8	8.9	19.3	8.7	2.1	1.0	1.5	.0	.3	1.8	9.1
	,					8.9 15.6 14.1	19.3 -21.9 -19.1	8.7 -8.5 -8.3	2.1 -5.1 -4.1	1.0 .2 .2	1.5 -2.0 -1.5	.0 -3.0 -3.6	.3 1.2 1.4	1.8 3.9 4.5	9.1 .9 1.2

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 website (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. $\frac{7}{7}$

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

ercent change, seasonally adjusted															
			1	rth quarte urth quar			nnual rat	te			Month	ly rate			Sept. '13
Item		2013 proportion	2011	2012	2013	2014 Q1	Q2 ^r	Q3 ^p	2014 Apr. ^r	May ^r	June ^r	July ^r	Aug. ^r	Sept. ^p	to Sept. '14
Total industry		100.00	3.2	3.2	3.3	3.9	5.5	3.2	.1	.5	.3	.2	2	1.0	4.3
Energy		27.74	3.3	1.8	4.8	10.5	2.2	1.7	4	.5	.0	9	.5	2.4	5.9
Consumer products		5.27	-1.2	1.0	5.7	20.8	-20.4	-10.8	-4.1	-1.2	-3.6	-1.2	.7	2.2	.8
Commercial products		2.92	2	1.4	4.0	6.2	-11.1	3.9	9	2	-1.1	.0	1.1	3.1	3.2
Oil and gas well drilling	213111	.73	21.3	-7.5	-1.2	3.4	14.0	12.2	1.3	.9	.4	.5	1.8	1.9	8.4
Converted fuel Primary energy		3.88 14.92	-1.3 6.6	.3 3.3	1.0 6.1	15.5 7.0	-14.6 18.6	-4.1 6.5	-4.7 2.1	.7 1.1	5 1.4	-3.3 4	2.2 .0	2.9 2.2	2.6 8.7
Non-energy		72.26	3.1	3.7	2.8	1.4	6.9	3.9	.3	.4	.4	.7	4	.5	3.7
Selected high-technology industries	22.41	3.27	8.8	16.9	5.4	2.6	16.7	1.3	1.5	2.2	1	7	.1	.8	6.0
Computers and peripheral equipment	3341	.35	-20.0	2.6	13.6	-19.1	-1.4	22.0	-4.0	1.8	3.2	5	4.6	7	-1.1
Communications equipment Semiconductors and related	3342	.49	11.2	-1.5	2.5	-14.4	6.0	3.3	2.0	1.2	.5	2	.3	.2	.3
electronic components	334412–9	2.42	13.7	23.9	5.0	9.9	21.5	-1.5	2.2	2.4	6	8	5	1.2	8.3
*	551112 9	2.12	15.7	23.7	5.0	,,,,	21.0	1.5	2.2	2.1	.0	.0		1.2	0.5
Excluding selected high-technology industries		68.99	2.8	3.1	2.7	1.4	6.4	4.0	.2	.4	.4	.7	5	.4	3.6
Motor vehicles and parts	3361-3	4.52	11.3	11.5	8.9	-2.5	17.5	19.7	.2	2.2	.0	9.4	-7.0	-1.4	5.7
Motor vehicles	3361	2.22	18.0	12.7	11.7	-7.7	22.3	27.2	.2	2.5	.4	14.5	-11.3	-2.4	4.4
Motor vehicle parts	3363	2.00	4.8	9.7	5.9	1.4	13.9	13.3	.2	2.3	.0	5.0	-3.3	8	6.0
Excluding motor vehicles and parts		64.47	2.3	2.5	2.3	1.6	5.7	2.9	.2	.2	.4	.1	.0	.6	3.4
Consumer goods		18.91	1.4	1.1	1.3	1.3	5.0	5	.4	5	.6	4	1	.4	2.2
Business equipment Construction supplies		8.20 4.13	5.4	6.0 3.9	3.8 5.0	7.7	9.3 4.0	3.7 10.2	.4 9	.9 1.3	5 .6	.4 1.5	.6 .0	.4 .4	5.2 5.0
Business supplies		6.05	.2	1.5	2.3	.8	4.6	1.0	.0	.4	.0	3	.0	.4	2.2
Materials		24.90	2.8	2.4	2.0	.6	5.7	4.5	.2	.4	.7	.3	1	.8	3.9
Measures excluding selected high-technology industries														1.0	
Total industry		96.73	2.9	2.7	3.3	3.9	5.1	3.3	0.	.4	.3	.3	2	1.0	4.3
Manufacturing ¹ Durable		71.04 34.84	2.8 5.7	2.8 5.1	2.8 4.9	1.3 1.7	6.3 9.2	3.6 7.0	.3	.3 1.1	.3 .5	.8 1.6	5 -1.1	.4 .4	3.6 5.3
Measures excluding motor vehicles		51.01	5.7	5.1	,	1.7	7.2	7.0			.5	1.0	1.1		5.5
and parts															
Total industry		95.48	2.8	2.8	3.1	4.2	5.0	2.5	.1	.4	.3	2	.2	1.1	4.3
Manufacturing ¹ Durable		69.79 33.59	2.7 5.4	3.0 5.5	2.6 4.4	1.6 2.4	6.1 8.8	2.5 4.8	.3 .3	.2 1.0	.3 .5	.1 .3	.0 1	.6 .7	3.5 5.3
Measures excluding selected high-technology industries															
and motor vehicles and parts															
Total industry		92.21	2.6	2.3	3.0	4.3	4.6	2.5	.0	.3	.3	2	.2	1.1	4.2
Manufacturing ¹		66.52	2.3	2.3	2.4	1.6	5.6	2.6	.3	.1	.3	.2	.0	.6	3.4
Stage-of-process components of non-energy materials,															
measures of the input to		11.17		6.0	2.0	1.0	0.2				4	0	2	_	
		11.17	7.3	6.0 3.5	3.8 1.8	1.9	9.2 6.3	6.6 3.5	.3	1.1 .4	.4 .7	.9 .3	3 3	.7 .7	5.5 3.8

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

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

annons of units, seasonally adjusted annu											
	2013	2013	2014			2014					
Item	average	Q4	Q1	Q2	Q3	Apr.	May	June	July	Aug.	Sept.
	11.07		11.10	11.55	10.00	11.40	11.55	11.50	10.01	11.00	11.70
Total	11.07	11.41	11.18	11.66	12.22	11.49	11.77	11.73	13.24	11.88	11.56
Autos	4.37	4.41	4.20	4.15	4.50	4.04	3.97	4.43	4.81	4.31	4.38
Trucks	6.70	7.00	6.98	7.52	7.72	7.45	7.80	7.30	8.42	7.57	7.18
Light	6.45	6.75	6.71	7.22	7.41	7.16	7.51	7.01	8.09	7.27	6.87
Medium and heavy	.25	.25	.27	.29	.31	.29	.29	.29	.33	.30	.31
Memo											
Autos and light trucks	10.82	11.16	10.91	11.37	11.91	11.20	11.47	11.44	12.91	11.58	11.25

NOTE. Seasonal factors and underlying data for auto, light truck, and medium and heavy truck production are available on the Board's website, 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		2013 proportion	2014 Jan.	Feb.	Mar.	Apr. ^r	May ^r	June ^r	July ^r	Aug. ^r	Sept. ^p
Total IP		100.00	101.3	102.3	103.1	103.2	103.7	104.0	104.2	104.0	105.1
MARKET GROUPS											
Final products and nonindustrial supplies		52.70	95.8	97.2	97.8	97.5	97.6	97.4	98.0	97.7	98.3
Consumer goods		26.78	95.8	97.3	97.9	97.4	97.0	96.7	97.1	96.5	97.0
Durable		5.88	97.2	99.9	100.7	100.7	102.2	102.8	107.3	103.5	103.2
Automotive products		3.01	108.4	115.1	115.9	115.2	117.8	118.4	127.4	120.5	119.1
Home electronics		.13	60.2	60.9	60.5	61.7	63.2	64.5	63.0	65.6	64.7
Appliances, furniture, carpeting		.78	73.1	70.8	73.0	74.7	75.6	76.3	78.8	76.5	78.1
Miscellaneous goods		1.97	95.7	95.6	96.0	95.9	96.1	96.6	96.8	95.5	95.8
Nondurable		20.90	95.7	96.9	97.6	96.8	96.0	95.4	94.7	95.0	95.7
Non-energy Foods and tobacco		15.62 9.00	91.3	92.0 101.2	93.1 102.3	93.5	92.7 101.7	93.2 101.5	92.7	92.7	93.0
Clothing		.19	100.0 61.4	60.9	62.4	103.0 62.2	61.7	61.2	100.8 62.2	100.6 60.3	100.7 61.2
Chemical products		4.65	82.5	82.8	84.6	84.6	84.1	85.6	85.6	86.3	86.9
Paper products		1.29	74.9	74.1	72.3	72.8	73.3	73.5	71.8	71.7	71.4
Energy		5.27	110.7	113.6	112.9	108.3	107.0	103.2	101.9	102.6	104.9
Business equipment		9.47	102.4	104.9	105.8	106.3	107.2	106.9	108.1	107.9	108.2
Transit		2.25	102.4	104.9	105.8	110.5	107.2	112.8	116.6	112.5	113.5
Information processing		2.02	104.1	107.0	107.1	101.0	101.1	101.0	101.0	102.9	103.5
Industrial and other		5.20	101.5	104.7	105.3	105.8	106.8	105.9	106.6	107.1	107.1
Defense and space equipment		2.26	114.4	114.8	115.7	116.1	116.1	116.5	116.7	116.6	118.2
Construction supplies		4.14	82.3	83.0	83.6	82.9	84.0	84.5	85.7	85.7	86.1
Business supplies		9.27	93.9	94.3	94.2	94.0	94.2	94.0	93.8	94.2	95.5
Materials		47.30	108.3	108.7	109.9	110.4	111.3	112.2	112.1	112.1	113.6
Non-energy		28.50	101.1	102.5	103.1	103.4	104.1	104.7	105.3	104.9	105.7
Durable		17.33	110.0	112.1	112.9	113.3	114.7	115.8	116.7	116.1	116.9
Consumer parts		2.49	94.9	96.9	97.8	97.8	99.6	100.9	105.3	102.3	101.5
Equipment parts		6.40	142.6	145.8	146.5	146.6	149.3	149.2	149.3	150.1	152.1
Other		8.45	94.0	95.6	96.2	96.9	97.6	99.2	99.4	98.8	99.5
Nondurable Textile		.41	89.1 76.3	89.4 73.3	89.8 78.8	90.0	89.8 76.4	89.8 77.7	89.9 79.5	89.9 78.1	90.5 79.3
Paper		1.88	81.7	80.3	78.8 80.6	78.9 82.2	76.4 81.0	81.5	79.5 80.7	78.1 81.1	79.3 81.5
Chemical		5.68	89.8	90.3	90.6	90.5	90.7	90.7	91.3	91.6	92.2
Energy		18.81	119.8	118.9	121.0	121.8	123.1	124.3	123.2	123.6	126.4
INDUSTRY GROUPS											
Manufacturing		74.32	96.8	98.0	98.8	99.1	99.5	99.8	100.5	100.0	100.5
Manufacturing (NAICS)	31–33	71.79	98.2	99.5	100.4	100.8	101.1	101.5	102.3	101.8	102.3
Durable manufacturing		37.96	105.2	107.3	108.1	108.4	109.7	110.2	111.7	110.6	111.1
Wood products	321	.91	78.0	78.1	79.3	80.3	80.7	80.9	82.7	82.6	81.9
Nonmetallic mineral products Primary metals	327 331	1.51 3.12	75.5	75.0 103.1	76.0 102.5	76.5 104.4	77.3 105.3	78.4 107.3	79.8 108.4	80.0 107.6	79.9 108.0
Fabricated metal products	331	5.61	96.1	97.1	97.4	97.7	98.3	99.6	99.9	98.4	99.2
Machinery	333	5.60	105.3	108.5	108.8	108.1	109.6	108.7	109.4	110.6	110.4
Computer and electronic products	334	6.07	146.7	147.4	149.0	149.7	151.2	150.8	150.1	151.6	152.7
Electrical equip., appliances,											
and components	335	1.81	89.3	90.1	90.8	90.0	91.2	91.9	91.7	92.2	92.3
Motor vehicles and parts	3361-3	4.52	103.2	110.1	110.5	110.7	113.2	113.2	123.8	115.2	113.6
Aerospace and miscellaneous	2251 5		107 -	1075	107 -	100 -	100 -	110 -	110 -	110 -	
transportation equipment	3364-9	4.61	105.1	106.2	107.9	108.2	109.7	110.6	110.5	110.3	112.2
Furniture and related products Miscellaneous	337 339	1.00 3.20	72.0	71.3 111.9	74.2 113.3	74.6 113.4	74.8 114.9	75.6 115.3	76.4 115.2	75.5 114.3	77.3 116.1
	,										
Nondurable manufacturing	211.2	33.82	91.1	91.7	92.7	93.0	92.5	92.7	92.8	92.9	93.4
Food, beverage, and tobacco products Textile and product mills	311,2 313,4	10.94	101.3	102.7	103.6	104.1	103.3	102.8	102.1	101.8	102.1
Apparel and leather	313,4 315,6	.66 .25	72.5 59.9	70.4 59.2	73.6 60.8	74.0 60.7	73.1 60.2	73.9 59.7	75.4 60.7	74.8 58.6	75.1 59.5
Paper	313,0	2.32	83.4	81.8	81.8	84.3	82.7	82.8	82.4	82.8	83.0
Printing and support	323	1.30	76.8	76.9	77.7	76.6	76.8	77.5	77.7	77.2	77.3
Petroleum and coal products	324	3.81	96.7	97.7	98.8	99.9	98.0	96.7	98.8	98.9	98.8
Chemicals	325	11.59	87.1	87.6	88.4	88.3	88.1	88.7	89.0	89.6	90.3
Plastics and rubber products	326	2.95	92.2	93.3	95.1	94.4	96.7	98.5	97.7	98.2	99.3
Other manufacturing (non-NAICS)	1133,5111	2.53	67.4	67.5	66.7	66.9	66.7	66.4	64.7	64.4	64.4
Mining	21	15.88	122.9	123.0	125.1	127.7	129.0	130.9	130.8	131.3	133.7
	2211,2	9.81	107.3	107.0	106.5	101.0	101.2	99.3	96.3	97.5	101.2
Utilities											
Utilities Electric Natural gas	2211,2 2211 2212	8.52 1.28	105.3 120.7	105.4 118.1	104.3 121.8	99.9 108.4	100.1 108.7	98.7 103.1	95.1 103.9	96.5 104.1	100.8 104.0

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

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

107 – 100, seasonany aujusteu											
Item		2013 proportion	2014 Jan.	Feb.	Mar.	Apr. ^r	May ^r	June ^r	July ^r	Aug. ^r	Sept. ^p
Total industry		100.00	101.3	102.3	103.1	103.2	103.7	104.0	104.2	104.0	105.1
lotul industry		100.00	101.5	102.5	105.1	105.2	105.7	101.0	101.2	101.0	105.1
Energy		27.74	115.9	115.7	116.8	116.3	116.9	116.9	115.9	116.5	119.3
Consumer products		5.27	110.7	113.6	112.9	108.3	107.0	103.2	101.9	102.6	104.9
Commercial products		2.92	108.4	107.1	105.3	104.4	104.2	103.0	103.0	104.1	107.4
Oil and gas well drilling	213111	.73	97.9	97.7	99.6	100.9	101.9	102.3	102.8	104.6	106.6
Converted fuel		3.88	102.7	101.3	102.8	98.0	98.7	98.2	95.0	97.0	99.8
Primary energy		14.92	125.5	124.7	127.0	129.6	131.1	132.9	132.4	132.3	135.2
Non-energy		72.26	96.5	97.8	98.6	98.8	99.3	99.7	100.3	99.9	100.4
Selected high-technology industries		3.27	182.9	185.6	186.9	189.7	193.8	193.7	192.3	192.6	194.2
Computers and peripheral equipment	3341	.35	68.0	69.3	70.2	67.4	68.6	70.8	70.4	73.7	73.2
Communications equipment	3342	.49	90.3	88.6	87.5	89.2	90.3	90.7	90.5	90.8	91.0
Semiconductors and related											
electronic components	334412–9	2.42	288.7	294.6	297.6	304.1	311.3	309.4	306.9	305.4	308.9
Excluding selected high-technology											
industries		68.99	93.0	94.3	95.0	95.2	95.5	95.9	96.6	96.2	96.6
Motor vehicles and parts	3361-3	4.52	103.2	110.1	110.5	110.7	113.2	113.2	123.8	115.2	113.6
Motor vehicles	3361	2.22	106.5	117.2	117.1	117.4	120.3	120.8	138.2	122.7	119.7
Motor vehicle parts	3363	2.00	101.9	105.2	105.9	106.2	108.6	108.6	114.0	110.2	109.4
Excluding motor vehicles and parts		64.47	92.3	93.2	94.0	94.2	94.4	94.8	94.9	95.0	95.5
Consumer goods		18.91	90.4	90.9	91.9	92.3	91.9	92.4	92.0	91.9	92.3
Business equipment		8.20	105.1	107.3	108.5	108.9	109.8	109.3	109.8	110.4	110.8
Construction supplies		4.13	82.2	82.9	83.5	82.8	83.9	84.4	85.6	85.7	86.0
Business supplies		6.05	84.3	85.3	85.8	85.8	86.1	86.3	86.1	86.2	86.7
Materials		24.90	92.7	93.6	94.1	94.3	94.7	95.4	95.6	95.6	96.3
Measures excluding selected high-technology											
industries											
Total industry		96.73	98.8	99.7	100.6	100.6	101.0	101.3	101.6	101.4	102.4
Manufacturing ¹		71.04	93.3	94.5	95.3	95.6	95.8	96.1	96.9	96.4	96.8
Durable		34.84	98.5	100.4	101.2	101.3	102.4	102.9	104.6	103.5	103.9
Measures excluding motor vehicles and parts											
Fotal industry		95.48	101.2	101.9	102.7	102.8	103.2	103.5	103.3	103.5	104.6
Manufacturing ¹		69.79	96.3	97.2	98.1	98.4	98.6	98.9	99.1	99.1	99.7
Durable		33.59	105.3	106.7	107.6	107.9	109.0	109.6	109.9	109.8	110.6
Measures excluding selected high-technology industries and motor vehicles and parts											
Total industry		92.21	98.6	99.2	100.1	100.1	100.4	100.7	100.5	100.7	101.9
Manufacturing ¹		66.52	92.7	93.6	94.4	94.6	94.8	95.1	95.2	95.2	95.8
Stage-of-process components of non-energy											
materials, measures of the input to											
			1						100 6		121.1
Finished processors		11.17	114.8	116.4	117.3	117.7	119.0	119.5	120.6	120.2	1/11

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

Table 6 DIFFUSION INDEXES OF INDUSTRIAL PRODUCTION Percent

ercent						·	* 1		a l	0		
Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
One month earlier												
2012	62.8	62.8	46.5	67.3	51.3	57.1	52.2	43.6	53.5	53.2	67.3	62.2
2013	55.1	62.2	50.6	51.6	54.5	62.2	50.6	63.5	57.4	53.8	58.7	53.5
2014	36.2	63.1	67.0	50.0	58.3	53.5	60.3	46.2				
Three months earlier												
2012	63.8	71.9	63.0	59.9	53.8	62.8	56.7	51.9	48.1	41.7	60.9	66.3
2013	67.6	63.5	55.4	53.8	51.6	56.1	55.1	64.1	58.7	61.2	61.9	56.4
2014	49.4	55.1	60.3	68.6	66.7	61.2	65.1	59.6				
Six months earlier												
2012	67.0	72.9	64.7	65.3	66.3	61.4	62.5	55.8	59.6	53.2	56.7	62.2
2013	58.3	63.8	65.1	67.6	57.7	56.7	57.4	56.7	57.4	66.3	66.2	64.1
2014	57.4	59.0	65.4	63.1	62.5	59.6	71.8	67.6				

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

31–33	2013 proportion 100.00	2013 ave. 80.1	95 high	2009 low	2014 Q1	Q2 ^r	Q3 ^p	2014 Apr. ^r	May ^r	June ^r	July ^r	Aug. ^r	Sept.
31–33		80.1				-		-					
31–33			85.0	66.9	78.6	79.1	79.0	79.0	79.1	79.1	79.1	78.7	79.
31-33	76.91	78.7	84.6	63.9	76.2	77.1	77.3	77.0	77.1	77.2	77.6	77.1	77.
	73.68	78.5	84.0	63.7	76.9	77.8	78.1	77.7	77.8	77.9	78.4	77.9	78.
	39.65	77.0	83.6	58.5	76.0	77.2	77.8	76.7	77.4	77.5	78.4	77.5	77.
321	1.03	76.7	86.5	50.1	70.0	71.2	71.8	71.2	71.2	71.2	72.4	72.0	71
327	2.03	74.5	82.6	44.1	60.8	62.5	64.7	61.8	62.5	63.4	64.6	64.8	64
331	3.18	79.0	94.1	48.7	76.3	78.9	80.5	78.1	78.7	80.1	80.9	80.3	80
332	5.48	77.5	84.8	61.9	80.4	81.1	80.8	80.6	80.9	81.7	81.7	80.2	80
333	5.61	78.1	87.6	59.3	80.3	80.6	81.0	80.3	81.2	80.3	80.6	81.3	81
334	6.67	78.0	84.3	70.6	72.7	72.7	71.8	72.8	73.0	72.4	71.6	71.8	71
335	1.72	82.6	92.5	66.0	83.6	84.1	84.7	83.3	84.3	84.7	84.4	84.8	84
3361-3	4.76	75.0	87.8	35.1	77.4	80.3	83.7	79.3	80.9	80.8	88.3	82.1	80
3364-9	4.77	73.4	70.3	72.0	75.3	77.1	77.9	76.3	77.3	77.8	77.6	77.4	78
	1.09	76.5						76.4			78.2	77.2	78
339	3.30	76.0	80.5	68.1	74.4	75.2	75.0	74.7	75.5	75.5	75.2	74.4	75
	34.03	80.7	86.0	69.1	77.9	78.5	78.4	78.8	78.3	78.3	78.3	78.3	78
311.2	10.68	81.0		75.1									79
								~ .					72
													75
													83
													72
													84
													76
326	3.04	82.0	93.2	58.5	76.9	78.4	79.0	77.0	78.6	79.7	78.8	78.8	79
1133,5111	3.24	81.7	83.2	68.6	60.5	60.2	58.4	60.4	60.2	60.0	58.5	58.2	58
21	13.48	87.3	88.5	78.8	87.9	89.9	89.7	89.6	89.8	90.4	89.6	89.2	90
2211,2	9.61	86.1	93.3	78.5	84.1	78.9	77.0	79.4	79.5	77.8	75.4	76.3	79
	3.77	77.9	86.3	72.2	70.8	72.1	70.7	71.6	72.6	72.0	71.0	70.5	70
3341													69
													75
00.2		,	01	1110	,	/011	1010	,	1010	1010	1010	1010	10
334412–9	2.82	79.7	90.8	63.3	71.0	72.5	70.0	72.3	73.3	72.1	70.7	69.6	69
	96.23	80.3	84.9	66.7	78.9	79.4	79.4	79.3	79.4	79.4	79.4	79.1	79
	73.15	78.7	84.5	63.5	76.5	77.4	77.7	77.3	77.4	77.5	78.0	77.5	77
	17.66	86.3	89.6	76.8	86.1	87.5	87.1	87.4	87.5	87.7	87.1	86.8	87
													77
													77
	327 331 332 333 334 335 3361–3 3364–9 337 339 311,2 313,4 315,6 322 323 324 325 326 1133,5111 21 2211,2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3211.0376.7 327 2.0374.5 331 3.1879.0 332 5.4877.5 333 5.6178.1 334 6.6778.0 335 1.7282.6 $3361-3$ 4.7675.0 $3364-9$ 4.7773.4 337 1.0976.5 339 3.3076.0 $311,2$ 10.6881.0 $313,4$.7579.6 $315,6$.2777.5 322 2.1986.7 323 1.5080.7 324 3.6285.5 325 11.9777.6 326 3.0482.01133,51113.2481.7 21 13.4887.3 $2211,2$ 9.6186.1 3341 .4278.2 3342 .5376.7 $334412-9$ 2.8279.7 33412 .5378.7 17.66 86.344.85 80.8 44.8580.8	321 1.03 76.7 86.5 327 2.03 74.5 82.6 331 3.18 79.0 94.1 332 5.48 77.5 84.8 333 5.61 78.1 87.6 334 6.67 78.0 84.3 335 1.72 82.6 92.5 3361-3 4.76 75.0 87.8 3364-9 4.77 73.4 70.3 337 1.09 76.5 82.6 339 3.30 76.0 80.5 344.03 80.7 86.0 311,2 10.68 81.0 85.4 313,4 .75 79.6 91.8 315,6 .27 77.5 87.2 322 2.19 86.7 92.6 323 1.50 80.7 82.0 324 3.62 85.5 91.1 325 11.97 77.6 82.0 324 3.62 85.5 91.1 325 1.97 77.9	321 1.03 76.7 86.5 50.1 327 2.03 74.5 82.6 44.1 331 3.18 79.0 94.1 48.7 332 5.48 77.5 84.8 61.9 333 5.61 78.0 84.3 70.6 333 5.61 78.0 84.3 70.6 333 5.61 78.0 84.3 70.6 333 5.61 78.0 84.3 70.6 333 5.61 78.0 84.3 70.6 333 5.61 78.0 84.3 70.6 333 5.61 78.0 84.3 70.6 333 5.61 78.0 84.3 70.6 333 5.61 78.0 84.3 70.6 333 76.0 80.5 68.1 93.3 72.0 337 1.09 76.5 82.6 57.2 93.9 311,2 10.68 81.0 85.4 75.1 313,4 .75 79.6 91.8 53.	3211.0376.786.550.170.0 327 2.0374.582.644.160.83313.1879.094.148.776.33325.4877.584.861.980.43335.6178.187.659.380.33346.6778.084.370.672.73351.7282.692.566.083.63361-34.7675.087.835.177.43364-94.7773.470.372.075.33371.0976.582.657.274.43393.3076.080.568.174.4311,210.6881.085.475.180.4313,4.7579.691.853.469.0315,6.2777.587.256.975.23222.1986.792.672.481.33231.5080.785.059.871.43243.6285.591.175.884.032511.9777.682.065.275.03263.0482.093.258.576.91133,51113.2481.783.564.73341.4278.287.783.564.73341.4278.287.783.564.73341.4278.784.563.576.533412.5376.784.1<	321 1.03 76.7 86.5 50.1 70.0 71.2 327 2.03 74.5 82.6 44.1 60.8 62.5 331 3.18 79.0 94.1 48.7 76.3 78.9 332 5.48 77.5 84.8 61.9 80.4 81.1 333 5.61 78.0 84.3 70.6 72.7 72.7 335 1.72 82.6 92.5 66.0 83.6 84.1 3361-3 4.76 75.0 87.8 35.1 77.4 80.3 3364-9 4.77 73.4 70.3 72.0 75.3 77.1 337 1.09 76.5 82.6 57.2 74.4 76.8 339 3.30 76.0 80.5 68.1 74.4 75.2 313,4 .75 79.6 91.8 53.4 69.0 70.7 312 21.9 86.7 92.6 72.4 81.3	321 1.03 76.7 86.5 50.1 70.0 71.2 71.8 327 2.03 74.5 82.6 44.1 60.8 62.5 64.7 331 3.18 79.0 94.1 48.7 76.3 78.9 80.5 332 5.48 77.5 84.8 61.9 80.4 81.1 80.8 333 5.61 78.1 87.6 59.3 80.3 80.6 81.0 334 6.67 78.0 84.3 70.6 72.7 72.7 71.8 335 1.72 82.6 92.5 66.0 83.6 84.1 84.7 3361-3 4.76 75.0 87.8 35.1 77.4 80.3 83.7 3361-3 4.76 75.0 87.8 35.1 77.4 71.7 79.9 337 1.09 76.5 82.6 57.2 74.4 76.8 78.1 339 3.30 76.0 80.5 68.1 74.4 75.2 75.0 3134 .75 79.6	321 1.03 76.7 86.5 50.1 70.0 71.2 71.8 71.2 327 2.03 74.5 82.6 44.1 60.8 62.5 64.7 76.1 331 3.18 79.0 94.1 48.7 76.3 78.9 80.5 78.1 332 5.48 77.5 84.8 61.9 80.4 81.1 80.8 80.6 333 5.61 78.0 84.3 70.6 72.7 72.7 71.8 72.8 335 1.72 82.6 92.5 66.0 83.6 84.1 84.7 83.3 3361-3 4.76 75.0 87.8 35.1 77.4 80.3 83.7 79.3 3364-9 4.77 73.4 70.3 72.0 75.3 77.1 77.9 76.3 337 1.09 76.5 82.6 67.2 74.4 76.8 78.4 78.8 311.2 10.68 81.0 85.4	321 1.03 76.7 86.5 50.1 70.0 71.2 71.8 71.2 71.2 327 2.03 74.5 82.6 44.1 60.8 62.5 64.7 61.8 62.5 331 3.18 79.0 94.1 48.7 76.3 78.9 80.5 78.1 78.7 332 5.48 77.5 84.8 61.9 80.4 81.1 80.8 80.6 80.9 333 5.61 78.1 87.6 59.3 80.3 80.6 81.0 80.3 81.2 334 6.67 78.0 84.3 70.6 72.7 72.7 71.8 72.8 73.3 80.3 3361-3 4.76 75.0 87.8 35.1 77.4 80.3 83.7 79.3 80.9 3364-9 4.77 73.4 70.3 72.0 75.3 77.1 75.9 76.4 76.4 75.2 75.0 74.7 75.5 34	321 1.03 76.7 86.5 50.1 70.0 71.2 71.3 78.1 78.3 80.3 80.6 81.0 80.3 81.2 80.3 334 6.67 78.0 87.8 35.1 77.4 80.3 83.7 79.3 80.9 80.8 3361-3 4.76 75.0 87.8 35.1 77.4 80.3 83.7 79.3 80.9 80.8 3364-9 4.77 73.4 70.3 72.0 75.3 77.1 77.9 78.5 78.4 78.4<	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$

Table 7 CAPACITY UTILIZATION Percent of capacity, seasonally adjusted

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

Table 8 INDUSTRIAL CAPACITY Percent change

		Average a	nnual rate		Fourth	quarter to	o fourth c	uprtor		Annual	rate		Monthly rate
Item	1972-	1980-	1989-	1995-	Tourui	quarter to	o iouitii t	luanci	2013	2014	Tate		2014
nem	79	88	94	2014	2011	2012	2013	2014	Q4	Q1	Q2	Q3	Sept.
Total industry	3.1	1.9	2.3	2.4	1.4	2.6	1.9	3.1	2.3	2.7	3.1	3.3	.3
Manufacturing ¹	3.3	2.2	2.6	2.5	.5	2.2	1.8	2.2	2.0	2.0	2.2	2.2	.2
Mining	.7	.1	6	1.2	5.9	4.8	4.0	9.2	4.8	7.5	9.0	10.0	.8
Utilities	4.2	2.1	1.8	1.9	1.8	1.3	.4	1.0	.6	.9	1.1	1.1	.1
Selected high-technology industries	19.6	17.3	15.7	20.2	25.9	19.0	4.7	8.6	5.2	6.5	8.5	9.8	.8
Manufacturing ¹ ex. selected													
high-technology industries	2.6	1.3	1.6	1.0	6	1.4	1.7	1.8	1.8	1.8	1.8	1.8	.1
STAGE-OF-PROCESS GROUPS													
Crude	1.6	.4	5	1.1	4.6	3.5	3.1	7.3	3.9	5.9	7.1	8.0	.7
Primary and semifinished	3.0	1.3	2.6	2.7	1.0	2.0	.7	1.9	1.1	1.5	1.9	2.2	.2
Finished	3.9	3.3	2.7	2.3	.5	2.6	2.9	2.3	3.0	2.6	2.4	2.2	.2

1. Refer to note on cover page.

Table 9 GROSS VALUE OF FINAL PRODUCTS AND NONINDUSTRIAL SUPPLIES Billions of 2009 dollars at annual rate, seasonally adjusted 2014

			2014			2014					
_			2014			2014					~
Item	2009	2013	Q1	Q2r	Q3 ^p	Apr. ^r	May ^r	June ^r	July ^r	Aug. ^r	Sept. ^p
Final products and nonindustrial supplies	3,212.1	3,626.4	3,715.1	3,742.4	3,765.9	3,751.4	3,746.3	3,729.6	3,780.5	3,749.6	3,767.5
Final products	2,410.8	2,746.7	2,820.8	2,848.0	2,855.7	2,858.5	2,850.1	2,835.3	2,876.5	2,842.0	2,848.6
Consumer goods	1,811.4	1,984.3	2,043.4	2,053.5	2,051.2	2,066.3	2,053.8	2,040.3	2,066.7	2,041.8	2,045.3
Durable	381.7	523.5	538.3	555.1	574.8	547.6	557.1	560.7	594.6	566.6	563.1
Automotive products	225.1	346.9	359.1	372.5	390.6	366.2	374.6	376.7	409.5	383.7	378.6
Other durable goods	156.5	176.6	179.3	182.9	184.8	181.6	182.8	184.4	186.2	183.4	184.8
Nondurable	1,429.8	1,474.1	1,518.6	1,515.0	1,497.3	1,533.2	1,513.7	1,498.0	1,496.4	1,494.8	1,500.8
Equipment, total	599.4	769.0	783.3	801.9	813.2	798.7	804.0	803.0	818.5	808.8	812.2
Business and defense	583.2	745.1	759.0	776.9	787.2	773.8	778.9	778.1	792.8	782.9	785.9
Business	477.2	627.3	641.1	657.8	667.2	654.8	659.9	658.6	673.3	663.5	664.7
Defense and space	106.0	118.2	118.4	119.8	120.7	119.6	119.7	120.1	120.3	120.0	121.7
Nonindustrial supplies	801.3	879.4	893.9	894.1	909.8	892.5	895.8	893.9	903.6	907.2	918.5
Construction supplies	221.8	260.6	264.6	266.6	273.1	263.5	267.5	268.9	273.0	272.8	273.5
Business supplies	579.5	619.4	629.9	628.2	637.5	629.6	629.1	625.8	631.5	635.3	645.7
Commercial energy products	233.3	241.7	246.5	240.8	247.2	243.1	241.0	238.2	242.9	245.5	253.3

r Revised. p Preliminary.

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

Percent change, seasonally adjusted

		Fou	rth quarte	er to										
		fo	urth quar	ter	A	Annual r	ate			Mont	nly rate			Sept. '13
Item	2013				2014			2014						to
	gross value1	2011	2012	2013	Q1	Q2 ^r	Q3 ^p	Apr. ^r	May ^r	June ^r	July ^r	Aug. ^r	Sept. ^p	Sept. '14
Finished	2,191.3	4.6	4.3	3.6	1.1	8.5	4.2	.6	.2	.2	1.9	-1.6	.1	3.4
Semifinished	1,907.4	2.7	3.7	3.3	5.4	1.4	4.1	9	1.1	.1	2	.4	1.5	4.8
Primary	1,418.8	1.3	.4	3.7	2.5	-1.4	.4	5	7	8	.8	2	.5	2.2
Crude	674.7	2.9	2.1	2.6	3.1	11.3	4.6	1.6	.2	.6	.1	.2	1.2	5.1

r Revised. p Preliminary.

1. Billions of 2009 dollars.

Seasonally adjusted Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent				1	y		y	0	1								
change) ¹																	
1992	6	.7	.9	.7	.3	.0	.9	5	.2	.8	.4	.1	5	7.2	3.0	4.3	2.8
1993	.5	.4	.0	.3	4	.2	.3	1	.5	.8	.4	.5	3.6	.8	1.6	6.2	3.3
1994	.4	.0	1.0	.5	.6	.7	.2	.6	.4	.8	.6	1.0	5.1	7.5	5.3	8.4	5.3
1995 1996	.2 7	1 1.6	.1 1	.0 .9	.3 .7	.4 .8	4 2	1.3 .6	.4 .6	1 1	.2 .9	.4 .6	4.4	1.5 8.5	3.9 5.0	3.4 5.5	4.7
1990	/	1.0	1	.9	./	.0	2	.0	.0	1	.9	.0	2.7	0.5	5.0	5.5	4.4
1997	.2	1.2	.7	.1	.6	.5	.9	1.0	.9	.9	.9	.3	7.9	6.3	9.8	10.5	7.2
1998	.5	.1	.1	.3	.6	7	4	2.1	3	.8	.0	.4	4.5	2.5	2.8	5.6	5.8
1999	.5	.5	.2	.2	.8	2	.6	.4	4	1.3	.5	.8	4.3	3.8	3.8	7.5	4.3
2000 2001	.0 7	.3	.4	.7	.2	.1 7	1 5	3 2	.4 4	3 5	.0 5	3	4.3	5.3 -5.5	4 -5.7	-1.2 -4.5	4.0
2001	/	0	5	5	/	/	5	2	4	5	5	.0	-5.0	-5.5	-5.7	-4.5	-3.4
2002	.6	.0	.8	.5	.4	1.0	2	.0	.1	3	.5	5	2.9	6.5	2.4	2	.2
2003	.7	.3	2	8	.0	.0	.6	3	.6	.1	.8	1	2.6	-3.1	2.7	3.4	1.2
2004	.3	.5	5	.4	.8	8	.8	.0	.1	1.0	.2	.7	2.5	1.8	2.1	5.7	2.3
2005 2006	.5 .1	.6 .0	1 .3	.1 .4	.2 1	.4 .4	2 .0	.2 .3	-2.0 2	1.3 .0	1.0 1	.6 1.0	5.7 3.8	2.2 2.4	-1.7 1.6	3.4 .8	3.2 2.2
2000	.1	.0	.0		.1		.0	.0	.2	.0	.1	1.0	5.0	2.1	1.0	.0	2.2
2007	5	1.1	.1	.7	.0	.0	.0	.1	.4	5	.6	.0	3.7	4.9	1.1	.7	2.5
2008	2	3	3	7	5	2	5	-1.5	-4.2	.8	-1.3	-2.8	-1.4	-5.3	-12.1	-16.0	-3.4
2009 2010	-2.2 1.2	7 .3	-1.5 .8	8 .4	-1.1 1.6	4 .2	1.0 .6	1.0 .3	.7 .3	.4 3	.4 .2	.3 .8	-20.0	-10.8 8.7	5.2 6.5	6.3 1.5	-11.3 5.7
2010	.0	.5 6	1.0	5	.3	.2	.0	.5	.5	5	.2	.0	2.5	1.2	5.2	3.9	3.3
2011	.0	.0	1.0			.2	.0						2.0	1.2	0.2	5.7	
2012	.9	.4	4	.8	.3	.1	.6	6	.3	1	1.0	.1	5.2	3.8	1.6	2.4	3.8
2013	.1	.6	.4	2	.1	.2	2	.6	.7	.1	.6	.2	4.2	1.9	2.5	4.9	2.9
2014	2	.9	.8	.1	.5	.3	.2	2	1.0				3.9	5.5	3.2		
IP (2007=100)																	
2012	96.0	96.4	96.0	96.8	97.1	97.2	97.7	97.1	97.4	97.3	98.3	98.4	96.1	97.0	97.4	98.0	97.1
2013	98.4	99.0	99.5	99.3	99.4	99.6	99.4	100.0	100.7	100.8	101.4	101.6	99.0	99.4	100.1	101.3	99.9
2014	101.3	102.3	103.1	103.2	103.7	104.0	104.2	104.0	105.1				102.2	103.6	104.4		
Capacity																	
(percent of																	
2007 output)																	
2012	124.2	124.5	124.8	125.1	125.4	125.7	125.9	126.2	126.4	126.6	126.8	127.0	124.5	125.4	126.2	126.8	125.7
2013 2014	127.2 129.7	127.3 130.0	127.5 130.4	127.7 130.7	127.9 131.0	128.0 131.4	128.2 131.7	128.5 132.1	128.7 132.5	128.9	129.2	129.4	127.3 130.0	127.9 131.0	128.5 132.1	129.2	128.2
2014	129.7	130.0	130.4	130.7	131.0	131.4	131.7	132.1	132.5				130.0	131.0	132.1		
Utilization																	
(percent)																	
1992	79.3	79.8	80.3	80.7	80.8	80.6	81.1	80.6	80.6	81.0	81.2	81.1	79.8	80.7	80.7	81.1	80.6
1993 1994	81.3 82.5	81.5 82.3	81.3 83.0	81.4 83.2	81.0 83.4	81.1 83.7	81.2 83.6	81.1 83.8	81.3 83.8	81.8 84.2	82.0 84.4	82.3 85.0	81.3 82.6	81.2 83.4	81.2 83.7	82.1 84.5	81.4 83.6
1995	84.8	84.4	84.3	83.9	83.9	83.9	83.2	84.0	84.0	83.6	83.4	83.4	84.5	83.9	83.8	83.5	83.9
1996	82.5	83.4	83.0	83.3	83.6	83.9	83.3	83.5	83.6	83.2	83.5	83.6	83.0	83.6	83.5	83.4	83.4
1005								o · •		o : -		o · -	0.5 -		o · -	o : -	
1997	83.3	83.9	84.0	83.6	83.7	83.6	83.9	84.2	84.4	84.6	84.8	84.5	83.7	83.7	84.2	84.7	84.1
1998 1999	84.4 81.8	83.9 81.8	83.4 81.6	83.2 81.5	83.2 81.8	82.2 81.4	81.4 81.6	82.6 81.6	82.0 81.0	82.3 81.8	81.8 81.9	81.8 82.2	83.9 81.7	82.8 81.5	82.0 81.4	81.9 81.9	82.7 81.7
2000	81.9	81.9	81.9	82.2	82.1	81.9	81.6	81.0	81.1	80.6	80.3	79.9	81.9	82.1	81.2	80.3	81.4
2001	79.1	78.3	77.9	77.5	76.7	76.0	75.4	75.1	74.7	74.2	73.6	73.5	78.4	76.7	75.1	73.8	76.0
2002	72.0	72.0	74.0	74.6	74.0	75.5	75.0	75.0	75 4	75.0	75.5	75.0	74.0	75.0	75.0	75.0	710
2002 2003	73.9 75.8	73.8 76.0	74.3 75.9	74.6 75.3	74.8 75.4	75.5 75.4	75.3 75.9	75.3 75.7	75.4 76.2	75.2 76.2	75.6 76.8	75.2 76.8	74.0 75.9	75.0 75.4	75.3 75.9	75.3 76.6	74.9 75.9
2003	75.8	76.0	75.9	75.3	78.0	75.4	78.0	78.1	78.1	78.9	79.0	79.5	75.9	75.4	78.1	70.0	73.9
2005	79.8	80.3	80.1	80.1	80.2	80.4	80.1	80.1	78.4	79.3	79.9	80.3	80.1	80.2	79.5	79.8	79.9
2006	80.2	80.2	80.3	80.4	80.2	80.4	80.3	80.4	80.1	79.9	79.7	80.3	80.2	80.4	80.3	80.0	80.2
2007	70.7	00.4	00.4	00.0	00.7	00.5	00.5	00 5	00.0	00.4	00.0	00.0	00.0	00.7	00.5	00.7	00.7
2007 2008	79.7 80.7	80.4 80.5	80.4 80.3	80.8 79.8	80.7 79.4	80.6 79.3	80.5 78.9	80.5 77.7	80.8 74.3	80.4 74.9	80.8 73.9	80.8 71.7	80.2 80.5	80.7 79.5	80.6 77.0	80.7 73.5	80.5 77.6
2008	70.1	69.5	68.5	67.9	67.2	66.9	67.6	68.3	68.9	69.3	69.7	70.0	69.4	67.3	68.3	69.7	68.7
2010	71.0	71.4	72.1	72.5	73.8	74.1	74.7	75.0	75.3	75.1	75.3	76.0	71.5	73.5	75.0	75.5	73.8
2011	76.0	75.6	76.3	75.8	76.0	76.1	76.4	76.6	76.6	76.8	76.7	76.8	75.9	76.0	76.5	76.8	76.3
2012								77 ^	77 ^						77.0		
2012 2013	77.3 77.4	77.4 77.8	76.9 78.0	77.4 77.8	77.4 77.8	77.3 77.8	77.6 77.5	77.0 77.8	77.0 78.3	76.9 78.2	77.5 78.5	77.5 78.5	77.2	77.4 77.8	77.2 77.9	77.3 78.4	77.3
2013	77.4	77.8	78.0	77.8	77.8	77.8	77.5	77.8	78.3	76.2	76.5	10.5	78.6	77.8	77.9	76.4	11.9
		. 0.0															
1 Quarterly changes		1 .				0											·

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

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

Seasonally adjusted																	
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP $(percent change)^2$																	
1992	6	.9	1.0	.5	.6	.2	.9	4	.1	.7	.4	1	.5	8.2	4.1	3.2	3.6
1993	1.0	.2	2	.5	1	2	.2	2	.6	.9	.4	.5	4.5	1.3	.7	7.0	3.5
1994	.2	.1	1.3	.8	.7	.3	.4	.8	.5	1.0	.8	1.1	4.9	9.6	6.2	10.1	5.9
1995 1996	.2 8	2 1.6	.2	1 1.1	.1 .7	.5 1.0	6 .2	1.2 .6	.9 .8	1 2	.1	.4	4.6	1.0 9.7	3.3 7.4	4.3 5.7	5.2 4.8
1990	0	1.0	2	1.1	./	1.0	.2	.0	.0	2	.0	.0	1.0	9.7	7.4	5.7	4.0
1997	.1	1.4	1.1	2	.8	.7	.8	1.2	.9	.9	1.1	.4	9.4	7.4	11.0	11.4	8.4
1998	.8	.1	1	.5	.5	8	4	2.5	3	1.0	.2	.5	6.1	1.9	3.1	7.8	6.6
1999	.3	.8	1	.3	1.0	3	.4	.6	4	1.5	.6	.7	4.9	4.3	3.4	8.9	5.0
2000	.1	.2	.7	.7	1	.2	.1	7	.4	3	3	6	4.7	5.1	5	-2.8	4.2
2001	7	6	3	3	8	7	5	5	2	6	3	.3	-6.5	-5.7	-6.2	-4.2	-4.1
2002	.5	.0	.8	.2	.6	1.1	3	.2	.1	4	.4	5	3.5	5.9	3.1	4	.3
2003	.5	.1	.2	9	.1	.4	.4	5	.8	.1	1.0	3	1.8	-2.1	2.4	3.8	1.3
2004	.0	.6	2	.4	.8	7	.9	.4	.0	1.0	1	.6	2.1	3.0	3.7	5.4	2.8
2005	.8	.8	4	.3	.4	.2	2	.3	-1.1	1.5	.8	.1	6.4	2.4	4	5.9	4.0
2006	.8	2	1	.5	5	.3	2	.6	.0	4	.0	1.5	3.9	.9	.9	1.5	2.5
2007	5	.4	.8	.7	1	.3	.2	4	.5	4	.5	.1	4.0	5.8	.9	.7	2.7
2007	3 4	.4 6	3	-1.1	1	6	-1.1	4	-3.4	4 6	-2.4	-3.4	-2.6	-7.5	-13.4	-21.6	-4.7
2009	-2.9	3	-1.8	7	-1.1	3	1.4	1.0	.8	.0	1.0	1	-23.9	-10.9	7.0	6.9	-13.6
2010	1.1	1	1.3	.9	1.5	.0	.8	.1	.1	.1	.2	.4	7.0	11.4	5.7	1.6	6.1
2011	.2	.0	.7	6	.2	.1	.8	.3	.4	.5	1	.7	2.9	.0	5.4	4.3	3.4
2012	1.0	.6	3	.8	2	.4	.4	5	.2	4	1.3	.7	7.3	3.0	1.2	2.5	4.1
2012	2	.6	3	2	2	.4	4	3	.2	4	.3	.2	4.4	1.3	1.2	4.2	2.6
2013	-1.0	1.3	.1	.3	.4	.3	.7	5	.5		.5	.2	1.4	6.8	3.5	7.2	2.0
IP (2007=100)																	
2012	92.9	93.5	93.2	93.9	93.7	94.0	94.4	94.0	94.1	93.7	94.9	95.6	93.2	93.9	94.2	94.7	94.0
2013 2014	95.4 96.8	95.9 98.0	96.0 98.8	95.8 99.1	96.1 99.5	96.4 99.8	96.0 100.5	96.7 100.0	96.9 100.5	97.3	97.6	97.7	95.8 97.9	96.1 99.5	96.5 100.3	97.5	96.5
Capacity (percent of 2007 output)	102.2	100.4	100 6	122.0	124.1	124.4	104.6	124.0	125.0	105.0	105.4	105.6	102.4	104.1	124.0	105.4	104.5
2012	123.2	123.4	123.6	123.9	124.1	124.4	124.6	124.8	125.0	125.2 127.5	125.4	125.6	123.4	124.1	124.8	125.4	124.5
2013 2014	125.8 128.1	126.0 128.4	126.2 128.6	126.3 128.8	126.5 129.0	126.7 129.3	126.9 129.5	127.1 129.8	127.3 130.0	127.5	127.7	127.9	126.0 128.4	126.5 129.0	127.1 129.8	127.7	126.8
2014	120.1	120.4	120.0	120.0	129.0	127.5	127.5	129.0	150.0				120.4	129.0	127.0		
Utilization (percent)	70.0	70 7	70.4	70 (70.0	70.0	00.4	70.0	70 7	00.0	00.1	70.0	70.0	70.0	00.0	00.0	70.6
1992 1993	78.2 80.4	78.7 80.4	79.4 80.1	79.6 80.4	79.9 80.2	79.9 80.0	80.4 80.1	79.8 79.8	79.7 80.2	80.0 80.8	80.1 81.0	79.8 81.3	78.8	79.8 80.2	80.0 80.0	80.0 81.0	79.6 80.4
1995	81.3	81.2	82.0	80.4 82.5	82.8	80.0 82.7	82.8	83.1	83.2	83.7	84.0	84.6	81.5	80.2 82.7	83.0	84.1	80.4
1995	84.4	83.9	83.7	83.3	83.1	83.1	82.3	82.8	83.2	82.7	82.4	82.3	84.0	83.2	82.8	82.5	83.1
1996	81.3	82.1	81.5	82.0	82.2	82.6	82.3	82.4	82.6	82.0	82.2	82.4	81.6	82.3	82.4	82.2	82.1
1005		o		<u> </u>			05.0	0.5.5			0.5	o			0.5		0.7.0
1997	82.1	82.7	83.1	82.5	82.7	82.7	82.8	83.2	83.3	83.4	83.8	83.5	82.6	82.6	83.1	83.6	83.0
1998 1999	83.5 80.6	83.0 80.8	82.3 80.4	82.1 80.3	81.9 80.7	80.7 80.1	79.9 80.1	81.3 80.2	80.6 79.6	81.0 80.5	80.7 80.6	80.7 80.8	82.9 80.6	81.5 80.3	80.6 80.0	80.8 80.6	81.5 80.4
2000	80.6	80.4	80.6	80.8	80.4	80.2	80.0	79.2	79.2	78.6	78.1	77.4	80.5	80.5	79.5	78.0	79.6
2001	76.6	75.9	75.5	75.1	74.3	73.6	73.1	72.6	72.3	71.7	71.4	71.6	76.0	74.3	72.7	71.6	73.6
2002	71.9	71.8	72.3	72.5	72.8	73.7	73.4	73.5	73.6	73.3	73.7	73.3	72.0	73.0	73.5	73.4	73.0
2003 2004	73.7 74.8	73.8 75.3	73.9 75.3	73.2 75.6	73.3 76.2	73.6 75.7	73.9 76.4	73.5 76.7	74.1 76.6	74.2 77.4	74.9 77.3	74.8 77.7	73.8	73.4 75.8	73.8 76.6	74.6 77.4	73.9 76.2
2004	74.8	78.7	78.2	78.3	78.4	78.4	78.0	78.1	70.0	78.1	78.6	78.5	78.3	78.3	70.0	78.4	78.2
2006	79.0	78.7	78.5	78.8	78.3	78.5	78.2	78.5	78.4	78.0	77.8	78.8	78.7	78.5	78.3	78.2	78.4
2007	78.2	78.4	78.8	79.2	78.9	79.0	78.9	78.5	78.7	78.3	78.6	78.6	78.5	79.0	78.7	78.5	78.7
2008	78.3	77.8	77.6	76.8	76.5	76.2	75.4	74.6	72.1	71.8	70.2	67.9	77.9	76.5	74.0	70.0	74.6
2009	66.1	66.0	65.0	64.6	64.0	63.9	64.9 72.0	65.7 72.2	66.3	66.5 72.5	67.3 72.7	67.4	65.7	64.2 70.8	65.6 72.2	67.1	65.6
2010 2011	68.2 73.2	68.3 73.3	69.3 73.8	70.0 73.3	71.2 73.4	71.3 73.5	72.0 74.0	72.2	72.4 74.3	72.5	74.4	73.0 74.8	68.6 73.4	70.8	72.2	72.7 74.6	71.1 73.9
2011	15.2	15.5	15.0	15.5	75.4	10.0	74.0	17.2	17.5	74.0	/	77.0	,	73.4	17.2	74.0	13.7
2012	75.5	75.8	75.4	75.8	75.5	75.6	75.8	75.3	75.3	74.8	75.7	76.1	75.5	75.6	75.4	75.5	75.5
2013	75.8	76.1	76.1	75.8	75.9	76.1	75.6	76.1	76.2	76.3	76.4	76.4	76.0	75.9	76.0	76.4	76.1
2014	75.5	76.4	76.8	77.0	77.1	77.2	77.6	77.1	77.3				76.2	77.1	77.3		
1 Pafar to note on a																	L

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.

Seasonally adjusted Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
				r ·											<u> </u>		
IP (percent change) ²																	
1992	8	.7	.8	.6	.3	2	.8	6	.1	.6	.3	.0	-2.0	6.1	1.9	3.0	1.9
1993	.5	.3	1	.3	4	.2	.3	1	.4	.7	.3	.5	3.1	.2	1.3	5.3	2.5
1994	.4	.0	.9	.3	.4	.6	.0	.4	.1	.6	.4	.9	4.4	5.4	3.2	5.7	4.0
1995	.1	2	1	3	.1	.2	6	1.1	.1	4	.1	.1	2.8	-1.2	1.5	.4	2.5
1996	-1.0	1.3	3	.8	.6	.6	5	.4	.4	4	.7	.5	5	6.6	2.0	2.9	1.7
1997	.0	.9	.4	2	.3	.2	.6	.7	.6	.7	.6	.1	5.1	2.5	6.4	7.5	4.2
1998	.3	.0	.0	.2	.6	9	7	1.9	6	.5	3	.1	2.0	.7	3	2.3	3.0
1999	.2 3	.1 .0	1	1	.6	5	.3 4	.4 5	5 .3	1.2	.2 2	.5 5	.7	.3 1.6	1.0 -3.1	5.5 -2.7	1.1
2000 2001	7	5	.1	.4 2	1 6	1 5	4	5	4	4 5	2	1	-5.9	-4.5	-4.4	-4.5	-4.0
												.1					
2002 2003	.7 .6	1 .1	.8 3	.4 9	.5 1	.9 1	3 .4	1 4	.1 .5	3 .0	.5 .7	6 1	2.6 1.5	6.4 -4.7	1.8 .9	8 2.4	.3
2003	.0	.1	6	9	1	1	.4	4	.0	1.0	.2	1	2.1	2.0	2.1	5.2	1.7
2005	.4	.6	2	.0	.1	.4	3	.0	-2.2	1.0	1.0	.5	4.8	1.3	-3.0	2.1	2.5
2006	.1	.0	.2	.4	2	.3	.0	.2	3	1	2	1.0	3.4	1.9	.7	.1	1.4
2007	5	1.0	1	.6	.1	.1	.0	.1	.3	7	.4	1	3.0	4.0	1.1	-1.0	1.8
2008	3	4	4	8	6	2	4	-1.6	-4.3	1.1	-1.1	-2.7	-2.5	-6.4	-12.3	-14.9	-4.2
2009	-2.2	7	-1.6	9	-1.1	4	1.0	1.0	.7	.3	.3	.3	-19.7	-11.7	5.0	5.8	-11.3
2010	1.1	.1	.6	.3	1.6	.2	.6	.2	.2	4	.1	.8	7.2	7.9	6.2	.7	5.0
2011	.0	6	1.1	5	.3	.2	.7	.4	.1	.6	.1	.4	1.8	1.1	5.0	3.8	2.9
2012	.9	.3	5	.8	.3	.0	.6	6	.2	2	1.0	.1	4.9	3.0	1.3	1.8	3.5
2013	.0	.7	.4	2	.1	.2	2	.5	.8	.1	.6	.2	4.3	1.6	2.3	5.0	2.6
2014	3	.9	.8	.0	.4	.3	.3	2	1.0				3.9	5.1	3.3		
IP (2007=100)																	
2012	94.1	94.4	94.0	94.7	95.0	95.0	95.5	94.9	95.1	95.0	95.9	96.0	94.2	94.9	95.2	95.6	95.0
2013 2014	96.1 98.8	96.7 99.7	97.1 100.6	96.9 100.6	97.0 101.0	97.2 101.3	97.0 101.6	97.5 101.4	98.2 102.4	98.3	98.9	99.1	96.6 99.7	97.0 101.0	97.6 101.8	98.8	97.5
Capacity (percent of 2007 output)																	
2012	121.4	121.6	121.8	122.0	122.2	122.4	122.6	122.8	123.0	123.2	123.4	123.5	121.6	122.2	122.8	123.4	122.5
2013	123.7	123.8	124.0	124.2	124.3	124.5	124.7	124.9	125.1	125.3	125.6	125.8	123.8	124.3	124.9	125.6	124.7
2014	126.1	126.3	126.6	126.9	127.2	127.6	127.9	128.2	128.5				126.4	127.2	128.2		
Utilization (percent)																	
1992	79.2	79.7	80.2	80.6	80.8	80.5	81.1	80.6	80.6	81.0	81.2	81.1	79.7	80.6	80.8	81.1	80.6
1993	81.4	81.6	81.4	81.6	81.1	81.2	81.4	81.2	81.4	81.9	82.1	82.4	81.5	81.3	81.3	82.1	81.6
1994	82.6	82.5	83.1	83.2	83.4	83.8	83.6	83.8	83.7	84.1	84.3	84.9	82.7	83.5	83.7	84.4	83.6
1995	84.9	84.5	84.3	83.9	83.8	83.8	83.2	83.9	83.8	83.3	83.3	83.2	84.6	83.8	83.6	83.3	83.8
1996	82.3	83.2	82.8	83.3	83.6	84.0	83.4	83.6	83.8	83.3	83.7	83.9	82.8	83.7	83.6	83.6	83.4
1997	83.6	84.1	84.2	83.7	83.7	83.6	83.9	84.1	84.3	84.6	84.8	84.6	84.0	83.7	84.1	84.7	84.1
1998	84.5	84.1	83.8	83.6	83.8	82.7	81.8	83.1	82.4	82.6	82.1	81.9	84.1	83.4	82.5	82.2	83.0
1999	81.8	81.7	81.5	81.2	81.5	80.9	81.0	81.1	80.6	81.5	81.5	81.8 79.3	81.7	81.2	80.9	81.6	81.3
2000 2001	81.4 78.7	81.3 78.2	81.3 77.9	81.6 77.7	81.4 77.1	81.2 76.6	80.8 76.2	80.3 76.0	80.4 75.7	80.0 75.2	79.8 74.8	79.5	81.4 78.2	81.4 77.1	80.5 76.0	79.7 74.9	80.7
2002 2003	75.1 77.0	74.9 77.1	75.5 76.9	75.8 76.3	76.1 76.3	76.8 76.2	76.6 76.6	76.5 76.3	76.6 76.8	76.4 76.7	76.8 77.3	76.4 77.2	75.2	76.2 76.3	76.6 76.6	76.5 77.1	76.1
2003	77.4	77.9	76.9	76.3	78.5	76.2	78.5	78.5	78.6	79.3	79.5	80.0	77.6	78.0	78.5	79.6	78.4
2005	80.3	80.7	80.6	80.6	80.6	80.8	80.5	80.5	78.6	79.4	80.1	80.4	80.5	80.7	79.8	80.0	80.3
2006	80.4	80.3	80.3	80.5	80.2	80.3	80.2	80.3	79.9	79.7	79.5	80.2	80.3	80.3	80.1	79.8	80.1
2007	79.7	80.4	80.3	80.7	80.7	80.8	80.8	80.9	81.2	80.7	81.0	81.0	80.1	80.8	81.0	80.9	80.7
2008	80.8	80.5	80.3	79.6	79.2	79.0	78.6	77.3	73.9	74.6	73.7	71.7	80.5	79.3	76.6	73.3	77.4
2009	70.0	69.4	68.3	67.6	66.9	66.7	67.4	68.2	68.8	69.1	69.5	69.9	69.2	67.1	68.1	69.5	68.5
2010	70.9	71.1	71.8	72.2	73.5	73.8	74.4	74.8	75.0	74.9	75.0	75.7	71.3	73.2	74.7	75.2	73.6
2011	75.7	75.3	76.0	75.7	75.9	76.0	76.4	76.6	76.6	76.9	76.9	77.0	75.7	75.8	76.6	76.9	76.2
2012	77.6	77.7	77.2	77.6	77.7	77.6	77.9	77.3	77.3	77.1	77.8	77.7	77.5	77.6	77.5	77.5	77.5
2013 2014	77.7	78.1 78.9	78.3 79.4	78.0 79.3	78.0 79.4	78.0 79.4	77.8 79.4	78.1 79.1	78.5 79.7	78.4	78.7	78.8	78.0	78.0 79.4	78.1 79.4	78.6	78.2
2014	/0.4	10.9	19.4	19.5	/9.4	/9.4	/9.4	/9.1	19.1				/0.9	19.4	19.4		
	1										-		1				1

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.

Seasonally adjusted	0,																
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
change) ³																	
1992	9	.9	1.0	.4	.5	.1	.9	5	1	.5	.3	2	-1.2	7.0	2.8	1.5	2.6
1993 1994	1.1	.1 .1	3 1.1	.5 .6	1 .5	2 .2	.2 .2	3 .6	.5 .2	.8 .7	.3 .6	.5 .9	4.0 4.0	.5 7.1	.2 3.8	6.0 7.0	2.5 4.4
1995	.1	4	1	4	1	.2	8	.0	.2	4	1	.)	2.7	-2.3	.3	.7	2.5
1996	-1.2	1.3	4	1.0	.6	.8	1	.3	.6	5	.7	.7	-2.0	7.4	4.0	2.6	1.5
1007			0		~		_	0	~	-	0	1	()	2.0	7.0	7.0	1.0
1997 1998	1	1.1 1	.8 3	6 .2	.5 .4	.4 -1.2	.5 8	.9 2.3	.5 7	.7 .7	.8 1	.1 .2	6.2 3.3	2.9 3	7.0 6	7.9 4.1	4.9 3.4
1999	1	.4	4	1	.4	-1.2	.0	.6	7	1.4	.3	.2	.8	.3	.2	6.7	1.4
2000	3	2	.3	.4	6	.0	2	-1.0	.3	4	6	8	.2	.7	-3.8	-4.7	.7
2001	6	5	3	1	7	6	2	5	2	7	2	.2	-7.0	-4.5	-4.6	-4.2	-4.8
2002	.6	2	.8	.2	.6	1.1	4	.1	.1	4	.4	6	3.2	5.7	2.5	-1.1	.4
2002	.0	2	.1	-1.0	1	.2	.2	7	.7	4	.9	3	.5	-4.0	.2	2.6	.4
2004	1	.7	2	.4	.8	8	1.0	.4	1	1.0	1	.6	1.6	3.3	3.7	4.9	2.0
2005	.6	.7	5	.2	.3	.1	4	.2	-1.4	1.5	.7	.0	5.2	1.3	-2.0	4.4	3.1
2006	.8	3	1	.5	6	.2	3	.5	1	4	.0	1.5	3.3	.1	2	.6	1.5
2007	6	.3	.6	.5	.0	.5	.2	5	.3	6	.3	.0	3.2	4.7	1.0	-1.6	1.8
2008	5	8	4	-1.2	6	6	-1.1	-1.3	-3.5	4	-2.1	-3.2	-4.3	-9.2	-13.7	-20.5	-5.8
2009	-2.9	3	-2.0	9	-1.2	3	1.4	1.0	.8	.1	1.0	2	-23.8	-12.1	6.8	6.2	-13.8
2010 2011	1.0	3 .0	1.2 .7	.9 7	1.5 .2	.0	.8 .9	.0	.0	.0 .6	.0 1	.2 .7	5.4 2.0	10.4 1	5.3 5.2	.6 4.3	5.1 2.8
2011	.1	.0	./	/	.∠	.1	.9	.∠	.4	.0	1	./	2.0	1	3.2	4.3	2.0
2012	1.1	.5	4	.7	3	.3	.4	5	.1	6	1.3	.7	7.0	1.9	.8	1.7	3.7
2013	3	.7	.1	3	.2	.3	5	.7	.3	.3	.3	.2	4.6	.8	1.6	4.3	2.3
2014	-1.1	1.3	.8	.3	.3	.3	.8	5	.4				1.3	6.3	3.6		
IP (2007=100)																	
2012	90.3	90.8	90.4	91.0	90.8	91.0	91.4	90.9	91.0	90.5	91.7	92.4	90.5	90.9	91.1	91.5	91.0
2013	92.1	92.7	92.8	92.5	92.7	93.0	92.6	93.2	93.5	93.8	94.1	94.3	92.5	92.7	93.1	94.1	93.1
2014	93.3	94.5	95.3	95.6	95.8	96.1	96.9	96.4	96.8				94.4	95.9	96.7		
Capacity																	
(percent of																	
2007 output)	110.0	110.4	110 5	110 5	110.0	120.0	120.1	120.2	120 5	120 6	100.0	120.0	110.4	110.0	120.2	120.0	120.1
2012 2013	119.3 121.1	119.4 121.3	119.5 121.4	119.7 121.6	119.8 121.7	120.0 121.9	120.1 122.1	120.3 122.2	120.5 122.4	120.6 122.6	120.8 122.8	120.9 123.0	119.4 121.3	119.8 121.7	120.3 122.2	120.8 122.8	120.1 122.0
2013	121.1	121.3	121.4	121.0	121.7	121.9	122.1	122.2	122.4	122.0	122.0	123.0	121.3	121.7	122.2	122.0	122.0
Utilization																	
(percent) 1992	78.0	78.6	79.3	79.5	79.8	79.8	80.3	79.8	79.6	79.9	80.0	79.8	78.6	79.7	79.9	79.9	79.5
1993	80.5	80.5	80.2	80.5	80.3	80.0	80.2	79.9	80.2	80.8	81.0	81.3	80.4	80.3	80.1	81.0	80.4
1994	81.3	81.2	82.1	82.4	82.7	82.7	82.8	83.1	83.1	83.5	83.8	84.5	81.5	82.6			82.8
1995	84.4	83.9	83.7	83.2	82.9	83.0	82.1	00 (00.0					62.0	83.0	83.9	02.0
1996	80.9	0: -						82.6	82.9	82.4	82.1	82.0	84.0	83.0	82.5	82.2	82.9
1997		81.7	81.2	81.9	82.2	82.6	82.4	82.6	82.9 82.7	82.4 82.0	82.1 82.4						
1998	82.3	81.7 82.9										82.0	84.0	83.0	82.5	82.2	82.9
	83.5	82.9 83.1	81.2 83.3 82.6	81.9 82.5 82.4	82.2 82.6 82.4	82.6 82.6 81.2	82.4 82.6 80.2	82.4 83.0 81.8	82.7 83.1 80.9	82.0 83.3 81.2	82.4 83.7 80.9	82.0 82.7 83.4 80.8	84.0 81.3 82.8 83.1	83.0 82.2 82.5 82.0	82.5 82.5 82.9 81.0	82.2 82.3 83.5 80.9	82.9 82.1 82.9 81.7
1999	83.5 80.5	82.9 83.1 80.6	81.2 83.3 82.6 80.0	81.9 82.5 82.4 79.8	82.2 82.6 82.4 80.2	82.6 82.6 81.2 79.4	82.4 82.6 80.2 79.3	82.4 83.0 81.8 79.6	82.7 83.1 80.9 79.0	82.0 83.3 81.2 80.0	82.4 83.7 80.9 80.1	82.0 82.7 83.4 80.8 80.2	84.0 81.3 82.8 83.1 80.4	83.0 82.2 82.5 82.0 79.8	82.5 82.5 82.9 81.0 79.3	82.2 82.3 83.5 80.9 80.1	82.9 82.1 82.9 81.7 79.9
1999 2000	83.5 80.5 79.9	82.9 83.1 80.6 79.6	81.2 83.3 82.6 80.0 79.7	81.9 82.5 82.4 79.8 79.9	82.2 82.6 82.4 80.2 79.4	82.6 82.6 81.2 79.4 79.2	82.4 82.6 80.2 79.3 79.0	82.4 83.0 81.8 79.6 78.1	82.7 83.1 80.9 79.0 78.2	82.0 83.3 81.2 80.0 77.8	82.4 83.7 80.9 80.1 77.3	82.0 82.7 83.4 80.8 80.2 76.5	84.0 81.3 82.8 83.1 80.4 79.7	83.0 82.2 82.5 82.0 79.8 79.5	82.5 82.5 82.9 81.0 79.3 78.4	82.2 82.3 83.5 80.9 80.1 77.2	82.9 82.1 82.9 81.7 79.9 78.7
1999	83.5 80.5	82.9 83.1 80.6	81.2 83.3 82.6 80.0	81.9 82.5 82.4 79.8	82.2 82.6 82.4 80.2	82.6 82.6 81.2 79.4	82.4 82.6 80.2 79.3	82.4 83.0 81.8 79.6	82.7 83.1 80.9 79.0	82.0 83.3 81.2 80.0	82.4 83.7 80.9 80.1	82.0 82.7 83.4 80.8 80.2	84.0 81.3 82.8 83.1 80.4	83.0 82.2 82.5 82.0 79.8	82.5 82.5 82.9 81.0 79.3	82.2 82.3 83.5 80.9 80.1	82.9 82.1 82.9 81.7 79.9
1999 2000 2001 2002	83.5 80.5 79.9 76.0 73.1	82.9 83.1 80.6 79.6 75.5 73.0	81.2 83.3 82.6 80.0 79.7 75.2 73.5	81.9 82.5 82.4 79.8 79.9 75.1 73.7	82.2 82.6 82.4 80.2 79.4 74.5 74.1	82.6 82.6 81.2 79.4 79.2 74.0 75.0	82.4 82.6 80.2 79.3 79.0 73.8 74.7	82.4 83.0 81.8 79.6 78.1 73.4 74.8	82.7 83.1 80.9 79.0 78.2 73.2 74.9	82.0 83.3 81.2 80.0 77.8 72.7 74.6	82.4 83.7 80.9 80.1 77.3 72.5 74.9	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3	82.5 82.5 82.9 81.0 79.3 78.4 73.5 74.8	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2
1999 2000 2001 2002 2003	83.5 80.5 79.9 76.0 73.1 74.9	82.9 83.1 80.6 79.6 75.5 73.0 74.9	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0	81.9 82.5 82.4 79.8 79.9 75.1 73.7 74.2	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.2	82.6 82.6 81.2 79.4 79.2 74.0 75.0 74.4	82.4 82.6 80.2 79.3 79.0 73.8 74.7 74.6	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3 74.3	82.5 82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7
1999 2000 2001 2002 2003 2004	83.5 80.5 79.9 76.0 73.1 74.9 75.2	82.9 83.1 80.6 79.6 75.5 73.0 74.9 75.7	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0 75.6	81.9 82.5 82.4 79.8 79.9 75.1 73.7 74.2 76.0	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.2 76.6	82.6 82.6 81.2 79.4 79.2 74.0 75.0 74.4 76.1	82.4 82.6 80.2 79.3 79.0 73.8 74.7 74.6 76.8	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1 77.1	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7 77.1	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6 74.6 77.8	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4 77.7	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2 78.2	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9 75.5	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3 74.3 76.2	82.5 82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4 77.0	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1 77.9	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7 76.7
1999 2000 2001 2002 2003 2004 2005	83.5 80.5 79.9 76.0 73.1 74.9 75.2 78.6	82.9 83.1 80.6 79.6 75.5 73.0 74.9 75.7 79.1	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0 75.6 78.6	81.9 82.5 82.4 79.8 79.9 75.1 73.7 74.2 76.0 78.7	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.2 76.6 78.8	82.6 82.6 81.2 79.4 79.2 74.0 75.0 74.4 76.1 78.8	82.4 82.6 80.2 79.3 79.0 73.8 74.7 74.6 76.8 78.4	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1 77.1 78.4	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7 77.1 77.2	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6 74.6 77.8 78.2	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4 77.7 78.7	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2 78.2 78.6	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9 75.5 78.8	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3 74.3 74.3 76.2 78.8	82.5 82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4 77.0 78.0	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1 77.9 78.5	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7 76.7 78.5
1999 2000 2001 2002 2003 2004	83.5 80.5 79.9 76.0 73.1 74.9 75.2	82.9 83.1 80.6 79.6 75.5 73.0 74.9 75.7 79.1 78.7	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0 75.6	81.9 82.5 82.4 79.8 79.9 75.1 73.7 74.2 76.0 78.7 78.7	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.5 74.1 74.2 76.6 78.8 78.2	82.6 82.6 81.2 79.4 79.2 74.0 75.0 74.4 76.1 78.8 78.3	82.4 82.6 80.2 79.3 79.0 73.8 74.7 74.6 76.8	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1 77.1	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7 77.1	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6 74.6 77.8	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4 77.7	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2 78.2	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9 75.5 78.8 78.7	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3 74.3 76.2	82.5 82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4 77.0	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1 77.9	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7 76.7
1999 2000 2001 2002 2003 2004 2005 2006 2007	83.5 80.5 79.9 76.0 73.1 74.9 75.2 78.6 79.1 78.0	82.9 83.1 80.6 79.6 75.5 73.0 74.9 75.7 79.1 78.7 78.2	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0 75.6 78.6 78.5 78.6	81.9 82.5 82.4 79.8 79.9 75.1 73.7 74.2 76.0 78.7 78.7 78.9	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.2 76.6 78.8 78.2 78.9	82.6 82.6 81.2 79.4 79.2 74.0 75.0 74.4 76.1 78.8 78.3 79.2	82.4 82.6 80.2 79.3 79.0 73.8 74.7 74.6 76.8 78.4 77.9 79.3	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1 77.1 78.4 78.2 78.8	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7 77.1 77.1 77.2 78.0 79.1	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6 74.6 74.6 77.8 78.2 77.6 78.5	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4 77.7 78.7 77.5 78.7	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2 78.6 78.6 78.6 78.7	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9 75.5 78.8 78.7 78.3	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3 74.3 76.2 78.8 78.4 79.0	82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4 77.0 78.0 78.0 78.0 79.1	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1 77.9 78.5 77.9 78.7	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7 76.7 78.5 78.3 78.3
1999 2000 2001 2002 2003 2004 2005 2006 2006 2007 2008	83.5 80.5 79.9 76.0 73.1 74.9 75.2 78.6 79.1 78.0 78.3	82.9 83.1 80.6 79.6 75.5 73.0 74.9 75.7 79.1 78.7 78.2 77.7	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0 75.6 78.6 78.6 78.6 77.4	81.9 82.5 82.4 79.8 79.9 75.1 73.7 74.2 76.0 78.7 78.7 78.9 76.4	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.2 76.6 78.8 78.2 78.9 76.0	82.6 82.6 81.2 79.4 79.2 74.0 75.0 74.4 76.1 78.8 78.3 79.2 75.6	82.4 82.6 80.2 79.3 79.0 73.8 74.7 74.6 76.8 78.4 77.9 79.3 74.8	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1 77.1 78.4 78.2 78.8 74.0	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7 77.1 77.2 78.0 79.1 71.4	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6 74.6 74.6 77.8 78.2 77.6 78.5 71.2	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4 77.7 78.7 77.5 78.7 69.8	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2 78.2 78.6 78.6 78.6 78.7 67.7	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9 75.5 78.8 78.7 78.3 77.8	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3 74.3 74.3 76.2 78.8 78.4 79.0 76.0	82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4 77.0 78.0 78.0 78.0 79.1 73.4	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1 77.9 78.5 77.9 78.7 69.6	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7 76.7 78.5 78.3 78.7 74.2
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	83.5 80.5 79.9 76.0 73.1 74.9 75.2 78.6 79.1 78.0 78.3 65.8	82.9 83.1 80.6 79.6 75.5 73.0 74.9 75.7 79.1 78.7 78.2 77.7 65.7	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0 75.6 78.6 78.6 78.6 78.6 77.4 64.5	81.9 82.5 82.4 79.8 79.9 75.1 73.7 74.2 76.0 78.7 78.7 78.9 76.4 64.1	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.2 76.6 78.8 78.2 78.9 76.0 63.5	82.6 82.6 81.2 79.4 79.2 74.0 75.0 74.4 76.1 78.8 78.3 79.2 75.6 63.5	82.4 82.6 80.2 79.3 79.0 73.8 74.7 74.6 76.8 78.4 77.9 79.3 74.8 64.5	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1 77.1 78.4 78.2 78.8 74.0 65.3	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7 77.1 77.2 78.0 79.1 71.4 66.0	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6 74.6 77.8 78.2 77.6 78.5 71.2 66.2	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4 77.7 78.7 77.5 78.7 78.7 69.8 67.0	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2 78.6 78.6 78.6 78.6 78.7 67.7 67.7	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9 75.5 78.8 78.7 78.3 77.8 65.3	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3 74.3 74.3 76.2 78.8 78.4 79.0 76.0 63.7	82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4 77.0 78.0 78.0 78.0 79.1 73.4 65.3	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1 77.9 78.5 77.9 78.7 69.6 66.8	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7 76.7 78.5 78.3 78.7 74.2 65.3
1999 2000 2001 2002 2003 2004 2005 2006 2006 2007 2008	83.5 80.5 79.9 76.0 73.1 74.9 75.2 78.6 79.1 78.0 78.3	82.9 83.1 80.6 79.6 75.5 73.0 74.9 75.7 79.1 78.7 78.2 77.7	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0 75.6 78.6 78.6 78.6 77.4	81.9 82.5 82.4 79.8 79.9 75.1 73.7 74.2 76.0 78.7 78.7 78.9 76.4	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.2 76.6 78.8 78.2 78.9 76.0	82.6 82.6 81.2 79.4 79.2 74.0 75.0 74.4 76.1 78.8 78.3 79.2 75.6	82.4 82.6 80.2 79.3 79.0 73.8 74.7 74.6 76.8 78.4 77.9 79.3 74.8	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1 77.1 78.4 78.2 78.8 74.0	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7 77.1 77.2 78.0 79.1 71.4	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6 74.6 74.6 77.8 78.2 77.6 78.5 71.2	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4 77.7 78.7 77.5 78.7 69.8	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2 78.2 78.6 78.6 78.6 78.7 67.7	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9 75.5 78.8 78.7 78.3 77.8	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3 74.3 74.3 76.2 78.8 78.4 79.0 76.0	82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4 77.0 78.0 78.0 78.0 79.1 73.4	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1 77.9 78.5 77.9 78.7 69.6	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7 76.7 78.5 78.3 78.7 74.2
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011	83.5 80.5 79.9 76.0 73.1 74.9 75.2 78.6 79.1 78.0 78.3 65.8 67.9 72.7	82.9 83.1 80.6 79.6 75.5 73.0 74.9 75.7 79.1 78.7 78.2 77.7 67.8 72.7	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0 75.6 78.6 78.6 78.6 77.4 64.5 68.8 8 73.4	81.9 82.5 82.4 79.9 75.1 73.7 74.2 76.0 78.7 78.7 78.7 78.9 76.4 64.1 69.5 72.9	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.2 76.6 78.8 78.2 78.9 76.0 63.5 70.7 73.1	82.6 81.2 79.4 79.2 74.0 75.0 74.4 76.1 78.8 78.3 79.2 75.6 63.5 70.9 73.2	82.4 82.6 80.2 79.0 73.8 74.7 74.6 76.8 78.4 77.9 79.3 74.8 64.5 71.6 73.9	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1 77.1 78.4 78.2 78.8 74.0 65.3 71.8 74.0	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7 77.1 77.2 78.0 79.1 71.4 66.0 71.9 74.3	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6 74.6 74.6 74.6 77.8 78.5 71.2 66.2 72.1 74.7	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4 77.7 78.7 77.5 78.7 69.8 67.0 72.2 74.6	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2 78.2 78.6 78.6 78.6 78.7 67.7 67.7 67.1 72.5 75.0	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9 75.5 78.8 78.8 78.3 77.8 65.3 68.2 72.9	83.0 82.2 82.5 82.0 79.8 79.5 74.3 74.3 74.3 76.2 78.8 78.4 79.0 76.0 76.0 63.7 70.4 73.1	82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4 77.0 78.0 78.0 78.0 78.0 79.1 73.4 65.3 71.7 74.1	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1 77.9 78.5 77.9 78.7 69.6 66.8 72.3 74.7	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7 76.7 78.5 78.3 78.7 74.2 65.3 70.6 73.7
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	83.5 80.5 79.9 76.0 73.1 74.9 75.2 78.6 79.1 78.0 78.3 65.8 67.9 72.7 75.7	82.9 83.1 80.6 79.6 75.5 73.0 74.9 75.7 79.1 78.7 78.7 78.2 77.7 65.7 67.8 72.7 76.1	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0 75.6 78.6 78.6 78.5 78.6 77.4 64.5 68.8 73.4 75.6	81.9 82.5 82.4 79.9 75.1 73.7 74.2 76.0 78.7 78.7 78.7 78.7 78.9 76.4 64.1 69.5 72.9 76.1	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.2 76.6 78.8 78.2 78.9 76.0 63.5 70.7 73.1 75.7	82.6 82.6 81.2 79.4 79.2 74.0 75.0 74.4 76.1 78.8 78.3 79.2 75.6 63.5 70.9 73.2 75.9	82.4 82.6 80.2 79.3 79.0 73.8 74.7 74.6 76.8 78.4 77.9 79.3 74.8 64.5 71.6 73.9 76.1	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1 77.1 78.4 78.2 78.8 74.0 65.3 71.8 74.0 75.6	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7 77.1 77.2 78.0 79.1 71.4 66.0 71.9 74.3 75.5	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6 74.6 77.8 78.2 77.6 78.5 71.2 66.2 72.1 74.7 75.0	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4 77.7 78.7 78.7 69.8 67.0 72.2 74.6 75.9	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2 78.2 78.6 78.6 78.6 78.7 67.7 67.1 72.5 75.0 76.4	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9 75.5 78.8 78.7 78.3 77.8 65.3 68.2 72.9 75.8	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3 74.3 74.3 74.3 76.2 78.8 78.4 79.0 76.0 63.7 70.4 73.1 75.9	82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4 77.0 78.0 78.0 78.0 79.1 73.4 65.3 71.7 74.1 75.7	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1 77.9 78.5 77.9 78.7 69.6 66.8 72.3 74.7 75.8	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7 76.7 78.5 78.3 78.5 78.3 78.7 74.2 65.3 70.6 73.7 75.8
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2011 2012 2013	83.5 80.5 79.9 76.0 73.1 74.9 75.2 78.6 79.1 78.0 78.3 65.8 67.9 72.7 75.7 76.1	82.9 83.1 80.6 79.6 75.5 73.0 74.9 75.7 79.1 78.7 78.2 77.7 65.7 67.8 72.7 76.1 76.5	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0 75.6 78.6 78.6 78.5 78.6 77.4 64.5 68.8 73.4 75.6 76.4	81.9 82.5 82.4 79.8 79.9 75.1 73.7 74.2 76.0 78.7 78.7 78.7 78.9 76.4 64.1 69.5 72.9 76.1 76.1	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.2 76.6 78.8 78.2 78.9 76.0 63.5 70.7 73.1 75.7 76.1	82.6 82.6 81.2 79.4 79.2 74.0 75.0 74.4 76.1 78.8 78.3 79.2 75.6 63.5 70.9 73.2 75.9 76.3	82.4 82.6 80.2 79.3 79.0 73.8 74.7 74.6 76.8 78.4 77.9 79.3 74.8 64.5 71.6 73.9 76.1 75.8	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1 77.1 78.4 78.2 78.8 74.0 65.3 71.8 74.0 75.6 76.3	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7 77.1 77.1 77.2 78.0 79.1 71.4 66.0 71.9 74.3 75.5 76.4	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6 74.6 74.6 74.6 77.8 78.5 71.2 66.2 72.1 74.7	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4 77.7 78.7 77.5 78.7 69.8 67.0 72.2 74.6	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2 78.2 78.6 78.6 78.6 78.7 67.7 67.7 67.1 72.5 75.0	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9 75.5 78.8 78.7 78.3 77.8 65.3 68.2 72.9 75.8 76.3	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3 74.3 74.3 76.2 78.8 78.4 79.0 76.0 63.7 70.4 73.1 75.9 76.2	82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4 77.0 78.0 78.0 78.0 78.0 79.1 73.4 65.3 71.7 74.1 75.7 76.2	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1 77.9 78.5 77.9 78.7 69.6 66.8 72.3 74.7	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7 76.7 78.5 78.3 78.7 74.2 65.3 70.6 73.7
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	83.5 80.5 79.9 76.0 73.1 74.9 75.2 78.6 79.1 78.0 78.3 65.8 67.9 72.7 75.7	82.9 83.1 80.6 79.6 75.5 73.0 74.9 75.7 79.1 78.7 78.7 78.2 77.7 65.7 67.8 72.7 76.1	81.2 83.3 82.6 80.0 79.7 75.2 73.5 75.0 75.6 78.6 78.6 78.5 78.6 77.4 64.5 68.8 73.4 75.6	81.9 82.5 82.4 79.9 75.1 73.7 74.2 76.0 78.7 78.7 78.7 78.7 78.9 76.4 64.1 69.5 72.9 76.1	82.2 82.6 82.4 80.2 79.4 74.5 74.1 74.2 76.6 78.8 78.2 78.9 76.0 63.5 70.7 73.1 75.7	82.6 82.6 81.2 79.4 79.2 74.0 75.0 74.4 76.1 78.8 78.3 79.2 75.6 63.5 70.9 73.2 75.9	82.4 82.6 80.2 79.3 79.0 73.8 74.7 74.6 76.8 78.4 77.9 79.3 74.8 64.5 71.6 73.9 76.1	82.4 83.0 81.8 79.6 78.1 73.4 74.8 74.1 77.1 78.4 78.2 78.8 74.0 65.3 71.8 74.0 75.6	82.7 83.1 80.9 79.0 78.2 73.2 74.9 74.7 77.1 77.2 78.0 79.1 71.4 66.0 71.9 74.3 75.5	82.0 83.3 81.2 80.0 77.8 72.7 74.6 74.6 74.6 77.8 78.2 77.6 78.5 71.2 66.2 72.1 74.7 75.0	82.4 83.7 80.9 80.1 77.3 72.5 74.9 75.4 77.7 78.7 78.7 69.8 67.0 72.2 74.6 75.9	82.0 82.7 83.4 80.8 80.2 76.5 72.6 74.6 75.2 78.2 78.6 78.6 78.6 78.7 67.7 67.1 72.5 75.0 76.4	84.0 81.3 82.8 83.1 80.4 79.7 75.6 73.2 74.9 75.5 78.8 78.7 78.3 77.8 65.3 68.2 72.9 75.8	83.0 82.2 82.5 82.0 79.8 79.5 74.5 74.3 74.3 74.3 74.3 76.2 78.8 78.4 79.0 76.0 63.7 70.4 73.1 75.9	82.5 82.9 81.0 79.3 78.4 73.5 74.8 74.4 77.0 78.0 78.0 78.0 78.0 79.1 73.4 65.3 71.7 74.1 75.7	82.2 82.3 83.5 80.9 80.1 77.2 72.6 74.7 75.1 77.9 78.5 77.9 78.7 69.6 66.8 72.3 74.7 75.8	82.9 82.1 82.9 81.7 79.9 78.7 74.1 74.2 74.7 76.7 78.5 78.3 78.5 78.3 78.7 74.2 65.3 70.6 73.7 75.8

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/About.htm**. 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 website (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 6 percent. If output in this industry increased 10 percent in a month, then this gain would boost growth in total IP by 6/10 percentage point (0.06 x 10% = 0.6%). To assist users with calculations, the Federal Reserve's website 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 72 percent of the source data (in value-added terms) are available; the fraction of available source data increases to 84 percent for estimates in the second month that the estimate is published, 94 percent in the third month, 95 percent in the fourth month. Data availability by data type in early 2014 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	32	44	54	55	57	58					
Production-worker hours	40	40	40	40	40	40					
IP data received	72	84	94	95	97	97					
IP data estimated	28	16	6	5	3	3					

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 (32 percent out of a total of 58 percent). Of the 32 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 2013; for other series, the factors were estimated with data through at least December 2012. 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 1987-2013 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 1987-2013 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. Čapacity 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 North American Industry Classification System (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 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 website (www.federalreserve.gov/releases/G17/Meth/MethCap.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 1972–2013 period, the average total industry utilization rate is 80.1 percent; for manufacturing, the average factory operating rate has been 78.7 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 28, 2014, 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 online staff studies (www.federalreserve.gov/releases/g17/articles/rev2010/industrial10.pdf, www.federalreserve.gov/releases/g17/articles/rev2012/industrial12.pdf,

www.federalreserve.gov/releases/g17/articles/rev2013/industrial13.pdf).

Release Schedule

At 9:15 a.m. on

2014: January 17, February 14, March 17, April 16, May 15, June 16, July 16, August 15, September 15, October 16, November 17, and December 15.

2015: January 16, February 18, March 16, April 15, May 15, June 15, July 15, August 14, September 15, October 16, November 17, and December 16.