John Williams'
Shadow Government Statistics
Analysis Behind and Beyond Government Economic Reporting

COMMENTARY NUMBER 641
June Industrial Production, Producer Price Index

July 16, 2014

Shifting Production Detail Indicated Still Weaker First-Quarter GDP, Suggested Slowing Second-Quarter Inventory Growth (a GDP Negative)

Volatile PPI Resumed Upswing in Inflation Reporting

PLEASE NOTE: The next regular Commentary *is scheduled for tomorrow, Thursday, July 17th covering June housing starts.*

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

Continued Indications of Second-Quarter GDP Contraction. Despite ongoing, positive quarterly growth in second-quarter industrial production, the greater relative swing from a first-quarter contraction to an apparent second-quarter gain in real retail sales suggests further slowing growth, or contraction, in inventories. Headline inventory reporting is highly unreliable and incomplete at best, but the underlying consumption-production fundamentals tend to prevail, eventually. Slowing of second-quarter inventory growth, let alone an outright contraction, would impact negatively the annualized pace of change in the headline second-quarter GDP estimate. Various GDP components continue to suggest reporting of a second consecutive quarterly GDP contraction (second-quarter 2014) on July 30th.

A formal assessment of June economic reporting will be published in *Commentary No. 643* of July 22nd, along with an overview of the upcoming GDP benchmark revisions and the pending first estimate of second-quarter 2014 GDP.

Today's (July 16th) brief missive concentrates on the June industrial production and the PPI.

Industrial Production—June 2014— First-Quarter 2014 Production Growth Revised Lower. Headline reporting of a below-consensus 0.2% monthly gain in June industrial production was accompanied by major prior-period revisions. The revised production series now shows a weaker 3.9% annualized growth rate for first-quarter production, down from initial reporting of 4.5%. In turn, what would have been 4.9% growth in second-quarter production was reported at 5.5%.

Unless the production numbers were revised so as to catch up with the last revision to first-quarter GDP data (usually GDP numbers lag the production data), the new numbers suggested further downside revision pending for first-quarter GDP, come the benchmark revisions on July 30th. Separately, where real change in first-quarter retail sales was an outright contraction, and second-quarter real growth should be on the plus-side, the relative quarterly shift in real sales activity likely was more than the gain in related production, suggesting a slowing or declining pace of inventory growth (a negative for GDP) in the second-quarter. A slowing pace of inventory growth was a negative contributing factor to first-quarter 2014 GDP activity.

As an aside, the unusually large revisions to earlier production data also suggested further heavy seasonal-adjustment distortions in the series. The headline monthly production growth in February 2014 was revised to 0.9% from 1.1%, March revised to 0.9% from 0.8%, April revised to "unchanged" (at the first decimal point) from a contraction of 0.3% (-0.3%), and May revised to 0.5% growth from 0.6%. Given recent unusual patterns in both economic activity and the weather, there likely have been ongoing seasonal distortions in June reporting. There simply has been too-little consistent and seasonally-repetitive reporting to generate meaningful seasonal adjustments or reliable month-to-month growth estimates for this series

Headline Reporting of Industrial Production. In the context of the above-mentioned revisions, headline June industrial production increased by 0.22%. Net of prior-period revisions, June production rose by 0.25% (rounds to 0.2%). The June reporting was against a revised 0.47% monthly gain in May, and a revised 0.04% gain in April.

The headline 0.2% monthly June gain (revised May 0.5% gain) in production was composed of a June 0.1% gain (revised May gain of 0.4%) in manufacturing, a 0.8% June gain (revised May gain of 1.1%) in mining, and a 0.3% June decline (-0.3%), versus a revised May decline of 0.4% (-0.4%) in utilities.

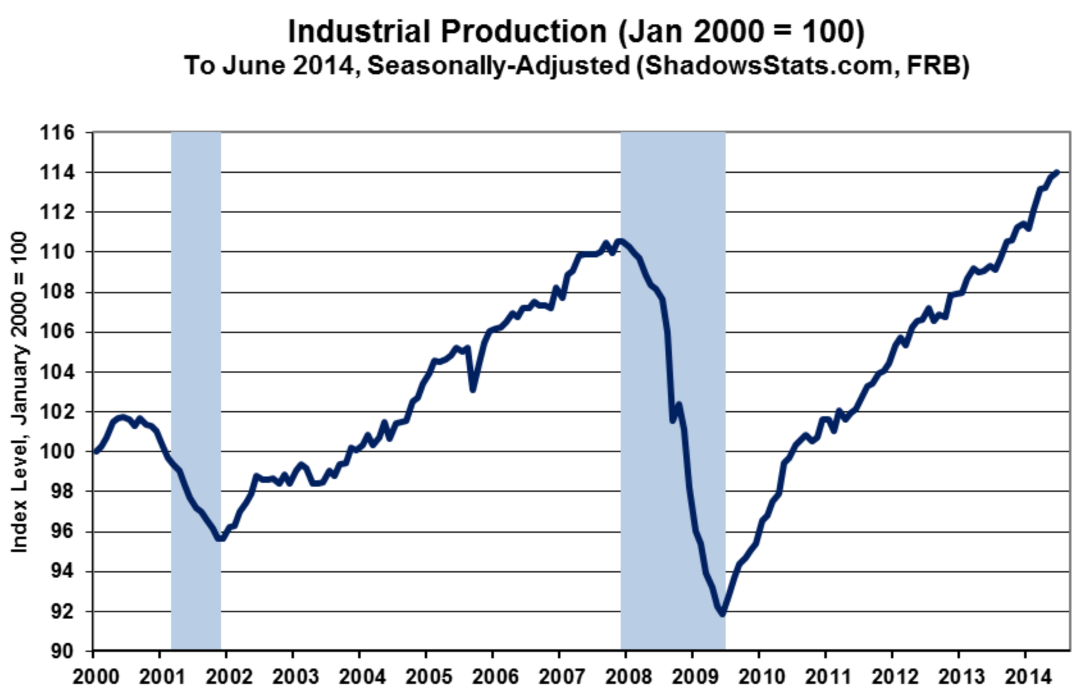
Year-to-year growth in June production held about even at 4.32%, versus a revised 4.30% gain in May, and versus revised 3.91% growth in April.

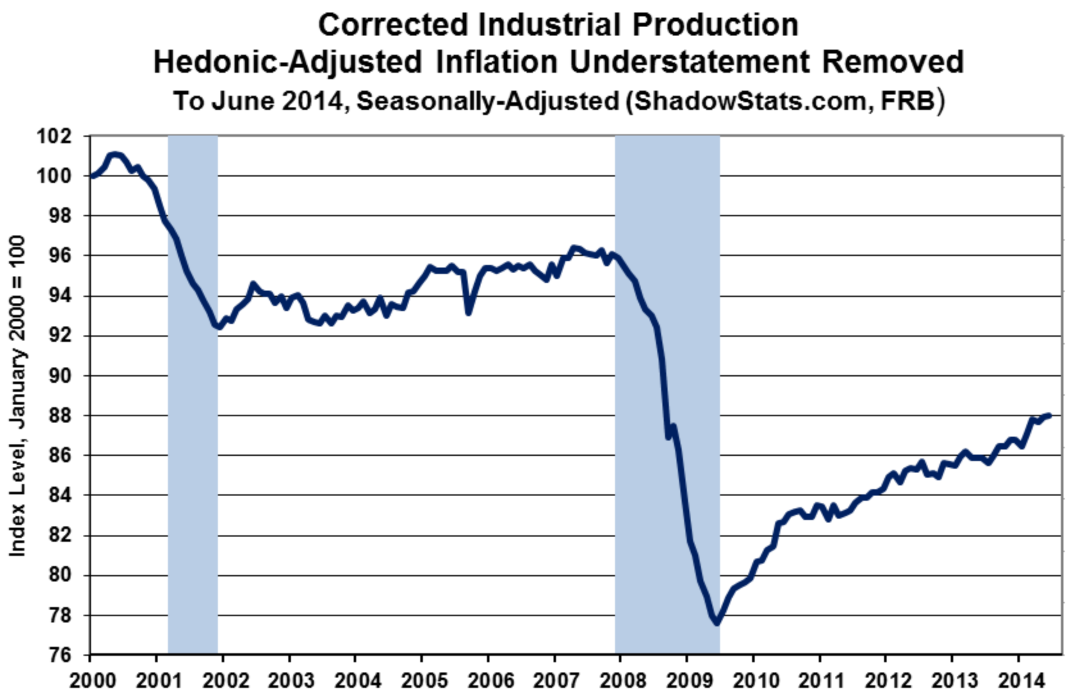
Production Graphs. Official production levels have moved higher since the June 2009 trough, setting a new series high, with June's reporting. Corrected for the understatement of inflation used in deflating portions of the industrial production index, however, the series has shown more of a pattern of stagnation with a slow upside trend, since 2009, topping out into 2012, with a renewed upside trend into a recent, protracted period of inventory build-up, and now a topping out as the excess inventories get worked off.

Updated versions of industrial production activity are shown in the two graphs following, the official headline production level, and production as corrected for the understatement of the inflation used in deflating certain components of industrial production. The regular graphs of short- and long-term headline industrial production activity, both in terms of official level and reported year-to-year change, are found in the *Reporting Detail* section. Drill-down and various graphics options for the headline data are available at ShadowStats-affiliate www.ExpliStats.com.

Corrected Industrial Production. Hedonic quality adjustments to inflation understate the inflation used in deflating some components of industrial production. That has the effect of overstating the resulting inflation-adjusted growth in the headline industrial production series (see *Public Comment on Inflation* and the discussion in *Chapter 9* of *2014 Hyperinflation Report—Great Economic Tumble*).

The two following graphs address that issue. The first reflects official industrial production reporting, indexed to January 2000 = 100, instead of the Fed's formal index that is set at 2007 = 100. The 2000 indexing is used simply so as to provide for some consistency in this series of revamped graphics; it does not affect the appearance of the graph or reported growth rates. The second graph is a version of the first that has been corrected for the understatement of the inflation rate used in deflating the production index, with estimated hedonic-inflation adjustments backed-out of the official industrial-production deflator.





The "corrected" graph does show some growth in the period following the official June 2009 near-term trough in production activity. Yet, that upturn has been far shy of the full recovery and the renewed expansion reported in official GDP estimation. Unlike the headline-production data and the headline GDP, corrected production levels have not recovered pre-recession highs. Instead, corrected production entered a period of protracted low-level stagnation in 2012, with quarterly contractions in third-quarter 2012, second-quarter 2013, with stagnation in third-quarter 2013, and some upturn in the fourth-quarter 2013 and first-quarter 2014, with activity in second-quarter 2014 netting out to effective stagnation.

Producer Price Index (PPI)—June 2014—Headline Wholesale Inflation Rebounded with Rising Energy Costs. The newly-designed PPI showed a 0.36% monthly pickup in headline wholesale inflation for June, topping market expectations. The gain was dominated by the "hard" inflation of a 0.52% monthly gain in the goods sector, which reflected higher energy costs. Annual inflation on the goods side also notched higher year-to-year to 2.13% in June, versus 1.86% in May. Slowing annual inflation in the "soft" inflation of the services sector, however, pulled the aggregate annual inflation rate lower, to 1.92% in June, versus 2.02% in May.

As discussed in *Commentary No. 591*, a new producer price index (PPI)—effective with January 2014 reporting—replaced the traditional headline monthly measure of wholesale inflation in "finished goods," with a headline monthly measure of wholesale "total final demand," composed of "final demand goods" (basically the old "finished goods" series), "final demand services" which tends to cap the goods inflation when oil prices are an issue, and "final demand construction."

In the new structure of the PPI series "final demand services" largely reflects problematic and questionable surveying of intermediate or quasi-wholesale profit margins in the services area. To the extent that profit margins shrink in the services sector, one could argue that the resulting lowered estimation of inflation actually is a precursor to higher inflation, as firms move to raise prices in an effort to regain more-normal margins. The new PPI series is an interesting concept, but likely limited as to its aggregate predictive ability versus general consumer inflation. There is not enough history available on the new series (just five years of post-2008-panic data) to establish any meaningful predictive relationship to general inflation, while the goods sector relationship has been established for many years.

June 2014 Headline PPI Detail. The seasonally-adjusted, month-to-month, headline PPI for June 2014 "total final demand" increased by 0.36%, following a 0.18% decline (-0.18%) in May. On a not-seasonally-adjusted basis (all annual growth rates are unadjusted), year-to-year headline PPI inflation was 1.92% in June 2014, versus 2.02% in May 2014. A 25-month annual-inflation high of 2.21% had been reported in April 2014.

In terms of the three major subcategories for June 2014 "final demand" PPI, headline monthly "final demand goods" was up by 0.52%, "final demand services" was up by 0.28%, and "final demand construction" was up by 0.09%.

Final Demand Goods. Running somewhat in parallel with the old "finished goods" PPI series, headline monthly "final demand goods" in June rose by 0.52%, versus a 0.17% decline (-0.17%) in May. Year-to-year inflation rose to 2.13% in June, up from 1.86% in May 2014, but lower than the 2.49% of April 2014. Headline monthly changes by major components for June final demand goods: "foods" was down by 0.24% (-0.24%) for a second month in June, depressed by seasonal adjustments; boosted by seasonal factors, "energy" was up by 2.06% in June [down by 0.24% (-0.24%)in May]; and "less foods and energy" ("core" goods inflation) was up by 0.09% in June, versus a decline of 0.24% (-0.24%) in May, with neutral impact from seasonal factors.

Final Demand Services. Headline monthly "final demand services" inflation rose by 0.28% in June, following a decline of 0.18% (-0.18%) in May. Year-to-year inflation was 1.87 % in June, versus 2.16% in May 2014 (1.96% in April). The headline monthly changes by major components for June final demand services: "services less trade, transportation and warehousing" was up by 0.28%, versus a contraction of 0.09% (-0.09%) in May; "transportation and warehousing" was up by 0.34% in June, versus a 0.86% gain in May; and "trade" was up by 0.18% in June, versus a decline of 0.54% (-0.54%) in May.

Final Demand Construction. Headline monthly "final demand construction" was up by 0.09% in June, the same gain as see in May. Year-to-year inflation was 3.27% in June 2014, versus 3.18% in May 2014.

[For further details on June industrial production and PPI, see the **Reporting Detail** ***section. Drill-down and various graphics options for the headline data are available at ShadowStats-affiliate www.ExpliStats.com.]***

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HYPERINFLATION WATCH

The Pending U.S. Dollar and Hyperinflation Crises Were Reviewed in *Commentary No. 639*. This section will be updated fully with the July 22nd *Commentary No. 643*. See *Commentary No. 639* for the recent review of key elements of the outlook and *Commentary No. 637* for the prior summary. Nothing of substance has changed.

REPORTING DETAIL

INDEX OF INDUSTRIAL PRODUCTION (June 2014)

First-Quarter 2014 Production Growth Revised Lower. Revisions released with the headline reporting of a 0.2% monthly gain in June industrial production showed a weaker 3.9% annualized growth rate for first-quarter production, down from initial reporting of 4.5%. In turn, what would have been 4.9% growth in second-quarter production now is 5.5%.

Unless the production numbers were revised so as to catch up with the first-quarter GDP data (usually GDP data lag the production data), the production revisions suggested further downside revision to first-quarter 2014 GDP, come the GDP benchmark revisions on July 30th. Separately, where real change in first-quarter retail sales was an outright contraction, and second-quarter real growth should be on the plus-side, the relative swing to the gain in real sales likely is more than the respective gains in related quarterly production, suggesting a slowing or declining pace of inventory growth (a negative for GDP) in the second-quarter.

As an aside, unusually large revisions to earlier production data suggested ongoing heavy seasonal-factor distortions in the series. The headline monthly production growth in February 2014 was revised to 0.9% from 1.1%, March revised to 0.9% from 0.8%, April revised to "unchanged" (at the first decimal point) from a contraction of 0.3% (-0.3%), and May revised to 0.5% growth from 0.6%. Given recent unusual patterns in both economic activity and the weather, there likely have been ongoing seasonal distortions in

June reporting. There simply has been too-little consistent and seasonally-repetitive reporting to generate meaningful seasonal adjustments or related month-to-month growth estimates for this series

Industrial Production—June 2014. The Federal Reserve Board released its first estimate of seasonally-adjusted, June 2014 industrial production today, July 16th. In the context of the above-mentioned revisions, June production increased by 0.2% (0.22% at the second decimal point). Net of prior-period revisions, June production rose by 0.25% (still rounds to 0.2%).

The June reporting was against a revised 0.47% (previously 0.59%) monthly gain in May, and a revised 0.04% gain (previously a 0.26% drop, initially a 0.57% decline) in April.

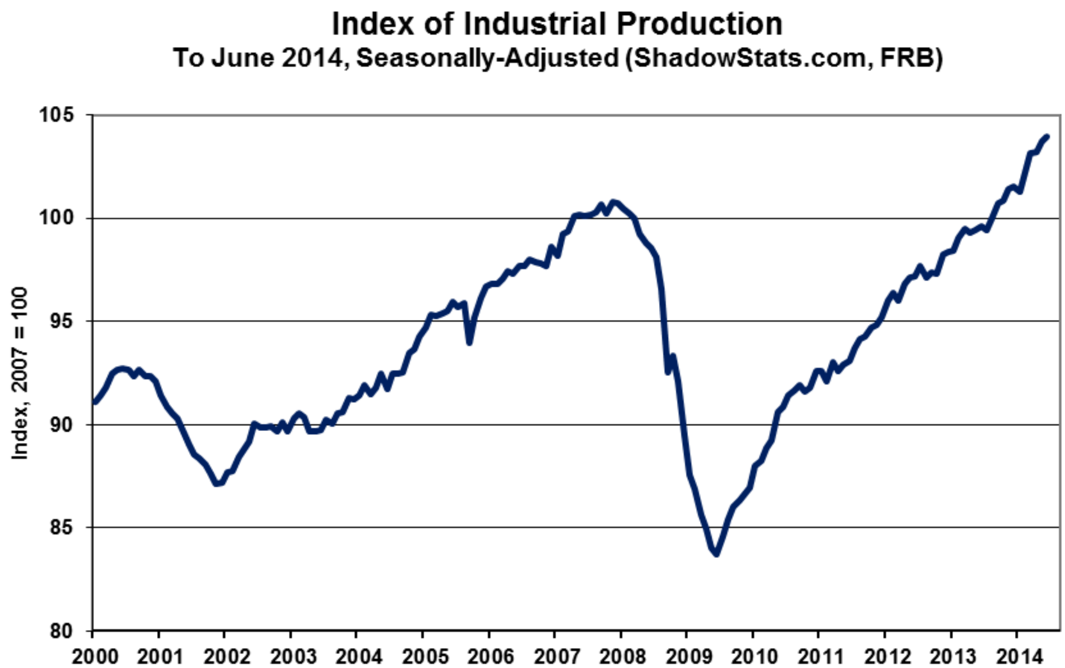
The headline 0.2% monthly June gain (revised May 0.5% gain, previously 0.6%) in production was composed of a June 0.1% gain (revised May gain of 0.4%, previously 0.6%) in manufacturing, a 0.8% June gain (revised May gain of 1.1%, previously 1.3%) in mining, and a 0.3% June decline (-0.3%), versus a revised May decline of 0.4% (-0.4%), previously a 0.8% drop (-0.8%), in utilities.

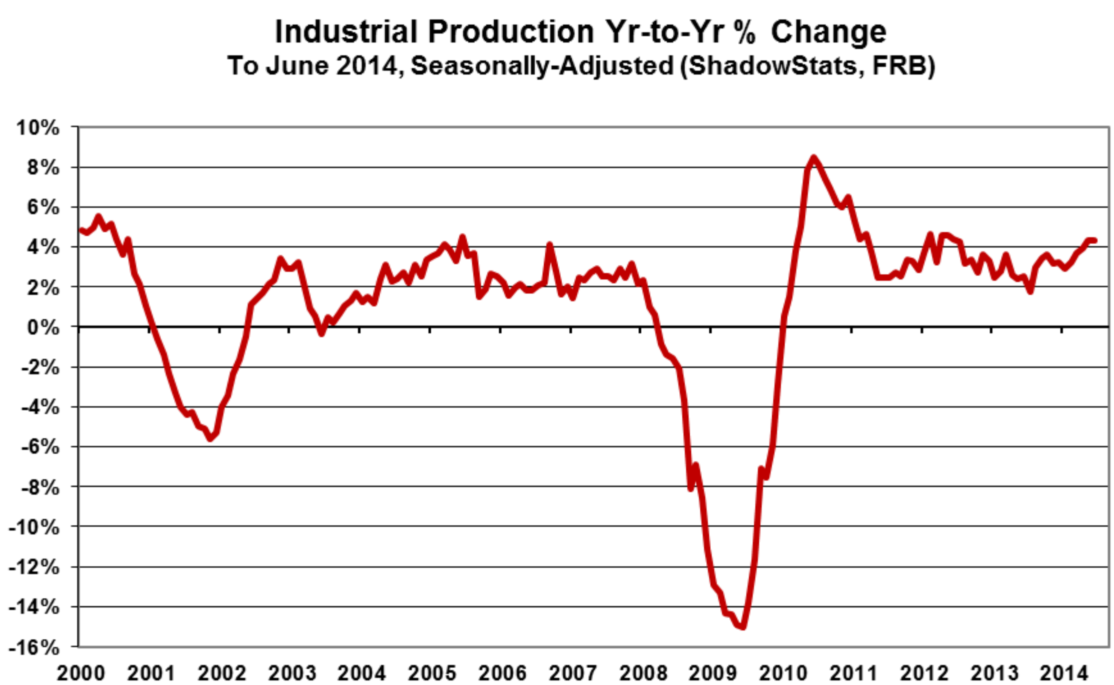
Year-to-year growth in June production held about even at 4.32%, versus a revised 4.30% (previously 4.27%) gain in May, and versus revised 3.91% (previously 3.76%, initially 3.46%) growth in April.

Production Graphs. Industrial production activity is reflected in the following two sets of graphs. The first graph in the first set shows the monthly level of the production index, while the second graph shows the year-to-year percentage change in the same series for recent historical detail, beginning January 2000. The second set of graphs shows the same data in historical context since World War II.

As shown more clearly in the first set of graphs, the pattern of year-to-year activity dipped anew in late-2013 to levels usually seen at the onset of recessions, although more-recent annual growth has firmed some. Annual growth remains well off the recent relative peak for the series, which was 8.49% in June 2010, going against the official June 2009 trough of the economic collapse. Indeed, as shown in the second set of graphs, the year-to-year contraction of 15.06% in June 2009, at the end of second-quarter 2009, was the steepest annual decline in production since the shutdown of war-time production following World War II.

Official production levels have moved higher since the June 2009 trough, setting a new series high, with June's reporting. Corrected for the understatement of inflation used in deflating portions of the industrial production index, however, the series has shown more of a pattern of stagnation with a slow upside trend, since 2009, topping out into 2012, with a renewed upside trend into a recent, protracted period of inventory build-up, and now a topping out as the excess inventories get worked off. The corrected production series is discussed and graphed in the *Opening Comments*.


Index of Industrial Production
To June 2014, Seasonally-Adjusted (ShadowStats.com, FRB)
Index, 2007 = 100
105
100
95
90
85
80
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014


Industrial Production Yr-to-Yr % Change
To June 2014, Seasonally-Adjusted (ShadowStats, FRB)
10%
8%
6%
4%
2%
0%
-2%
-4%
-6%
-8%
-10%
-12%
-14%
-16%
2000
2001
2002
2003
2004
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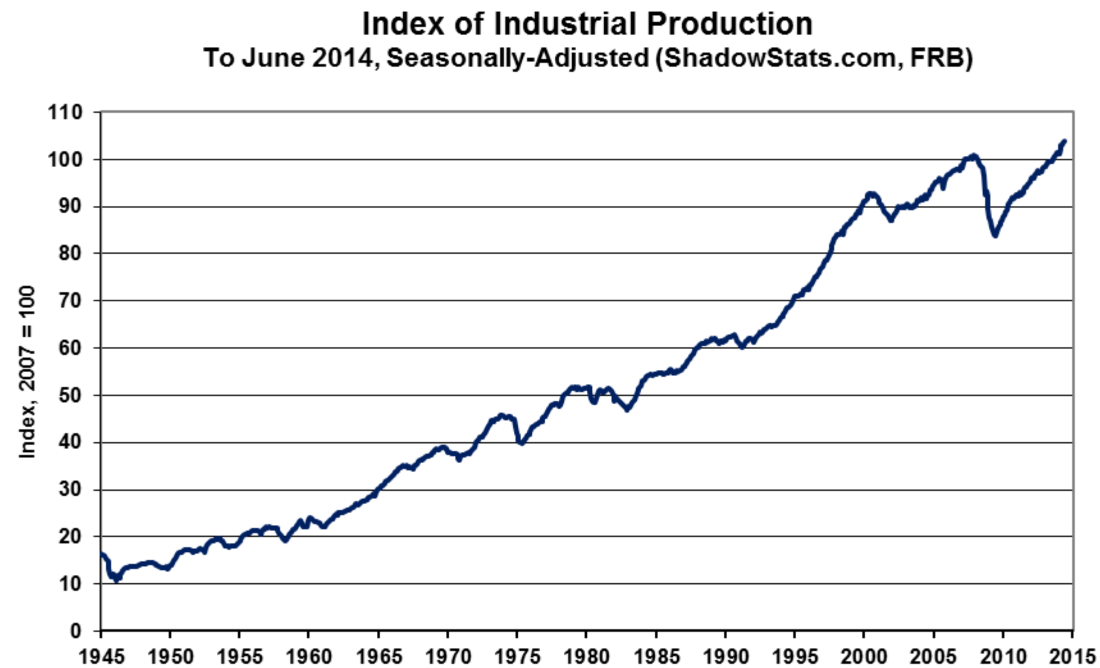
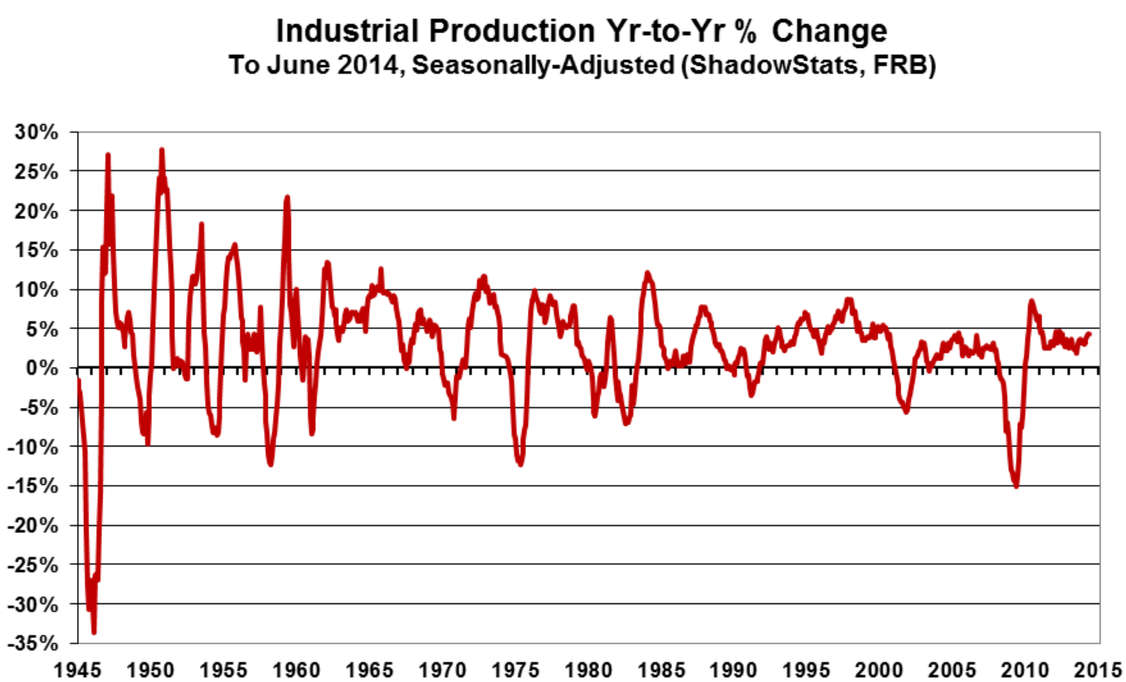
2008
2009
2010
2011
2012
2013
2014


Index of Industrial Production
To June 2014, Seasonally-Adjusted (ShadowStats.com, FRB)
Index, 2007 = 100
110
100
90
80
70
60
50
40
30
20
10
0
1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015


Industrial Production Yr-to-Yr % Change
To June 2014, Seasonally-Adjusted (ShadowStats, FRB)
30%
25%
20%
15%
10%
5%
0%
-5%
-10%
-15%
-20%
-25%
-30%
-35%
1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015

PRODUCER PRICE INDEX—PPI (June 2014)

Positive Seasonal Adjustments Helped to Boost Energy Prices. The newly-designed PPI showed a 0.36% pickup in headline wholesale inflation for June, topping market expectations. The gain was dominated by the "hard" inflation in the goods sector, reflecting higher energy costs. Annual inflation on the goods side notched higher year-to-year to 2.13% in June, versus 1.86% in May. Slowing annual inflation in the "soft" services sector, however, pulled the aggregate annual inflation rate lower, to 1.92% in June, versus 2.02% in May.

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June 2014 Headline PPI Detail. The Bureau of Labor Statistics (BLS) reported, today, July 16th, that the seasonally-adjusted, month-to-month, headline producer price index (PPI) for June 2014 "total final demand" increased by 0.36%, following a 0.18% decline (-0.18%) in May. On a not-seasonally-adjusted basis (all annual growth rates are unadjusted), year-to-year headline PPI inflation was 1.92% in June 2014, versus 2.02% in May 2014. A 25-month annual-inflation high of 2.21% had been reported in April 2014.

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Final Demand Construction. Headline monthly "final demand construction" was up by 0.09% in June, the same gain as see in May. Year-to-year inflation was 3.27% in June 2014, versus 3.18% in May 2014.

Descriptive material on the recently revamped PPI series is available along with the latest detail in the June 2014-related Press Release.

WEEK AHEAD

Much-Weaker-Economic and Stronger-Inflation Reporting Likely in the Months and Year Ahead. Although shifting to the downside, amidst fluctuations, market expectations generally still are overly optimistic as to the economic outlook. Expectations should continue to be hammered, though, by ongoing downside corrective revisions and an accelerating pace of downturn in headline economic activity. The initial stages of that process have been seen in the recent headline reporting of many major economic series (see *2014 Hyperinflation Report—Great Economic Tumble – Second Installment*), including the sharp pace of economic decline seen in real first-quarter 2014 GDP, which is the first contemporary reporting of a quarterly GDP contraction since the formal end of the 2007 recession, in mid-2009.

Weakening, underlying economic fundamentals indicate still further deterioration in business activity. Accordingly, weaker-than-consensus economic reporting should become the general trend until such time as the unfolding "new" recession receives general recognition, which likely would follow the reporting of a headline contraction in second-quarter 2014 GDP real growth.

Stronger inflation reporting also remains likely, as has been seen in recent reporting. Upside pressure on oil-related prices should reflect intensifying impact from global political instabilities and a weakening U.S. dollar in the currency markets. Food inflation has been picking up as well. The dollar faces pummeling from the weakening economy, continuing QE3, the ongoing U.S. fiscal-crisis debacle, and deteriorating U.S. and global political conditions (see *Hyperinflation 2014—The End Game Begins (Updated) – First Installment*). Particularly in tandem with a weakened dollar, reporting in the year ahead generally should reflect much higher-than-expected inflation.

A Note on Reporting-Quality Issues and Systemic-Reporting Biases. Significant reporting-quality problems remain with most major economic series. Ongoing headline reporting issues are tied largely to systemic distortions of seasonal adjustments. The data instabilities were induced by the still-evolving economic turmoil of the last eight years, which has been without precedent in the post-World War II era of modern economic reporting. These impaired reporting methodologies provide particularly unstable headline economic results, when concurrent seasonal adjustments are used (as with retail sales, durable goods orders, employment and unemployment data). These issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular economic series.

PENDING RELEASES:

Residential Construction—Housing Starts (June 2014). The Census Bureau will publish its estimate of June 2014 housing starts, tomorrow, Thursday, July 17th. Despite extreme monthly volatility seen regularly in the reporting of this series, and despite near-perpetual wishful upside market expectations for housing starts—June late-expectations appear to be for a headline reading on the plus-side of flat—headline month-to-month change likely will continue a pattern of statistical-insignificance, with ongoing stagnation and renewed downturn or downside revisions. As usual, this series is subject to large prior-period revisions.

In the wake of a 75% collapse in aggregate activity from 2006 through 2008, and an ensuing five-year pattern of housing starts stagnation at historically low levels, little has changed. Again, as was discussed in the updated section on *Consumer Liquidity Conditions*, there remains no chance of a near-term, sustainable turnaround in the housing market, unless there is a fundamental upturn in consumer and banking-liquidity conditions. That has not happened and does not appear to be in the offing.

