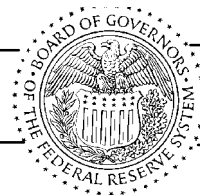

FEDERAL RESERVE statistical release



G.17 (419) 2011 Historical and Annual Revision

For release at 12:00 noon (EDT)
March 25, 2011

Industrial Production and Capacity Utilization: The 2011 Annual Revision

The Federal Reserve has revised its index of industrial production (IP) and the related measures of capacity and capacity utilization. Although the revisions affect these data for January 1972 through February 2011, the most significant effects are for the period from 2008 through 2010. Measured from fourth quarter to fourth quarter, total IP is now reported to have declined 1.4 percentage points and 1.7 percentage points more sharply in 2008 and in 2009, respectively, and to have risen 0.5 percentage point more rapidly in 2010. That said, the broad contour of total IP in recent years is similar to previous estimates, and the dates of the recent peak (September 2007) and the recent trough (June 2009) are unchanged from the earlier estimates. However, the peak-to-trough decline in total IP, at 17.1 percent, is 2.0 percentage points larger than previously estimated. As of February 2011, total IP is now shown to have reversed about 55 percent of its peak-to-trough decline, somewhat less than previously reported.

The revised IP indexes incorporate detailed data from the U.S. Census Bureau's 2009 Annual Survey of Manufactures (ASM), which showed a lower level of annual output than had been previously estimated. In addition to the 2009 ASM, data from selected editions of the Census Bureau's 2009 Current Industrial Reports and annual data from the U.S. Geological Survey regarding metallic and nonmetallic minerals (except fuels) for 2009 were used in the revised estimates. The monthly estimates of production were updated to incorporate late-arriving or revised monthly indicator data (either product data or input data), and they also reflect recalculations of seasonal factors.

The revisions show that the rate of capacity utilization for total industry was about $\frac{3}{4}$ percentage point lower than previously estimated in the fourth quarters of 2008 and 2009, as downward revisions to IP were only partly mirrored by downward revisions to estimates of industrial capacity. In contrast, overall capacity utilization in the fourth quarter of 2010, at 76.2 percent, was 0.6 percentage point higher than previously reported.

The revised estimates of capacity and capacity utilization incorporate data from the Census Bureau's Quarterly Survey of Plant Capacity for the fourth quarter of 2010, which covered the manufacturing sector, along with new data on capacity in the energy and mining sectors from the U.S. Geological Survey, the Department of Energy, and other organizations.

RESULTS OF THE REVISION

The tables show the summary statistics for the annual revision. Tables 1A and 1B present the monthly, quarterly, and annual average index levels for total IP and for total capacity and utilization for January 1981 through February 2011, along with the percentage changes in total IP. Tables 2 through 4 show the revised rates of change in IP from 2006 through 2010 for market groups, industry groups, special aggregates, and selected detail. Table 5 presents the revised rates of change in capacity by industry groups for the 2006–10 period. Tables 2 through 5 also show the differences between the revised and previous estimates of the rates of change. Table 6 contains the revised capacity utilization rates for the final quarters of 2007 through 2010 and the differences between the revised and previous estimates. Table 7 reports revised semiannual rates of change for industrial

production for 2006 through 2010. Table 8 contains revised capacity utilization rates for the second and fourth quarters of 2006 through 2010. Tables 9A, 9B, 10A, 10B, 11A, and 11B report the revised production, capacity, and utilization series for total manufacturing, total industry excluding selected high-technology industries, and manufacturing excluding selected high-technology industries. Table 12 displays the annual proportions in IP by market and industry groups for 2003 through 2010. Table 13 reports revised IP indexes and capacity utilization rates for the major market and industry groups for the most recent six months. Table 14 shows price indexes for data networking equipment.

Industrial Production

The changes in total IP were revised down for 2008 and 2009 (table 2), but the overall contour for IP during recent years was little changed—moderate gains in 2006 and 2007 are still followed by a steep drop in the index in 2008 and in the first half of 2009; the index still shows a solid gain in the second half of 2009 and in 2010.¹

Production by Industry Group

Manufacturing production expanded in 2006 and 2007 before contracting sharply in 2008 and in the first half of 2009; the gain in factory output in the second half of 2009 and in 2010 was nearly equivalent to its decline in the first half of 2009.² The drop in 2008 was widespread, as output fell for all major manufacturing industries; for most of these industries, the current estimates show steeper declines than were previously reported. The net decline in manufacturing for 2009 as a whole was also broadly based, and the current estimates show larger drops than those reported earlier. For durable goods industries as a whole, output posted a modest gain in 2006 and rose solidly in 2007; the increase over this period was revised up on balance. Durable goods output fell sharply in 2008 and 2009, and those declines are now reported to have been even steeper than previously estimated. For 2010, the production of durable goods moved up strongly, and the gain is now reported to have been a little stronger than the previous estimate. All major categories of durables posted increases in 2010, and, with only two exceptions (machinery, and computer and electronic products), these gains are now reported to have been faster than stated earlier.

Production in nondurable manufacturing industries advanced in 2006 and was little changed in 2007 before falling markedly in 2008 and then moving down modestly in the first half of 2009. Beginning in the second half of 2009, the output of nondurables advanced moderately; by the end of 2010, output was about 6 percent above the level at its 2009 trough but 9 percent below its 2007 level. The rates of change in nondurable production in 2006 and 2007 are nearly identical to previous reports, while the declines for 2008 and for 2009 as a whole are now reported to have been more steep. For the 2008–09 period, the downward revision was concentrated in the indexes for chemicals, for apparel and leather, and for textile and product mills. The bounceback in the output of nondurables in 2010 is a bit stronger than reported earlier.

The output index for industries not in the scope of manufacturing under the North American Industry Classification System (NAICS) (that is, logging and publishing) fell each year from 2006 through 2010. The declines are now reported to have been somewhat smaller in 2006, 2009, and 2010 but notably larger in 2007 and 2008. The index for mining moved up strongly in 2006, posted a much smaller gain in 2007, edged down in 2008, fell substantially in 2009, and then jumped in 2010. On net, the revisions to mining output show rates of change in 2006 and 2009 that are lower than previously reported and a gain in 2010 that is higher. The index for utilities is nearly unchanged from previous estimates, with the exception of 2010, which now shows a stronger gain than reported earlier.

¹In this section, all the rates of change for a full year are calculated from the fourth quarter of the previous year to the fourth quarter of the reference year. Rates of change on a half-year basis are shown in table 7.

²Manufacturing consists of those industries in the North American Industry Classification System definition of manufacturing, plus those industries—logging and newspaper, periodical, book, and directory publishing—that were in the manufacturing sector under the Standard Industrial Classification system.

The estimates for selected high-technology industries—computers and peripheral equipment, communications equipment, and semiconductors and related electronic components—were revised modestly, on net, over the 2006–10 period (table 3). Output in the high-technology sector is still reported to have posted robust gains in 2006 and 2007, followed by a decline in 2008. The output of high-technology industries turned up in 2009 and advanced further in 2010. The index for computers and peripheral equipment moved up in each year from 2006 through 2010, except in 2008, when it fell slightly. Relative to earlier estimates, production of computers in 2009 is now considerably stronger; revisions in other recent years are, on net, positive but much smaller. The index for communications equipment recorded a strong gain in 2006, but it fell substantially in 2007 and slipped more in 2008; the index was little changed in 2009 and advanced in 2010. The rates of change for communications equipment are now reported to have been weaker in each year from 2006 through 2010. The output of semiconductors and related electronic components moved up in 2006, 2007, 2009, and 2010 but moved down in 2008; the gain in 2007 was especially strong. These revisions over the 2006–10 period were fairly small, and the gains in 2009 and 2010 are now tempered relative to earlier estimates.

Production by Market Group

The production index for final products and nonindustrial supplies (table 2) posted modest gains in 2006 and 2007 and then fell markedly in 2008 and 2009 before reversing course in 2010. The declines in 2008 and 2009 are steeper than previously reported, and the gain in 2010 is now slightly larger than before.

The production of consumer goods edged higher in 2006 and fell a bit in 2007; it then moved down significantly in 2008 and declined further in 2009. The index moved up in 2010. Compared with previous estimates, output was revised down noticeably in 2008 and 2009; the revisions in other recent years were much smaller. The output of durable consumer goods was little changed, on net, from 2006 through 2007, then dropped steeply in 2008 and declined moderately in 2009; it posted a sizable gain in 2010. Overall revisions were small for the 2006–10 period. Among durable consumer goods, the revised index for automotive products declined sharply in 2008, although by less than reported earlier, and the rebound in 2009 is now larger than before. The index posted a solid gain in 2010. The index for appliances, furniture, and carpeting registered moderate declines in 2006 and 2007 but then tumbled in 2008 and 2009 before moving up somewhat last year. The declines in 2008 and 2009 are now even bigger than reported earlier.

The index for consumer nondurables rose modestly in 2006 and then declined in each of the next three years before moving up in 2010. Relative to earlier reports, the declines are now steeper. The rates of change in the index for consumer nondurable non-energy goods display a similar pattern; the index was little revised in 2006 and 2007, was revised down in 2008 and 2009, and was revised up in 2010. The largest revision occurred in the production of clothing, which is now shown to have fallen substantially more steeply, on net, for 2006 through 2009. The index for consumer energy products posted gains from 2006 through 2008 and did so again in 2010, but it was little changed in 2009.

The production of business equipment increased strongly in 2006, rose modestly in 2007, fell sharply in 2008 and again in 2009, and then moved up significantly in 2010. Relative to previous estimates, the declines in the index were steeper in 2008 and 2009; on net, the revisions to other recent years were small. Among its components, the output index for transit equipment rose solidly in 2006 and 2007 before plummeting in 2008; the drop in 2008 was due partly to weakness in the motor vehicle industry and partly to a strike at a major aircraft producer in the second half of that year. Production advanced markedly in 2009 and 2010, and both estimates—especially the one for 2010—are stronger than reported earlier. The production of information processing equipment expanded in each year from 2006 through 2010, except in 2008, when it posted a modest decline; on net, the rates of change for this market group were revised down. The production of defense and space equipment is now estimated to have risen every year in the 2006–10 period. The rates of change are now

noticeably stronger in 2007, 2008, and 2010, and they are moderately weaker in 2006 and 2009.

The output of construction supplies fell modestly in 2006 and 2007 and declined very steeply in 2008 and 2009; in 2010, the index recovered some of the heavy losses from earlier years. Relative to previous estimates, the decreases in 2008 and 2009 are now even greater than reported earlier, and the gain in 2010 is stronger. The production of business supplies rose modestly in 2006 and 2007, tumbled in 2008 and 2009, and then moved up somewhat in 2010. The revisions in this category were relatively small in most years.

The index for materials posted gains in 2006 and 2007 before falling over the next two years and then turning back up again last year. The revisions to the change in output of materials show larger drops in 2008 and 2009, and larger gains in 2007 and 2010, than were reported earlier. Up through 2008, the indexes for durable and nondurable materials show similar patterns: Moderate gains in 2006 and 2007 were followed by steep declines in 2008. In 2009, the output of durable materials continued to contract sharply, but then it rebounded strongly in 2010. The production of nondurable materials was unchanged in 2009 and rose moderately in 2010. Revisions to the indexes for durable and nondurable materials show similar patterns in recent years; most notably, the rates of change for both indexes are lower in 2008, and especially in 2009, than reported earlier. The index for energy materials moved up in 2006 and 2007, declined modestly in 2008 and 2009, and increased sharply in 2010. On net, revisions over the 2006–10 period were negative.

Capacity

Total industrial capacity edged up in 2008 and then declined noticeably in 2009 and 2010 (table 5); capacity was previously estimated to have increased moderately through 2009 and to have edged down in 2010. For 2011, capacity is still expected to increase 1.1 percent. Manufacturing capacity contracted in 2008, 2009, and 2010, and the rates of change for all three years were revised down between 1 and 2 percentage points. From the fourth quarter of 2007 to the fourth quarter of 2010, manufacturing capacity shrank 5.4 percent; previously, capacity was reported to have decreased 0.8 percent, on net, over this period. In 2011, capacity in the manufacturing sector is expected to expand 0.9 percent, slightly stronger than the earlier estimate.

Capacity for the selected high-technology industries expanded somewhat more slowly than previously reported, on net, through 2010, but an upward revision to the rate of change of this measure for 2011 leaves the level of capacity in the fourth quarter of this year little different from the earlier estimate. In the motor vehicle and parts sector, revisions generally left the level of capacity a little higher in recent years than previously reported, though the revised contour of capacity is broadly similar; in particular, after declining nearly 12 percent from 2006 through 2010, capacity is expected to turn up and increase 2.4 percent in 2011. Excluding the selected high-technology industries and motor vehicles and parts, durable manufacturing capacity fell in each year from 2008 through 2011; the revised contour is noticeably weaker than the earlier estimates, in which capacity expanded slightly in 2008, fell less rapidly in 2009 and 2010, and was roughly flat in 2011. Nondurable manufacturing capacity is now estimated to have edged down, rather than to have increased, in 2008 and to have contracted more rapidly in 2009 and 2010; in 2011, capacity is now expected to edge up 0.3 percent rather than advance 1.1 percent.

Capacity at mines expanded from 2007 through 2009 and decreased in 2010; in 2011, the expected increase in capacity more than reverses the decline from the previous year. The gains in 2008 and 2009 are stronger than previously published, while the estimates for 2010 now show a decline rather than no change. Oil and gas extraction capacity steadily increased from 2008 through 2011, while mining capacity elsewhere decreased in every year except 2011, when a small gain is expected. Capacity at electric and natural gas utilities is still estimated to have increased steadily over the 2008–10 period; a downward revision to the rate of change in 2009 is offset by an upward revision in 2010 that leaves the level of capacity in the fourth quarter of 2010 essentially unrevised. In 2011, capacity rises less rapidly than previously projected.

By stage of processing, capacity in the crude stage rose in 2008 and 2009 despite a sharp downward revision in 2009; the decline in 2010 and subsequent reversal in 2011 are both only slightly weaker than in the earlier estimates. In contrast, capacity at the primary and semifinished stages shrunk more substantially in 2009 and 2010 than previously reported, and the small gains in 2008 and 2011 have been reduced somewhat. At the finished stage, capacity is now estimated to have declined in each year from 2008 through 2010; capacity at this stage was previously estimated to have increased in 2008 and 2010. In 2011, capacity at the finished stage is projected to post a solid increase.

Capacity Utilization

In 2007, the rate of capacity utilization for total industry, at 81.1 percent, was 0.7 percentage point above its long-run (1972 through 2010) average of 80.4 percent (table 6).³ Utilization rates plunged in 2008 and in the first half of 2009, reaching a trough of 67.3 percent in June of that year, before increasing steadily through the end of 2010. Despite these gains, the level in the fourth quarter of 2010, at 76.2 percent, was still 4.2 percentage points below its long-run average. The rate of capacity utilization for total industry was revised down about $\frac{3}{4}$ percentage point in 2008 and 2009 but was revised up 0.6 percentage point in 2010.

In manufacturing, the rate of utilization in 2007 was revised down 0.1 percentage point to 79.0 percent, a rate equal to its long-run average. The factory operating rate was revised down 0.8 percentage point in 2008 and 1.1 percentage points in 2009. In particular, the level of the factory operating rate at the June 2009 trough of the recent recession was revised down 1.0 percentage point to 64.4 percent, the lowest level in the history of the series, which begins in 1948. For 2010, the factory operating rate was revised up 0.4 percentage point to 73.4 percent. The rates of capacity utilization for durable manufacturing were revised down in each year from 2008 through 2010, while the rates for nondurable manufacturing were revised down in 2007 and 2008 but were revised up in 2009 and 2010.

As of the fourth quarter of 2010, most major manufacturing industry groups were operating at rates below—and in some cases, far below—their industry-specific long-run averages. In particular, the utilization rates for several industries—textile and product mills, wood products, printing and related support activities, and nonmetallic mineral products—were more than 15 percentage points below their long-run averages. The handful of industries that were operating at rates above their long-run averages included computers and peripheral equipment, communications equipment, and miscellaneous manufacturing.

Capacity utilization in mining was above its long-run average in 2006 through 2008, fell below its long-run average in 2009, and then moved up noticeably in 2010. Relative to the earlier estimates, the utilization rate for overall mining was revised up somewhat in 2007, down a little in 2008, and down more noticeably in 2009. In 2010, the utilization rate for mining stood at 89.1 percent, a rate 0.2 percentage point higher than previously reported and 1.7 percentage points above its long-run average. At electric and natural gas utilities, the rate of capacity utilization was revised up in 2009 and 2010 but down a little in 2008. The rate of utilization at electric and natural gas utilities stood at 81.3 percent in 2010, a rate 5.3 percent below its long-run average of 86.6 percent.

TECHNICAL ASPECTS OF THE REVISION

This revision incorporated new comprehensive data from the 2009 ASM and revised data from the 2008 ASM for manufacturing production. Revised price indexes from the Bureau of Economic Analysis (BEA) and updated price indexes constructed by the Federal Reserve for a few selected industries were also incorporated.⁴

³Unless otherwise noted, rates of capacity utilization are reported for the fourth quarter of the reference year.

⁴Price indexes for pharmaceuticals (NAICS 325412), for semiconductors (NAICS 334413), and for most components of communications equipment (NAICS 3342) are constructed by the Federal Reserve from alternative sources. A table that lists annual and quarterly price indexes for the networking equipment component of communications equipment follows the text.

In addition, the updated production indexes include revisions to the measures of employment and production-worker hours from the Current Employment Statistics monthly survey by the Bureau of Labor Statistics. The benchmark indexes for logging and publishing (included in the IP index for manufacturing but no longer included in manufacturing under NAICS) were updated through 2009 based on data from the U.S. Forest Service and the Census Bureau.

The revised IP indexes incorporated information from selected Current Industrial Reports for 2010, the Quarterly Survey of Plant Capacity for 2010, and other annual industry reports. The indexes also incorporated revised monthly and quarterly source data on production, shipments, and inventories.

Annual Benchmark Output Indexes

The annual benchmark indexes—defined for each six-digit NAICS industry as nominal gross output divided by a price index—were updated to include new as well as revised information from the 2008 and 2009 ASMs. Industrial production and capacity utilization are structured to follow a single industry classification system, currently 2002 NAICS, from 1972 forward. For the purposes of maintaining a consistent benchmark time series, data from the 2007 Economic Census and the 2008 and 2009 ASMs, originally classified based on the 2007 NAICS, were transformed to the 2002 NAICS system using data from tables on product shipments by industry from the 2002 Economic Census.⁵ The Census Bureau plans to issue bridge tables providing a more precise allocation of the data from the 2007 Economic Census into the 2002 NAICS.

Since 2003, the ASM has not included separate data for every six-digit manufacturing industry; data for some industries were included only as part of a larger group of industries. For 2003 through 2006, the IP benchmark indexes were calculated by allocating the data from these combined industries to their six-digit components based on each component's share of the total in both the 2002 and 2007 Economic Censuses. Data from the 2008 and 2009 ASMs were allocated to the component six-digit industries based on shares solely from the 2007 Economic Census.

The deflators for the IP benchmarks primarily reflect industry shipments deflators issued by the BEA in December 2010.

Changes to Individual Production and Capacity Series

Very few production indicators were affected by methodological changes in this revision.

Computers

This revision updates the methods used to calculate four IP series for computers (business desktop computers, consumer desktop computers, business mobile computers, and consumer mobile computers). These four IP series are all components of NAICS 334111. The source data for computers come from IDC and measure quarterly domestic absorption of computers. Up through the third quarter of 2009, the Federal Reserve received detailed information on the absorption of desktop and mobile computers by businesses and by consumers. Beginning with the fourth quarter of 2009, the Federal Reserve acquired information on absorption of only total desktops and total mobiles but did not acquire detailed information on the business and consumer components for these platforms.

This revision adopted a new method of calculating the share of total desktops (or mobiles) that should be attributed to business absorption and the share that should be attributed to consumer absorption. Data from the

⁵The 2007 NAICS included about a dozen six-digit manufacturing industries that had different coverage than they did in the 2002 NAICS. One industry included in the 2002 NAICS, Laboratory apparatus and furniture manufacturing (NAICS 339111), was eliminated; its various components were distributed among seven different six-digit industries in the 2007 NAICS.

BEA's national income and product accounts for consumer and business spending on computers are used to extend the business and consumer shares of computer output beyond the end of the IDC data. A strong historical relationship exists between the business and consumer splits in the IDC data and the ratio of personal consumption expenditures on computers to business expenditures on computers.

Series Switched from Using Product Data to Using Production-Worker Hours

Product data used as an indicator for the output of aluminum foundries (NAICS 331521,4) have been discontinued. This revision replaces the discontinued data with production-worker hours from 2007 to the present.

Weights for Aggregation

The IP index is a Fisher index. The weights for manufacturing industries are derived from value-added measures from the Census of Manufactures and the ASM. The Federal Reserve derives estimates of value added for the electric and gas utility industries from annual revenue and expense data issued by other organizations. The weights for aggregation, expressed as value added per unit, were estimated with the latest data on producer prices for the period after 2009. Table 12 shows the annual value-added proportions in the IP index from 2003 through 2010.

Revised Quarterly and Monthly Data

This revision incorporates product data that became available or were revised after the regular six-month reporting window for monthly IP was closed. These data were released with too great a lag to be included with monthly IP estimates but were available for inclusion in the annual revision.

Revised Seasonal Factors

Seasonal factors for all series were reestimated using data that extend into 2011. Factors for production-worker hours—which adjust for timing, holiday, and monthly seasonal patterns—were updated with data through January 2011. The updated factors for the physical product series, which include adjustments for holiday and workday patterns, used data through December 2010 where available. Seasonal factors for unit motor vehicle assemblies have been updated, and projections through June 2011 are on the Board's website at www.federalreserve.gov/releases/g17/mvsf.htm.

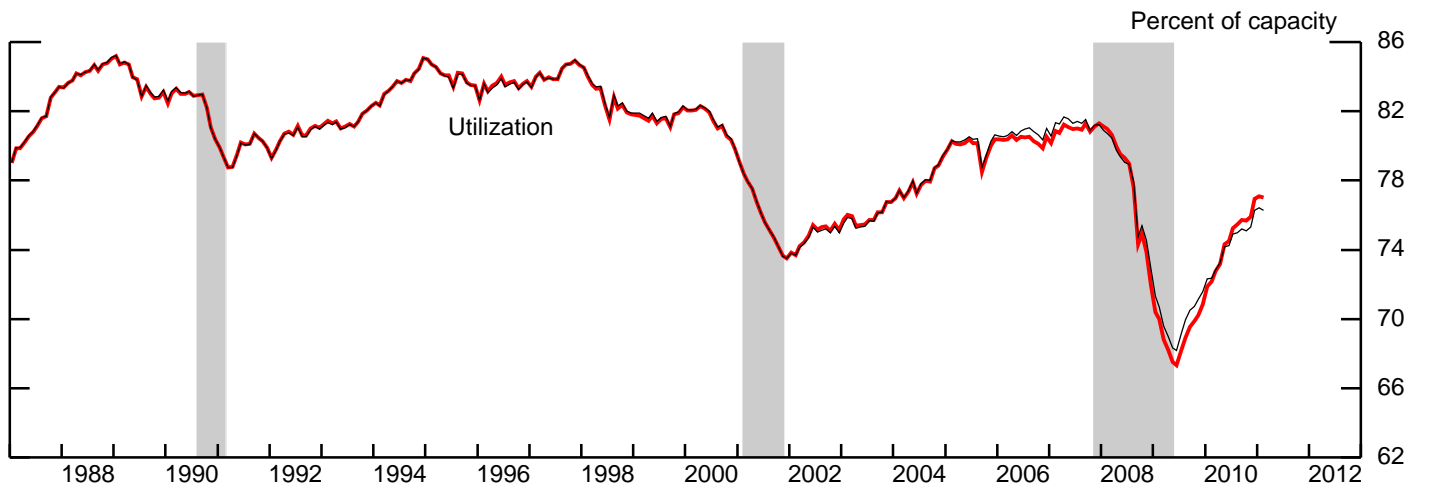
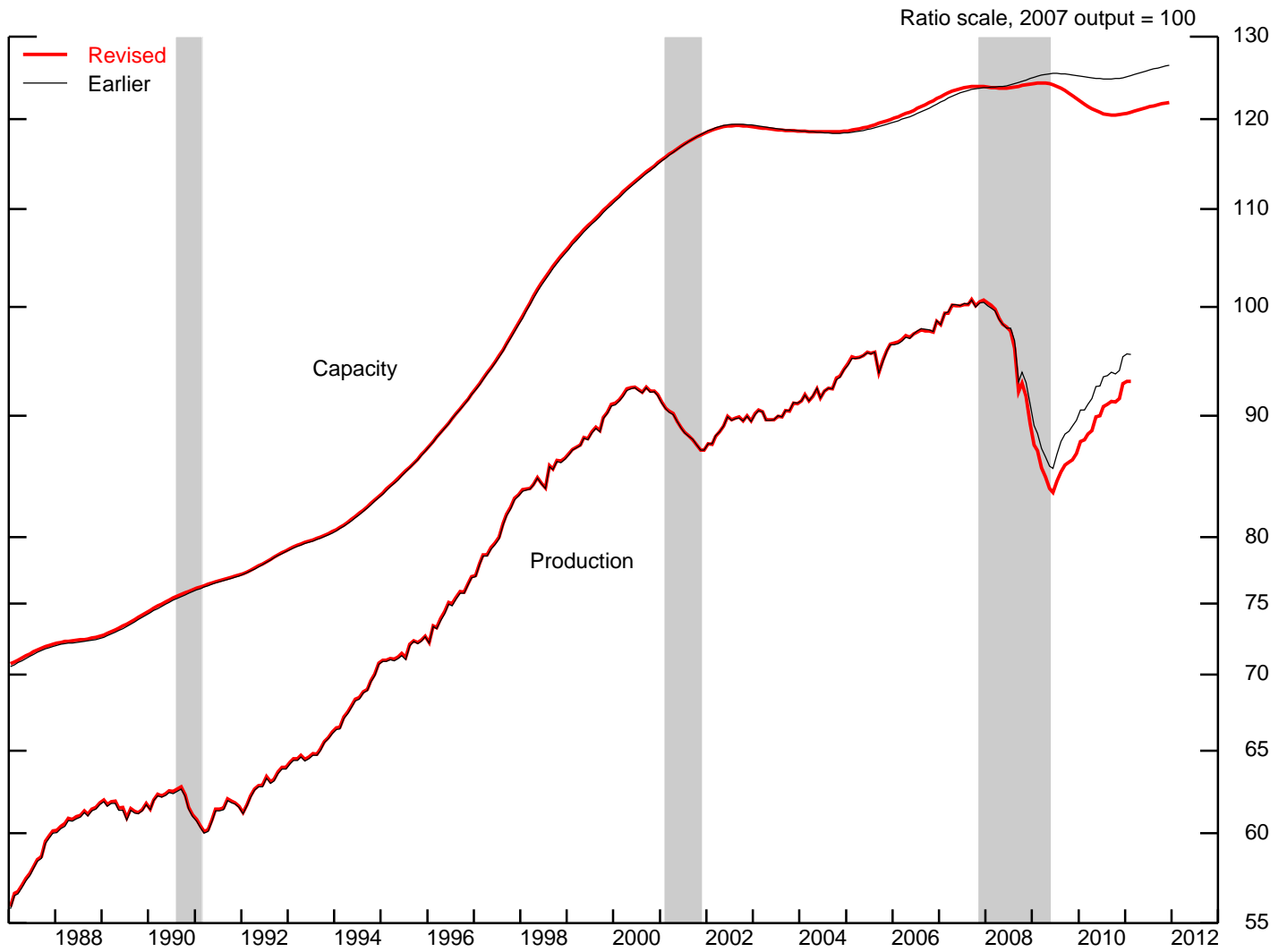
Data Availability and Publication Changes

Files containing the revised data and the text and tables from this release are available on the Board's website at www.federalreserve.gov/releases/g17, as are updated data for the annual revision and for all of the regularly issued series on industrial production, capacity, and capacity utilization. Further information on these revisions is available from the Board's Industrial Output Section (telephone 202-452-3197).

A document with printed tables of the revised estimates of series shown in the G.17 release is available upon request to the Industrial Output Section, Mail Stop 82, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, DC 20551.

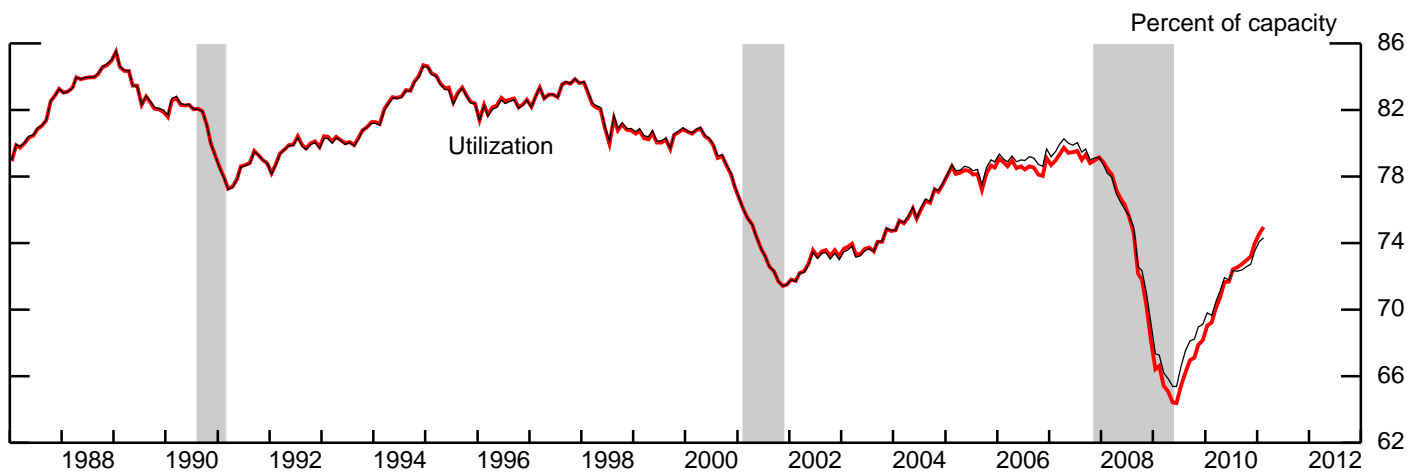
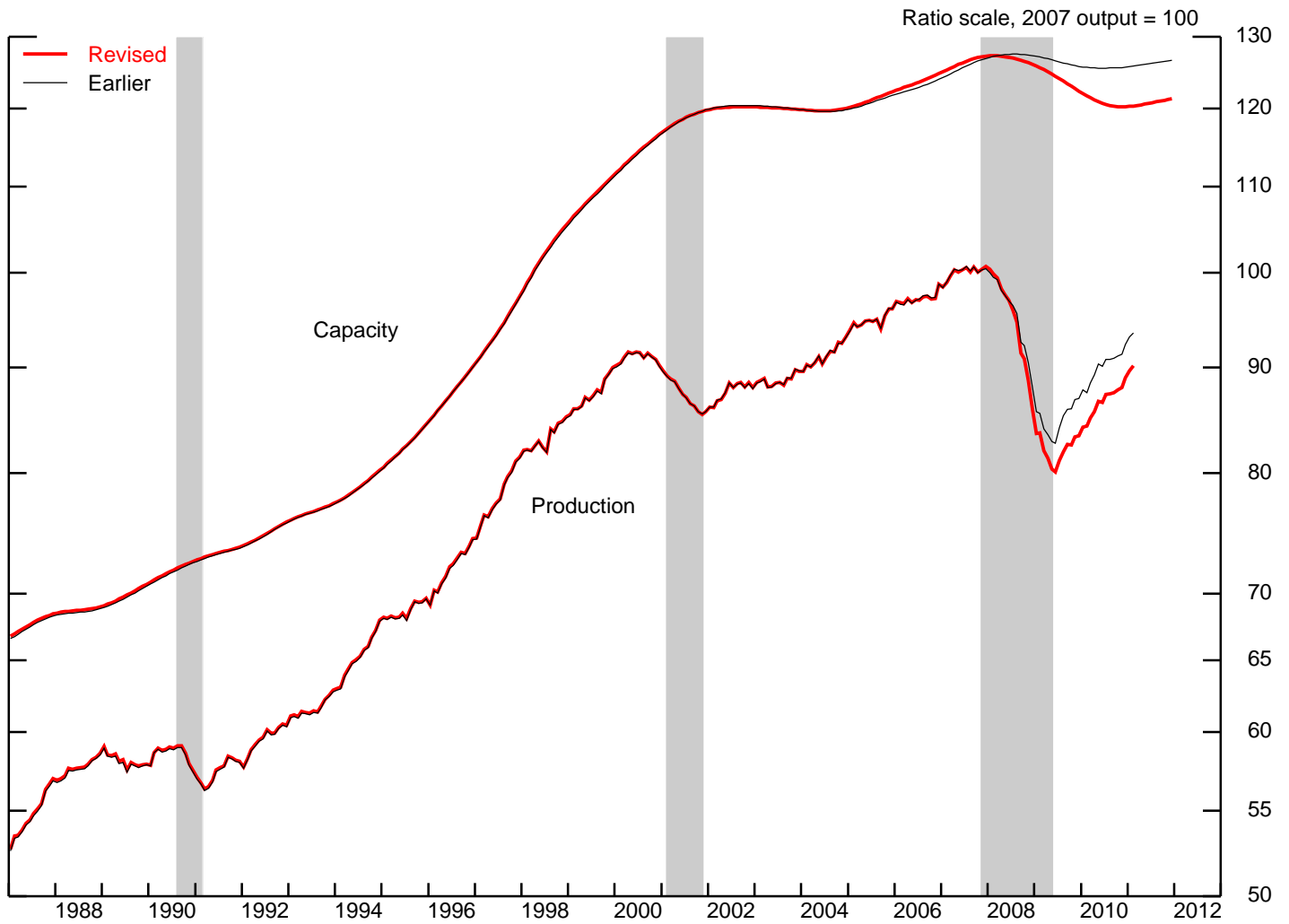
An expanded version of this release will be published in a forthcoming report that will be available on the Board's website.

1. Total industrial production, capacity, and utilization



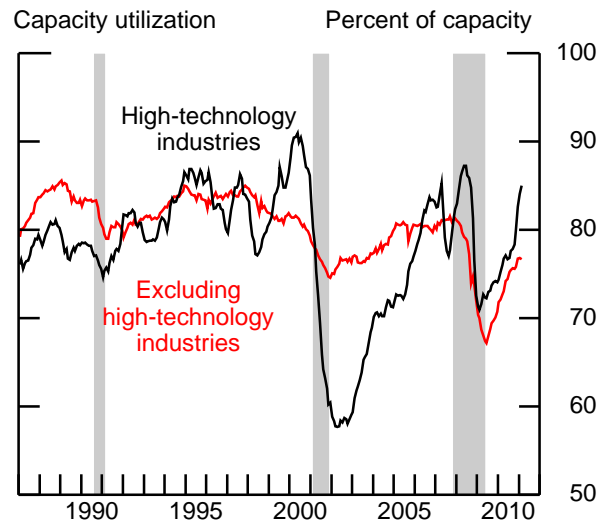
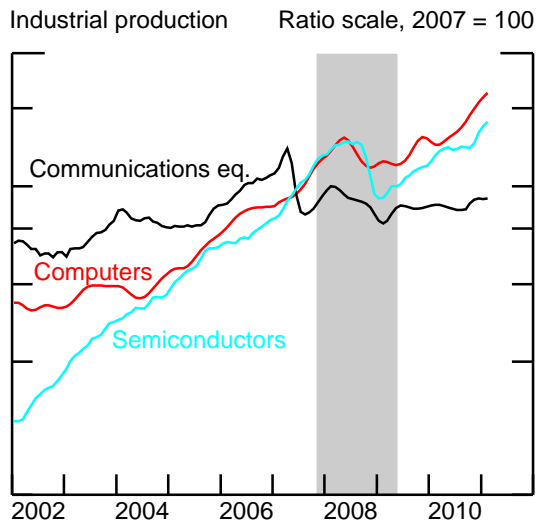
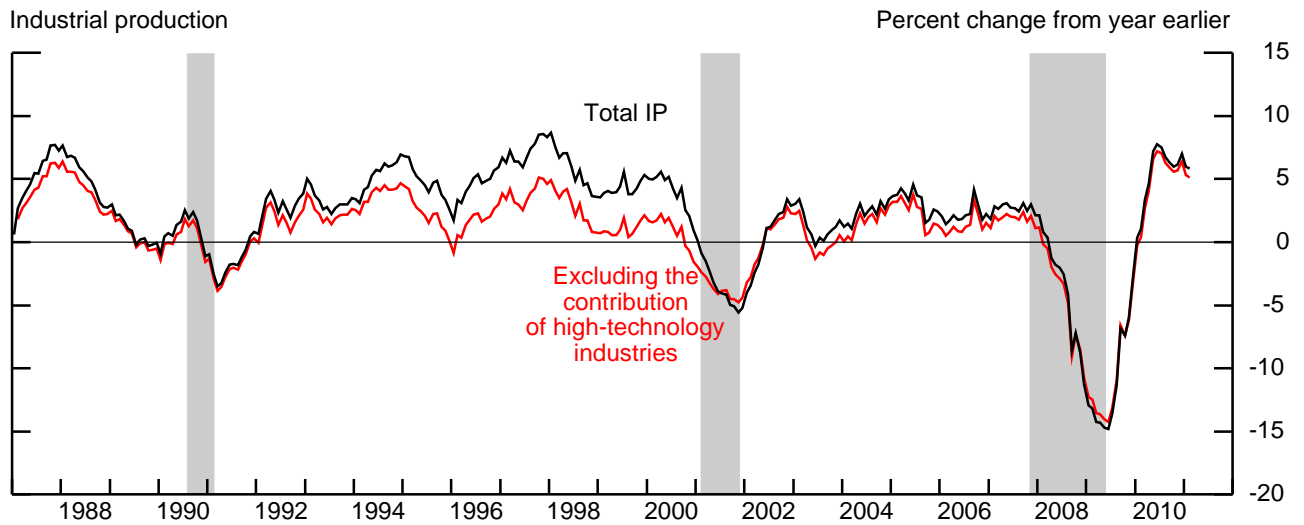
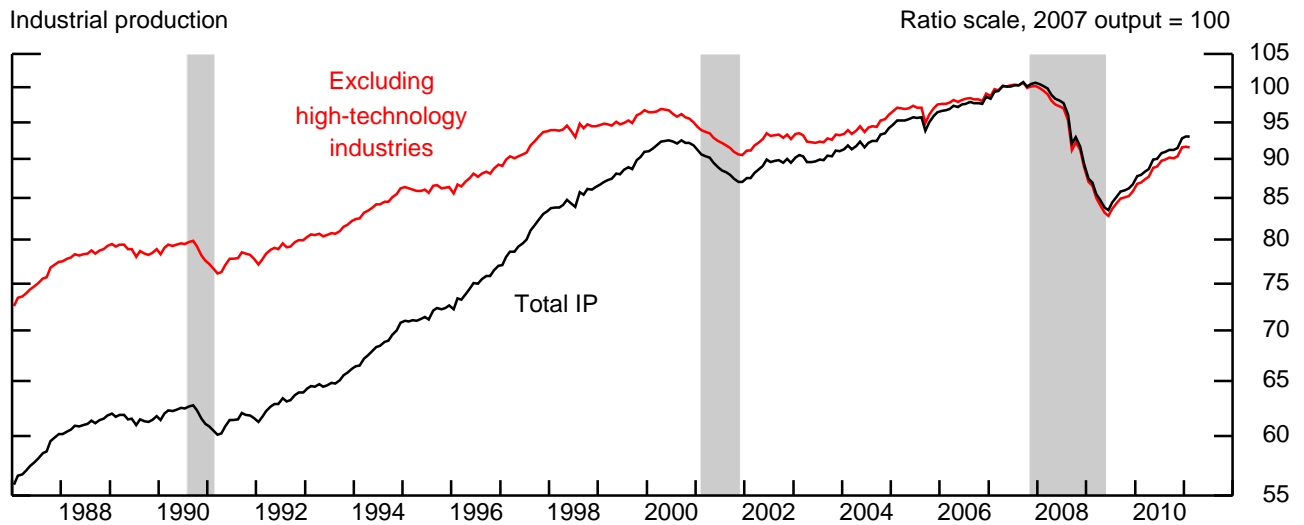
Note: The shaded areas are periods of business recession as defined by the National Bureau of Economic Research (NBER).

2. Manufacturing industrial production, capacity, and utilization



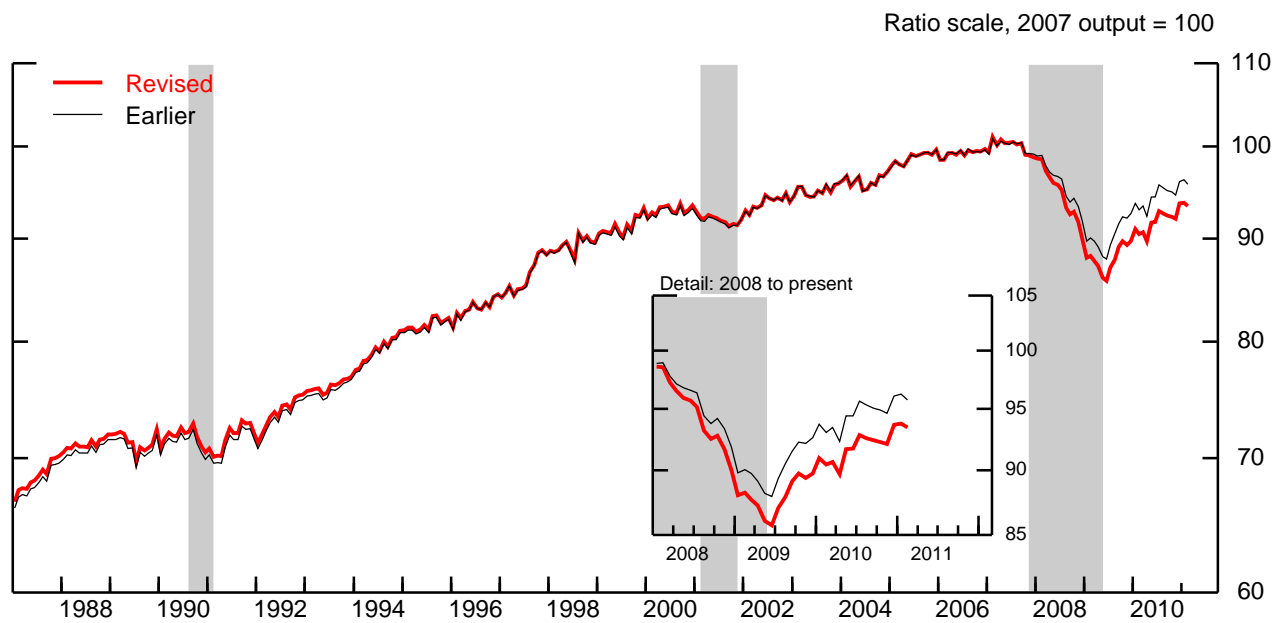
Notes: The shaded areas are periods of business recession as defined by the NBER. Manufacturing consists of those industries in the North American Industry Classification System, or NAICS, definition of manufacturing plus those industries--logging and newspaper, periodical, book, and directory publishing--that have traditionally been considered to be manufacturing and included in the industrial sector.

3. Industrial production and capacity utilization

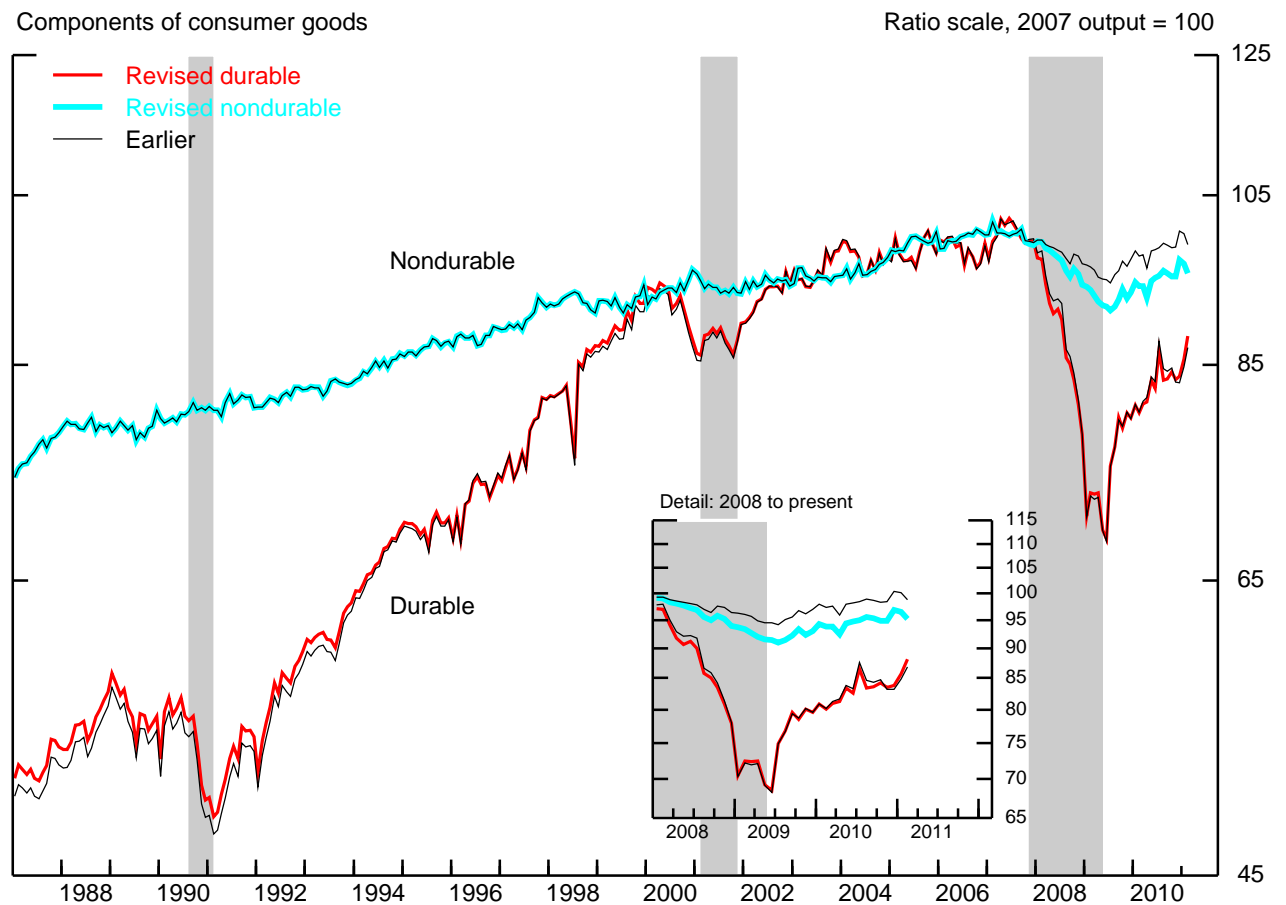


Notes: High-technology industries are defined as semiconductors and related electronic components (NAICS 334412-9), computers (NAICS 3341), and communications equipment (NAICS 3342). The shaded areas are periods of business recession as defined by the NBER.

4. Consumer goods

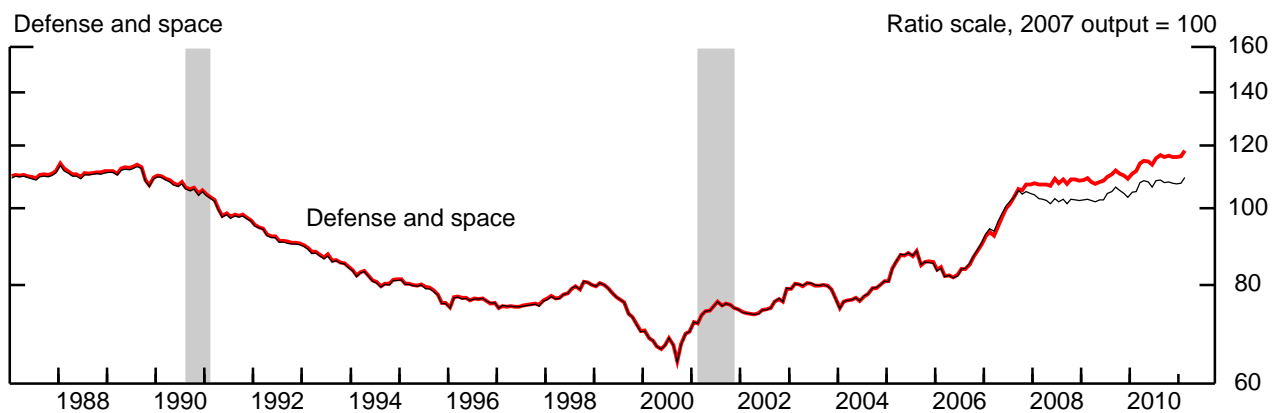
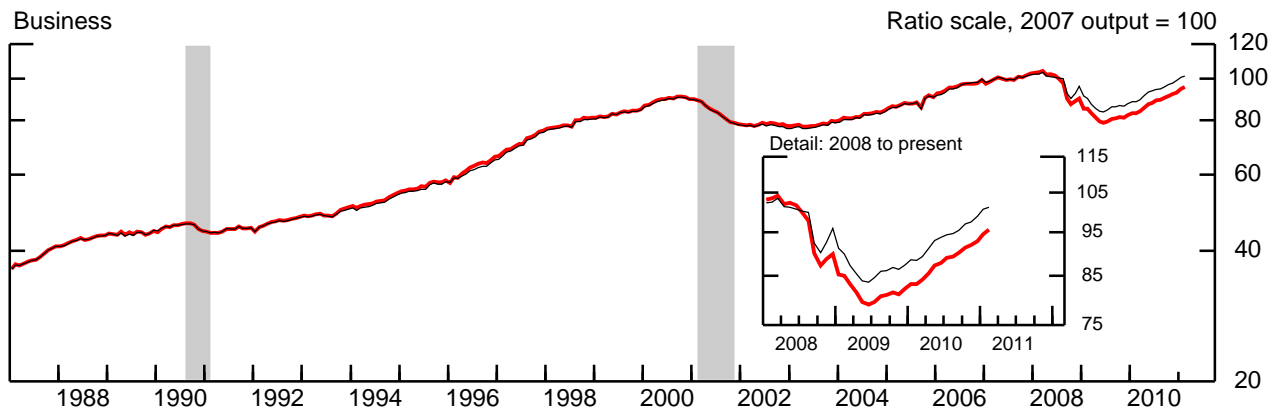
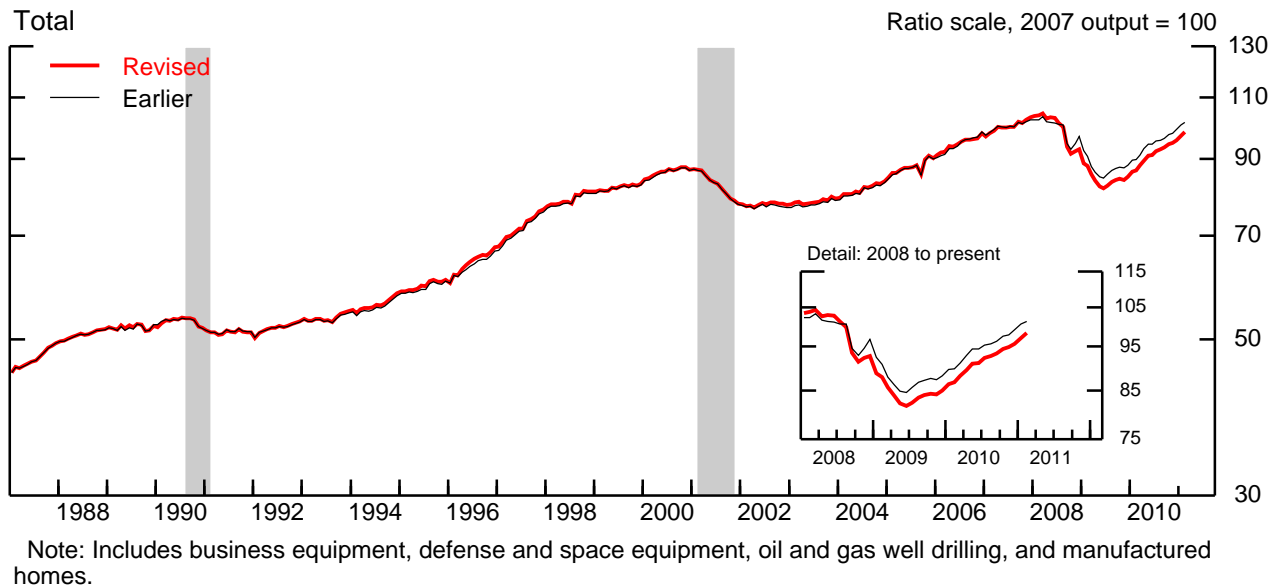


Components of consumer goods



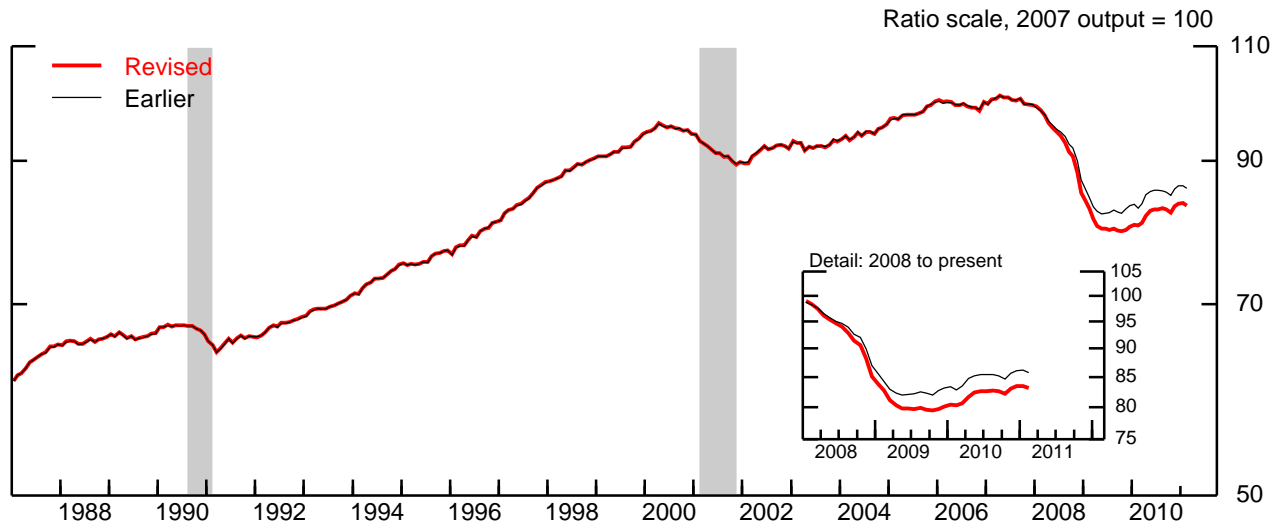
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5. Equipment

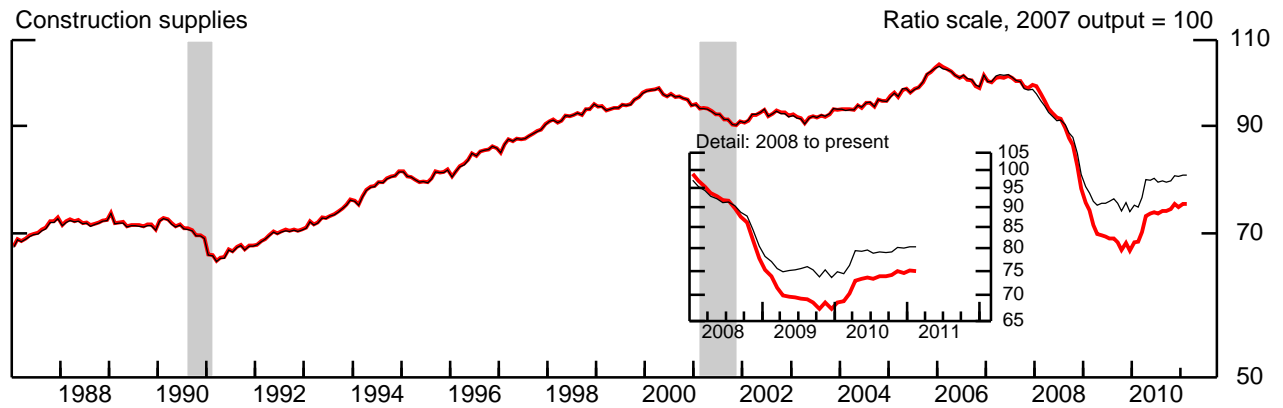


Note: The shaded areas represent periods of business recession as defined by the NBER.

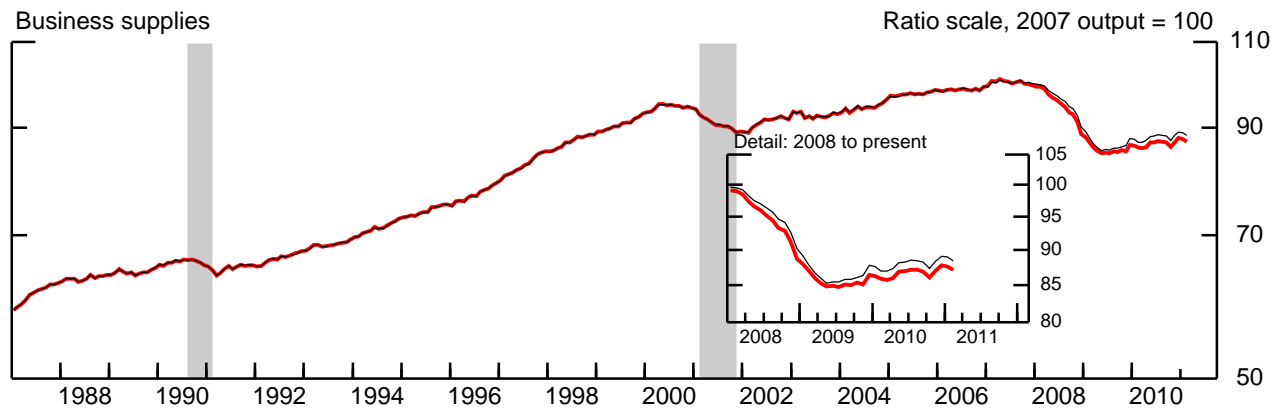
6. Nonindustrial supplies



Construction supplies

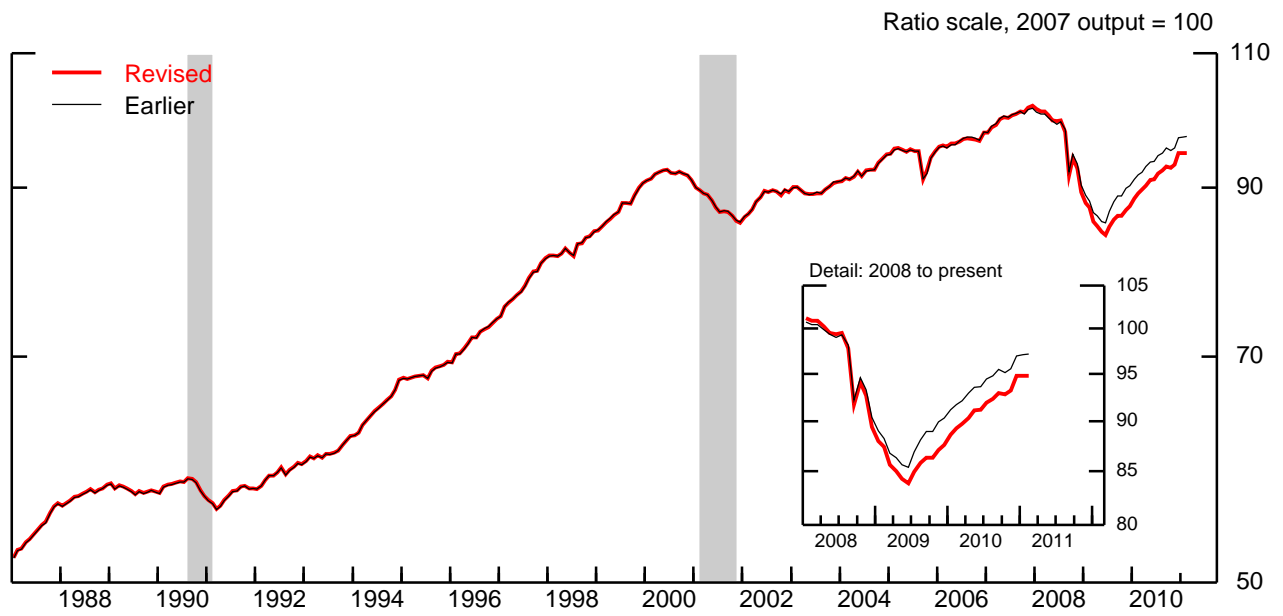


Business supplies

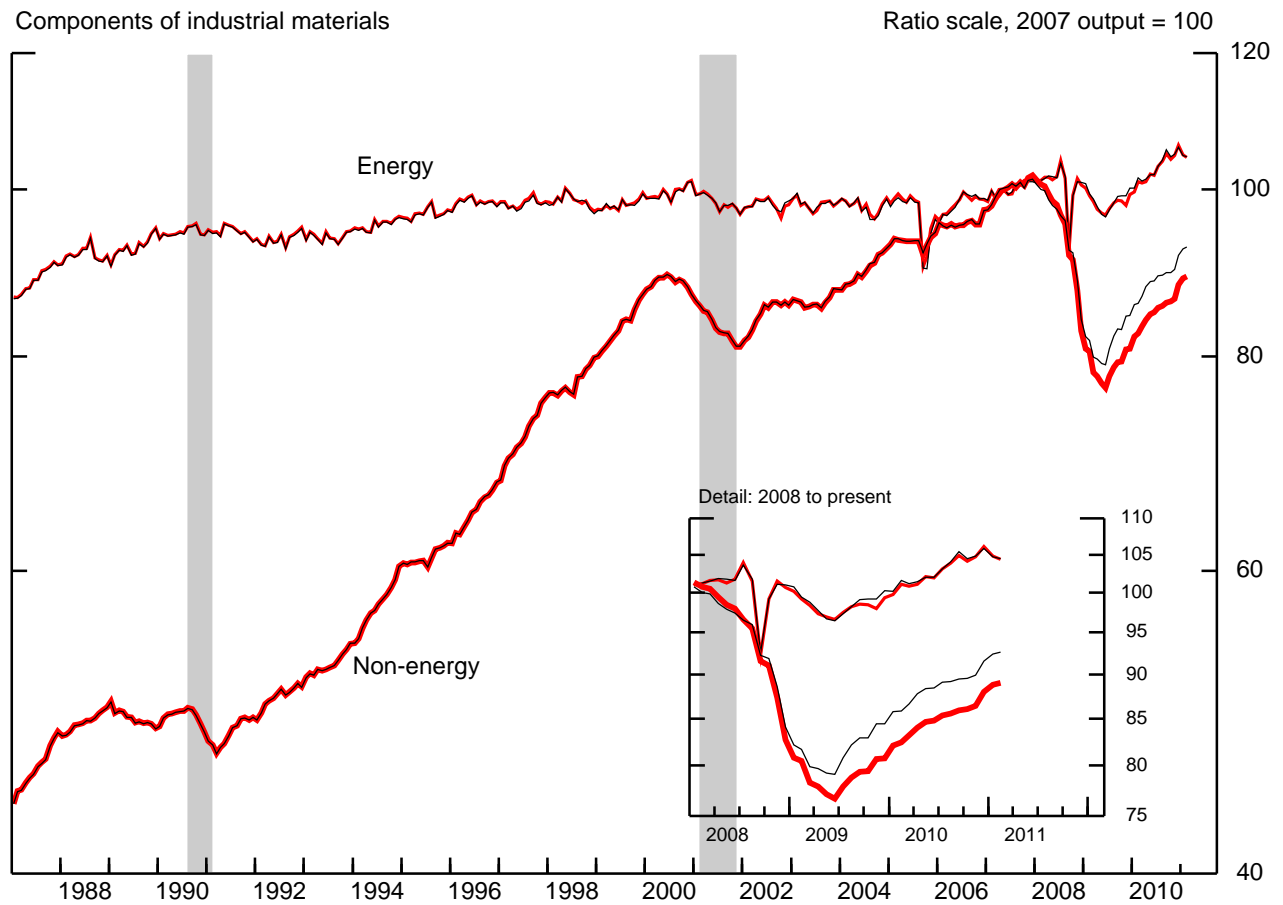


Note: The shaded areas represent periods of business recession as defined by the NBER.

7. Industrial materials

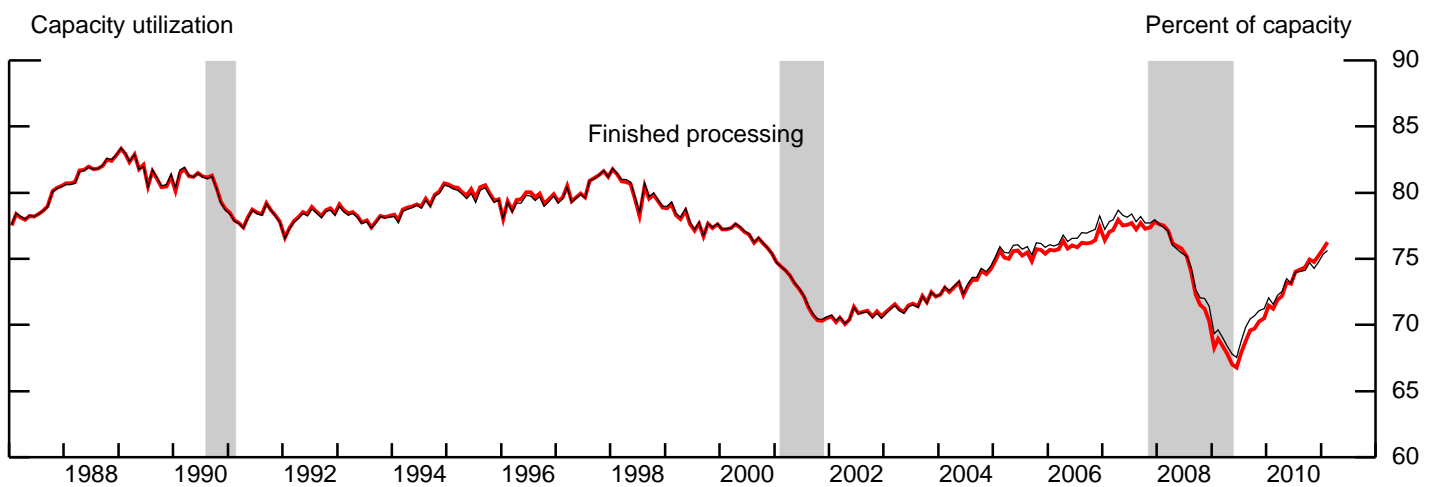
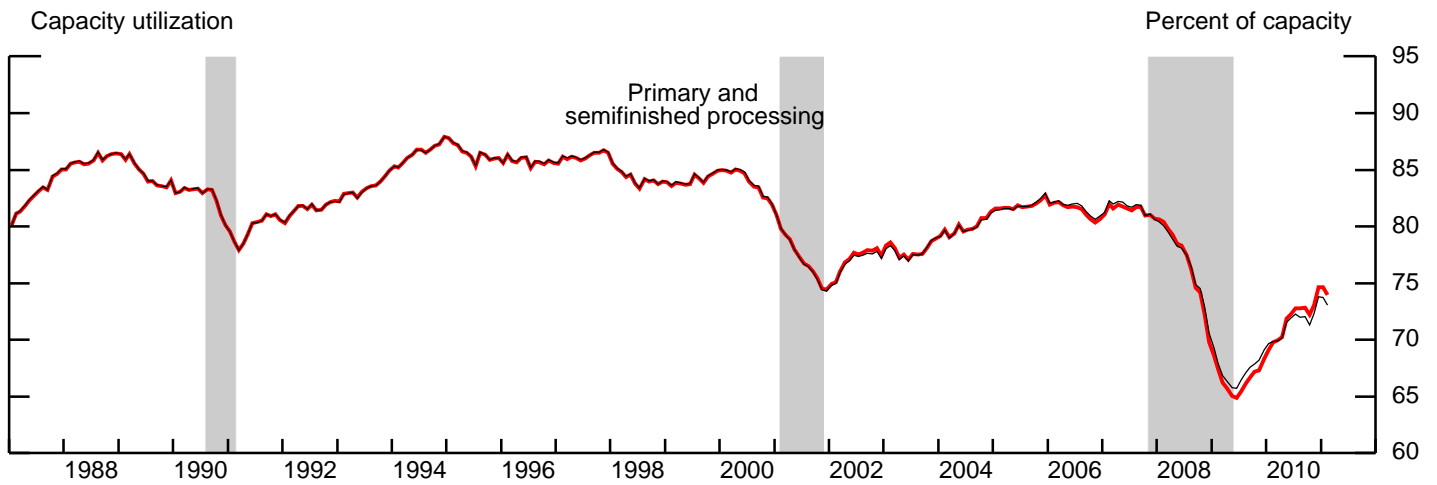
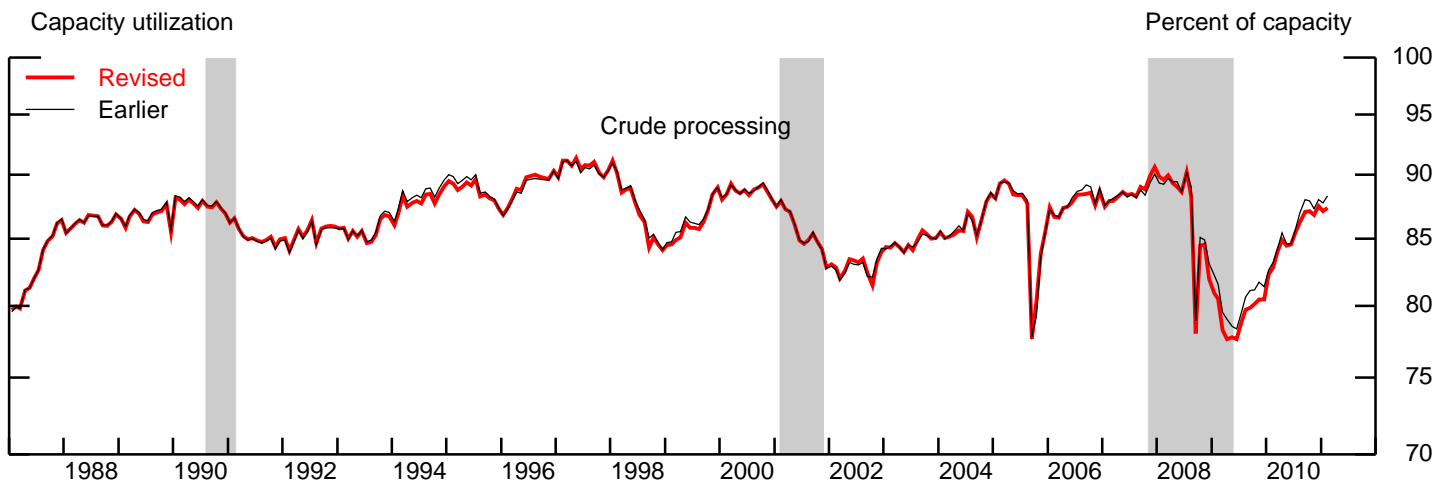


Components of industrial materials



Note: The shaded areas represent periods of business recession as defined by the NBER.

8. Capacity utilization by stage of process



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

Table 1A
INDUSTRIAL PRODUCTION: Total
 Seasonally adjusted

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual ¹
IP (percent change)																	
1981	-6	-5	.5	-4	.6	.5	.6	.0	-6	-7	-1.1	-1.1	1.0	1.3	3.8	-8.5	1.3
1982	-2.0	2.0	-7	-9	-6	-3	-3	-8	-4	-8	-4	-7	-7.9	-4.9	-5.5	-7.2	-5.2
1983	1.9	-6	.8	1.2	.7	.5	1.5	1.1	1.5	.8	.3	.5	4.7	9.2	14.3	10.7	2.8
1984	2.0	.5	.5	.6	.5	.3	.3	.1	-2	-1	.4	.1	12.4	6.3	2.9	.3	8.9
1985	-2	.4	.1	-2	.1	.1	-7	.4	.4	-4	.3	1.0	1.1	.4	-7	2.4	1.2
1986	.5	-7	-6	.1	.2	-3	.6	-2	.2	.5	.5	.9	2.3	-2.3	1.6	4.6	1.0
1987	-3	1.3	.2	.6	.7	.5	.6	.7	.3	1.5	.5	.5	5.4	7.3	7.3	10.2	5.2
1988	.1	.4	.2	.5	-1	.2	.1	.5	-4	.5	.2	.4	3.6	3.4	1.8	2.8	5.2
1989	.3	-4	.3	.0	-7	.1	-1.0	.9	-3	-1	.3	.6	1.7	-1.4	-2.6	1.6	.9
1990	-6	.9	.5	-1	.2	.3	-1	.2	.2	-8	-1.2	-7	2.9	3.0	1.7	-6.2	1.0
1991	-4	-7	-5	.2	1.0	1.0	.0	.1	.9	-2	-1	-3	-7.4	2.5	5.5	.8	-1.5
1992	-6	.8	.8	.7	.3	.0	.9	-5	.2	.7	.4	.0	-4	7.2	2.9	4.1	2.8
1993	.5	.4	.0	.3	-4	.2	.3	.0	.5	.7	.4	.5	3.6	1.0	2.0	6.1	3.3
1994	.4	.0	1.0	.5	.5	.7	.2	.6	.2	.8	.6	1.1	5.2	7.4	5.1	8.2	5.3
1995	.3	.0	.2	-1	.2	.3	-4	1.3	.3	-2	.2	.4	5.1	1.2	3.7	3.0	4.7
1996	-6	1.6	-1	.8	.7	.9	-1	.6	.5	.0	.8	.6	3.0	8.5	5.4	5.4	4.4
1997	.1	1.2	.8	.0	.7	.5	.6	1.3	.9	.7	.9	.4	7.8	6.5	9.6	10.1	7.2
1998	.5	.1	.1	.4	.7	-6	-4	2.2	-3	.8	-1	.3	4.4	2.9	3.0	5.7	5.8
1999	.4	.4	.2	.2	.8	-1	.7	.4	-3	1.3	.5	.8	3.8	3.9	4.1	7.5	4.3
2000	.1	.4	.4	.6	.1	.1	-3	-2	.5	-4	.0	-3	4.7	4.5	-6	-1.1	4.0
2001	-7	-6	-3	-2	-7	-6	-5	-3	-4	-5	-5	.0	-5.5	-5.2	-5.7	-4.7	-3.4
2002	.6	.0	.8	.4	.6	.9	-3	.2	.1	-4	.5	-5	2.8	6.7	2.6	-4	.2
2003	.8	.3	-2	-8	.0	.0	.3	-1	.6	.0	.8	.0	3.0	-3.1	2.0	3.4	1.3
2004	.3	.6	-6	.4	.7	-9	.7	.3	.0	1.0	.2	.7	2.8	1.7	2.1	5.8	2.3
2005	.5	.7	-1	.0	.2	.4	-2	.1	-2.0	1.2	1.0	.6	6.1	1.7	-1.7	3.1	3.2
2006	.2	.1	.2	.4	-2	.4	.2	.2	-1	.0	-1	1.1	4.0	2.4	1.8	1.0	2.2
2007	-3	1.1	.0	.8	-1	.0	.1	.0	.5	-6	.4	.2	4.5	4.5	1.1	.1	2.7
2008	-3	-2	-4	-9	-6	-3	-4	-1.7	-4.1	.9	-1.3	-2.6	-1.2	-6.6	-12.2	-15.7	-3.7
2009	-2.1	-5	-1.7	-9	-1.1	-4	1.1	.9	.7	.3	.2	.6	-18.9	-11.5	5.3	5.6	-11.2
2010	1.2	.2	.5	.4	1.3	.1	.9	.2	.3	-1	.4	1.4	8.1	7.1	6.7	3.7	5.3
2011	.2	.0															
IP (2007=100)																	
1981	50.8	50.6	50.9	50.6	51.0	51.2	51.5	51.5	51.2	50.8	50.3	49.7	50.8	50.9	51.4	50.3	50.8
1982	48.7	49.7	49.3	48.9	48.6	48.4	48.3	47.9	47.7	47.3	47.1	46.8	49.2	48.6	47.9	47.1	48.2
1983	47.7	47.4	47.8	48.3	48.7	48.9	49.7	50.2	51.0	51.4	51.6	51.8	47.6	48.7	50.3	51.6	49.5
1984	52.9	53.1	53.4	53.7	54.0	54.2	54.4	54.4	54.3	54.2	54.4	54.5	53.1	54.0	54.3	54.4	54.0
1985	54.4	54.6	54.7	54.5	54.6	54.6	54.3	54.5	54.7	54.5	54.7	55.3	54.5	54.6	54.5	54.8	54.6
1986	55.5	55.1	54.8	54.8	54.9	54.7	55.1	55.0	55.1	55.3	55.6	56.1	55.1	54.8	55.0	55.7	55.2
1987	55.9	56.6	56.7	57.0	57.4	57.7	58.1	58.5	58.7	59.5	59.9	60.1	56.4	57.4	58.4	59.8	58.0
1988	60.2	60.4	60.6	60.9	60.8	61.0	61.0	61.3	61.1	61.4	61.5	61.8	60.4	60.9	61.2	61.6	61.0
1989	62.0	61.7	61.9	61.9	61.5	61.5	60.9	61.5	61.3	61.2	61.4	61.8	61.8	61.6	61.2	61.5	61.5
1990	61.4	62.0	62.3	62.2	62.3	62.5	62.5	62.6	62.8	62.3	61.5	61.1	61.9	62.4	62.6	61.6	62.1
1991	60.8	60.4	60.1	60.2	60.8	61.4	61.4	61.5	62.0	61.9	61.8	61.6	60.4	60.8	61.6	61.8	61.2
1992	61.2	61.7	62.2	62.6	62.9	62.9	63.4	63.1	63.2	63.7	63.9	64.0	61.7	62.8	63.2	63.9	62.9
1993	64.3	64.5	64.5	64.7	64.5	64.6	64.8	64.8	65.1	65.6	65.8	66.2	64.4	64.6	64.9	65.9	65.0
1994	66.5	66.5	67.2	67.5	67.9	68.3	68.5	68.8	69.0	69.6	70.0	70.8	66.7	67.9	68.8	70.1	68.4
1995	71.0	71.0	71.1	71.0	71.2	71.4	71.2	72.1	72.3	72.2	72.4	72.6	71.0	71.2	71.9	72.4	71.6
1996	72.2	73.4	73.3	73.9	74.4	75.1	75.0	75.5	75.9	75.8	76.5	77.0	72.9	74.4	75.4	76.4	74.8
1997	77.0	78.0	78.6	78.6	79.2	79.5	80.0	81.1	81.8	82.3	83.0	83.3	77.9	79.1	80.9	82.9	80.2
1998	83.7	83.8	83.9	84.2	84.8	84.3	83.9	85.7	85.5	86.2	86.1	86.4	83.8	84.4	85.0	86.2	84.9
1999	86.7	87.1	87.3	87.5	88.1	88.0	88.6	89.0	88.7	89.8	90.3	91.0	87.0	87.9	88.8	90.4	88.5
2000	91.1	91.4	91.8	92.3	92.5	92.5	92.3	92.1	92.5	92.1	92.2	91.8	91.4	92.4	92.3	92.0	92.1
2001	91.2	90.6	90.4	90.2	89.5	88.9	88.5	88.2	87.9	87.5	87.0	87.0	90.7	89.5	88.2	87.2	88.9
2002	87.6	87.5	88.2	88.6	89.1	89.9	89.6	89.8	89.9	89.5	90.0	89.5	87.8	89.2	89.8	89.7	89.1
2003	90.2	90.5	90.4	89.6	89.6	89.7	89.9	89.9	90.4	90.4	91.1	91.1	90.4	89.6	90.1	90.8	90.2
2004	91.3	91.8	91.3	91.7	92.4	91.5	92.2	92.4	92.4	93.3	93.5	94.1	91.5	91.9	92.3	93.6	92.3
2005	94.6	95.3	95.2	95.2	95.4	95.7	95.6	95.7	93.8	95.0	95.9	96.4	95.0	95.4	95.0	95.8	95.3
2006	96.6	96.7	96.9	97.3	97.1	97.5	97.6	97.8	97.7	97.7	97.6	98.6	96.7	97.3	97.7	98.0	97.4
2007	98.3	99.4	99.4	100.2	100.1	100.1	100.2	100.2	100.7	100.1	100.5	100.7	99.0	100.1	100.4	100.4	100.0
2008	100.4	100.2	99.8	98.9	98.3	98.1	97.7	96.1	92.1	92.9	91.7	89.3	100.1	98.4	95.3	91.3	96.3
2009	87.5	87.0	85.5	84.8	83.9	83.5	84.4	85.2	85.8	86.0	86.2	86.7	86.7	84.1	85.2	86.3	85.5
2010	87.7	87.9	88.4	88.7	89.9	90.0	90.8	91.0	91.2	91.2	91.5	92.8	88.0	89.5	91.0	91.8	90.1
2011	93.0	93.0															

NOTE: Estimates from October 2010 through February 2011 are subject to further revision in the upcoming monthly releases.
 1. Annual averages of industrial production are calculated from not seasonally adjusted indexes.

Table 1B
CAPACITY AND UTILIZATION: Total
 Seasonally adjusted

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
Capacity (percent of 2007 output)																	
1981	63.0	63.1	63.3	63.4	63.6	63.8	63.9	64.1	64.2	64.4	64.6	64.7	63.1	63.6	64.1	64.6	63.8
1982	64.9	65.0	65.1	65.3	65.4	65.5	65.6	65.7	65.8	65.8	65.9	65.9	65.0	65.4	65.7	65.9	65.5
1983	66.0	66.0	66.0	66.1	66.1	66.1	66.1	66.2	66.2	66.2	66.3	66.4	66.0	66.1	66.2	66.3	66.1
1984	66.4	66.5	66.6	66.7	66.9	67.0	67.1	67.3	67.4	67.6	67.7	67.9	66.5	66.9	67.3	67.8	67.1
1985	68.1	68.3	68.4	68.6	68.8	68.9	69.1	69.2	69.4	69.5	69.6	69.7	68.3	68.8	69.2	69.6	69.0
1986	69.8	69.8	69.9	70.0	70.0	70.1	70.2	70.2	70.3	70.4	70.5	70.6	69.8	70.0	70.2	70.5	70.2
1987	70.7	70.9	71.0	71.1	71.3	71.4	71.6	71.7	71.8	71.9	72.0	72.1	70.9	71.3	71.7	72.0	71.5
1988	72.2	72.2	72.3	72.3	72.3	72.4	72.4	72.4	72.5	72.5	72.6	72.7	72.2	72.3	72.4	72.6	72.4
1989	72.7	72.8	73.0	73.1	73.2	73.4	73.5	73.7	73.8	74.0	74.2	74.3	72.8	73.2	73.7	74.2	73.5
1990	74.5	74.6	74.8	75.0	75.1	75.2	75.4	75.5	75.6	75.8	75.9	76.0	74.6	75.1	75.5	75.9	75.3
1991	76.1	76.2	76.3	76.4	76.5	76.6	76.7	76.7	76.8	76.9	77.0	77.1	76.2	76.5	76.7	77.0	76.6
1992	77.2	77.3	77.5	77.6	77.8	77.9	78.1	78.3	78.4	78.6	78.8	78.9	77.3	77.8	78.3	78.8	78.0
1993	79.1	79.2	79.3	79.5	79.6	79.7	79.8	79.9	80.0	80.1	80.3	80.4	79.2	79.6	79.9	80.3	79.7
1994	80.6	80.7	80.9	81.1	81.4	81.6	81.9	82.1	82.4	82.6	82.9	83.2	80.8	81.4	82.1	82.9	81.8
1995	83.5	83.8	84.1	84.4	84.7	85.0	85.3	85.6	85.9	86.3	86.6	87.0	83.8	84.7	85.6	86.6	85.2
1996	87.4	87.7	88.1	88.5	88.9	89.3	89.8	90.2	90.6	91.0	91.5	91.9	87.7	88.9	90.2	91.5	89.6
1997	92.4	92.8	93.3	93.8	94.3	94.8	95.4	95.9	96.5	97.2	97.8	98.4	92.8	94.3	96.0	97.8	95.2
1998	99.1	99.8	100.4	101.1	101.7	102.3	102.9	103.5	104.0	104.6	105.1	105.6	99.8	101.7	103.5	105.1	102.5
1999	106.0	106.5	106.9	107.4	107.8	108.2	108.6	109.0	109.4	109.8	110.2	110.6	106.5	107.8	109.0	110.2	108.4
2000	111.0	111.4	111.8	112.2	112.6	112.9	113.3	113.7	114.0	114.3	114.7	115.0	111.4	112.6	113.6	114.7	113.1
2001	115.3	115.7	116.0	116.3	116.6	116.9	117.2	117.4	117.7	117.9	118.2	118.4	115.7	116.6	117.4	118.2	117.0
2002	118.6	118.7	118.9	119.0	119.1	119.2	119.2	119.2	119.2	119.2	119.2	119.1	118.7	119.1	119.2	119.2	119.1
2003	119.1	119.0	119.0	118.9	118.9	118.8	118.8	118.7	118.7	118.7	118.6	118.6	119.0	118.9	118.7	118.6	118.8
2004	118.6	118.6	118.6	118.6	118.5	118.5	118.5	118.5	118.5	118.5	118.6	118.6	118.6	118.5	118.5	118.6	118.6
2005	118.6	118.7	118.8	118.9	119.0	119.1	119.2	119.4	119.5	119.7	119.8	120.0	118.7	119.0	119.4	119.8	119.2
2006	120.1	120.3	120.5	120.7	120.8	121.0	121.3	121.5	121.7	121.9	122.2	122.4	120.3	120.8	121.5	122.2	121.2
2007	122.7	122.9	123.1	123.3	123.5	123.6	123.7	123.8	123.9	123.9	123.9	123.8	122.9	123.5	123.8	123.9	123.5
2008	123.8	123.8	123.7	123.7	123.7	123.7	123.7	123.8	123.9	124.0	124.1	124.2	123.8	123.7	123.8	124.1	123.8
2009	124.2	124.3	124.3	124.3	124.2	124.1	123.9	123.6	123.4	123.1	122.8	122.4	124.3	124.2	123.6	122.8	123.7
2010	122.1	121.8	121.5	121.2	121.0	120.8	120.6	120.5	120.5	120.5	120.5	120.6	121.8	121.0	120.6	120.5	121.0
2011	120.7	120.8															
Utilization (percent)																	
1981	80.7	80.1	80.4	79.8	80.1	80.3	80.6	80.4	79.7	78.9	77.9	76.8	80.4	80.1	80.2	77.9	79.6
1982	75.1	76.4	75.7	74.9	74.3	73.9	73.6	72.9	72.5	71.9	71.5	70.9	75.8	74.4	73.0	71.4	73.6
1983	72.3	71.8	72.3	73.2	73.7	74.1	75.2	75.9	77.0	77.6	77.8	78.1	72.1	73.6	76.0	77.8	74.9
1984	79.6	79.9	80.1	80.5	80.7	80.9	81.0	80.8	80.5	80.2	80.3	80.2	79.9	80.7	80.8	80.3	80.4
1985	79.8	80.0	79.9	79.5	79.4	79.3	78.5	78.7	78.9	78.5	78.6	79.3	79.9	79.4	78.7	78.8	79.2
1986	79.6	78.9	78.3	78.3	78.4	78.1	78.5	78.3	78.3	78.6	78.8	79.4	78.9	78.3	78.4	78.9	78.6
1987	79.0	79.9	79.9	80.2	80.6	80.8	81.2	81.6	81.7	82.8	83.1	83.4	79.6	80.5	81.5	83.1	81.2
1988	83.4	83.6	83.8	84.2	84.1	84.3	84.3	84.7	84.3	84.7	84.8	85.1	83.6	84.2	84.4	84.8	84.3
1989	85.2	84.7	84.8	84.7	84.0	83.9	82.9	83.4	83.0	82.7	82.8	83.1	84.9	84.2	83.1	82.9	83.8
1990	82.5	83.0	83.3	83.0	83.0	83.1	82.9	82.9	83.0	82.2	81.1	80.4	82.9	83.0	82.9	81.2	82.5
1991	79.9	79.3	78.8	78.8	79.5	80.2	80.1	80.1	80.7	80.5	80.3	79.9	79.3	79.5	80.3	80.2	79.8
1992	79.3	79.8	80.3	80.7	80.8	80.7	81.2	80.6	80.6	81.0	81.2	81.0	79.8	80.7	80.8	81.1	80.6
1993	81.3	81.4	81.3	81.4	81.0	81.1	81.3	81.1	81.4	81.9	82.0	82.3	81.3	81.2	81.3	82.1	81.5
1994	82.5	82.3	83.0	83.2	83.4	83.7	83.6	83.8	83.8	84.2	84.4	85.1	82.6	83.5	83.7	84.6	83.6
1995	85.0	84.7	84.6	84.2	84.1	84.1	83.4	84.2	84.2	83.7	83.5	83.5	84.8	84.1	83.9	83.6	84.1
1996	82.6	83.6	83.1	83.5	83.6	84.0	83.5	83.7	83.7	83.3	83.6	83.7	83.1	83.7	83.6	83.6	83.5
1997	83.4	84.0	84.2	83.8	84.0	83.9	83.9	84.5	84.7	84.7	84.9	84.7	83.9	83.9	84.4	84.8	84.2
1998	84.5	84.0	83.5	83.3	83.3	82.3	81.5	82.8	82.1	82.4	81.9	81.8	84.0	83.0	82.2	82.1	82.8
1999	81.8	81.8	81.6	81.5	81.7	81.3	81.6	81.6	81.1	81.8	81.9	82.2	81.7	81.5	81.4	82.0	81.7
2000	82.0	82.0	82.1	82.3	82.1	81.9	81.5	81.0	81.2	80.6	80.4	79.8	82.1	82.1	81.2	80.3	81.4
2001	79.1	78.4	77.9	77.5	76.8	76.1	75.6	75.1	74.7	74.2	73.6	73.5	78.5	76.8	75.1	73.8	76.0
2002	73.8	73.7	74.2	74.4	74.8	75.4	75.2	75.3	75.4	75.1	75.5	75.1	73.9	74.9	75.3	75.2	74.8
2003	75.7	76.0	75.9	75.4	75.4	75.5	75.7	75.7	76.2	76.2	76.8	76.8	75.9	75.4	75.9	76.6	75.9
2004	77.0	77.4	77.0	77.3	77.9	77.2	77.8	78.0	77.9	78.7	78.8	79.4	77.1	77.5	77.9	79.0	77.9
2005	79.8	80.3	80.1	80.1	80.2	80.4	80.2	80.2	78.5	79.4	80.0	80.4	80.1	80.2	79.6	79.9	79.9
2006	80.4	80.3	80.4	80.6	80.3	80.5	80.5	80.5	80.3	80.1	79.9	80.5	80.4	80.5	80.4	80.2	80.4
2007	80.2	80.9	80.8	81.2	81.1	81.0	81.0	81.0	81.3	80.8	81.1	81.3	80.6	81.1	81.1	81.1	81.0
2008	81.1	81.0	80.6	80.0	79.5	79.3	79.0	77.6	74.3	74.9	73.9	71.9	80.9	79.6	77.0	73.6	77.8
2009	70.4	70.0	68.8	68.2	67.5	67.3	68.2	68.9	69.5	69.9	70.2	70.8	69.7	67.7	68.9	70.3	69.2
2010	71.9	72.2	72.8	73.2	74.3	74.5	75.3	75.5	75.7	75.7	75.9	77.0	72.3	74.0	75.5	76.2	74.5
2011	77.1	77.0															

NOTE: Estimates from October 2010 through February 2011 are subject to further revision in the upcoming monthly releases.

Table 2
RATES OF CHANGE IN INDUSTRIAL PRODUCTION, MARKET AND INDUSTRY GROUP SUMMARY: 2006–10¹

Item	Revised change (percent)					Difference between revised and earlier changes (percentage points)					
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010	
Total IP	2.3	2.5	-9.1	-5.5	6.4	-2	.2	-1.4	-1.7	.5	
MARKET GROUPS											
Final products and nonindustrial supplies	1.5	1.0	-9.1	-5.5	5.5	-1	.1	-1.8	-1.2	.4	
Consumer goods	.2	-.6	-7.5	-2.1	3.4	.1	-.3	-1.4	-1.2	.3	
Durable	-1.9	2.0	-18.5	-1.7	5.6	.2	-.5	-.2	.4	.3	
Automotive products	-1.6	6.1	-22.2	9.1	6.1	.4	-1.1	1.9	3.2	-.2	
Home electronics	8.9	18.5	-6.5	2.5	-5.7	2.6	-.3	-3.1	.1	-.9	
Appliances, furniture, carpeting	-5.6	-4.0	-22.2	-15.0	3.1	-.3	.4	-3.4	-4.6	1.5	
Miscellaneous goods	-2.1	-3.6	-12.7	-12.1	7.6	-.2	.2	-1.6	-2.1	.3	
Nondurable	.9	-1.4	-3.9	-2.2	2.8	.1	-.2	-1.9	-1.6	.3	
Non-energy	.6	-2.6	-5.7	-2.8	2.4	.0	-.1	-2.7	-2.4	.2	
Foods and tobacco	-1.1	-2.0	-4.1	-1.2	4.8	-.2	.3	-.5	-1.7	-.4	
Clothing	-15.1	-23.0	-12.3	-23.8	7.7	-1.3	1.3	-6.2	-10.3	-.5	
Chemical products	5.2	-1.6	-7.3	-3.5	-.4	.2	-.5	-5.6	-3.7	.7	
Paper products	1.6	-4.4	-9.8	-5.7	-2.7	.8	-2.2	-4.6	-.5	.5	
Energy	1.8	2.1	1.9	.1	4.3	.3	-.5	.4	1.0	.4	
Business equipment	8.0	3.7	-12.9	-7.9	12.8	-.9	.8	-4.5	-1.4	.2	
Transit	8.5	5.1	-35.4	11.9	10.5	-2.2	3.6	-8.4	.8	6.4	
Information processing	14.1	3.4	-3.7	1.3	13.4	-1.1	-1.2	-4.4	2.2	-2.2	
Industrial and other	4.4	3.3	-8.4	-18.0	13.4	-.3	.8	-2.0	-3.6	-.5	
Defense and space equipment	3.3	20.5	1.9	1.2	5.8	-6	2.7	3.8	-6	2.7	
Construction supplies	-2.7	-.9	-17.0	-17.3	10.1	-.2	.8	-2.9	-5.5	2.7	
Business supplies	.7	1.0	-8.7	-5.8	1.5	.0	-.3	-1.1	.2	-.2	
Materials	3.3	4.4	-9.1	-5.5	7.6	-.3	.4	-1.0	-2.3	.7	
Non-energy	2.6	5.5	-14.1	-7.7	8.1	.1	.5	-1.4	-3.0	.5	
Durable	1.4	6.7	-13.7	-12.9	11.8	.1	.5	-1.5	-3.7	.9	
Consumer parts	-5.1	-1.1	-26.0	-14.7	9.0	-.5	1.7	-2.5	-7.0	-.9	
Equipment parts	9.5	16.3	-7.3	-10.7	12.3	.3	.4	-1.6	-2.6	-.2	
Other	-1.9	2.6	-14.3	-14.0	12.1	.3	.1	-1.2	-3.6	2.2	
Nondurable	4.6	3.6	-14.8	.0	3.5	.1	-.4	-1.3	-2.1	.6	
Textile	-12.3	-8.3	-16.9	-4.6	9.5	-.4	.9	-.5	-2.5	1.6	
Paper	1.2	-.6	-11.0	-4.5	.5	.0	.1	.3	1.1	.3	
Chemical	10.6	7.8	-21.1	2.9	4.8	.1	1.1	-3.0	-6.6	1.3	
Energy	4.8	2.5	-.8	-1.9	6.5	-1.2	.4	-.2	-1.0	.9	
INDUSTRY GROUPS											
Manufacturing	2.0	2.8	-11.8	-6.1	6.2	.0	.2	-1.9	-2.0	.4	
Manufacturing (NAICS)	31–33	2.1	3.2	-11.8	-5.9	6.7	-.1	.4	-1.8	-.2	.4
Durable manufacturing		2.5	5.9	-13.3	-9.1	9.9	-.2	.6	-2.0	-.2	.7
Wood products	321	-11.1	-4.2	-22.5	-11.7	5.9	-.2	.3	-1.6	-1.0	4.6
Nonmetallic mineral products	327	-2.5	-1.5	-19.4	-18.3	7.1	-.3	.9	-3.5	-6.5	1.9
Primary metal	331	-2.8	9.5	-19.9	-8.3	12.4	1.8	-1.4	3.3	-5.3	1.0
Fabricated metal products	332	4.1	4.9	-11.8	-19.3	14.0	-.5	1.6	-4.6	-7.6	2.2
Machinery	333	3.3	3.2	-9.0	-20.4	16.4	.0	.2	-.8	-1.3	-2.1
Computer and electronic products	334	12.8	14.9	-5.7	1.4	12.1	.0	-.5	-3.1	-.3	-1.6
Electrical equip., appliances, and components	335	.1	4.2	-10.5	-17.5	9.6	-.2	1.0	-4.9	-7.1	.9
Motor vehicles and parts	3361–3	-3.9	-2.7	-28.7	2.3	10.2	.0	.0	-1.2	1.0	1.9
Aerospace and miscellaneous transportation equipment	3364–9	8.3	21.2	-13.7	.8	1.0	-1.1	3.7	-.5	-1.8	1.9
Furniture and related products	337	-3.2	-.1	-20.7	-21.3	6.5	-.5	1.4	-4.4	-6.1	2.7
Miscellaneous	339	.0	-.9	-1.1	-5.3	4.1	-.7	.7	-.9	-2.5	1.7
Nondurable manufacturing		1.6	.1	-10.1	-2.3	3.6	.1	.1	-1.6	-1.7	.3
Food, beverage, and tobacco products	311,2	-1.0	-1.1	-3.4	-.5	4.4	-.1	.2	.0	-.5	-.7
Textile and product mills	313,4	-13.0	-10.2	-16.7	-10.5	6.7	-.4	1.1	-1.6	-5.0	3.2
Apparel and leather	315,6	-7.9	-22.8	-18.6	-18.9	6.9	-.8	.2	-3.6	-5.0	-1.2
Paper	322	.3	-.1	-12.9	-.3	2.2	.0	.2	.3	.0	.5
Printing and support	323	2.0	.5	-10.3	-13.5	-3.0	.1	.1	-1.0	.5	.2
Petroleum and coal products	324	7.0	-.3	-4.0	-.9	4.2	.8	-1.0	.3	.5	-1.0
Chemical	325	6.5	3.6	-14.6	-.5	2.0	.1	.3	-4.2	-4.4	.9
Plastics and rubber products	326	-4.3	-.9	-15.5	-7.3	9.8	.1	-.3	-.5	1.6	1.5
Other manufacturing (non-NAICS)	1133,5111	-.4	-4.7	-12.2	-10.0	-4.5	.8	-2.2	-3.1	1.3	.3
Mining	21	7.2	.6	-.4	-5.4	10.1	-1.5	.5	-.1	-.9	1.2
Utilities	2211,2	-.8	3.1	-.4	-1.3	3.4	-.1	.0	.0	.1	.8
Electric	2211	-1.2	3.4	-1.5	-1.7	2.8	-.1	.0	-.1	.1	.8
Natural gas	2212	1.1	1.3	5.1	.9	6.8	-.1	-.2	.2	.3	.9

1. Rates of change are calculated as the percent change in the seasonally adjusted index from the fourth quarter of the previous year to the fourth quarter of the year specified in the column heading.

Table 3
RATES OF CHANGE IN INDUSTRIAL PRODUCTION, SPECIAL AGGREGATES AND SELECTED DETAIL: 2006–10¹

Item	Revised change (percent)					Difference between revised and earlier changes (percentage points)				
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
Total industry	2.3	2.5	-9.1	-5.5	6.4	-2	.2	-1.4	-1.7	.5
Energy	4.0	2.3	-.1	-2.4	6.1	-.7	.2	-.1	-.4	.6
Consumer products	1.8	2.1	1.9	.1	4.3	.3	-.5	.4	1.0	.4
Commercial products	2.1	2.2	-.6	-.2	1.9	-.1	-.2	-.1	-.2	-.4
Oil and gas well drilling	213111	14.5	-1.1	6.8	-42.4	44.7	-1	-1	-1	-1
Converted fuel	2.5	6.0	-5.7	-1.3	3.0	-1	.1	-.6	-.8	1.0
Primary energy	5.6	1.4	.7	-2.1	7.7	-1.6	.5	-.1	-1.0	1.1
Non-energy	1.7	2.6	-12.1	-6.5	6.5	.0	.3	-1.9	-2.1	.5
Selected high-technology industries	16.0	21.6	-5.5	6.1	12.8	-.5	.2	-.3	2.1	-1.5
Computers and peripheral equipment	3341	18.1	25.3	-1.5	15.7	16.9	1.9	-2.3	3.4	17.7
Communications equipment	3342	18.1	-12.0	-3.1	.1	3.9	-5.5	-.4	-5.3	-5.0
Semiconductors and related electronic components	334412-9	13.5	39.2	-7.8	4.3	14.6	.6	1.5	.4	-2.1
Excluding selected high-technology industries	.8	1.5	-12.6	-7.2	6.1	.0	.3	-2.0	-2.3	.6
Motor vehicles and parts	3361-3	-3.9	-2.7	-28.7	2.3	10.2	.0	.0	-1.2	1.0
Motor vehicles	3361	-3.3	-3.0	-32.0	10.9	15.3	.7	-1.4	-.5	5.7
Motor vehicle parts	3363	-4.2	-2.0	-23.0	-7.3	2.7	-.8	1.6	-2.3	-4.4
Excluding motor vehicles and parts	1.3	1.8	-11.4	-7.8	5.9	.0	.3	-2.1	-2.5	.5
Consumer goods	.0	-2.0	-7.7	-4.8	3.0	-1	.0	-2.4	-2.5	.3
Business equipment	6.8	6.3	-13.0	-9.7	10.5	-2	1.0	-4.8	-3.6	-.9
Construction supplies	-2.8	-.9	-17.1	-17.4	10.1	-2	.9	-2.8	-5.5	2.7
Business supplies	-.5	-.2	-11.7	-8.4	.9	.2	-.6	-1.5	.4	-.1
Materials	2.3	3.6	-13.4	-8.5	7.7	.1	.3	-1.5	-2.8	.9
Measures excluding selected high-technology industries										
Total industry	1.6	1.7	-9.3	-5.9	6.1	-2	.2	-1.5	-1.8	.6
Manufacturing ²	1.1	1.7	-12.3	-6.8	5.9	.0	.2	-2.0	-2.2	.5
Durable	.7	3.9	-14.3	-10.8	9.5	-.1	.7	-2.3	-3.3	1.0
Measures excluding motor vehicles and parts										
Total industry	2.7	2.8	-8.1	-5.8	6.2	-2	.3	-1.4	-1.8	.5
Manufacturing ²	2.4	3.2	-10.7	-6.6	6.0	.0	.2	-1.9	-2.2	.3
Durable	3.5	7.2	-11.1	-10.6	9.8	-2	.7	-2.1	-3.4	.6
Measures excluding selected high-technology industries and motor vehicles and parts										
Total industry	2.0	1.9	-8.2	-6.3	6.0	-2	.3	-1.5	-1.9	.6
Manufacturing ²	1.5	2.0	-11.1	-7.3	5.6	.0	.3	-2.0	-2.4	.4
Measure of non-energy material inputs to										
Finished processors	2.9	7.5	-12.8	-10.0	8.9	.0	.7	-1.4	-2.7	-.4
Primary and semifinished processors	2.4	4.1	-15.0	-6.1	7.6	.2	.3	-1.5	-3.1	1.2
STAGE-OF-PROCESS GROUPS										
Crude	7.3	2.3	-5.3	-1.3	6.2	-1.1	.5	-.6	-1.9	.4
Primary and semifinished	-.1	3.3	-10.6	-8.3	6.1	.1	.2	-1.3	-1.7	.9
Finished	3.5	1.5	-9.1	-3.7	6.9	-.2	.2	-2.2	-1.4	.2

1. Rates of change are calculated as the percent change in the seasonally adjusted index from the fourth quarter of the previous year to the fourth quarter of the year specified in the column heading.

2. Manufacturing consists of those industries included in the North American Industry Classification System, or NAICS, definition of manufacturing plus those industries—logging and newspaper, periodical, book, and directory publishing—that have traditionally been considered to be a part of manufacturing and are included in the industrial sector.

Table 4
ANNUAL RATES OF CHANGE FOR INDUSTRIAL PRODUCTION: 2006–10¹

Item	Revised change (percent)					Difference between revised and earlier changes (percentage points)				
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
Total IP	2.2	2.7	-3.7	-11.2	5.3	-.1	.0	-.4	-1.9	-.5
MARKET GROUPS										
Consumer goods	.5	.8	-5.2	-7.2	4.3	-.1	.0	-1.0	-1.4	-.4
Durable	.2	1.9	-11.3	-15.9	11.1	-.2	.1	-.9	1.0	-.8
Nondurable	.6	.5	-3.2	-4.6	2.5	.0	.0	-1.1	-2.2	-.3
Business equipment	9.2	4.2	-2.5	-16.3	7.8	.0	-.3	-1.0	-4.1	-.5
Defense and space equipment	-1.5	18.3	7.9	1.2	5.0	.0	.0	5.4	.2	1.3
Construction supplies	2.3	-1.2	-9.7	-22.5	3.8	.0	.0	-.1	-5.9	-.4
Business supplies	1.0	1.7	-4.9	-10.0	1.2	.0	.0	-1.0	.1	-.6
Materials	2.1	3.7	-2.7	-11.6	6.4	-.1	.0	.0	-1.9	-.5
Non-energy	2.5	4.6	-4.7	-17.1	7.4	.1	.0	.0	-2.7	-1.1
Energy	1.3	1.9	.6	-2.4	4.7	-.4	.0	.0	-.3	.2
INDUSTRY GROUPS										
Manufacturing²	2.5	2.9	-5.0	-13.5	5.4	.0	.0	-.5	-2.4	-.7
Manufacturing (NAICS)	2.7	3.2	-4.7	-13.5	5.9	.0	.0	-.4	-2.6	-.8
Durable manufacturing	4.6	4.9	-3.7	-18.0	8.0	.0	-.1	-.1	-3.1	-1.1
Nondurable manufacturing	.6	1.2	-6.0	-8.1	3.7	.0	.0	-.6	-2.1	-.4
Other manufacturing (non-NAICS)	-1.2	-1.3	-10.6	-13.8	-3.8	.0	.0	-4.1	.7	.6
Mining	2.4	.5	.8	-5.2	5.9	-.6	.0	.0	-.2	.4
Utilities	-.6	3.4	-.1	-2.6	4.1	.0	.0	.1	.0	.6

1. The rates of change are calculated as the percent change in the annual averages of not seasonally adjusted industrial production indexes, rather than as the percent change between the fourth quarter of one year and the fourth quarter of the next.

2. See footnote 2 to table 3.

Table 5
RATES OF CHANGE IN CAPACITY, BY INDUSTRY GROUPS: 2007–11¹

Item	Revised change (percent)					Difference between revised and earlier changes (percentage points)				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Total industry	1.4	.2	-1.1	-1.8	1.1	-.4	-.6	-1.5	-1.5	-.1
Manufacturing²	2.1	-.6	-2.8	-2.0	.8	-.4	-1.2	-1.7	-1.8	.1
Manufacturing (NAICS)	2.3	-.2	-2.9	-2.1	.9	-.3	-1.0	-1.8	-1.9	.1
Durable manufacturing	3.4	-.1	-2.1	-1.9	1.5	-.5	-.8	-.8	-2.4	.9
Nondurable manufacturing	1.0	-.3	-3.6	-2.1	.3	-.1	-1.3	-2.8	-1.1	-.8
Other manufacturing (non-NAICS)	-2.9	-8.3	-1.9	.0	-.7	-1.6	-3.7	1.7	.0	-.4
Mining	.4	2.6	3.4	-.9	2.1	-.4	1.1	.4	-.9	.1
Utilities	.7	2.4	.5	3.6	2.0	.1	.2	-2.7	2.2	-1.6
Selected high-technology industries	24.9	-.1	10.0	4.1	15.2	-2.3	-.4	2.3	-7.3	10.6
Manufacturing ² ex. selected high-technology industries	.8	-.7	-3.6	-2.3	.1	-.2	-1.2	-1.9	-1.5	-.4
STAGE-OF-PROCESS GROUPS										
Crude	.2	2.3	.9	-.9	1.5	-.4	.8	-1.7	-.1	-.1
Primary and semifinished	2.7	.0	-2.3	-2.1	.2	-.2	-.6	-1.6	-1.5	-.2
Finished	.8	-.8	-2.1	-.7	2.0	-.5	-1.5	-1.3	-1.5	.0

1. Rates of change are calculated as the percent change in the seasonally adjusted index from the fourth quarter of the previous year to the fourth quarter of the year specified in the column heading.

2. See footnote 2 to table 3.

Table 6**REVISED AND EARLIER CAPACITY UTILIZATION RATES, BY INDUSTRY GROUPS**

Percent of capacity, seasonally adjusted

Item	Revised Rate					Difference between revised and earlier rates (percentage points)				
	1972-2010 Ave.	2007 Q4	2008 Q4	2009 Q4	2010 Q4	2007 Q4	2008 Q4	2009 Q4	2010 Q4	
Total industry		80.4	81.1	73.6	70.3	76.2	.0	-.7	-.8	.6
Manufacturing¹		79.0	79.0	70.1	67.7	73.4	-.1	-.8	-1.1	.4
Manufacturing (NAICS)	31-33	78.8	79.0	69.8	67.6	73.7	-.1	-.8	-1.1	.5
Durable manufacturing		77.2	78.4	68.0	63.2	70.8	.1	-1.0	-2.4	-.5
Wood products	321	77.8	70.8	58.2	54.6	60.6	-.9	-.8	-2.7	-2.0
Nonmetallic mineral products	327	75.9	67.4	54.6	46.5	51.8	-3.5	-4.5	-7.0	-5.7
Primary metal	331	79.4	83.6	64.5	61.6	68.6	-.3	1.0	-1.0	-.2
Fabricated metal products	332	77.2	84.6	73.9	61.9	72.9	2.6	-1.1	-5.8	-4.2
Machinery	333	78.1	83.0	77.0	62.3	74.2	-.6	.0	-1.1	-2.3
Computer and electronic products	334	78.1	75.8	72.2	71.2	79.4	-.4	-.9	.4	5.0
Electrical equip., appliances, and components	335	82.7	88.6	79.9	67.6	76.1	2.5	.4	-4.6	-3.0
Motor vehicles and parts	3361-3	75.3	68.8	48.9	54.0	61.3	-.2	-.7	-.9	.0
Aerospace and miscellaneous transportation equipment	3364-9	73.0	88.6	73.2	71.5	71.4	.9	-.7	-1.4	.9
Furniture and related products	337	77.5	78.6	68.2	60.4	66.7	-1.9	-3.7	-5.1	-4.8
Miscellaneous	339	76.0	73.5	72.8	71.3	76.5	.3	.1	1.1	6.9
Nondurable manufacturing		81.1	79.7	71.9	72.9	77.0	-.3	-.6	.2	1.3
Food, beverage, and tobacco products	311,2	81.2	79.1	76.5	75.9	79.0	-.8	.2	.0	-.4
Textile and product mills	313,4	80.4	71.8	63.7	58.1	64.0	-.9	.4	-5.2	-4.9
Apparel and leather	315,6	78.2	72.4	73.9	63.2	69.2	1.2	-.3	-6.3	-11.7
Paper	322	87.1	84.4	75.0	79.5	83.2	-.2	.9	4.3	5.0
Printing and support	323	82.2	77.5	69.4	63.8	64.0	.1	-1.5	-.2	-.1
Petroleum and coal products	324	85.8	86.4	81.8	79.1	85.5	-1.1	-1.7	-1.6	-.5
Chemical	325	78.0	79.0	68.3	73.1	76.4	.3	-1.5	-.2	1.5
Plastics and rubber products	326	82.3	77.9	64.5	62.8	71.6	.1	-.4	1.7	5.2
Other manufacturing (non-NAICS)	1133,5111	83.4	79.5	76.2	69.9	66.8	-.4	.0	-.2	.0
Mining	21	87.4	90.5	87.8	80.2	89.1	.7	-.3	-1.4	.2
Utilities	2211,2	86.6	85.2	82.9	81.5	81.3	-.3	-.5	1.7	.6
Selected high-technology industries		78.4	81.1	76.8	74.1	80.3	1.6	1.7	1.6	5.9
Computers and peripheral equipment	3341	78.6	82.4	80.0	93.3	86.3	2.4	2.9	13.2	2.2
Communications equipment	3342	76.7	75.5	84.7	80.9	78.7	.0	.0	.8	-2.3
Semiconductors and related electronic components	334412-9	80.3	82.1	72.7	65.8	78.8	1.7	2.5	-.7	10.1
Measures excluding selected high-technology industries										
Total industry		80.5	81.1	73.5	70.2	76.0	-.1	-.8	-.9	.5
Manufacturing ¹		79.0	78.9	69.7	67.4	73.0	-.2	-.9	-1.2	.2
STAGE-OF-PROCESS GROUPS										
Crude		86.4	89.8	83.6	80.4	87.1	.6	-.7	-1.1	-.6
Primary and semifinished		81.3	80.9	72.0	67.6	73.3	.0	-.6	-.8	.8
Finished		77.3	77.5	71.0	70.2	75.0	-.3	-.8	-.8	.4

1. See footnote 2 to table 3.

Table 7
RATES OF CHANGE IN INDUSTRIAL PRODUCTION, 2006–10

Item	NAICS code	2006		2007		2008		2009		2010	
		H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
Total IP		3.2	1.4	4.5	.6	-3.9	-14.0	-15.3	5.5	7.6	4.4
MARKET GROUPS											
Final products and nonindustrial supplies		1.7	1.3	3.4	-1.3	-4.7	-13.3	-14.7	4.8	6.5	3.9
Consumer goods		-1	.5	2.0	-3.2	-5.7	-9.3	-11.0	7.7	3.2	3.1
Durable		-3	-3.5	9.6	-5.1	-15.3	-21.5	-24.7	28.4	7.7	3.1
Automotive products		-2	-3.0	24.3	-9.5	-23.4	-21.0	-28.8	67.4	6.2	5.1
Home electronics		25.8	-5.8	5.8	32.7	9.1	-19.8	6.1	-1.0	-8.0	-2.9
Appliances, furniture, carpeting		-5.6	-5.6	-3.9	-4.0	-13.7	-29.8	-24.2	-4.7	9.4	-2.3
Miscellaneous goods		-1.5	-2.6	-3.3	-3.9	-7.2	-18.0	-23.3	.9	12.2	2.7
Nondurable		.0	1.8	-3	-2.5	-2.5	-5.4	-6.8	2.8	2.0	3.1
Non-energy		.0	1.1	-2.0	-3.1	-3.9	-7.5	-7.6	2.2	2.3	2.1
Foods and tobacco		-3.5	1.2	-1.1	-2.9	-3.2	-5.0	-4.4	2.1	5.7	3.4
Clothing		-6.2	-23.1	-28.0	-17.7	-4.8	-19.3	-34.3	-11.7	10.9	3.9
Chemical products		6.7	3.8	-2.5	-7	-4.1	-10.4	-8.7	2.0	-1.2	.4
Paper products		1.3	2.0	1.2	-9.6	-9.2	-10.5	-14.9	4.6	-5.1	-2
Energy		-2	3.9	5.0	-8	1.9	2.0	-4.4	4.8	1.0	6.5
Business equipment		10.9	5.1	4.1	3.3	.6	-24.5	-18.4	4.1	13.4	10.4
Transit		23.8	-5.0	-5.7	17.1	4.7	-60.2	4.2	20.2	7.9	11.1
Information processing		13.7	14.6	13.5	-5.7	7.7	-14.0	-4.2	7.1	10.4	14.0
Industrial and other		4.5	4.2	3.3	3.3	-4.5	-12.1	-30.5	-3.1	17.4	8.1
Defense and space equipment		-7.8	15.8	21.3	19.8	2.1	1.8	-1.3	3.7	8.3	2.9
Construction supplies		-1.6	-3.8	2.7	-4.3	-11.6	-22.1	-27.6	-5.6	17.1	3.0
Business supplies		.9	.5	3.9	-1.9	-5.8	-11.4	-12.6	1.5	2.3	.7
Materials		5.2	1.5	6.0	2.9	-3.1	-14.8	-16.0	6.3	9.1	5.1
Non-energy		3.7	1.5	8.5	2.6	-5.3	-22.1	-21.3	8.1	10.7	4.8
Durable		3.4	-6	9.3	4.1	-2.7	-23.4	-30.2	8.9	16.5	6.2
Consumer parts		-2.1	-8.0	7.6	-9.1	-15.7	-35.1	-44.8	31.9	17.1	1.2
Equipment parts		7.5	11.5	17.0	15.6	5.4	-18.4	-23.3	4.0	14.3	8.8
Other		2.5	-6.0	4.5	.7	-4.2	-23.4	-31.2	7.4	18.1	5.5
Nondurable		4.2	5.0	7.1	.3	-9.3	-19.9	-6.7	7.2	3.6	2.9
Textile		-15.4	-9.1	-2.3	-13.8	-14.4	-19.3	-21.8	16.3	8.5	8.9
Paper		-3	2.7	-1.6	.5	-3.9	-17.5	-14.6	6.8	3.3	-1.9
Chemical		11.8	9.5	14.4	1.6	-14.2	-27.4	-3.8	10.0	4.6	4.3
Energy		8.1	1.6	1.5	3.6	.6	-2.2	-6.8	3.4	6.4	5.6
INDUSTRY GROUPS											
Manufacturing²		2.5	1.4	5.3	.3	-5.5	-17.8	-17.0	6.2	7.9	3.9
Manufacturing (NAICS)	31–33	2.6	1.6	5.6	.8	-5.2	-18.0	-16.8	6.5	8.5	4.3
Durable manufacturing		3.6	1.3	8.8	3.0	-3.7	-21.9	-24.2	8.9	12.3	6.4
Wood products	321	-8.5	-13.6	1.8	-9.8	-15.6	-28.9	-26.2	5.6	16.1	-2.9
Nonmetallic mineral products	327	-6	-4.4	2.9	-5.7	-13.2	-25.2	-27.8	-7.4	10.9	2.8
Primary metal	331	7.5	-12.1	11.1	7.9	5.6	-39.2	-41.8	44.4	22.9	2.4
Fabricated metal products	332	5.4	2.7	6.2	3.6	-5.0	-18.1	-33.9	-1.5	15.1	11.0
Machinery	333	1.3	5.4	4.5	1.9	-3.8	-13.9	-34.0	-4.1	21.5	9.7
Computer and electronic products	334	10.9	14.6	17.8	12.0	9.8	-19.1	-6.7	10.2	13.2	9.4
Selected high-technology industries		16.4	15.5	22.9	20.3	19.2	-25.0	-4.6	18.1	12.3	11.2
Computers and peripheral equipment	3341	29.5	7.7	11.4	40.9	28.9	-24.8	2.7	30.3	.5	30.2
Communications equipment	3342	22.4	14.0	11.1	-30.2	8.7	-13.6	-1.2	1.4	.6	6.2
Semiconductors and related electronic components	334412–9	8.7	18.6	34.8	43.9	19.6	-28.9	-10.1	21.0	22.0	6.5
Electrical equip., appliances, and components	335	-1.3	1.4	8.4	.2	-2.5	-17.8	-28.8	-4.5	12.8	5.5
Motor vehicles and parts	3361–3	.8	-8.3	10.1	-14.0	-25.1	-32.0	-44.5	88.8	14.5	5.1
Aerospace and miscellaneous transportation equipment	3364–9	4.8	11.8	19.7	22.8	2.0	-27.0	8.2	-6.0	-.7	2.4
Furniture and related products	337	-1	-6.3	-2.7	2.7	-11.9	-28.6	-31.6	-9.5	10.1	2.6
Miscellaneous	339	2.5	-2.4	-2.7	1.0	3.3	-5.3	-12.5	2.4	3.9	3.6
Nondurable manufacturing		1.4	1.9	1.9	-1.6	-6.8	-13.2	-8.2	4.0	4.7	2.1
Food, beverage, and tobacco products	311,2	-3.1	1.2	.1	-2.2	-2.6	-4.1	-3.1	2.2	4.5	3.7
Textile and product mills	313,4	-13.7	-12.3	-7.5	-12.9	-11.0	-22.0	-26.3	8.7	8.8	4.0
Apparel and leather	315,6	-.4	-14.9	-21.6	-24.1	-16.9	-20.2	-28.1	-8.6	5.4	7.1
Paper	322	-2.7	3.5	-1.4	1.2	-2.7	-22.0	-9.0	9.1	5.2	-.7
Printing and support	323	1.1	2.8	1.6	-.6	-7.9	-12.6	-20.1	-6.4	-1.3	-4.1
Petroleum and coal products	324	6.3	7.7	2.4	-2.9	-3.4	-4.6	-.4	-1.5	6.3	1.9
Chemical	325	7.6	5.5	6.5	.7	-10.0	-18.9	-6.6	6.1	2.1	1.6
Plastics and rubber products	326	-.8	-7.6	1.2	-2.9	-12.4	-18.5	-22.8	11.4	16.4	3.0
Other manufacturing (non-NAICS)	1133,5111	.8	-1.6	.6	-9.7	-12.0	-12.4	-20.3	1.6	-4.1	-4.2
Mining	21	12.0	2.6	-1.0	2.2	1.1	-1.9	-12.7	2.4	10.9	7.9
Utilities	2211,2	-1.4	-.1	5.2	1.0	1.1	-1.8	-6.1	3.8	2.3	3.8

NOTE: The data are semiannual. Rates of change are calculated as the annualized percent change in the seasonally adjusted index from the second quarter of the previous half-year to the second quarter of the half-year specified in the column heading.

1. See footnote 2 to table 3.

Table 8
CAPACITY UTILIZATION RATES, BY INDUSTRY GROUPS, 2006–10

Percent of capacity, seasonally adjusted

Item	NAICS code	2006		2007		2008		2009		2010	
		Q2	Q4	Q2	Q4	Q2	Q4	Q2	Q4	Q2	Q4
Total industry		80.5	80.2	81.1	81.1	79.6	73.6	67.7	70.3	74.0	76.2
Manufacturing¹		78.7	78.4	79.5	79.0	76.8	70.1	64.6	67.7	71.4	73.4
Manufacturing (NAICS)	31–33	78.5	78.3	79.4	79.0	76.7	69.8	64.4	67.6	71.5	73.7
Durable manufacturing		77.3	76.6	78.4	78.4	76.7	68.0	59.7	63.2	67.9	70.8
Wood products	321	79.0	72.8	73.6	70.8	66.8	58.2	51.6	54.6	60.4	60.6
Nonmetallic mineral products	327	75.0	71.4	70.5	67.4	62.6	54.6	47.2	46.5	50.1	51.8
Primary metal	331	81.7	75.9	80.4	83.6	84.0	64.5	50.0	61.6	68.6	68.6
Fabricated metal products	332	81.8	82.9	84.5	84.6	81.5	73.9	61.0	61.9	67.7	72.9
Machinery	333	79.3	81.3	82.5	83.0	82.0	77.0	63.0	62.3	69.6	74.2
Computer and electronic products	334	75.6	77.5	77.2	75.8	78.8	72.2	69.2	71.2	75.7	79.4
Selected high-technology industries		81.0	83.3	82.4	81.1	87.0	76.8	72.4	74.1	76.8	80.3
Computers and peripheral equipment	3341	78.2	78.2	76.1	82.4	90.1	80.0	84.0	93.3	83.7	86.3
Communications equipment	3342	72.0	80.1	86.4	75.5	85.4	84.7	84.0	80.9	78.2	78.7
Semiconductors and related electronic components	334412–9	88.0	87.3	82.4	82.1	86.0	72.7	64.3	65.8	74.0	78.8
Electrical equip., appliances, and components	335	82.4	83.1	87.4	88.6	88.0	79.9	68.0	67.6	72.9	76.1
Motor vehicles and parts	3361–3	73.5	69.1	73.2	68.8	59.2	48.9	37.6	54.0	59.3	61.3
Aerospace and miscellaneous transportation equipment	3364–9	71.2	74.7	81.1	88.6	87.6	73.2	74.7	71.5	70.8	71.4
Furniture and related products	337	80.3	78.1	77.0	78.6	76.3	68.2	60.3	60.4	65.1	66.7
Miscellaneous	339	77.5	75.5	73.6	73.5	74.5	72.8	69.0	71.3	74.2	76.5
Nondurable manufacturing		80.1	80.4	80.7	79.7	76.7	71.9	70.0	72.9	75.7	77.0
Food, beverage, and tobacco products	311,2	78.1	79.1	79.6	79.1	78.2	76.5	75.1	75.9	77.5	79.0
Textile and product mills	313,4	75.0	73.5	73.8	71.8	70.3	63.7	55.2	58.1	61.5	64.0
Apparel and leather	315,6	78.2	75.3	73.1	72.4	75.2	73.9	65.3	63.2	65.6	69.2
Paper	322	83.1	84.3	83.7	84.4	83.7	75.0	73.8	79.5	83.0	83.2
Printing and support	323	80.0	80.3	79.3	77.5	73.6	69.4	63.8	63.8	64.9	64.0
Petroleum and coal products	324	89.6	89.7	88.5	86.4	84.8	81.8	80.0	79.1	83.1	85.5
Chemical	325	77.6	78.9	80.1	79.0	74.6	68.3	68.4	73.1	75.3	76.4
Plastics and rubber products	326	84.4	79.8	79.7	77.9	71.9	64.5	57.7	62.8	69.4	71.6
Other manufacturing (non-NAICS)	1133,5111	82.0	81.0	81.7	79.5	78.0	76.2	69.3	69.9	68.3	66.8
Mining	21	90.3	90.3	89.1	90.5	90.9	87.8	79.6	80.2	85.4	89.1
Utilities	2211,2	83.6	83.3	85.4	85.2	84.5	82.9	80.2	81.5	81.2	81.3

1. See footnote 2 to table 3.

Table 9A
INDUSTRIAL PRODUCTION: Manufacturing¹
 Seasonally adjusted

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual ²
IP (percent change)																	
1981	-.3	-.6	.3	.5	.5	-.5	.1	.1	-.5	-.9	-1.2	-1.7	.8	3.0	-.4	-9.8	1.1
1982	-2.4	2.7	-.8	-.7	-.1	-.2	-.1	-.8	-.3	-1.1	-.6	-.4	-9.3	-2.0	-3.5	-8.1	-5.4
1983	2.4	-.1	1.0	1.1	1.3	.7	1.5	.8	1.9	1.1	.4	.3	9.2	11.9	14.9	12.4	4.8
1984	1.8	1.1	-.4	.5	.3	.5	.5	.2	-.2	.4	.3	.4	12.8	6.2	3.7	2.6	9.8
1985	-.4	-.3	.8	-.3	.1	.2	-.6	.6	.1	-.3	.6	.4	.1	.8	-.1	2.2	1.6
1986	1.1	-.6	-.3	.4	.2	-.4	.6	.2	.2	.4	.5	.9	4.5	.0	2.5	5.0	2.2
1987	-.3	1.5	.1	.6	.7	.4	.7	.5	.6	1.6	.6	.6	5.9	7.1	7.2	11.7	5.7
1988	-.2	.2	.3	.8	-.1	.1	.1	.1	.3	.6	.3	.4	2.6	4.4	1.0	4.4	5.3
1989	.8	-.9	-.1	.2	-.8	.2	-1.1	.8	-.2	-.2	.2	.1	2.0	-2.7	-3.2	.3	.8
1990	-.1	1.4	.5	-.3	.2	.3	-.1	.2	.0	-.8	-1.1	-.8	4.3	2.9	1.1	-6.8	.8
1991	-.8	-.6	-.7	.3	.7	1.1	.2	.2	1.1	-.2	-.2	-.1	-8.8	1.9	7.2	1.5	-2.0
1992	-.6	.9	1.0	.5	.6	.3	.9	-.4	.0	.6	.4	-.2	.6	8.2	4.0	2.9	3.6
1993	1.0	.2	-.2	.5	-.1	-.1	.3	-.1	.6	.8	.4	.5	4.5	1.5	1.1	6.9	3.5
1994	.2	.1	1.3	.8	.7	.3	.4	.8	.3	1.0	.8	1.2	5.1	9.4	6.0	9.9	5.9
1995	.3	-.1	.3	-.2	.1	.5	-.6	1.1	.8	-.1	.0	.4	5.5	.6	3.0	3.8	5.2
1996	-.7	1.6	-.2	1.1	.7	1.1	.3	.6	.7	-.1	.8	.9	2.2	9.7	7.8	5.6	4.8
1997	.1	1.4	1.2	-.2	.9	.7	.5	1.6	.8	.6	1.1	.4	9.2	7.7	10.8	10.9	8.4
1998	.8	.1	-.1	.5	.6	-.7	-.5	2.6	-.3	1.0	.2	.5	6.0	2.4	3.3	7.8	6.6
1999	.2	.7	-.1	.4	.9	-.3	.5	.7	-.3	1.5	.6	.7	4.4	4.5	3.8	9.0	5.0
2000	.2	.3	.6	.6	-.2	.2	.0	-.6	.5	-.4	-.3	-.7	5.3	4.2	-.8	-2.7	4.2
2001	-.6	-.6	-.3	-.2	-.8	-.7	-.4	-.7	-.2	-.7	-.3	.3	-6.4	-5.4	-6.3	-4.5	-4.0
2002	.5	-.1	.8	.2	.7	1.1	-.5	.4	.1	-.5	.5	-.5	3.3	6.1	3.4	-.5	.3
2003	.6	.2	.2	-.9	.1	.4	.1	-.3	.7	.0	1.0	-.2	2.3	-2.2	1.5	3.9	1.3
2004	.0	.7	-.3	.4	.7	-.8	.8	.7	-.1	1.1	-.1	.7	2.6	2.9	3.5	5.7	2.8
2005	.8	.8	-.5	.2	.4	.1	-.1	.2	-1.1	1.5	.8	.0	6.7	2.0	-.5	5.5	4.0
2006	.9	-.1	-.1	.6	-.4	.3	-.1	.4	.1	-.3	.1	1.6	4.0	1.0	1.1	1.8	2.5
2007	-.3	.5	.7	.7	-.2	.3	.3	-.5	.5	-.5	.3	.3	5.4	5.2	.8	-.2	2.9
2008	-.3	-.5	-.4	-1.2	-.6	-.6	-1.1	-1.4	-3.4	-.6	-2.4	-3.1	-2.0	-8.9	-13.9	-21.4	-5.0
2009	-2.7	.1	-2.0	-.8	-1.2	-.3	1.3	1.0	.8	.0	.8	.2	-22.2	-11.4	6.6	5.9	-13.5
2010	1.0	.1	.9	.7	1.1	-.1	.8	.1	.2	.3	.3	1.1	7.1	8.7	5.1	4.0	5.4
2011	.8	.6															
IP (2007=100)																	
1981	46.1	45.8	46.0	46.2	46.4	46.2	46.3	46.3	46.1	45.7	45.1	44.4	45.9	46.3	46.2	45.1	45.9
1982	43.3	44.5	44.1	43.8	43.8	43.7	43.6	43.3	43.2	42.7	42.4	42.3	44.0	43.7	43.4	42.5	43.4
1983	43.3	43.3	43.7	44.2	44.7	45.0	45.7	46.0	46.9	47.4	47.6	47.7	43.4	44.6	46.2	47.6	45.5
1984	48.6	49.2	49.4	49.6	49.8	50.0	50.2	50.3	50.2	50.4	50.6	50.7	49.0	49.8	50.2	50.6	49.9
1985	50.6	50.4	50.8	50.6	50.7	50.8	50.5	50.8	50.8	50.7	51.0	51.2	50.6	50.7	50.7	51.0	50.7
1986	51.8	51.5	51.3	51.5	51.6	51.4	51.7	51.8	51.9	52.2	52.4	52.9	51.5	51.5	51.8	52.5	51.8
1987	52.7	53.5	53.5	53.8	54.2	54.4	54.8	55.1	55.4	56.3	56.6	57.0	53.2	54.2	55.1	56.6	54.8
1988	56.9	57.0	57.2	57.6	57.6	57.7	57.7	57.7	57.9	58.2	58.4	58.6	57.0	57.6	57.8	58.4	57.7
1989	59.1	58.5	58.5	58.6	58.1	58.2	57.5	58.0	57.9	57.8	57.9	57.9	58.7	58.3	57.8	57.9	58.2
1990	57.8	58.7	58.9	58.8	58.9	59.0	59.0	59.1	59.1	58.6	57.9	57.5	58.5	58.9	59.1	58.0	58.6
1991	57.1	56.7	56.3	56.5	56.9	57.5	57.7	57.8	58.4	58.3	58.2	58.1	56.7	57.0	58.0	58.2	57.5
1992	57.7	58.3	58.8	59.2	59.5	59.7	60.2	59.9	59.9	60.3	60.6	60.5	58.3	59.4	60.0	60.4	59.5
1993	61.1	61.2	61.1	61.4	61.3	61.3	61.4	61.3	61.7	62.2	62.5	62.9	61.1	61.3	61.5	62.5	61.6
1994	63.0	63.1	63.9	64.4	64.8	65.0	65.3	65.8	66.0	66.7	67.2	68.0	63.3	64.7	65.7	67.3	65.3
1995	68.2	68.1	68.3	68.1	68.2	68.5	68.1	68.9	69.4	69.3	69.4	69.6	68.2	68.3	68.8	69.4	68.7
1996	69.1	70.2	70.1	70.9	71.3	72.1	72.3	72.8	73.3	73.2	73.8	74.4	69.8	71.4	72.8	73.8	72.0
1997	74.5	75.5	76.4	76.2	76.9	77.4	77.8	79.0	79.7	80.2	81.1	81.5	75.4	76.9	78.8	80.9	78.0
1998	82.1	82.2	82.1	82.5	82.9	82.4	81.9	84.1	83.8	84.6	84.8	85.2	82.1	82.6	83.3	84.8	83.2
1999	85.4	86.0	85.9	86.2	87.1	86.8	87.2	87.8	87.5	88.8	89.4	90.0	85.8	86.7	87.5	89.4	87.3
2000	90.2	90.4	91.0	91.6	91.4	91.5	91.5	91.0	91.4	91.1	90.8	90.2	90.6	91.5	91.3	90.7	91.0
2001	89.7	89.1	88.8	88.6	87.9	87.4	87.0	86.4	86.2	85.7	85.4	85.7	89.2	88.0	86.6	85.6	87.3
2002	86.1	86.1	86.7	86.8	87.5	88.4	88.0	88.4	88.5	88.1	88.5	88.0	86.3	87.6	88.3	88.2	87.6
2003	88.5	88.7	88.9	88.1	88.1	88.5	88.5	88.2	88.9	88.9	89.8	89.6	88.7	88.2	88.5	89.4	88.7
2004	89.6	90.3	90.0	90.4	91.1	90.3	91.0	91.6	91.5	92.5	92.4	93.1	90.0	90.6	91.4	92.7	91.2
2005	93.8	94.6	94.2	94.4	94.7	94.8	94.7	94.9	93.9	95.3	96.0	96.0	94.2	94.6	94.5	95.8	94.8
2006	96.9	96.7	96.6	97.2	96.7	97.0	97.0	97.3	97.4	97.1	97.2	98.7	96.7	97.0	97.2	97.7	97.2
2007	98.4	98.9	99.6	100.3	100.1	100.3	100.6	100.1	100.6	100.1	100.4	100.7	99.0	100.2	100.4	100.4	100.0
2008	100.4	99.9	99.4	98.2	97.6	97.0	95.9	94.6	91.4	90.8	88.7	86.0	99.9	97.6	94.0	88.5	95.0
2009	83.6	83.7	82.0	81.4	80.4	80.1	81.2	81.9	82.6	82.6	83.3	83.4	83.1	80.6	81.9	83.1	82.2
2010	84.2	84.3	85.1	85.7	86.7	86.6	87.3	87.4	87.5	87.8	88.0	89.0	84.5	86.3	87.4	88.3	86.6
2011	89.7	90.2															

NOTE: Estimates from October 2010 through February 2011 are subject to further revision in the upcoming monthly releases.

1. See footnote 2 to table 3.

2. Annual averages of industrial production are calculated from not seasonally adjusted indexes.

Table 9B
CAPACITY AND UTILIZATION: Manufacturing¹
 Seasonally adjusted

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
Capacity (percent of 2007 output)																	
1981	58.7	58.9	59.0	59.2	59.4	59.5	59.7	59.9	60.0	60.2	60.3	60.4	58.9	59.4	59.9	60.3	59.6
1982	60.6	60.7	60.8	61.0	61.1	61.2	61.3	61.4	61.5	61.5	61.6	61.6	60.7	61.1	61.4	61.6	61.2
1983	61.7	61.7	61.8	61.8	61.8	61.9	61.9	61.9	62.0	62.0	62.1	62.1	61.7	61.8	61.9	62.1	61.9
1984	62.2	62.3	62.4	62.5	62.7	62.8	63.0	63.1	63.3	63.5	63.7	63.9	62.3	62.7	63.1	63.7	62.9
1985	64.0	64.2	64.4	64.6	64.8	65.0	65.1	65.3	65.4	65.5	65.6	65.7	64.2	64.8	65.3	65.6	65.0
1986	65.8	65.8	65.9	65.9	66.0	66.0	66.1	66.2	66.3	66.4	66.5	66.6	65.8	66.0	66.2	66.5	66.1
1987	66.8	66.9	67.1	67.3	67.4	67.6	67.8	67.9	68.1	68.2	68.3	68.4	66.9	67.4	67.9	68.3	67.7
1988	68.5	68.6	68.6	68.6	68.7	68.7	68.7	68.7	68.8	68.8	68.9	69.0	68.5	68.7	68.7	68.9	68.7
1989	69.1	69.2	69.3	69.4	69.6	69.7	69.9	70.0	70.2	70.4	70.6	70.7	69.2	69.6	70.0	70.6	69.8
1990	70.9	71.1	71.2	71.4	71.5	71.7	71.9	72.0	72.1	72.3	72.4	72.5	71.1	71.5	72.0	72.4	71.8
1991	72.7	72.8	72.9	73.0	73.1	73.2	73.3	73.3	73.4	73.5	73.6	73.7	72.8	73.1	73.3	73.6	73.2
1992	73.8	74.0	74.1	74.3	74.4	74.6	74.8	75.0	75.2	75.4	75.6	75.8	74.0	74.4	75.0	75.6	74.8
1993	75.9	76.1	76.2	76.4	76.5	76.6	76.7	76.8	76.9	77.0	77.2	77.3	76.1	76.5	76.8	77.2	76.6
1994	77.5	77.7	77.9	78.1	78.3	78.6	78.8	79.1	79.4	79.7	79.9	80.3	77.7	78.3	79.1	80.0	78.8
1995	80.6	80.9	81.2	81.5	81.8	82.2	82.5	82.9	83.3	83.7	84.1	84.5	80.9	81.8	82.9	84.1	82.4
1996	84.9	85.3	85.8	86.2	86.7	87.2	87.6	88.1	88.6	89.1	89.6	90.1	85.3	86.7	88.1	89.6	87.4
1997	90.6	91.1	91.6	92.2	92.7	93.3	94.0	94.6	95.3	96.0	96.7	97.4	91.1	92.8	94.6	96.7	93.8
1998	98.1	98.9	99.6	100.4	101.1	101.8	102.5	103.1	103.7	104.3	104.9	105.4	98.9	101.1	103.1	104.9	102.0
1999	106.0	106.5	107.0	107.5	108.0	108.4	108.9	109.4	109.9	110.3	110.8	111.3	106.5	108.0	109.4	110.8	108.7
2000	111.8	112.2	112.7	113.2	113.6	114.1	114.5	115.0	115.4	115.8	116.2	116.6	112.2	113.6	115.0	116.2	114.3
2001	117.0	117.3	117.7	118.0	118.3	118.6	118.8	119.1	119.3	119.5	119.6	119.8	117.3	118.3	119.1	119.6	118.6
2002	119.9	120.0	120.1	120.1	120.2	120.2	120.2	120.2	120.2	120.2	120.2	120.2	120.0	120.2	120.2	120.2	120.1
2003	120.2	120.2	120.2	120.1	120.1	120.1	120.1	120.0	120.0	119.9	119.9	119.9	120.2	120.1	120.0	119.9	120.1
2004	119.8	119.8	119.7	119.7	119.7	119.7	119.7	119.7	119.8	119.8	119.9	120.0	119.8	119.7	119.7	119.9	119.8
2005	120.1	120.3	120.4	120.6	120.8	121.0	121.2	121.4	121.7	121.9	122.1	122.3	120.3	120.8	121.4	122.1	121.2
2006	122.5	122.7	122.8	123.0	123.2	123.4	123.6	123.8	124.0	124.3	124.5	124.8	122.7	123.2	123.8	124.5	123.6
2007	125.0	125.3	125.5	125.8	126.0	126.2	126.5	126.7	126.8	127.0	127.1	127.2	125.3	126.0	126.7	127.1	126.3
2008	127.2	127.3	127.2	127.2	127.1	127.0	126.9	126.8	126.6	126.5	126.3	126.1	127.2	127.1	126.8	126.3	126.9
2009	125.8	125.6	125.3	125.0	124.7	124.4	124.1	123.7	123.4	123.0	122.7	122.4	125.6	124.7	123.7	122.7	124.2
2010	122.0	121.7	121.4	121.2	120.9	120.7	120.6	120.4	120.3	120.3	120.2	120.2	121.7	120.9	120.4	120.3	120.8
2011	120.3	120.3															
Utilization (percent)																	
1981	78.5	77.8	77.8	78.0	78.2	77.6	77.5	77.4	76.8	75.9	74.8	73.4	78.0	78.0	77.2	74.7	77.0
1982	71.5	73.2	72.5	71.9	71.6	71.4	71.2	70.5	70.2	69.4	68.9	68.6	72.4	71.6	70.7	68.9	70.9
1983	70.2	70.1	70.7	71.4	72.3	72.8	73.8	74.4	75.7	76.5	76.7	76.8	70.3	72.2	74.6	76.7	73.4
1984	78.1	78.9	79.1	79.3	79.4	79.6	79.8	79.7	79.3	79.4	79.4	79.5	78.7	79.4	79.6	79.4	79.3
1985	78.9	78.5	78.8	78.3	78.2	78.1	77.5	77.8	77.7	77.3	77.7	77.9	78.7	78.2	77.6	77.7	78.1
1986	78.7	78.2	77.9	78.1	78.2	77.9	78.2	78.3	78.4	78.6	78.8	79.3	78.3	78.1	78.3	78.9	78.4
1987	78.9	79.9	79.8	80.0	80.4	80.5	80.8	81.1	81.4	82.5	82.9	83.3	79.5	80.3	81.1	82.9	81.0
1988	83.0	83.1	83.3	84.0	83.9	84.0	84.0	84.0	84.2	84.6	84.7	85.0	83.2	83.9	84.0	84.7	84.0
1989	85.5	84.6	84.4	84.3	83.5	83.5	82.3	82.8	82.4	82.1	82.0	81.9	84.8	83.8	82.5	82.0	83.3
1990	81.6	82.5	82.7	82.3	82.3	82.3	82.1	82.1	81.9	81.1	80.0	79.3	82.3	82.3	82.0	80.1	81.7
1991	78.5	77.9	77.3	77.4	77.8	78.6	78.7	78.8	79.5	79.3	79.0	78.8	77.9	78.0	79.0	79.0	78.5
1992	78.2	78.8	79.4	79.6	79.9	79.9	80.4	79.9	79.7	80.0	80.1	79.8	78.8	79.8	80.0	80.0	79.6
1993	80.4	80.4	80.1	80.4	80.2	80.0	80.1	79.9	80.3	80.8	81.0	81.3	80.3	80.2	80.1	81.0	80.4
1994	81.3	81.2	82.1	82.5	82.8	82.8	82.8	83.2	83.2	83.7	84.0	84.7	81.5	82.7	83.1	84.1	82.8
1995	84.6	84.2	84.1	83.6	83.3	83.3	82.5	83.1	83.4	82.9	82.5	82.4	84.3	83.4	83.0	82.6	83.3
1996	81.4	82.3	81.7	82.2	82.3	82.8	82.6	82.6	82.7	82.2	82.4	82.6	81.8	82.4	82.6	82.4	82.3
1997	82.2	82.9	83.4	82.7	82.9	82.9	82.8	83.6	83.7	83.6	83.9	83.6	82.8	82.9	83.3	83.7	83.2
1998	83.7	83.1	82.4	82.2	82.0	80.9	80.0	81.5	80.8	81.1	80.8	80.8	83.0	81.7	80.8	80.9	81.6
1999	80.6	80.7	80.3	80.2	80.6	80.0	80.1	80.3	79.7	80.5	80.7	80.9	80.5	80.3	80.0	80.7	80.4
2000	80.7	80.6	80.8	80.9	80.4	80.2	79.9	79.1	79.2	78.7	78.1	77.4	80.7	80.5	79.4	78.1	79.7
2001	76.7	76.0	75.5	75.1	74.3	73.7	73.2	72.6	72.3	71.7	71.4	71.5	76.0	74.4	72.7	71.6	73.7
2002	71.8	71.7	72.2	72.3	72.8	73.6	73.2	73.5	73.6	73.3	73.6	73.2	71.9	72.9	73.5	73.4	72.9
2003	73.7	73.8	74.0	73.3	73.4	73.7	73.7	73.5	74.1	74.1	74.9	74.7	73.8	73.4	73.8	74.6	73.9
2004	74.8	75.4	75.2	75.5	76.1	75.5	76.1	76.6	76.4	77.2	77.1	77.6	75.1	75.7	76.3	77.3	76.1
2005	78.1	78.6	78.2	78.2	78.4	78.4	78.1	78.2	77.2	78.2	78.7	78.5	78.3	78.3	77.8	78.5	78.2
2006	79.1	78.9	78.6	79.0	78.5	78.6	78.4	78.6	78.5	78.1	78.0	79.1	78.9	78.7	78.5	78.4	78.6
2007	78.7	79.0	79.3	79.7	79.4	79.5	79.5	79.0	79.3	78.8	79.0	79.2	79.0	79.5	79.3	79.0	79.2
2008	78.9	78.5	78.1	77.2	76.8	76.3	75.6	74.6	72.2	71.8	70.2	68.2	78.5	76.8	74.1	70.1	74.9
2009	66.4	66.6	65.5	65.1	64.4	64.4	65.4	66.2	67.0	67.1	67.9	68.2	66.2	64.6	66.2	67.7	66.2
2010	69.0	69.3	70.0	70.7	71.7	71.7	72.4	72.6	72.7	73.0	73.2	74.0	69.4	71.4	72.6	73.4	71.7
2011	74.5	75.0															

NOTE: Estimates from October 2010 through February 2011 are subject to further revision in the upcoming monthly releases.

1. See footnote 2 to table 3.

Table 10A
INDUSTRIAL PRODUCTION: Total Industry Excluding Selected High-Technology Industries¹
 Seasonally adjusted

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual ²
IP (percent change)																	
1981	-7	-5	.5	-6	.6	.5	.6	-1	-7	-8	-1.1	-1.2	.2	.4	3.1	-9.5	.6
1982	-2.0	1.8	-8	-1.0	-7	-4	-5	-8	-5	-9	-5	-9	-8.7	-5.7	-6.3	-8.0	-6.0
1983	1.9	-7	.7	1.1	.6	.5	1.4	1.2	1.2	.7	.2	.5	3.8	8.1	13.3	9.6	1.8
1984	2.0	.4	.4	.5	.4	.2	.3	.0	-2	-2	.3	.1	11.6	5.1	1.8	-4	7.9
1985	-3	.5	.1	-1	.1	.0	-6	.4	.5	-4	.3	1.1	1.0	.9	-4	2.5	1.0
1986	.5	-8	-7	.1	.1	-2	.4	-3	.1	.4	.4	.8	2.4	-2.5	.6	4.0	.9
1987	-5	1.2	.2	.5	.6	.4	.5	.6	.2	1.4	.5	.4	4.3	6.5	6.0	9.2	4.3
1988	.0	.4	.2	.4	-2	.2	.1	.5	-4	.5	.2	.4	3.1	2.6	1.2	2.6	4.4
1989	.3	-4	.3	.0	-7	.0	-1.1	.8	-3	-2	.2	.6	2.0	-1.6	-3.5	.8	.6
1990	-7	.9	.5	-2	.1	.3	-1	.2	.2	-8	-1.3	-8	2.2	2.5	1.3	-6.7	.3
1991	-4	-8	-6	.2	1.0	1.0	.0	.0	.9	-2	-2	-5	-8.0	2.0	5.3	.3	-2.0
1992	-8	.8	.8	.6	.2	-1	.8	-6	.1	.6	.3	.0	-1.9	6.2	1.8	2.9	1.9
1993	.5	.3	-1	.3	-4	.2	.3	-1	.4	.7	.3	.5	3.1	.3	1.4	5.1	2.5
1994	.4	.0	.9	.3	.3	.6	.0	.4	.0	.6	.4	.9	4.5	5.3	3.2	5.7	4.0
1995	.1	-2	-1	-3	.1	.2	-6	1.1	.1	-5	.1	.1	2.9	-1.2	1.5	.2	2.4
1996	-1.0	1.3	-3	.8	.5	.7	-5	.4	.3	-3	.8	.5	-4	6.4	2.1	3.0	1.7
1997	-1	.9	.5	-3	.3	.2	.3	1.0	.7	.6	.6	.1	5.1	2.4	6.2	7.8	4.2
1998	.2	.0	-1	.2	.6	-9	-8	2.0	-7	.6	-3	.1	1.9	.8	-3	2.4	3.1
1999	.2	.1	-1	-1	.6	-4	.3	.4	-4	1.2	.2	.5	.6	.3	1.1	5.4	1.1
2000	-3	.0	.1	.4	-2	-1	-6	-4	.4	-5	-2	-5	.5	1.5	-3.0	-2.7	1.0
2001	-7	-5	-3	-1	-7	-5	-3	-3	-4	-5	-4	-1	-5.9	-4.4	-4.6	-4.8	-4.0
2002	.7	-1	.8	.4	.5	.9	-4	.1	.0	-4	.4	-6	3.0	6.4	1.8	-1.1	.3
2003	.7	.2	-3	-9	-1	-1	.2	-1	.6	-2	.7	-1	1.7	-4.6	.9	2.6	.2
2004	.2	.6	-6	.5	.7	-9	.7	.2	-1	1.0	.2	.7	2.2	1.8	1.6	5.4	1.7
2005	.4	.6	-2	.0	.1	.3	-3	.0	-2.2	1.2	1.0	.5	5.3	.9	-3.0	2.0	2.5
2006	.1	.0	.2	.4	-3	.3	.2	.2	-2	.0	-2	1.0	3.4	1.7	1.2	.3	1.4
2007	-3	1.0	-2	.6	.0	.1	.1	-1	.4	-8	.2	.1	3.7	3.6	1.1	-1.5	1.9
2008	-3	-3	-5	-9	-6	-3	-3	-1.7	-4.3	1.1	-1.1	-2.5	-2.4	-7.4	-12.2	-14.7	-4.4
2009	-2.1	-6	-1.8	-1.0	-1.1	-5	1.0	.9	.6	.2	.2	.6	-18.7	-12.5	4.8	5.2	-11.2
2010	1.2	.1	.5	.3	1.4	.1	.9	.2	.3	-1	.3	1.3	7.9	6.9	6.8	3.0	5.0
2011	.1	-1															
IP (2007=100)																	
1981	68.6	68.2	68.5	68.1	68.5	68.8	69.3	69.2	68.7	68.1	67.4	66.5	68.4	68.5	69.0	67.3	68.3
1982	65.2	66.4	65.9	65.3	64.8	64.5	64.2	63.8	63.5	62.9	62.6	62.0	65.8	64.9	63.8	62.5	64.3
1983	63.2	62.8	63.3	64.0	64.4	64.7	65.6	66.4	67.2	67.7	67.9	68.2	63.1	64.3	66.4	67.9	65.4
1984	69.5	69.8	70.1	70.4	70.7	70.9	71.1	71.0	70.9	70.7	71.0	71.1	69.8	70.7	71.0	70.9	70.6
1985	70.8	71.2	71.3	71.2	71.3	71.3	70.9	71.2	71.5	71.2	71.5	72.2	71.1	71.3	71.2	71.6	71.3
1986	72.6	72.1	71.6	71.6	71.7	71.6	71.8	71.6	71.7	72.0	72.3	72.9	72.1	71.6	71.7	72.4	72.0
1987	72.6	73.5	73.6	73.9	74.4	74.7	75.1	75.6	75.7	76.8	77.1	77.4	73.2	74.3	75.4	77.1	75.0
1988	77.5	77.8	77.9	78.3	78.1	78.3	78.3	78.7	78.4	78.8	78.9	79.3	77.7	78.2	78.5	79.0	78.3
1989	79.5	79.2	79.4	79.4	78.9	78.9	78.0	78.6	78.4	78.2	78.4	78.8	79.4	79.0	78.3	78.5	78.8
1990	78.3	79.0	79.4	79.3	79.4	79.6	79.5	79.7	79.8	79.2	78.1	77.6	78.9	79.4	79.7	78.3	79.1
1991	77.2	76.6	76.2	76.3	77.0	77.8	77.8	77.8	78.5	78.4	78.2	77.8	76.7	77.0	78.1	78.1	77.5
1992	77.2	77.7	78.3	78.8	79.0	78.9	79.5	79.1	79.2	79.7	79.9	79.9	77.7	78.9	79.3	79.8	78.9
1993	80.3	80.6	80.5	80.7	80.4	80.5	80.8	80.7	81.0	81.5	81.8	82.2	80.5	80.5	80.8	81.8	80.9
1994	82.5	82.5	83.2	83.4	83.7	84.2	84.2	84.5	84.6	85.1	85.5	86.3	82.7	83.8	84.4	85.6	84.1
1995	86.4	86.2	86.1	85.9	85.9	86.1	85.6	86.6	86.6	86.2	86.3	86.4	86.2	86.0	86.3	86.3	86.2
1996	85.6	86.7	86.4	87.1	87.6	88.1	87.7	88.1	88.4	88.1	88.8	89.2	86.2	87.6	88.1	88.7	87.7
1997	89.1	89.9	90.4	90.1	90.4	90.6	90.9	91.8	92.5	93.0	93.6	93.7	89.8	90.3	91.7	93.4	91.3
1998	93.9	93.9	93.8	94.0	94.5	93.7	92.9	94.8	94.2	94.7	94.4	94.5	93.9	94.1	94.0	94.5	94.1
1999	94.6	94.8	94.7	94.6	95.1	94.7	94.9	95.3	94.9	96.0	96.2	96.7	94.7	94.8	95.0	96.3	95.2
2000	96.4	96.4	96.5	96.9	96.7	96.7	96.1	95.8	96.2	95.7	95.5	95.0	96.4	96.8	96.0	95.4	96.2
2001	94.4	93.9	93.6	93.5	92.9	92.4	92.1	91.9	91.5	91.0	90.6	90.5	94.0	92.9	91.8	90.7	92.3
2002	91.2	91.1	91.8	92.2	92.7	93.5	93.1	93.2	93.3	92.9	93.3	92.7	91.4	92.8	93.2	92.9	92.6
2003	93.3	93.5	93.2	92.3	92.3	92.2	92.3	92.2	92.8	92.6	93.3	93.2	93.3	92.3	92.5	93.1	92.8
2004	93.4	93.9	93.3	93.8	94.5	93.6	94.3	94.4	94.3	95.3	95.4	96.1	93.6	94.0	94.3	95.6	94.4
2005	96.5	97.1	96.9	96.9	97.0	97.3	97.1	97.1	94.9	96.0	96.9	97.5	96.8	97.1	96.3	96.8	96.8
2006	97.6	97.6	97.8	98.1	97.8	98.2	98.3	98.5	98.2	98.2	98.0	99.0	97.6	98.0	98.3	98.4	98.1
2007	98.7	99.7	99.5	100.2	100.1	100.2	100.4	100.3	100.7	99.9	100.1	100.2	99.3	100.2	100.4	100.1	100.0
2008	99.9	99.5	99.0	98.1	97.5	97.2	96.9	95.2	91.2	92.2	91.2	88.9	99.5	97.6	94.5	90.8	95.6
2009	87.0	86.6	85.0	84.1	83.2	82.8	83.7	84.4	85.0	85.1	85.3	85.8	86.2	83.4	84.3	85.4	84.8
2010	86.8	86.9	87.4	87.7	88.9	89.0	89.8	90.0	90.2	90.1	90.3	91.5	87.1	88.5	90.0	90.6	89.1
2011	91.6	91.6															

NOTE: Estimates from October 2010 through February 2011 are subject to further revision in the upcoming monthly releases.

1. High-technology industries include computers, communications equipment, and semiconductors and related electronic components.

2. Annual averages of industrial production are calculated from not seasonally adjusted indexes.

Table 10B
CAPACITY AND UTILIZATION: Total Industry Excluding Selected High-Technology Industries¹
 Seasonally adjusted

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
Capacity (percent of 2007 output)																	
1981	85.3	85.4	85.6	85.7	85.9	86.0	86.2	86.3	86.5	86.6	86.8	86.9	85.4	85.9	86.3	86.8	86.1
1982	87.0	87.2	87.3	87.4	87.5	87.6	87.6	87.7	87.7	87.7	87.8	87.8	87.2	87.5	87.7	87.7	87.5
1983	87.7	87.7	87.7	87.7	87.7	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.7	87.7	87.6	87.6	87.7
1984	87.7	87.7	87.8	87.9	88.0	88.1	88.2	88.3	88.5	88.6	88.8	88.9	87.7	88.0	88.3	88.8	88.2
1985	89.1	89.2	89.4	89.6	89.7	89.9	90.0	90.2	90.3	90.4	90.5	90.6	89.2	89.7	90.2	90.5	89.9
1986	90.7	90.8	90.9	91.0	91.0	91.1	91.2	91.2	91.3	91.4	91.5	91.6	90.8	91.0	91.2	91.5	91.1
1987	91.6	91.7	91.8	91.9	92.0	92.1	92.2	92.3	92.4	92.5	92.5	92.6	91.7	92.0	92.3	92.5	92.2
1988	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.7	92.7	92.7	92.8	92.9	92.6	92.6	92.7	92.8	92.7
1989	92.9	93.0	93.2	93.3	93.4	93.6	93.7	93.9	94.1	94.2	94.4	94.5	93.0	93.4	93.9	94.4	93.7
1990	94.7	94.9	95.0	95.1	95.3	95.4	95.5	95.7	95.8	95.9	96.0	96.1	94.9	95.3	95.7	96.0	95.5
1991	96.2	96.4	96.5	96.6	96.7	96.8	96.9	97.0	97.1	97.2	97.3	97.4	96.4	96.7	97.0	97.3	96.8
1992	97.5	97.6	97.7	97.8	97.9	98.0	98.0	98.1	98.2	98.3	98.4	98.5	97.6	97.9	98.1	98.4	98.0
1993	98.6	98.7	98.8	98.9	99.0	99.1	99.2	99.3	99.4	99.5	99.6	99.7	98.7	99.0	99.3	99.6	99.2
1994	99.8	100.0	100.1	100.2	100.4	100.5	100.7	100.8	101.0	101.2	101.3	101.5	100.0	100.4	100.8	101.3	100.6
1995	101.7	101.9	102.1	102.2	102.4	102.6	102.8	103.0	103.1	103.3	103.5	103.7	101.9	102.4	103.0	103.5	102.7
1996	103.8	104.0	104.2	104.4	104.5	104.7	104.9	105.1	105.4	105.6	105.9	106.1	104.0	104.5	105.1	105.9	104.9
1997	106.4	106.7	107.0	107.4	107.7	108.1	108.5	108.9	109.3	109.7	110.2	110.6	106.7	107.7	108.9	110.2	108.4
1998	111.0	111.4	111.9	112.3	112.7	113.1	113.5	113.9	114.2	114.6	114.9	115.3	111.4	112.7	113.9	114.9	113.2
1999	115.6	115.9	116.1	116.4	116.7	116.9	117.1	117.3	117.5	117.7	117.9	118.1	115.9	116.7	117.3	117.9	116.9
2000	118.3	118.4	118.6	118.7	118.8	119.0	119.1	119.2	119.4	119.5	119.6	119.8	118.4	118.8	119.2	119.6	119.0
2001	119.9	120.0	120.1	120.3	120.4	120.5	120.7	120.8	121.0	121.1	121.2	121.3	120.0	120.4	120.8	121.2	120.6
2002	121.4	121.5	121.6	121.7	121.7	121.7	121.7	121.7	121.7	121.6	121.5	121.4	121.5	121.7	121.7	121.5	121.6
2003	121.3	121.3	121.2	121.1	121.0	120.9	120.8	120.8	120.8	120.7	120.7	120.7	121.3	121.0	120.8	120.7	120.9
2004	120.7	120.6	120.6	120.6	120.6	120.5	120.5	120.5	120.4	120.4	120.4	120.3	120.6	120.6	120.5	120.4	120.5
2005	120.3	120.3	120.3	120.3	120.3	120.4	120.4	120.5	120.6	120.7	120.9	121.0	120.3	120.3	120.5	120.9	120.5
2006	121.1	121.3	121.5	121.7	121.8	122.0	122.2	122.4	122.6	122.8	123.0	123.1	121.3	121.9	122.4	123.0	122.1
2007	123.3	123.4	123.5	123.6	123.6	123.6	123.6	123.6	123.5	123.5	123.4	123.3	123.4	123.6	123.6	123.4	123.5
2008	123.2	123.2	123.1	123.1	123.1	123.1	123.2	123.3	123.4	123.5	123.6	123.7	123.2	123.1	123.3	123.6	123.3
2009	123.7	123.7	123.7	123.6	123.5	123.3	123.1	122.8	122.4	122.1	121.7	121.3	123.7	123.5	122.8	121.7	122.9
2010	121.0	120.6	120.3	120.0	119.8	119.6	119.4	119.3	119.3	119.2	119.2	119.3	120.6	119.8	119.3	119.3	119.8
2011	119.3	119.4															
Utilization (percent)																	
1981	80.4	79.9	80.1	79.5	79.8	80.0	80.4	80.1	79.4	78.7	77.6	76.6	80.1	79.8	80.0	77.6	79.4
1982	74.9	76.2	75.5	74.7	74.1	73.7	73.3	72.7	72.4	71.7	71.3	70.7	75.5	74.2	72.8	71.2	73.4
1983	72.1	71.6	72.1	72.9	73.4	73.8	74.8	75.8	76.7	77.3	77.5	77.8	71.9	73.4	75.8	77.5	74.6
1984	79.3	79.5	79.8	80.1	80.4	80.5	80.6	80.4	80.1	79.8	80.0	79.9	79.5	80.3	80.4	79.9	80.0
1985	79.5	79.8	79.7	79.5	79.5	79.3	78.7	78.9	79.2	78.8	78.9	79.7	79.7	79.4	79.0	79.1	79.3
1986	80.0	79.3	78.7	78.7	78.7	78.5	78.8	78.5	78.5	78.8	79.1	79.6	79.4	78.7	78.6	79.2	79.0
1987	79.2	80.1	80.1	80.4	80.8	81.1	81.4	81.8	81.9	83.0	83.4	83.7	79.8	80.8	81.7	83.4	81.4
1988	83.7	84.0	84.1	84.5	84.4	84.5	84.6	84.9	84.5	84.9	85.0	85.3	83.9	84.4	84.7	85.1	84.5
1989	85.5	85.1	85.3	85.1	84.4	84.3	83.2	83.8	83.3	83.0	83.1	83.4	85.3	84.6	83.4	83.2	84.1
1990	82.7	83.3	83.6	83.3	83.3	83.4	83.2	83.3	83.3	82.5	81.4	80.7	83.2	83.3	83.3	81.5	82.8
1991	80.2	79.5	78.9	79.0	79.7	80.4	80.3	80.3	80.9	80.6	80.4	79.9	79.6	79.7	80.5	80.3	80.0
1992	79.2	79.7	80.2	80.6	80.8	80.6	81.1	80.6	80.6	81.0	81.2	81.1	79.7	80.7	80.8	81.1	80.6
1993	81.4	81.6	81.5	81.6	81.2	81.2	81.4	81.2	81.5	81.9	82.1	82.4	81.5	81.3	81.4	82.1	81.6
1994	82.6	82.5	83.1	83.2	83.4	83.8	83.7	83.9	83.7	84.1	84.4	85.0	82.7	83.5	83.8	84.5	83.6
1995	84.9	84.6	84.4	84.0	83.9	83.9	83.3	84.1	84.0	83.5	83.4	83.4	84.6	83.9	83.8	83.4	83.9
1996	82.4	83.4	83.0	83.5	83.8	84.2	83.6	83.8	83.9	83.4	83.9	84.1	82.9	83.8	83.7	83.8	83.6
1997	83.8	84.3	84.4	83.9	83.9	83.8	83.8	84.3	84.6	84.8	85.0	84.7	84.1	83.9	84.2	84.8	84.3
1998	84.6	84.2	83.9	83.7	83.9	82.8	81.9	83.3	82.5	82.7	82.1	82.0	84.2	83.5	82.5	82.3	83.1
1999	81.9	81.8	81.5	81.2	81.5	81.0	81.0	81.2	80.7	81.5	81.6	81.9	81.7	81.2	81.0	81.7	81.4
2000	81.5	81.4	81.4	81.6	81.4	81.3	80.7	80.3	80.6	80.0	79.8	79.3	81.4	81.4	80.5	79.7	80.8
2001	78.7	78.2	77.9	77.7	77.1	76.6	76.3	76.0	75.6	75.1	74.7	74.6	78.3	77.2	76.0	74.8	76.6
2002	75.1	75.0	75.5	75.8	76.1	76.8	76.5	76.6	76.7	76.4	76.8	76.3	75.2	76.2	76.6	76.5	76.1
2003	76.9	77.1	76.9	76.3	76.3	76.2	76.4	76.4	76.8	76.7	77.3	77.3	77.0	76.3	76.5	77.1	76.7
2004	77.4	77.9	77.4	77.8	78.4	77.7	78.2	78.4	78.3	79.1	79.3	79.9	77.5	77.9	78.3	79.4	78.3
2005	80.2	80.7	80.6	80.5	80.6	80.8	80.6	80.5	78.7	79.5	80.2	80.6	80.5	80.6	79.9	80.1	80.3
2006	80.5	80.4	80.5	80.7	80.3	80.4	80.4	80.4	80.1	80.0	79.7	80.4	80.5	80.5	80.3	80.0	80.3
2007	80.1	80.8	80.6	81.0	81.0	81.1	81.2	81.1	81.5	80.9	81.1	81.3	80.5	81.0	81.3	81.1	81.0
2008	81.0	80.8	80.4	79.7	79.2	79.0	78.7	77.3	73.9	74.7	73.8	71.9	80.8	79.3	76.6	73.5	77.5
2009	70.3	70.0	68.7	68.1	67.3	67.1	68.0	68.8	69.4	69.7	70.1	70.7	69.7	67.5	68.7	70.2	69.0
2010	71.8	72.1	72.6	73.0	74.2	74.4	75.2	75.4	75.6	75.6	75.8	76.7	72.2	73.9	75.4	76.0	74.4
2011	76.8	76.7															

NOTE: Estimates from October 2010 through February 2011 are subject to further revision in the upcoming monthly releases.

1. High-technology industries include computers, communications equipment, and semiconductors and related electronic components.

Table 11A
INDUSTRIAL PRODUCTION: Manufacturing Excluding Selected High-Technology Industries^{1,2}
 Seasonally adjusted

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual ³
IP (percent change)																	
1981	-5	-6	.3	.4	.4	-.6	.1	.0	-.6	-1.1	-1.2	-1.8	-.3	1.9	-1.5	-11.2	.1
1982	-2.5	2.5	-.8	-.8	-.2	-.2	-.3	-.7	-.4	-1.2	-.7	-.5	-10.5	-3.0	-4.3	-9.2	-6.6
1983	2.5	-.2	.8	1.0	1.2	.6	1.3	.9	1.5	1.1	.3	.2	8.2	10.6	13.6	11.0	3.7
1984	1.8	1.0	.3	.4	.2	.3	.4	.0	-.3	.3	.3	.4	11.7	4.6	2.3	1.9	8.5
1985	-.5	-.2	.8	-.2	.1	.1	-.5	.6	.2	-.3	.6	.4	-.1	1.6	.5	2.3	1.4
1986	1.2	-.6	-.3	.4	.1	-.2	.2	.1	.2	.4	.4	.8	4.7	-.1	1.2	4.3	2.2
1987	-.5	1.4	.1	.4	-.6	.3	.6	.3	.5	1.6	.6	.5	4.6	6.1	5.6	10.6	4.6
1988	-.2	.2	.2	.8	-.2	.1	.0	.1	.2	.5	.3	.4	2.0	3.4	.3	4.2	4.4
1989	.9	-1.0	.0	.1	-.9	.2	-1.4	.8	-.3	-.3	.1	.0	2.3	-3.1	-4.3	-.7	.4
1990	-.3	1.5	.4	-.3	.1	.2	-.2	.2	-.1	-.9	-1.2	-.8	3.6	2.3	.6	-7.6	.0
1991	-.8	-.8	-.8	.3	.7	1.1	.3	.2	1.1	-.2	-.3	-.3	-9.7	1.4	7.0	1.0	-2.6
1992	-.9	.9	.9	.4	.5	.1	.8	-.5	-.1	.5	.3	-.2	-1.1	7.1	2.7	1.4	2.6
1993	1.1	.1	-.3	.5	-.2	-.2	.2	-.2	.5	.7	.3	.5	4.0	.7	.4	5.7	2.5
1994	.1	.1	1.2	.5	.4	.2	.2	.6	.1	.8	.5	.9	4.2	7.0	3.7	7.0	4.4
1995	.1	-.3	-.1	-.4	-.1	.3	-.8	.9	.5	-.4	-.1	.0	2.8	-2.2	.3	.6	2.5
1996	-1.2	1.3	-.4	1.0	.5	.8	-.1	.3	.4	-.4	.7	.7	-1.8	7.3	4.0	2.8	1.5
1997	-.2	1.0	.9	-.7	.5	.4	.1	1.3	.6	.5	.8	.2	6.1	2.9	6.8	8.2	4.9
1998	.5	-.1	-.3	.2	.4	-1.1	-.9	2.4	-.8	.7	-.1	.2	3.1	-.2	-.5	4.1	3.5
1999	-.1	.4	-.4	.0	.7	-.7	.0	.6	-.4	1.4	.3	.3	.7	.3	.2	6.6	1.4
2000	-.3	-.2	.3	.4	-.6	.0	-.4	-.8	.4	-.5	-.6	-.9	.3	.6	-3.7	-4.7	.7
2001	-.6	-.5	-.3	-.1	-.7	-.5	-.1	-.7	-.3	-.7	-.2	.2	-6.9	-4.3	-4.9	-4.6	-4.8
2002	.7	-.1	.8	.1	.7	1.0	-.5	.3	.1	-.5	.4	-.7	3.7	5.7	2.4	-1.4	.4
2003	.5	.0	.1	-1.1	-.1	.3	-.1	-.4	.7	-.2	.9	-.3	.7	-3.9	.1	2.9	.0
2004	-.1	.8	-.3	.5	.7	-.9	.8	.6	-.3	1.1	-.1	.6	1.8	3.1	3.1	5.2	2.0
2005	.7	.8	-.6	.1	.3	.1	-.3	.1	-1.3	1.4	.7	-.1	5.7	.9	-2.1	4.2	3.1
2006	.8	-.2	-.2	.5	-.6	.2	-.1	.3	.0	-.4	.0	1.6	3.3	.0	.2	.9	1.5
2007	-.4	.4	.5	.5	-.2	.4	.3	-.6	.4	-.8	.1	.2	4.5	4.0	.8	-2.3	2.0
2008	-.4	-.7	-.6	-1.3	-.7	-.6	-1.0	-1.4	-3.5	-.4	-2.2	-3.0	-3.6	-10.0	-14.1	-20.4	-6.0
2009	-2.8	.1	-2.2	-1.0	-1.3	-.4	1.3	.9	.8	-.1	.8	.2	-22.2	-12.9	5.9	5.4	-13.7
2010	1.0	.0	.9	.7	1.2	-.1	.9	.0	.1	.2	.1	.9	6.8	8.6	5.1	3.0	5.0
2011	.7	.5															
IP (2007=100)																	
1981	65.9	65.5	65.7	65.9	66.2	65.8	65.9	65.9	65.5	64.8	64.0	62.8	65.7	66.0	65.7	63.8	65.3
1982	61.2	62.8	62.3	61.8	61.6	61.5	61.3	60.9	60.6	59.9	59.4	59.1	62.1	61.6	60.9	59.5	61.0
1983	60.6	60.5	61.0	61.6	62.3	62.7	63.5	64.1	65.1	65.8	65.9	66.1	60.7	62.2	64.2	65.9	63.3
1984	67.3	67.9	68.2	68.4	68.5	68.7	69.0	69.0	68.8	69.1	69.2	69.5	67.8	68.5	68.9	69.3	68.6
1985	69.2	69.0	69.6	69.4	69.5	69.6	69.3	69.7	69.8	69.6	70.0	70.3	69.2	69.5	69.6	70.0	69.6
1986	71.2	70.7	70.5	70.8	70.9	70.7	70.9	71.0	71.1	71.4	71.7	72.2	70.8	70.8	71.0	71.7	71.1
1987	71.9	72.9	72.9	73.2	73.7	73.9	74.3	74.6	75.0	76.1	76.5	76.9	72.5	73.6	74.6	76.5	74.3
1988	76.8	76.9	77.1	77.7	77.5	77.5	77.5	77.6	77.8	78.2	78.4	78.7	76.9	77.6	77.6	78.4	77.6
1989	79.4	78.6	78.6	78.7	78.0	78.1	77.1	77.7	77.5	77.2	77.3	77.3	78.9	78.3	77.4	77.3	78.0
1990	77.1	78.2	78.5	78.3	78.4	78.5	78.4	78.6	78.5	77.8	76.9	76.2	77.9	78.4	78.5	77.0	78.0
1991	75.6	75.1	74.5	74.7	75.2	76.0	76.2	76.4	77.2	77.0	76.8	76.5	75.1	75.3	76.6	76.8	75.9
1992	75.9	76.6	77.3	77.6	78.0	78.1	78.7	78.3	78.2	78.6	78.8	78.6	76.6	77.9	78.4	78.7	77.9
1993	79.5	79.5	79.3	79.7	79.6	79.4	79.6	79.4	79.9	80.5	80.7	81.1	79.4	79.6	79.7	80.8	79.9
1994	81.2	81.3	82.3	82.7	83.1	83.2	83.4	83.9	84.0	84.6	85.1	85.9	81.6	83.0	83.8	85.2	83.4
1995	86.0	85.7	85.6	85.3	85.1	85.4	84.7	85.4	85.9	85.5	85.4	85.4	85.8	85.3	85.3	85.5	85.5
1996	84.5	85.6	85.2	86.1	86.5	87.2	87.1	87.4	87.8	87.4	88.0	88.7	85.1	86.6	87.4	88.0	86.8
1997	88.5	89.4	90.2	89.6	90.0	90.4	90.5	91.7	92.3	92.7	93.5	93.7	89.3	90.0	91.5	93.3	91.0
1998	94.2	94.1	93.8	94.0	94.5	93.4	92.6	94.8	94.1	94.8	94.7	94.9	94.0	94.0	93.9	94.8	94.2
1999	94.8	95.2	94.8	94.8	95.5	94.9	94.8	95.4	95.0	96.3	96.6	97.0	95.0	95.1	95.1	96.6	95.4
2000	96.7	96.6	96.9	97.2	96.7	96.7	96.3	95.6	95.9	95.4	94.9	94.1	96.7	96.9	95.9	94.8	96.1
2001	93.5	93.1	92.8	92.7	92.0	91.5	91.4	90.8	90.6	89.9	89.8	89.9	93.1	92.1	90.9	89.9	91.5
2002	90.5	90.4	91.1	91.2	91.8	92.8	92.3	92.6	92.6	92.2	92.5	91.9	90.7	91.9	92.5	92.2	91.8
2003	92.3	92.3	92.4	91.4	91.3	91.6	91.5	91.1	91.8	91.6	92.5	92.2	92.3	91.4	91.4	92.1	91.8
2004	92.1	92.8	92.6	93.0	93.7	92.9	93.6	94.2	93.9	95.0	94.9	95.5	92.5	93.2	93.9	95.1	93.7
2005	96.1	96.9	96.3	96.4	96.8	96.8	96.5	96.6	95.3	96.7	97.4	97.4	96.4	96.7	96.2	97.2	96.6
2006	98.2	97.9	97.8	98.3	97.7	97.9	97.8	98.1	98.1	97.7	97.7	99.3	98.0	98.0	98.0	98.2	98.0
2007	98.9	99.3	99.8	100.3	100.1	100.5	100.8	100.1	100.6	99.8	99.9	100.1	99.3	100.3	100.5	99.9	100.0
2008	99.6	99.0	98.4	97.1	96.4	95.8	94.8	93.4	90.2	89.8	87.9	85.3	99.0	96.4	92.8	87.6	94.0
2009	82.9	82.9	81.1	80.3	79.3	79.0	80.0	80.7	81.3	81.2	81.9	82.0	82.3	79.5	80.7	81.7	81.1
2010	82.8	82.8	83.6	84.2	85.2	85.1	85.8	85.8	86.0	86.2	86.3	87.1	83.1	84.8	85.9	86.5	85.1
2011	87.7	88.1															

NOTE: Estimates from October 2010 through February 2011 are subject to further revision in the upcoming monthly releases.

1. See footnote 2 to table 3.

2. High-technology industries include computers, communications equipment, and semiconductors and related electronic components.

3. Annual averages of industrial production are calculated from not seasonally adjusted indexes.

Table 11B
CAPACITY AND UTILIZATION: Manufacturing Excluding Selected High-Technology Industries^{1,2}

Seasonally adjusted

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
Capacity (percent of 2007 output)																	
1981	84.5	84.7	84.8	85.0	85.2	85.3	85.5	85.6	85.8	85.9	86.0	86.1	84.7	85.2	85.6	86.0	85.4
1982	86.2	86.3	86.4	86.5	86.6	86.7	86.7	86.8	86.8	86.8	86.8	86.8	86.3	86.6	86.8	86.8	86.6
1983	86.8	86.8	86.7	86.7	86.7	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.8	86.7	86.6	86.6	86.7
1984	86.6	86.7	86.7	86.8	86.9	87.0	87.2	87.3	87.4	87.6	87.8	88.0	86.7	86.9	87.3	87.8	87.2
1985	88.1	88.3	88.5	88.7	88.9	89.0	89.2	89.3	89.5	89.6	89.7	89.8	88.3	88.9	89.3	89.7	89.1
1986	89.9	89.9	90.0	90.0	90.1	90.1	90.2	90.3	90.4	90.5	90.6	90.7	89.9	90.1	90.3	90.6	90.2
1987	90.8	90.9	91.1	91.2	91.4	91.5	91.6	91.7	91.8	91.9	92.0	92.0	90.9	91.4	91.7	92.0	91.5
1988	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.2	92.3	92.1	92.1	92.1	92.2	92.1
1989	92.4	92.5	92.6	92.7	92.9	93.0	93.2	93.4	93.5	93.7	93.9	94.1	92.5	92.9	93.4	93.9	93.2
1990	94.2	94.4	94.6	94.7	94.9	95.0	95.2	95.3	95.4	95.6	95.7	95.8	94.4	94.9	95.3	95.7	95.1
1991	96.0	96.1	96.2	96.3	96.5	96.6	96.7	96.8	96.9	97.0	97.1	97.2	96.1	96.5	96.8	97.1	96.6
1992	97.3	97.4	97.5	97.6	97.7	97.9	98.0	98.1	98.2	98.3	98.4	98.5	97.4	97.7	98.1	98.4	97.9
1993	98.7	98.8	98.9	99.0	99.1	99.2	99.3	99.4	99.5	99.6	99.7	99.8	98.8	99.1	99.4	99.7	99.2
1994	99.9	100.0	100.2	100.3	100.4	100.6	100.7	100.9	101.0	101.2	101.4	101.6	100.1	100.4	100.9	101.4	100.7
1995	101.8	102.0	102.2	102.4	102.6	102.8	103.0	103.2	103.4	103.6	103.8	104.0	102.0	102.6	103.2	103.8	102.9
1996	104.2	104.4	104.7	104.9	105.1	105.3	105.5	105.8	106.1	106.3	106.6	106.9	104.4	105.1	105.8	106.6	105.5
1997	107.3	107.6	108.0	108.4	108.8	109.2	109.6	110.1	110.6	111.1	111.5	112.0	107.6	108.8	110.1	111.5	109.5
1998	112.5	113.0	113.5	114.0	114.5	114.9	115.4	115.8	116.2	116.6	117.0	117.4	113.0	114.4	115.8	117.0	115.1
1999	117.7	118.1	118.4	118.7	119.0	119.3	119.6	119.8	120.1	120.3	120.6	120.8	118.1	119.0	119.8	120.6	119.4
2000	121.0	121.2	121.4	121.6	121.8	122.0	122.1	122.3	122.5	122.6	122.8	122.9	121.2	121.8	122.3	122.8	122.0
2001	123.0	123.1	123.3	123.4	123.5	123.5	123.6	123.7	123.8	123.8	123.8	123.8	123.1	123.5	123.7	123.8	123.5
2002	123.8	123.8	123.8	123.8	123.8	123.7	123.7	123.6	123.6	123.5	123.5	123.4	123.8	123.8	123.6	123.5	123.7
2003	123.3	123.3	123.2	123.1	123.1	123.0	122.9	122.9	122.8	122.8	122.7	122.7	123.3	123.1	122.9	122.7	123.0
2004	122.6	122.6	122.5	122.5	122.5	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.6	122.5	122.4	122.4	122.5
2005	122.5	122.5	122.6	122.7	122.8	122.9	123.0	123.1	123.3	123.4	123.6	123.8	122.5	122.8	123.1	123.6	123.0
2006	124.0	124.2	124.4	124.5	124.7	124.9	125.1	125.3	125.4	125.6	125.7	125.8	124.2	124.7	125.2	125.7	125.0
2007	126.0	126.1	126.2	126.3	126.4	126.4	126.5	126.6	126.6	126.6	126.7	126.7	126.1	126.4	126.6	126.7	126.4
2008	126.7	126.7	126.7	126.6	126.6	126.5	126.4	126.3	126.1	125.9	125.7	125.5	126.7	126.6	126.3	125.7	126.3
2009	125.2	124.9	124.5	124.2	123.8	123.4	122.9	122.5	122.1	121.6	121.2	120.8	124.9	123.8	122.5	121.2	123.1
2010	120.5	120.1	119.8	119.5	119.3	119.1	118.9	118.7	118.6	118.5	118.5	118.4	120.1	119.3	118.7	118.5	119.2
2011	118.4	118.4															
Utilization (percent)																	
1981	78.0	77.3	77.4	77.6	77.8	77.2	77.1	76.9	76.3	75.4	74.3	72.9	77.6	77.5	76.8	74.2	76.5
1982	71.0	72.7	72.0	71.4	71.2	70.9	70.7	70.2	69.9	69.0	68.5	68.1	71.9	71.1	70.2	68.5	70.5
1983	69.8	69.7	70.3	71.0	71.9	72.4	73.3	74.0	75.2	76.0	76.2	76.3	69.9	71.8	74.2	76.1	73.0
1984	77.6	78.4	78.6	78.8	78.8	79.0	79.2	79.1	78.7	78.8	78.9	79.0	78.2	78.9	79.0	78.9	78.7
1985	78.5	78.1	78.6	78.3	78.2	78.2	77.7	78.0	78.0	77.7	78.1	78.3	78.4	78.2	77.9	78.0	78.1
1986	79.2	78.6	78.3	78.6	78.7	78.5	78.6	78.6	78.7	78.9	79.1	79.6	78.7	78.6	78.6	79.2	78.8
1987	79.1	80.1	80.1	80.3	80.7	80.8	81.1	81.3	81.6	82.8	83.2	83.6	79.8	80.6	81.4	83.2	81.2
1988	83.4	83.5	83.7	84.3	84.2	84.2	84.2	84.2	84.4	84.8	85.0	85.3	83.5	84.2	84.3	85.1	84.3
1989	86.0	85.0	84.9	84.8	84.0	84.0	82.7	83.2	82.8	82.4	82.3	82.2	85.3	84.3	82.9	82.3	83.7
1990	81.8	82.9	83.0	82.6	82.6	82.6	82.4	82.5	82.3	81.4	80.3	79.5	82.6	82.6	82.4	80.4	82.0
1991	78.8	78.1	77.4	77.5	78.0	78.7	78.9	78.9	79.7	79.4	79.1	78.7	78.1	78.1	79.1	79.1	78.6
1992	77.9	78.6	79.2	79.5	79.8	79.8	80.3	79.8	79.7	79.9	80.1	79.8	78.6	79.7	79.9	79.9	79.5
1993	80.6	80.5	80.2	80.5	80.3	80.1	80.2	79.9	80.3	80.8	81.0	81.3	80.4	80.3	80.1	81.0	80.5
1994	81.3	81.3	82.1	82.5	82.7	82.7	82.8	83.2	83.1	83.6	83.9	84.5	81.6	82.6	83.0	84.0	82.8
1995	84.5	84.0	83.8	83.3	83.0	83.1	82.2	82.8	83.1	82.5	82.3	82.1	84.1	83.1	82.7	82.3	83.1
1996	81.0	81.9	81.4	82.1	82.3	82.8	82.5	82.6	82.8	82.2	82.6	82.9	81.4	82.4	82.6	82.5	82.3
1997	82.5	83.1	83.5	82.7	82.7	82.7	82.5	83.3	83.4	83.5	83.8	83.6	83.0	82.7	83.1	83.6	83.1
1998	83.7	83.2	82.7	82.5	82.5	81.3	80.3	81.9	81.0	81.3	80.9	80.8	83.2	82.1	81.1	81.0	81.8
1999	80.6	80.7	80.1	79.9	80.2	79.5	79.3	79.6	79.1	80.0	80.2	80.3	80.4	79.9	79.4	80.2	80.0
2000	79.9	79.7	79.8	79.9	79.4	79.3	78.9	78.1	78.3	77.8	77.3	76.5	79.8	79.5	78.4	77.2	78.7
2001	76.0	75.6	75.3	75.1	74.5	74.1	74.0	73.4	73.2	72.7	72.5	72.6	75.6	74.6	73.5	72.6	74.1
2002	73.1	73.0	73.6	73.7	74.2	75.0	74.6	74.9	75.0	74.6	74.9	74.4	73.2	74.3	74.8	74.7	74.2
2003	74.9	74.9	75.0	74.2	74.2	74.4	74.4	74.1	74.7	74.6	75.4	75.2	74.9	74.3	74.4	75.1	74.7
2004	75.1	75.7	75.5	76.0	76.5	75.9	76.5	77.0	76.8	77.6	77.5	78.0	75.5	76.1	76.7	77.7	76.5
2005	78.5	79.1	78.6	78.6	78.8	78.8	78.5	78.5	77.3	78.3	78.8	78.6	78.7	78.8	78.1	78.6	78.5
2006	79.2	78.9	78.6	78.9	78.3	78.4	78.2	78.3	78.2	77.8	77.7	78.9	78.9	78.5	78.3	78.1	78.5
2007	78.5	78.8	79.1	79.4	79.2	79.5	79.6	79.1	79.4	78.8	78.9	79.0	78.8	79.4	79.4	78.9	79.1
2008	78.6	78.1	77.7	76.7	76.2	75.7	75.0	74.0	71.5	71.3	69.9	68.0	78.2	76.2	73.5	69.7	74.4
2009	66.2	66.4	65.1	64.7	64.0	64.0	65.1	65.9	66.6	66.8	67.6	67.9	65.9	64.3	65.9	67.4	65.9
2010	68.8	69.0	69.8	70.4	71.4	71.5	72.2	72.3	72.5	72.7	72.9	73.5	69.2	71.1	72.3	73.0	71.4
2011	74.0	74.4															

NOTE: Estimates from October 2010 through February 2011 are subject to further revision in the upcoming monthly releases.

1. See footnote 2 to table 3.

2. High-technology industries include computers, communications equipment, and semiconductors and related electronic components.

Table 12

ANNUAL PROPORTIONS IN INDUSTRIAL PRODUCTION, MARKET AND INDUSTRY GROUP SUMMARY

Item		2003	2004	2005	2006	2007	2008	2009	2010
Total IP		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MARKET GROUPS									
Final products and nonindustrial supplies		57.8	56.4	55.9	55.9	54.7	55.0	56.5	55.3
Consumer goods		30.6	29.7	29.1	28.4	27.4	27.3	29.5	29.1
Durable		8.4	7.6	7.1	6.9	6.7	6.3	6.1	6.2
Automotive products		4.3	3.7	3.3	3.2	3.3	2.9	3.0	3.3
Home electronics		.4	.4	.4	.4	.3	.3	.3	.2
Appliances, furniture, carpeting		1.3	1.3	1.2	1.2	1.1	1.0	.9	.8
Miscellaneous goods		2.3	2.2	2.2	2.2	2.0	2.0	1.9	1.9
Nondurable		22.2	22.0	22.0	21.5	20.7	21.0	23.4	22.9
Non-energy		17.9	17.1	16.5	16.2	15.6	16.2	17.9	17.0
Foods and tobacco		9.5	9.2	8.8	8.5	8.2	8.6	9.7	9.4
Clothing		.7	.6	.5	.4	.3	.3	.2	.2
Chemical products		5.2	5.0	4.9	5.0	5.0	5.2	5.6	5.3
Paper products		1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.6
Energy		4.2	4.9	5.5	5.4	5.0	4.8	5.5	5.9
Business equipment		9.7	9.4	9.3	9.8	9.7	9.9	9.3	9.1
Transit		1.8	1.8	1.8	2.1	2.0	2.0	1.8	1.9
Information processing		2.9	2.8	2.7	2.8	2.7	2.7	2.7	2.5
Industrial and other		5.0	4.8	4.8	4.9	5.0	5.2	4.8	4.7
Defense and space equipment		1.6	1.5	1.5	1.5	1.8	2.0	2.4	2.4
Construction supplies		4.8	4.8	4.9	5.1	4.9	4.8	4.2	4.1
Business supplies		10.7	10.5	10.5	10.3	10.2	10.3	10.6	10.1
Materials		42.2	43.6	44.1	44.1	45.3	45.0	43.5	44.7
Non-energy		29.5	29.4	28.8	28.5	28.3	28.2	26.9	27.3
Durable		18.3	18.1	17.7	17.6	17.3	17.2	15.1	15.4
Consumer parts		3.8	3.5	3.3	3.1	2.9	2.5	1.9	2.0
Equipment parts		6.4	6.2	6.1	6.0	6.1	6.4	5.9	5.7
Other		8.1	8.3	8.3	8.5	8.4	8.2	7.3	7.7
Nondurable		11.2	11.3	11.2	10.9	11.0	11.1	11.8	11.9
Textile		.7	.7	.7	.6	.5	.4	.4	.5
Paper		2.5	2.4	2.3	2.3	2.2	2.3	2.4	2.3
Chemical		4.5	5.0	5.1	4.9	5.2	4.9	5.2	5.4
Energy		12.7	14.2	15.2	15.6	17.0	16.8	16.6	17.5
INDUSTRY GROUPS									
Manufacturing		81.2	79.6	78.2	77.6	76.2	75.9	75.6	74.7
Manufacturing (NAICS)	31–33	76.8	75.3	74.2	73.7	72.4	72.3	72.0	71.5
Durable manufacturing		41.7	40.1	39.1	39.3	39.2	39.1	36.2	35.7
Wood products	321	1.6	1.5	1.5	1.4	1.2	1.1	.9	.9
Nonmetallic mineral products	327	2.2	2.2	2.3	2.3	2.2	2.0	1.7	1.6
Primary metal	331	2.4	2.7	2.6	2.7	2.7	2.5	1.8	2.2
Fabricated metal products	332	5.5	5.3	5.3	5.5	5.7	6.0	5.3	5.1
Machinery	333	5.0	4.8	4.8	5.0	5.1	5.3	4.7	4.6
Computer and electronic products	334	7.7	7.6	7.2	7.0	6.9	7.0	6.8	6.5
Electrical equip., appliances, and components	335	2.0	1.9	1.9	1.9	1.9	2.0	1.8	1.7
Motor vehicles and parts	3361–3	7.2	6.3	5.8	5.5	5.1	4.4	3.9	4.5
Aerospace and miscellaneous transportation equipment	3364–9	3.3	3.1	3.2	3.4	4.0	4.3	4.7	4.2
Furniture and related products	337	1.7	1.6	1.6	1.5	1.4	1.4	1.1	1.0
Miscellaneous	339	3.3	3.1	3.1	3.1	3.0	3.2	3.4	3.2
Nondurable manufacturing		35.1	35.2	35.1	34.3	33.2	33.1	35.8	35.8
Food, beverage, and tobacco products	311,2	11.4	10.9	10.5	10.1	9.9	10.5	12.0	11.7
Textile and product mills	313,4	1.2	1.2	1.2	1.0	.9	.8	.7	.7
Apparel and leather	315,6	.9	.7	.6	.6	.4	.4	.3	.3
Paper	322	2.9	2.7	2.6	2.6	2.5	2.6	2.8	2.7
Printing and support	323	2.2	2.1	2.0	1.9	1.9	1.9	1.8	1.6
Petroleum and coal products	324	2.2	3.2	4.0	3.9	3.3	2.7	3.2	3.8
Chemical	325	10.8	11.1	11.0	10.9	11.3	11.3	12.0	11.9
Plastics and rubber products	326	3.6	3.4	3.2	3.2	3.0	3.0	3.0	3.1
Other manufacturing (non-NAICS)	1133,5111	4.4	4.3	4.0	3.9	3.8	3.6	3.6	3.2
Mining	21	9.0	10.8	12.1	12.9	14.1	13.6	12.7	13.9
Utilities	2211,2	9.8	9.6	9.7	9.6	9.8	10.5	11.7	11.4
Electric	2211	8.2	7.9	7.9	8.0	8.1	8.8	10.0	9.7
Natural gas	2212	1.6	1.7	1.8	1.6	1.6	1.7	1.7	1.6

NOTE: The IP proportion data are estimates of the industries' relative contributions to overall IP change between the reference year and the following year. For example, a 1 percent increase in durable goods manufacturing between 2010 and 2011 would account for a 0.357 percent increase in total IP.

Table 13

INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION: SUMMARY

Seasonally adjusted

Industrial production	2007=100						Percent change						Feb. '10 to Feb. '11
	2010 Sept. ^r	Oct. ^r	Nov. ^r	Dec. ^r	2011 Jan. ^r	Feb. ^r	2010 Sept. ^r	Oct. ^r	Nov. ^r	Dec. ^r	2011 Jan. ^r	Feb. ^r	
Total index	91.2	91.2	91.5	92.8	93.0	93.0	.3	-.1	.4	1.4	.2	.0	5.8
<i>Previous estimates</i>	93.9	93.7	94.0	95.3	95.6	95.5	.3	-.1	.3	1.3	.3	-.1	5.6
Major market groups													
Final Products	92.7	92.9	92.9	94.2	94.7	94.8	.0	.2	.0	1.5	.5	.1	6.2
Consumer goods	92.4	92.3	92.1	93.7	93.8	93.4	-.2	-.1	-.2	1.7	.1	-.4	3.3
Business equipment	90.1	91.3	92.0	92.9	94.5	95.6	.9	1.3	.7	1.0	1.7	1.2	15.0
Nonindustrial supplies	82.6	82.2	83.0	83.4	83.5	83.1	-.2	-.5	1.1	.5	.1	-.4	3.6
Construction	73.8	74.2	75.0	74.5	75.0	75.0	.0	.5	1.1	-.7	.7	-.1	9.1
Materials	92.9	92.8	93.2	94.7	94.8	94.8	.6	-.2	.5	1.7	.0	.0	6.2
Major industry groups													
Manufacturing (see note below)	87.5	87.8	88.0	89.0	89.7	90.2	.2	.3	.3	1.1	.8	.6	7.0
<i>Previous estimates</i>	90.9	91.2	91.3	92.3	93.1	93.5	.1	.3	.2	1.1	.9	.4	6.9
Mining	103.9	104.8	104.5	104.8	103.9	104.4	1.1	.9	-.3	.3	-.8	.5	7.4
Utilities	102.6	98.8	100.6	105.9	103.8	99.1	-.1	-3.6	1.8	5.2	-2.0	-4.6	-3.3
Capacity utilization													Capacity growth
	Percent of capacity												
	Average 1972-2010	1988-89 high	1990-91 low	1994-95 high	2008-09 low	2010 Feb.	2010 Sept. ^r	Oct. ^r	Nov. ^r	Dec. ^r	2011 Jan. ^r	Feb. ^r	Feb. '10 to Feb. '11
Total industry	80.4	85.2	78.8	85.1	67.3	72.2	75.7	75.7	75.9	77.0	77.1	77.0	-.8
<i>Previous estimates</i>	80.5	85.2	78.7	85.1	68.2	72.4	75.2	75.1	75.3	76.3	76.4	76.3	.1
Manufacturing (see note below)	79.0	85.5	77.3	84.7	64.4	69.3	72.7	73.0	73.2	74.0	74.5	75.0	-1.1
<i>Previous estimates</i>	79.1	85.6	77.2	84.6	65.4	69.7	72.4	72.6	72.7	73.5	74.1	74.3	.1
Mining	87.4	86.3	83.8	88.5	79.0	82.5	88.6	89.3	88.9	89.0	88.1	88.4	.2
Utilities	86.6	92.9	84.3	93.3	79.2	84.3	82.4	79.2	80.4	84.3	82.4	78.5	3.8
Stage-of-process groups													
Crude	86.4	87.7	84.3	89.6	77.6	82.8	87.1	87.1	86.8	87.5	87.1	87.3	.3
Primary and semifinished	81.3	86.5	77.9	87.9	64.9	69.8	72.8	72.2	73.0	74.6	74.6	74.0	-1.3
Finished	77.3	83.3	77.4	80.7	66.8	71.2	74.4	74.9	74.7	75.3	75.7	76.2	.2

^r Revised.

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.

Table 14
NETWORKING EQUIPMENT, 1999–2009

	Production Index (2007=100)	Price Index (2007=100)	Value of Production (millions of dollars)
Annual Estimates			
1999	50.4	396.0	22,111.2
2000	61.4	354.9	24,174.1
2001	79.0	272.0	23,839.6
2002	59.7	204.4	13,595.4
2003	69.1	156.6	11,941.9
2004	79.4	122.4	10,809.1
2005	92.6	110.9	11,398.8
2006	148.8	105.1	17,251.4
2007	100.0	100.0	11,326.7
2008	7.9	93.6	828.5
2009	14.9	83.5	1,367.9
Quarterly Estimates			
1999Q1	44.2	417.9	18,589.6
Q2	56.1	398.8	22,495.2
Q3	61.1	386.9	23,766.9
Q4	61.7	380.9	23,633.0
2000Q1	66.6	373.5	25,006.2
Q2	66.5	352.5	23,571.1
Q3	66.9	348.4	23,453.8
Q4	70.8	345.9	24,630.8
2001Q1	86.5	297.3	25,858.0
Q2	85.4	286.3	24,587.9
Q3	88.4	261.9	23,292.9
Q4	87.8	244.7	21,602.9
2002Q1	70.5	228.9	16,234.7
Q2	64.6	211.0	13,710.1
Q3	64.0	195.8	12,596.3
Q4	64.3	183.9	11,890.1
2003Q1	63.7	171.8	11,010.3
Q2	75.5	167.2	12,702.4
Q3	84.9	154.0	13,146.9
Q4	81.1	134.5	10,973.4
2004Q1	92.7	136.2	12,704.0
Q2	84.8	124.1	10,584.3
Q3	87.3	117.6	10,329.6
Q4	88.1	112.4	9,966.7
2005Q1	84.6	110.8	9,425.1
Q2	91.3	110.0	10,102.2
Q3	111.8	111.4	12,524.4
Q4	128.9	112.0	14,513.1
2006Q1	119.5	110.1	13,233.9
Q2	130.2	105.0	13,752.0
Q3	195.3	102.8	20,177.7
Q4	239.5	102.5	24,686.1
2007Q1	194.2	102.0	19,920.9
Q2	157.1	102.1	16,129.3
Q3	21.9	99.2	2,181.7
Q4	26.9	96.7	2,611.7
2008Q1	13.6	97.7	1,333.6
Q2	7.2	93.9	677.4
Q3	7.5	92.7	699.2
Q4	5.9	89.8	535.1
2009Q1	4.6	85.2	396.0
Q2	5.3	85.3	453.0
Q3	15.0	80.4	1,216.2
Q4	52.0	83.1	4,347.6

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 at www.federalreserve.gov/releases/G17 at the Board's World Wide Web site. 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 at the Board's Web site. Instructions for searching for and downloading specific series are provided as well. For paid access to the data files through the Department of Commerce's Economic Bulletin Board or World Wide Web site, please call STAT-USA at 1-800-STAT-USA or 202-452-1986.

INDUSTRIAL PRODUCTION

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

Source data. On a monthly basis, the individual indexes of industrial production are constructed from two main types of source data: (1) output measured in physical units and (2) data on inputs to the production process, from which output is inferred. Data on physical products, such as tons of steel or barrels of oil, are typically 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 or sales and unit values) 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 data on physical 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 Bulletin* 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 the

geometric mean of the change in output (I), and, as can be seen below, is computed using the unit value added estimate for the current month (p_m) and the estimate for previous month:

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

The IP proportions (typically shown in the first column of the relevant tables in the monthly G.17 release) are estimates of the industries' relative contributions to overall growth in the following year. For example, the relative importance weight of the motor vehicles and parts industry is about 4 percent. If output in this industry increased 10 percent in a month, then this gain would boost growth in total IP by 4/10 percentage point (0.04 x 10% = 0.4%). To assist users with calculations, the Federal Reserve's web site provides supplemental monthly statistics that represent the exact proportionate contribution of a monthly change in a component index to the monthly change in the total index (www.federalreserve.gov/releases/G17/ipdisk/ipweights.sa.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 70 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, 93 percent in the third month, 97 percent in the fourth month, 98 percent in the fifth month, and 98 percent in the sixth month. Data availability by data type, based on the six-month reporting window used in 2009, is summarized in the table below:

Availability of Monthly IP Data in Publication Window
(Percent of value added in 2009)

Type of data	Month of estimate					
	1st	2nd	3rd	4th	5th	6th
Physical product	25	39	48	52	53	53
Production-worker hours	45	45	45	45	45	45
IP data received	70	84	93	97	98	98
IP data estimated	30	16	7	3	2	2

The physical product group includes series based on either monthly or quarterly data. As can be seen in the first line 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 (25 percent out of total of 53 percent). Of the 25 percent, about three-fourths (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 third estimate of industrial production. Specifically, quarterly data are available for the second estimate of the last month of a quarter, the third estimate of the second month of a quarter, and the fourth estimate of the first month of a quarter.

Seasonal adjustment. Individual series are seasonally adjusted using Census X-12 ARIMA. For series based on production-worker hours, the current seasonal factors were estimated with data through January 2011; for other series, the factors were estimated with data through at least December 2010. Series are pre-adjusted for the effects of holidays or the business cycle 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 0.26 percent during the 1987–2009 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 1987–2009 period. In most cases (about 85 percent), the direction of change in output indicated by the first estimate for a given month is the same as that shown by the fourth estimate.

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

CAPACITY UTILIZATION

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

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

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

Aggregation Methodology. Monthly capacity aggregates are calculated in three steps: (1) utilization aggregates are calculated on an annual basis through the most recent full year as capacity-weighted aggregates of individual utilization rates; (2) the annual aggregate capacity is derived from the corresponding production and utilization aggregates; (3) the monthly capacity aggregate is obtained by interpolating 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 annual Survey of Plant Capacity (the primary source of factory operating rates through 2006, after which it was discontinued) for the fourteen years they overlapped. Adjustments have been made to keep the industry utilization rates currently reported by the Federal Reserve (now based on the QSPC) 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 Census utilization surveys.

Perspective. Over the 1972–2010 period, the average total industry utilization rate was 80.4 percent; for manufacturing, the average factory operating rate was 79.0 percent. Industrial plants usually operate at capacity utilization rates that are well below 100 percent: none of the broad aggregates has ever reached 100 percent. For total industry and total manufacturing, utilization rates have exceeded 90 percent only in wartime. The highs and lows in capacity utilization shown in table 11 are specific to each series and do not all occur in the same month.

REFERENCES AND RELEASE DATES

References. The annual revision published in March 2009 is described in an article published in the *Federal Reserve Bulletin* and is available on the Board's website at: www.federalreserve.gov/releases/G17/About.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).

Release Schedule

At 9:15 a.m. on

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