

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

COMMENTARY NUMBER 743

Global Currency Instabilities, Oil Industry, July Retail Sales, Production and PPI

August 17, 2015

**Artificial U.S. Dollar Surge of the Last Year
Has Reflected Faux Economic Strength, Manipulations and a Duplicitous Fed;
It Also Has Distorted Global Economies, Financial Markets and Systems**

**U.S. Oil and Gas Exploration Has Fallen 55% since Last September,
Clobbered by a Strong Dollar and Low Oil Prices**

**Headline Production and Manufacturing Bounce in July 2015 Was Helped by
Downside Revisions to Already-Contracting Second-Quarter Activity**

**July Retail Sales Gain Will Be Softened in
Real Terms, Net of Inflation**

**Rising Headline PPI Construction Inflation
Will Weaken Real Construction Spending Growth**

"New" Recession Continues to Unfold

PLEASE NOTE: The next regular Commentary, tomorrow, August 18th will cover July Housing Starts, with a subsequent missive on the 19th, covering the July CPI and related Real Retail Sales and Earnings.

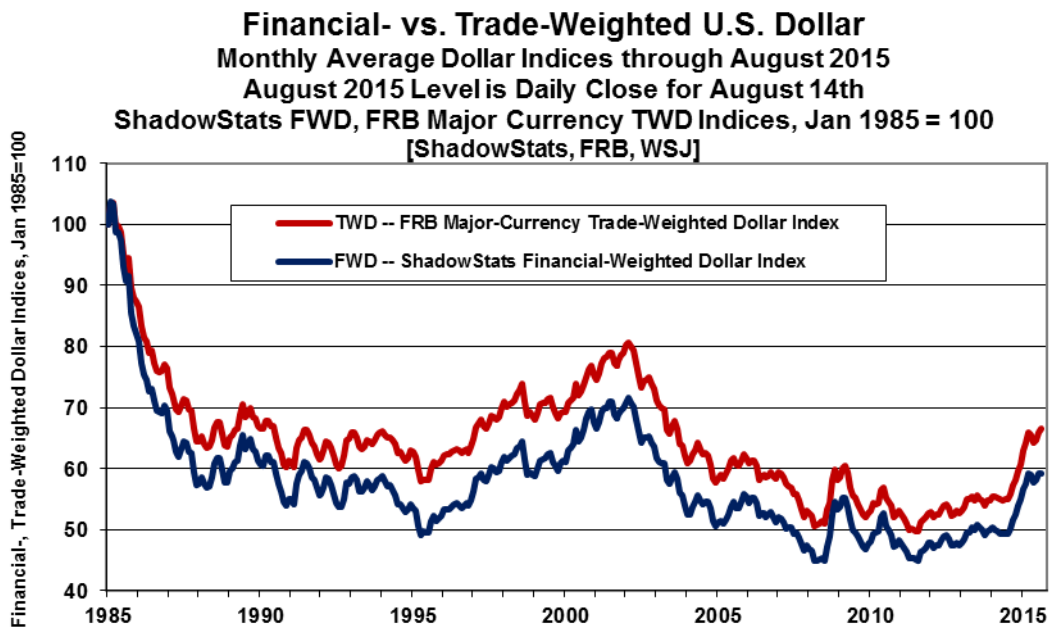
Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

Global Instabilities Continue to Mount as U.S. Economy Continues to Falter. With last week's [No. 742 Special Commentary: A World Increasingly Out of Balance](#) as background, circumstances tied to global financial stability and to domestic economic activity continued to evolve unhappily for the United States last week. On the currency front, China moved towards a more market-driven valuation of its yuan, versus the U.S. dollar. With a sharply rising U.S. dollar, the less-than-market-driven relationship between the U.S. and Chinese currencies had pulled the yuan sharply higher against the other major Western currencies. On the economic front, restraints on U.S. economic activity also were evident in key domestic sectors, as a direct result of the artificially-strong dollar.

Noted in [No. 742](#), the excessive, artificial strength in the U.S. dollar remains the major distorting element in global financial markets. Despite sporadic bouts of dollar selling during the prior six months, it still has strengthened meaningfully—hitting a twelve-year high in recent weeks versus the other major Western currencies as shown in *Graph 1* (see the [Alternate Data](#) tab for TWD and FWD definitions). That dollar strength is related partially to central bank jawboning and interventions, including manipulations in the gold and oil markets that have helped to pummel the near-term prices for the precious metals and oil. From the Federal Reserve has come incessant, but varied jawboning on interest rates, combined with the federal government having provided an extended period of overstated, headline economic-growth statistics, both of which have contributed to headline dollar strength.

Graph 1: U.S. DOLLAR – Financial- versus Trade-Weighted U.S. Dollar Indices (1985 – 2015)



Part of the circumstance here, however, also involved apparent covert financial sanctions and actions aimed specifically at creating financial stress for Russia, as a penalty for Russia's activities related to Ukraine. Noted in [No. 692](#), while the U.S. publicly pursued financial sanctions against Russian officials

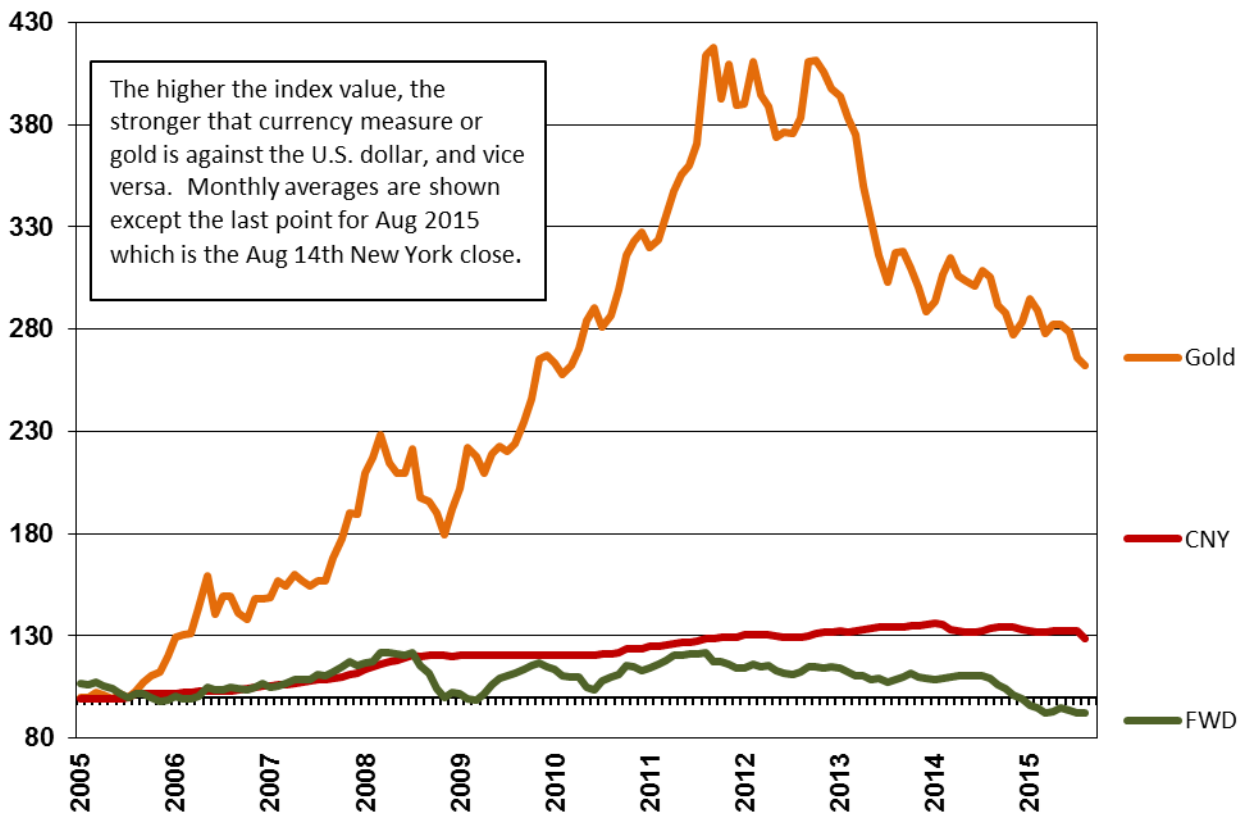
in the third week of June 2014, oil prices peaked (Brent peaked on June 19, 2014) and began to fall off sharply. In related form, the U.S. dollar bottomed out against the euro on July 1st. Those anti-Russia sanctions involved strengthening the U.S. dollar and a related pummeling of oil prices.

China Caught in the U.S. Dollar Rally. The Chinese yuan [CNY], or the renminbi, effectively had been pegged against the U.S. dollar since the late-1990s, until July 2005, when it was re-pegged with a trading band around against a basket of currencies (the U.S. dollar [USD], euro [EUR], the Japanese yen [JPY] and the South Korean won [KRW]). That basket broke apart in 2010 in the context of heavy selling pressures against the EUR. Since then, the trading level and bands have been reset increasingly reflective of market forces. Where the U.S. dollar had broadly weakened into 2012, the Chinese yuan had been held at a USD level needed for strong, positive-trade growth with United States, while riding the dollar lower, otherwise gaining a competitive edge against other currencies.

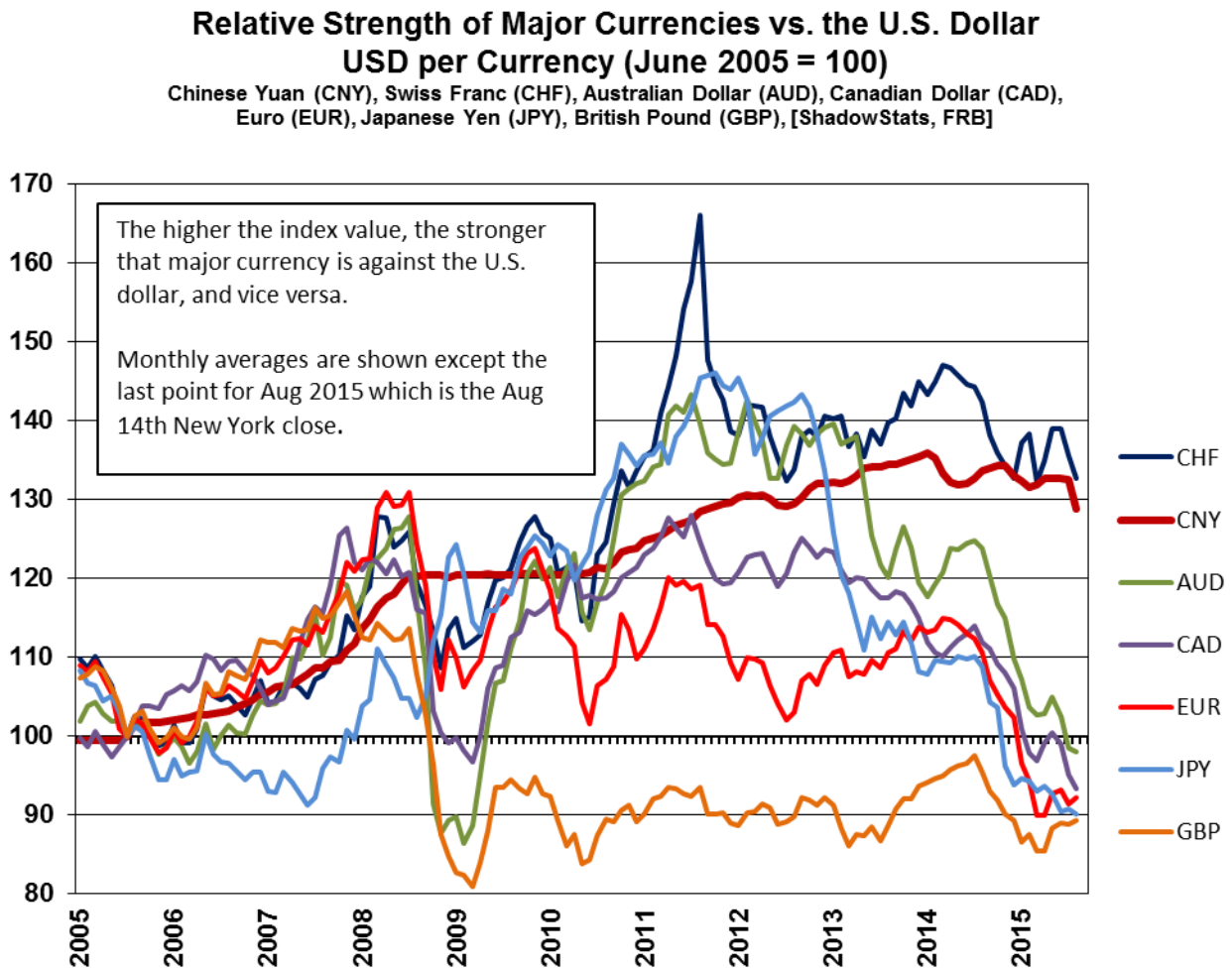
The following graphs reflect the exchange rate of the CNY against the dollar and on a comparative basis with the major Western currencies and gold. All values are indexed to July 2005 = 100, when the CNY theoretically was unpegged began its general strengthening against the USD (the vertical scales in *Graphs* 2 and 3 reflect the index values).

Graph 2: Relative Strength of Major Currencies and Gold vs. U.S. Dollar

Relative Strength of Major Currencies, Gold vs. the U.S. Dollar
USD per Unit, Indexed to June 2005 = 100
 Gold, Chinese Yuan (CNY), ShadowStats Financial-Weighted Dollar (FWD)
 [ShadowStats, St. Louis Fed, Kitco]



Graph 3: Relative Strength of Major Currencies vs. U.S. Dollar



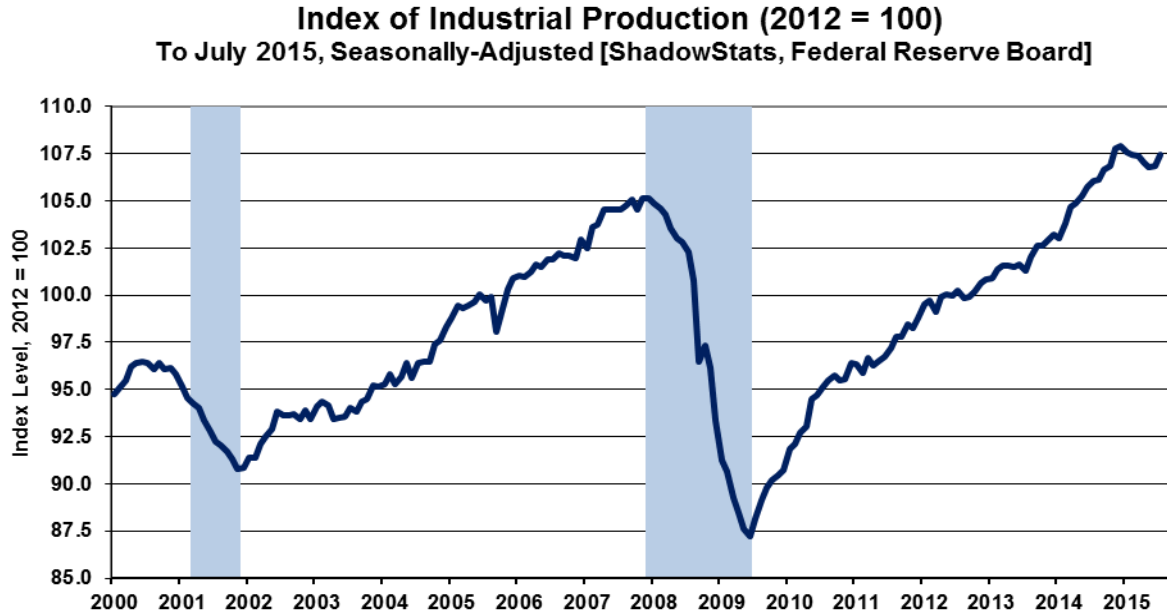
Seen in *Graph 3*, since 2005 the Chinese yuan and the Swiss franc have been the strongest currencies against the U.S. dollar, where the comparison is versus the other major Western currencies defined earlier.

Although the Swiss National Bank pegged its franc to a depreciating euro in 2011, ostensibly to maintain its trade competitiveness, the massive currency interventions and related internal financial distortions required to hold that artificial peg, and effectively to support the U.S. dollar, eventually forced the Swiss to float the franc again in January 2015.

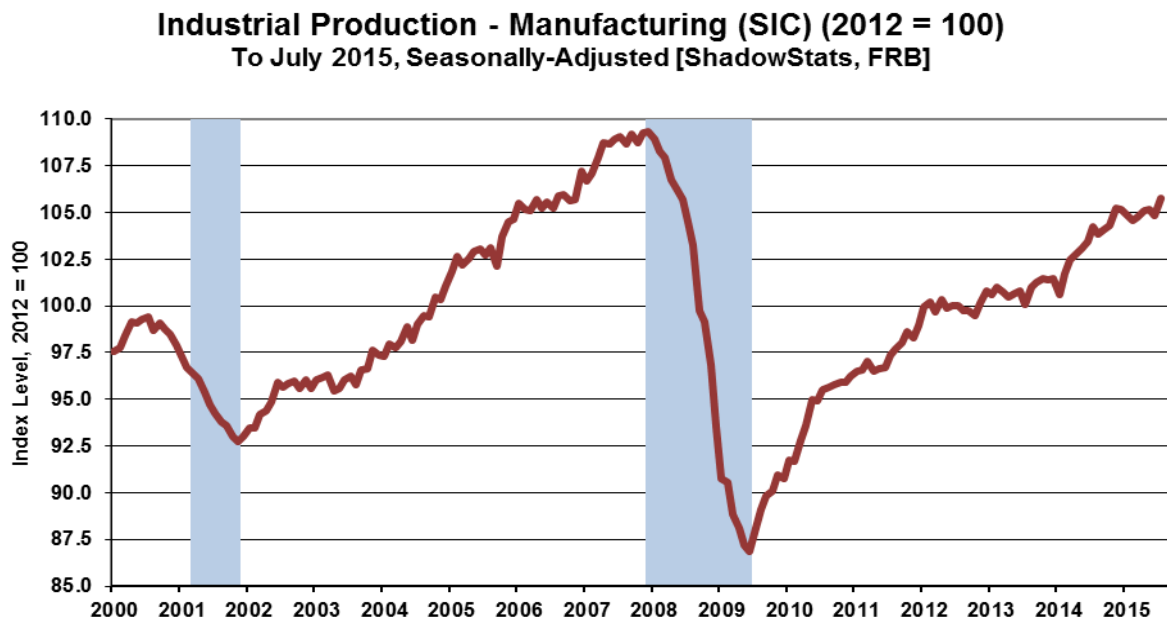
In like manner, massive intervention by the Chinese reportedly was needed recently to keep the yuan holding in the desired alignment with the U.S. dollar. Such may have created enough internal financial instabilities to force the headline "devaluation." As reportedly structured now, the yuan increasingly reflects "market" pressures, but such pressures very likely will remain heavily guided or controlled by the Chinese central bank.

Drilling Down into July 2015 U.S. Industrial Production Detail. The following graphs show headline reporting of industrial production and some major components. The broad index (*Graph 4*) contracted in both first- and second-quarter 2015, a circumstance not seen outside of recessions. Such is detailed in the regular reporting on production found later in these *Opening Comments* and in the *Reporting Detail*.

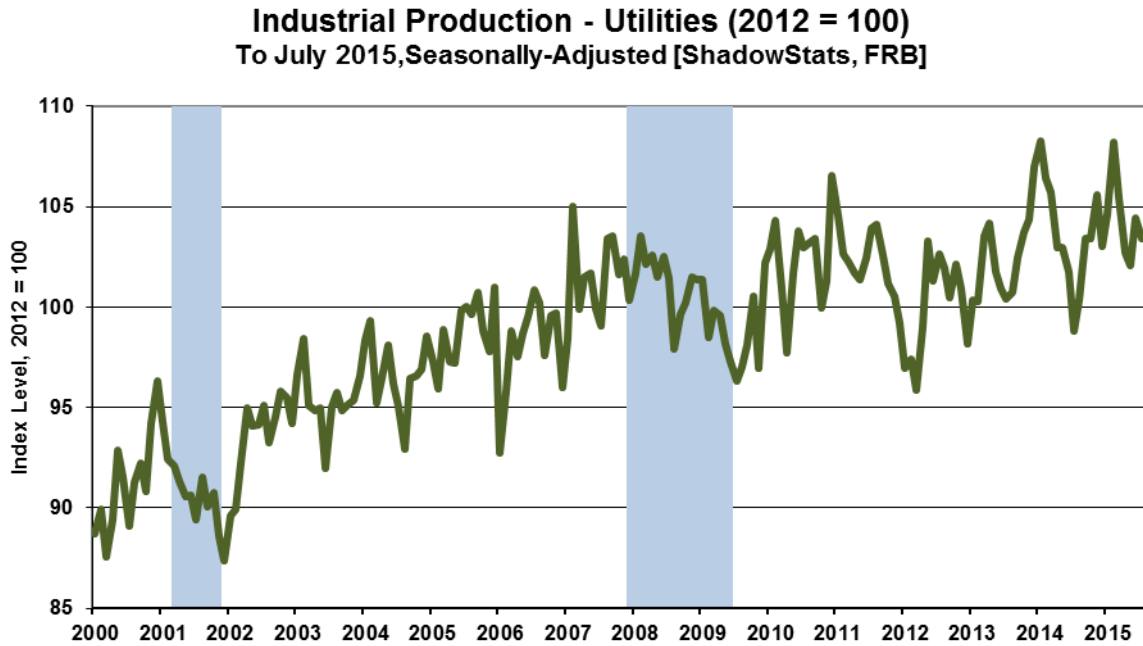
Graph 4: Index of Industrial Production for the United States - Aggregate



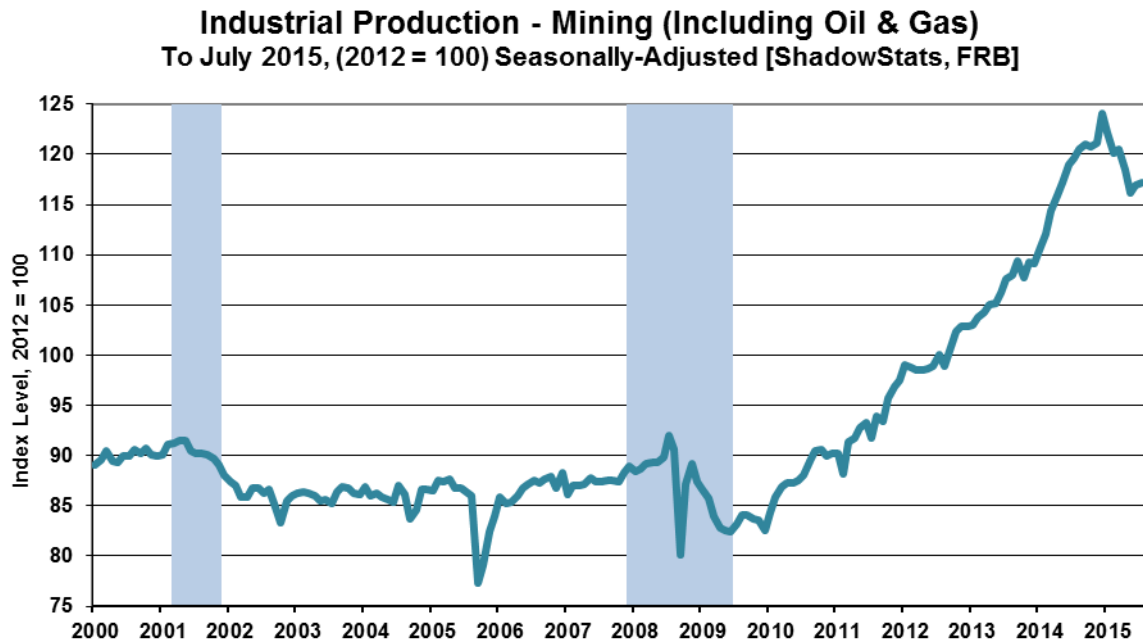
Graph 5: Industrial Production – U.S. Manufacturing (73.91% Weighting in Aggregate Index)



Graph 6: Industrial Production – U.S. Utilities (10.63% Weighting in Aggregate Index)



Graph 7: Industrial Production – U.S. Mining, Including Oil and Gas (15.46% Weighting in Aggregate Index)



Accounting for 73.91% of the activity in the aggregate index, by weighting, the manufacturing sector (*Graph 5*) showed some monthly rebound in July, but that was in the context of downside revisions to earlier activity. Unlike the aggregate series, the dominant manufacturing sector has yet to recover its official pre-economic-collapse high.

The utilities sector activity (*Graph 6*), which accounts for 10.63% of aggregate activity, by weighting, continued to trend slightly higher, although sharp volatility in month-to-month activity regularly reflects the impact of "unseasonable" extremes in weather patterns.

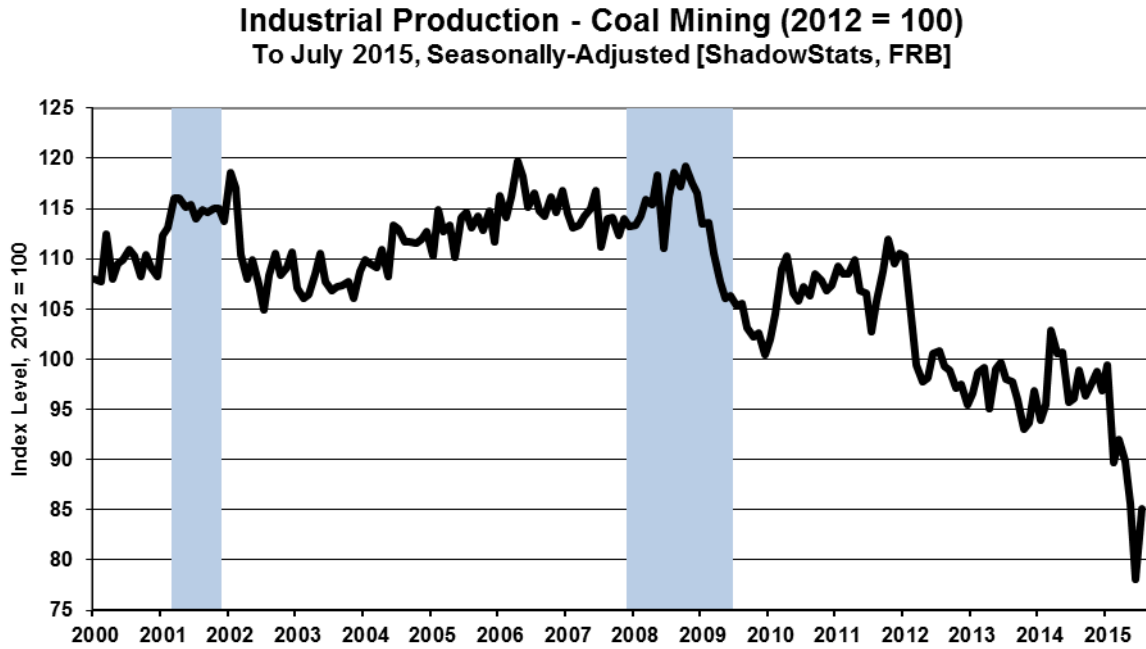
The mining sector activity (*Graph 7*), accounts for 15.46% of aggregate industrial production activity, by weighting. Mining sector activity, particularly oil and gas exploration and production, are the focus of this analysis. This sector easily recovered its pre-recession high and accounts for the full "recovery" in the aggregate production detail. Mining activity, however, has turned down sharply recently, reflecting a number of factors, including the decline in oil prices (and related U.S. dollar strength).

Graphs 8 and 9, with respective shorter-term and longer-term time scales, show coal mining currently in decline. A drop-off in activity also is evident in domestic gold and silver production (*Graphs 10 and 11*).

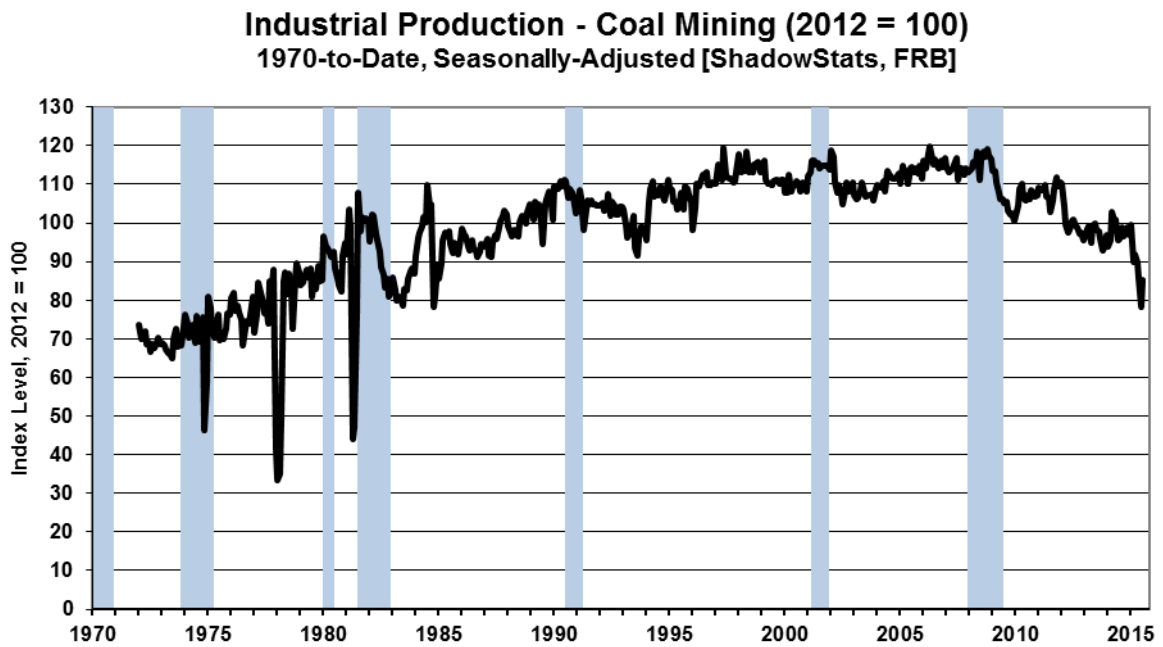
Despite the decline in oil prices, however, *Graphs 12 and 13* show that oil and gas extraction is holding near an all-time high. It is in the area of exploration, oil and gas drilling, however, that the decline in oil prices since mid-2014 has taken a sharp toll.

Oil and Gas Drilling Activity Down by 55% in Eleven Months. The good news was that July 2015 U.S. oil and gas exploration picked up by 1.27% for the month, the first gain in eleven months. The bad news was that domestic exploration still had plummeted by 54.56% (-54.56%) from the recent peak in activity in September 2014, as seen in *Graphs 14 and 15*. The collapse in drilling largely was an artefact of a massive U.S. dollar rally and oil-price plunge—beginning in July 2014—that appeared to be U.S. orchestrated covert actions designed to stress Russia, financially, in response the circumstance in Ukraine. (*Text continues following Graph 15.*)

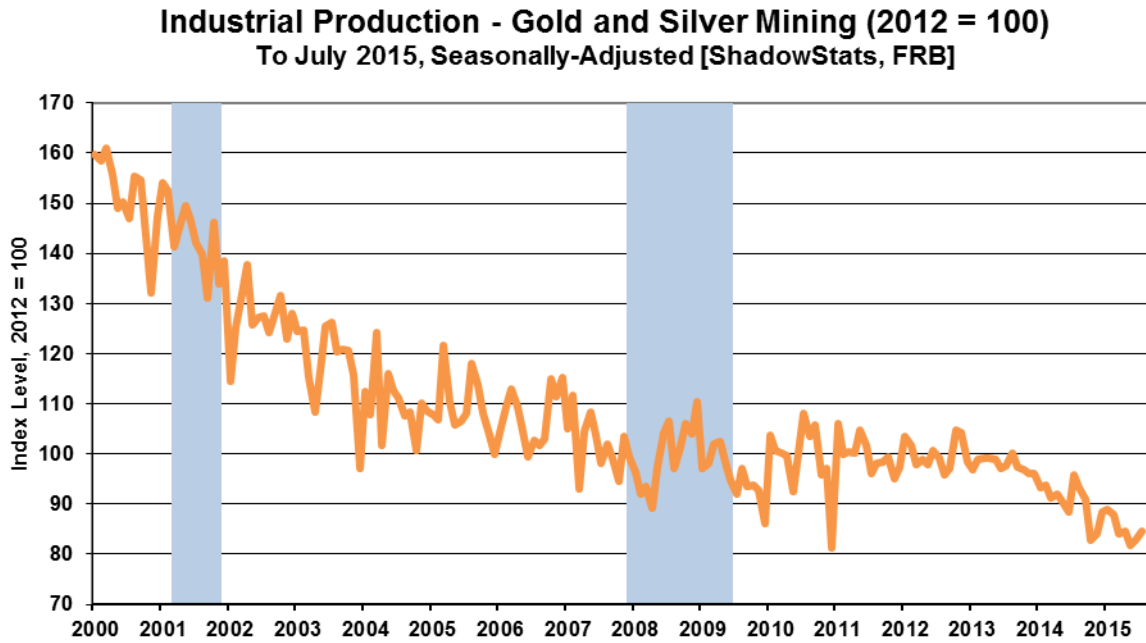
Graph 8: Mining - Coal Mining (Since 2000)



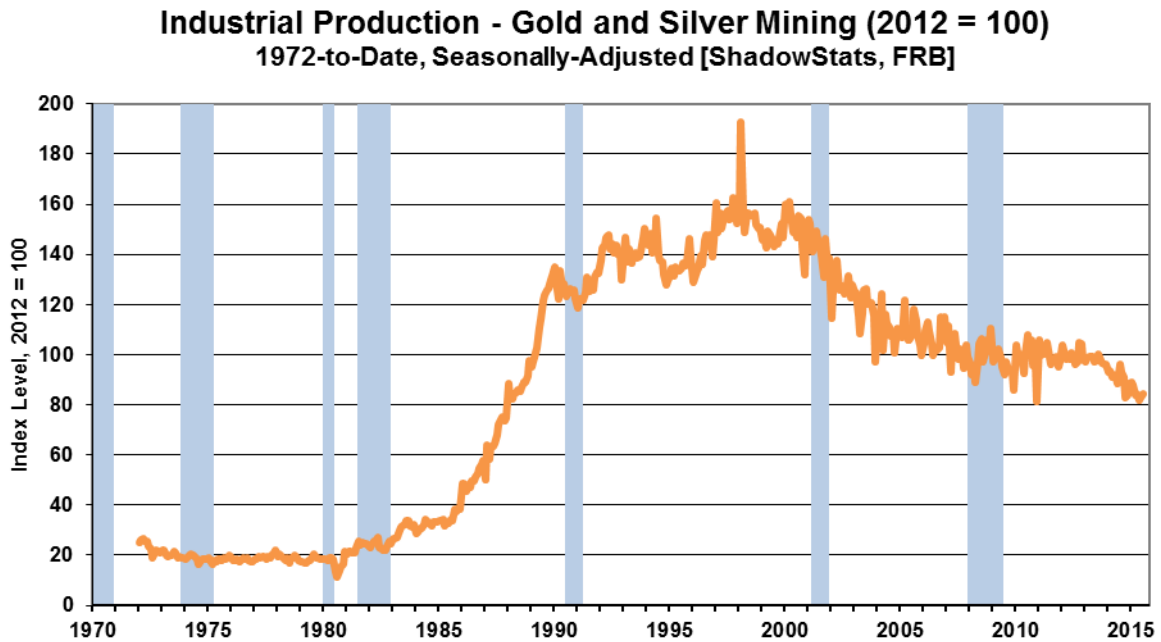
Graph 9: Mining - Coal Mining (Since 1972)



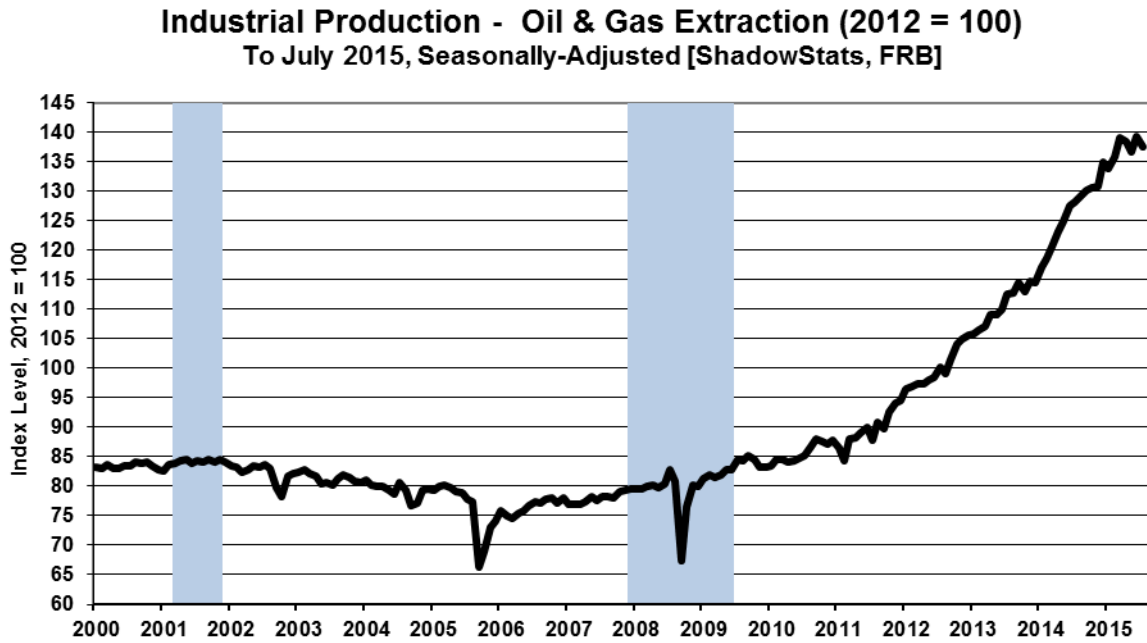
Graph 10: Mining – Gold and Silver Mining (Since 2000)



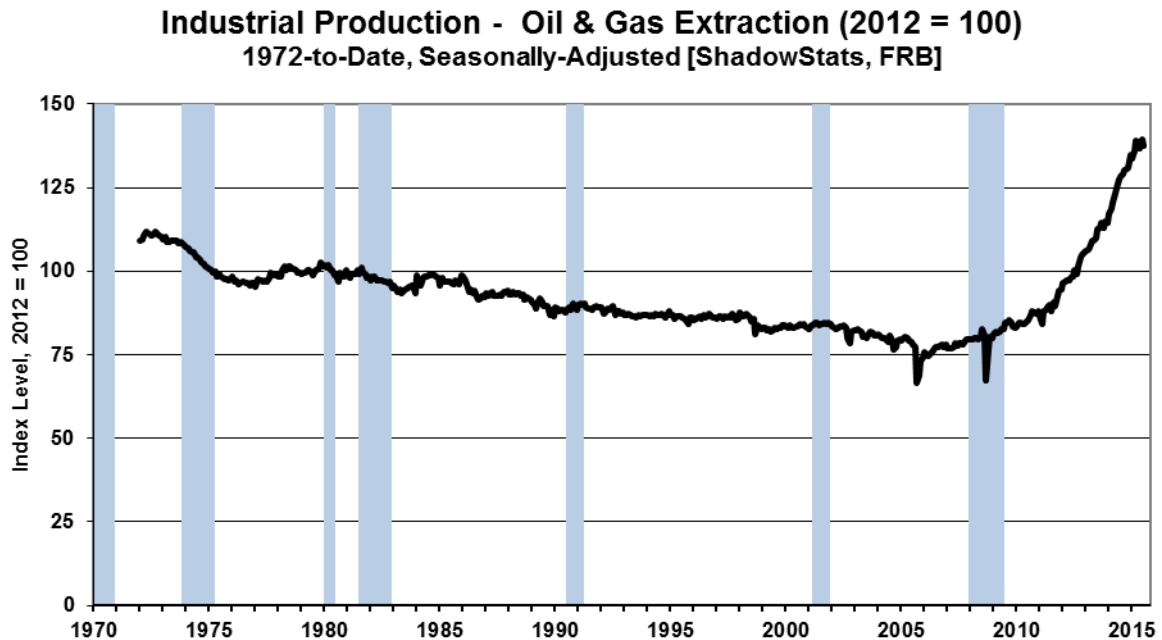
Graph 11: Mining – Gold and Silver Mining (Since 1972)



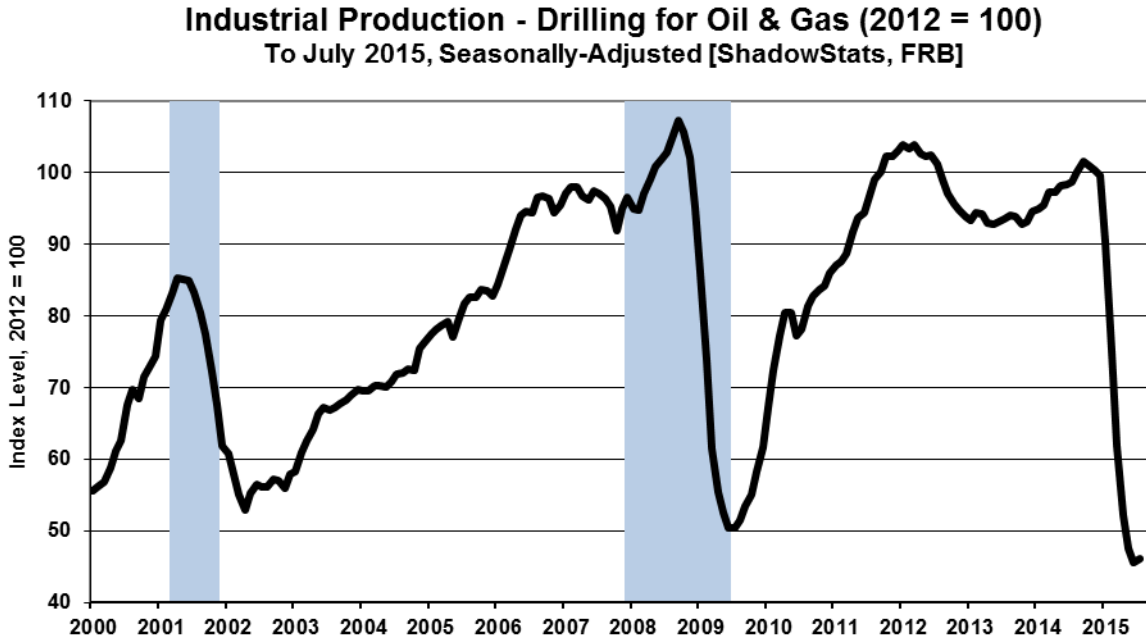
Graph 12: Mining – U.S. Oil & Gas Extraction (Since 2000)



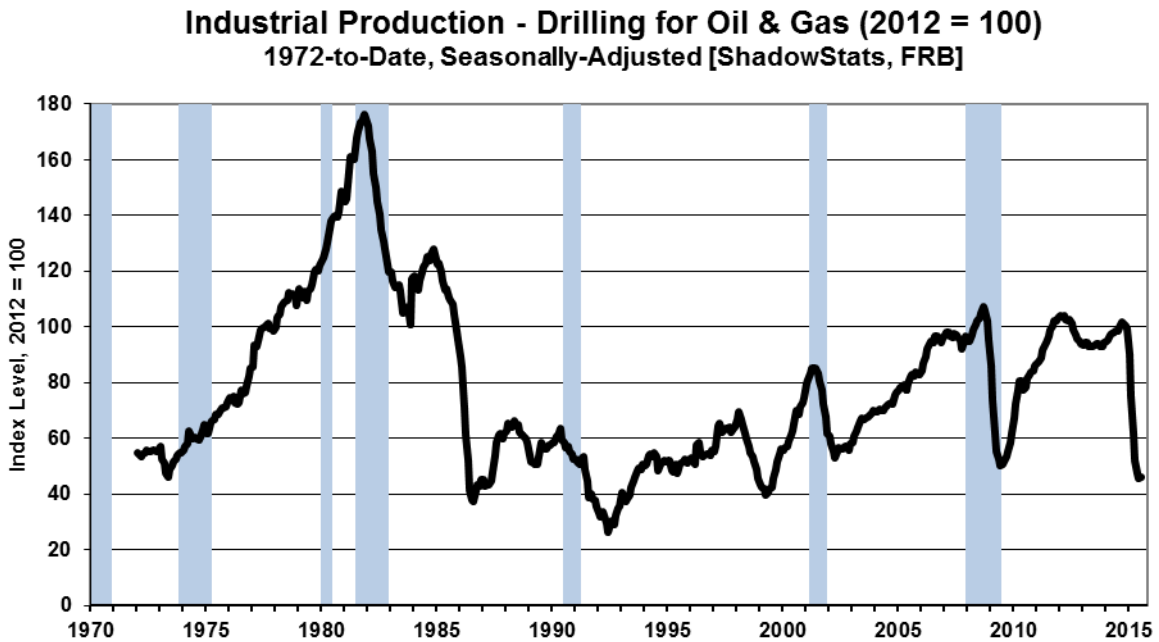
Graph 13: Mining – U.S. Oil & Gas Extraction (Since 1972)



Graph 14: Mining – U.S. Drilling for Oil & Gas (Since 2000)



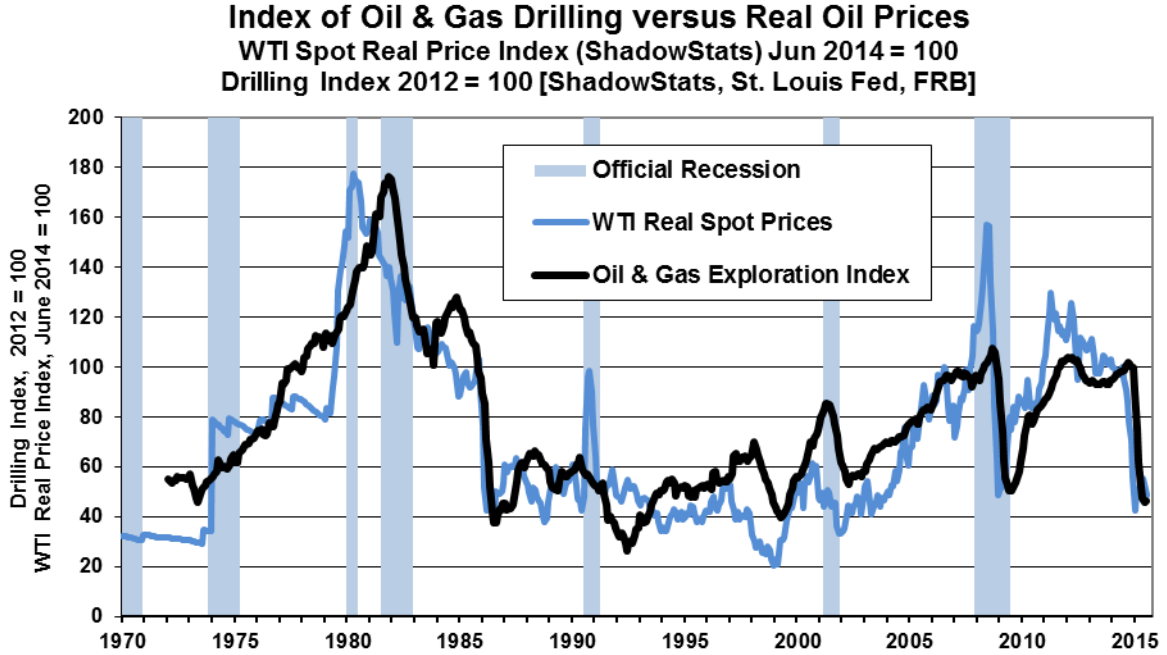
Graph 15: Mining – U.S. Drilling for Oil & Gas (Since 1972)



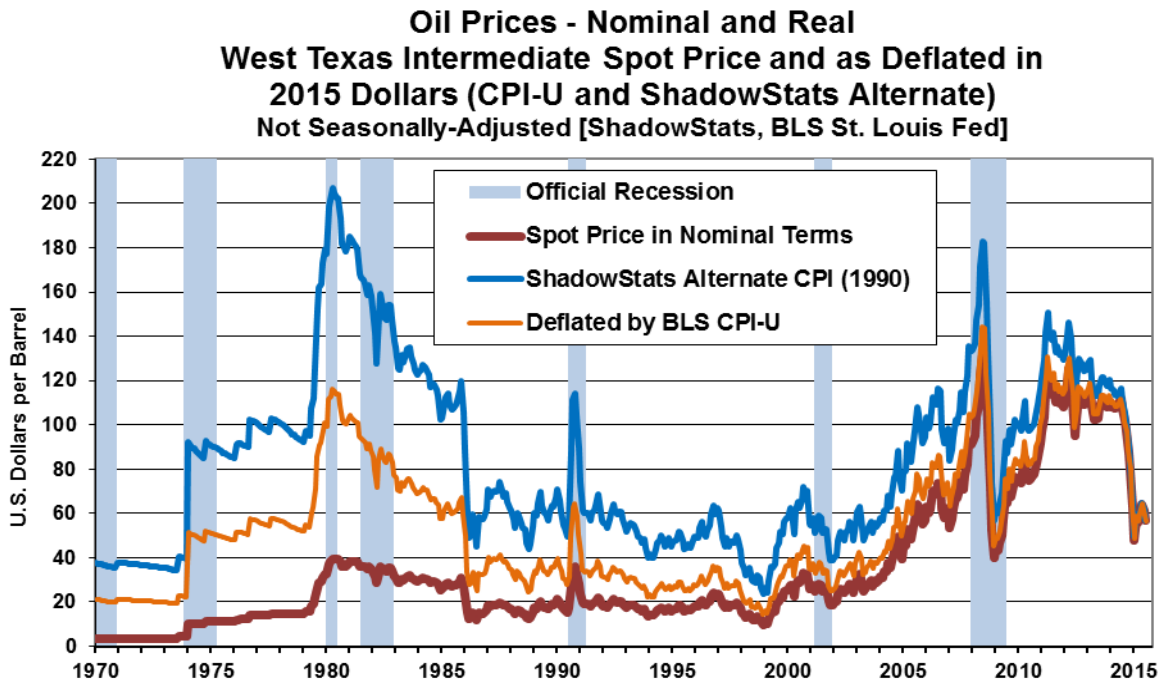
Shown in *Graph 16*, with some lag following sharp movements in oil prices, oil and gas drilling tend to move in tandem. The oil price index used is for the West Texas Intermediate (WTI) monthly average spot price, deflated using the ShadowStats Alternate CPI measure (based on 1990 methodologies). Shown in

Graph 17, the ShadowStats deflated series appears to be a better match for the price-versus-drilling relationship than does the CPI-U deflation.

Graph 16: Mining – U.S. Drilling for Oil & Gas versus Real Oil Prices



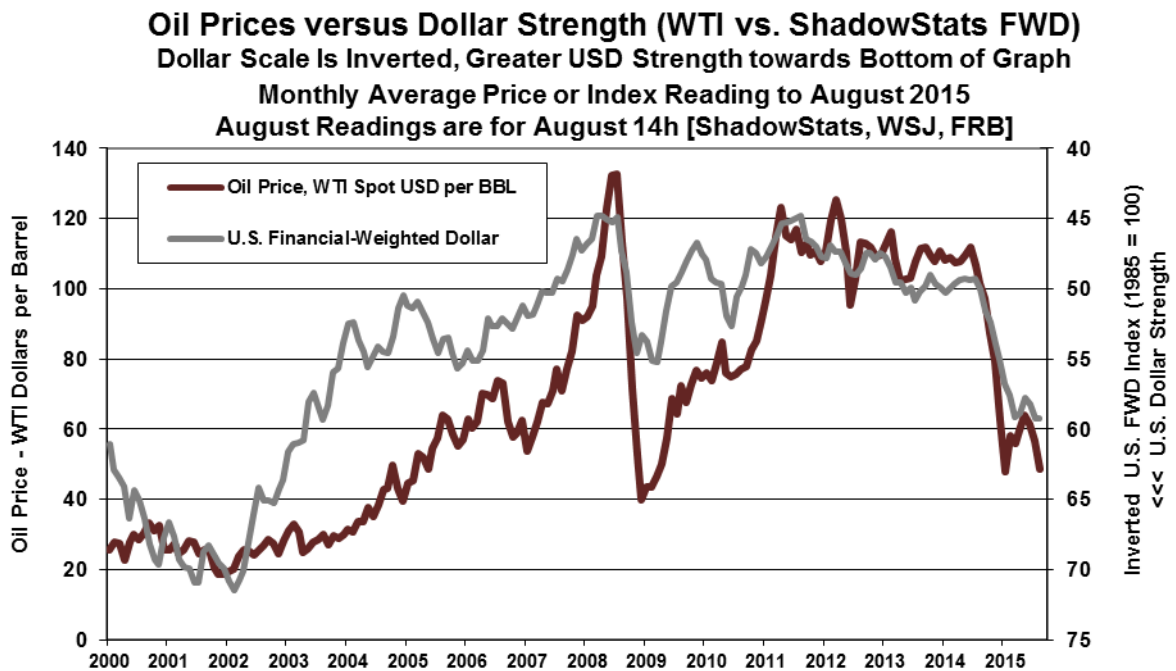
Graph 17: Oil Prices Before and After Inflation Adjustment (Nominal vs. Real)



The final *Graph 18* in this section shows the highly-correlated but inverse relationship of the last ten years, between the U.S. dollar and oil prices. The ShadowStats Financial-Weighted U.S. Dollar (FWD) is used here, but as seen earlier in *Graph 1*, the Federal Reserve's Trade-Weighted U.S. Dollar (TWD) would show effectively the same pattern.

As the dollar strengthens, dollar-denominated oil prices weaken, and vice versa. At such time as the U.S. dollar declines—ShadowStats is looking for a massive sell-off in the dollar in the year ahead (again, see [No. 742](#))—oil prices will rally anew, along with surging gold and silver prices.

Graph 18: Oil Prices versus U.S. Dollar Strength



Today's Missive (August 17th). The balance of today's *Opening Comments* addresses the usual headline detail on July Industrial Production, nominal Retail Sales and the Producer Price Index (PPI).

Last week's August 10th [No. 742 Special Commentary: A World Increasingly Out of Balance](#), updated the general economic and inflation outlook. The *Hyperinflation Watch* and an updated *Hyperinflation Outlook Summary* will return shortly, excerpted from *No. 742*.

The *Week Ahead* section previews detail of the July Housing Starts and the Consumer Price Index (CPI) releases of the week ahead.

Index of Industrial Production—July 2015— Second-Quarter Contraction Deepened in Revision.

The following detail from the August 14th release of headline July 2015 industrial production was reported in the context of the July 21st downside, comprehensive-benchmark revision to the industrial

production series. Unless stated otherwise, revisions in this missive are just for the data in the headline July 2015 reporting versus the benchmark-revised data. Details of the benchmark revisions, versus the prior June 2015 headline numbers of July 15th, were discussed and covered fully in [Commentary No. 737](#). *Graph 28* in the *Reporting Detail* section shows the impact of the broad benchmark revision.

In the context of the benchmark revisions and the July 2015 reporting, headline July production rose by an above-consensus headline gain of 0.6% [consensus growth forecasts were for 0.4% per Bloomberg and MarketWatch]. The July headline gain also received a relative boost in the context of downside revisions to first- and second-quarter activity.

Given the benchmarking detail and July headline data, headline industrial production has not seen anything close to the current headline economic weakness since the economic collapse into 2009.

Patterns of Deepening Contractions. Using the Fed's measure of annualized growth by half year (second quarter of one half, versus the second quarter of the subsequent half), second-half 2014 industrial production grew at an unrevised, annualized pace of 4.31%, while first-half 2015 production contracted at a deeper, revised annualized pace of 1.13% (-1.13%).

First-quarter 2015 industrial production activity contracted a deeper, revised annualized quarterly pace of 0.21% (-0.21%), while second-quarter 2015 production contracted at a revised, deeper annualized pace of 2.04% (-2.04%). Based solely on the initial reporting for July 2015, annualized third-quarter growth would be 2.13%, yet year-to-year growth also fell to a post-collapse low of 1.12% for third-quarter 2015, from a downwardly revised 1.56% in second-quarter 2015.

Year-to-year July 2015 production growth was 1.32%, versus a downwardly-revised 1.10% in June 2015, and a downwardly-revised 1.46% in May 2015. These patterns and levels of annual growth commonly are seen in, or at the onset of formal recessions.

The Fed's industrial production series still indicates that broad economic activity entered a "new" recession, likely to be timed officially from December of 2014.

Industrial Production—Headline Detail. The headline estimate of seasonally-adjusted, July 2015 industrial production rose by 0.56%, following a downwardly revised gain of 0.09% in June, and a deeper, revised decline of 0.27% (-0.27%) in May. Net of prior-period reporting, the headline July monthly gain would have been 0.39%, instead of 0.56%.

Detailed in *Graphs 5 to 7* of major industry groups, earlier in these *Opening Comments*, the headline July 2015 monthly aggregate production gain of 0.6% [June gain of 0.1%], was composed of a 0.8% gain in July manufacturing activity [down by 0.3% (-0.3%) in June]; a July gain of 0.2% [June gain of 0.7%] in mining (including oil and gas production); and a July contraction of 1.0% (-1.0%) [June gain of 2.3%] in utilities.

Year-to-year growth in July 2015 production was 1.32%, versus a downwardly revised 1.10% in June 2015, and a downwardly revised 1.46% in May 2015. Annual growth slowing to these levels commonly is seen at the onset of formal recessions.

Production Graphs—Corrected and Otherwise. The opening section of these *Opening Comments* includes drill-down detail of a number of production graphs (*Graphs 5 to 15*), which will be incorporated

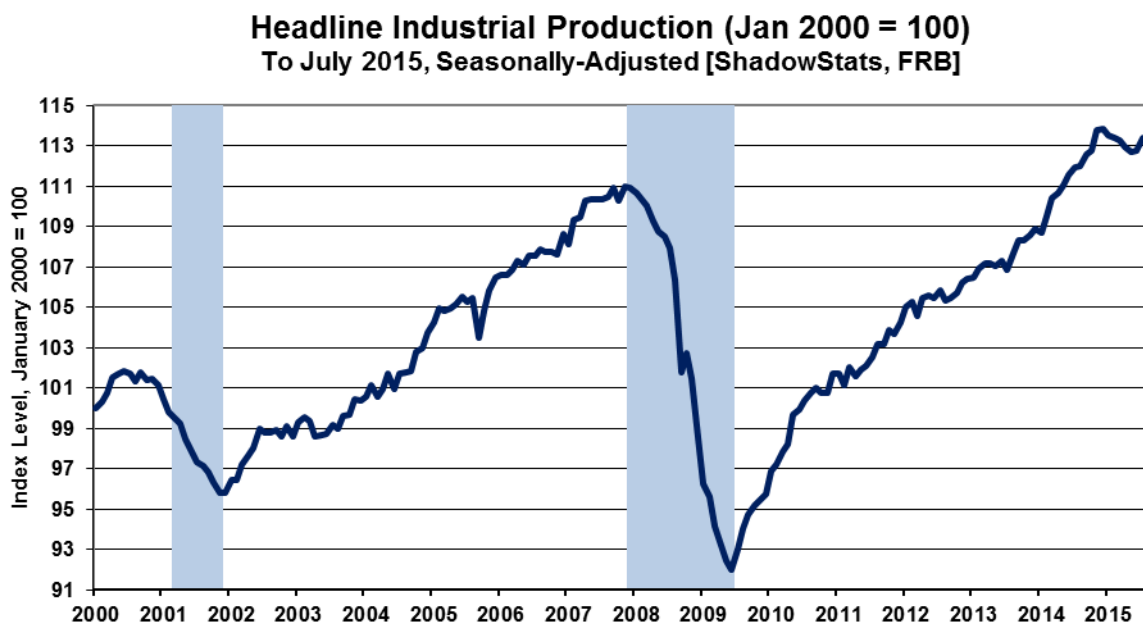
into the regular *Reporting Detail* section in the future. Today's regular *Reporting Detail* section includes the traditional graphs of the aggregate industrial production level and year-to-year change (*Graphs 28 to 31*), through July 2015. The level of headline production showed a topping-out process late in 2014, followed by renewed downturn into first- and second-quarter 2015, with July reporting still off recent-peak activity. Such patterns of monthly and quarterly declines were last seen in the depths of the economic collapse from 2007 (or earlier) into 2009. Although off the revised new near-term low of 1.10% in June 2015, the annual growth in July 2015 otherwise remained a level commonly seen at the onset of a formal recession.

The two graphs that follow in this section address reporting quality issues tied just to the overstatement of headline growth that results directly from the Federal Reserve Board using too-low an estimate of inflation in deflating some components of its production estimates into real dollar terms, for inclusion in the index of industrial production.

Hedonic quality adjustments to the inflation estimates understate the inflation rates used in deflating those components; thus overstating the resulting inflation-adjusted growth in the headline industrial production series (see [Public Comment on Inflation](#) and the *Chapter 9* of [2014 Hyperinflation Report—Great Economic Tumble](#)).

The first graph, *Graph 19*, shows official, headline industrial production reporting, but indexed to January 2000 = 100, instead of the Fed's formal index that is now set at a benchmarked 2012 = 100. The 2000 indexing simply provides for some consistency in the series of revamped "corrected" graphics (including real retail sales, new orders for durable goods and the GDP); it does not affect the appearance of the graph or reported growth rates (as can be seen with a comparison to *Graph 29* in the *Reporting Detail* section).

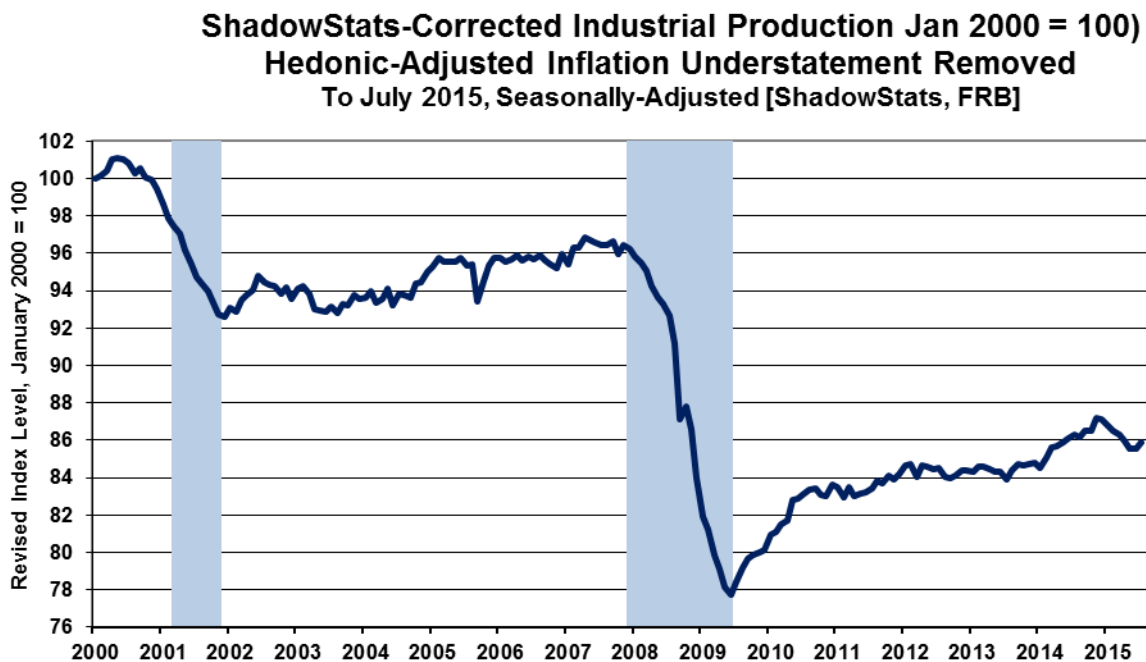
Graph 19: Headline Level of Industrial Production (Jan 2000 = 100)



The second graph is a recast version of the first, corrected for the estimated understatement of the inflation used in deflating components of the production index. Estimated hedonic-inflation adjustments have been backed-out of the official industrial-production deflators used for headline reporting.

This “corrected” *Graph 20* shows growth in the period subsequent to the official June 2009 trough in production activity, however, that upturn has been far shy of the full recovery and the renewed expansion reported in official GDP estimation (see [Commentary No. 739](#)). Unlike the headline industrial production data and the headline GDP numbers, corrected production levels have not recovered pre-recession highs. Instead, corrected production entered a period of protracted low-level, but up-trending, stagnation in 2010, with irregular quarterly contractions seen through 2014, and an irregular uptrend into 2014, a topping-out in late-2014 and turning down into the first two quarters of 2015. Where the corrected series has remained well shy of a formal recovery, both the official and corrected series suffered an outright contraction in both first- and second-quarter 2015; this a pattern of severe economic weakness last seen during the economic collapse.

Graph 20: Headline ShadowStats-Corrected Level of Industrial Production (Jan 2000 = 100)



Nominal Retail Sales—July 2015—Nominal Gain Will Be Muted in Real Terms. In the context of upside revisions to prior reporting, and reflecting an expected pick-up in automobile sales, nominal retail sales in July 2015 rose by near-consensus headline 0.6% growth of (Bloomberg reported expectations of 0.7%, MarketWatch 0.5%). Such was before adjustment for rising inflation.

Expectations for a 0.2% gain in July CPI-U on Wednesday, August 19th, are likely to be shy of the actual headline reporting (see the *Week Ahead* section). Although real month-to-month activity in July, net of inflation, should still be positive, annual real growth still should continue generating a solid signal for a

formal, new recession. Adjusting for realistic inflation (see [Commentary No. 736](#) and [No. 742 Special Commentary: A World Increasingly Out of Balance](#)), real retail sales and the broad economy never truly recovered from the economic collapse into 2008 and 2009. Discussed in the next section, the primary underlying issue with current retail sales activity remains intense, structural-liquidity woes besetting the consumer.

Nominal (Not-Adjusted-for-Inflation) Retail Sales—July 2015. In the context of upside revisions to May and June retail sales activity, which narrowed the headline July gain by 0.4% from what it would have been otherwise, and with the usual seasonal-adjustment aberrations that likely boosted the headline July sales gain and the upwardly-revised June activity, July sales rose by a headline 0.6%, at the first decimal point. At the second decimal point, July 2015 retail sales showed a statistically-insignificant, seasonally-adjusted gain of 0.56%. Net of prior-period revisions, though, the monthly gain in July sales would have been 1.01%.

Such followed statistically-insignificant, upwardly revised monthly activity of "unchanged," at 0.00% in June 2015, and an upwardly revised 1.18% monthly gain in May.

Year-to-Year Annual Change. Year-to-year nominal retail sales in July 2015 increased by a statistically-significant 2.43%, versus an upwardly revised gain of 1.83% in June 2015, and an upwardly revised gain of 2.42% in May 2015.

Annualized Nominal Second-Quarter Gain, First-Quarter Contraction. The pace of annualized nominal retail sales change in first-quarter 2015 remained at 4.04% (-4.04%), the worst quarterly showing since the economic collapse.

The nominal annualized quarterly growth for second-quarter 2015 retail sales revised upwardly to 6.87%. Based solely on July's reporting, the annualized third-quarter growth would be 3.94%.

Net of inflation, the real retail sales change in first-quarter 2015 remained at an annualized quarterly contraction of 1.02% (-1.02%). The quarterly change in second-quarter real retail sales revised upwardly to a gain of 3.78%. July's indication will be assessed in the August 19th CPI-U *Commentary*, but it should be solidly in positive territory.

Real (Inflation-Adjusted) Retail Sales—July 2015. The nominal gain of 0.56% in July 2015 retail sales was before accounting for inflation. The change in real retail sales for July will be published along with the headline estimate of consumer inflation for June 2015, to be covered in *Commentary No. 745* of Wednesday, August 19th. Consensus expectations [MarketWatch and Bloomberg] are for a 0.2% gain in the headline June CPI-U, but those expectations likely are somewhat shy of what will be the headline reporting (see *Week Ahead* section).

Nonetheless, a consensus inflation reading would reduce the July headline nominal gain from 0.6% to about 0.4%. Annual real growth in July 2015 retail sales, though, will continue generating a strong, historical-warning signal of imminent recession.

Consumer Conditions—Early-August Sentiment Turned Down. Updating [Commentary No. 734](#) of July 14th, and as otherwise discussed regularly in these *Commentaries*, structural liquidity woes have constrained domestic economic activity, severely, since before the Panic of 2008. Never recovering in the post-Panic era, limited income, credit and a faltering consumer outlook have eviscerated and continue to impair business activity that feeds off the financial health and liquidity of consumers.

Without real (inflation-adjusted) growth in household income and without the ability or willingness to take on meaningful new debt, the consumer simply has not had the wherewithal to fuel sustainable economic growth. Impaired consumer liquidity and its direct restraints on consumption have been responsible for much of the economic turmoil of the last eight-plus years, driving the housing-market collapse and ongoing stagnation in consumer-related real estate and construction activity, as well as constraining real retail sales activity and the related, personal-consumption-expenditures category of the GDP. Together, those sectors account for more than 70% of total U.S. GDP activity.

Underlying economic fundamentals simply have not supported, and do not support a turnaround in broad economic activity. There has been no economic recovery, and there remains no chance of meaningful, broad economic growth, without a fundamental upturn in consumer- and banking-liquidity conditions.

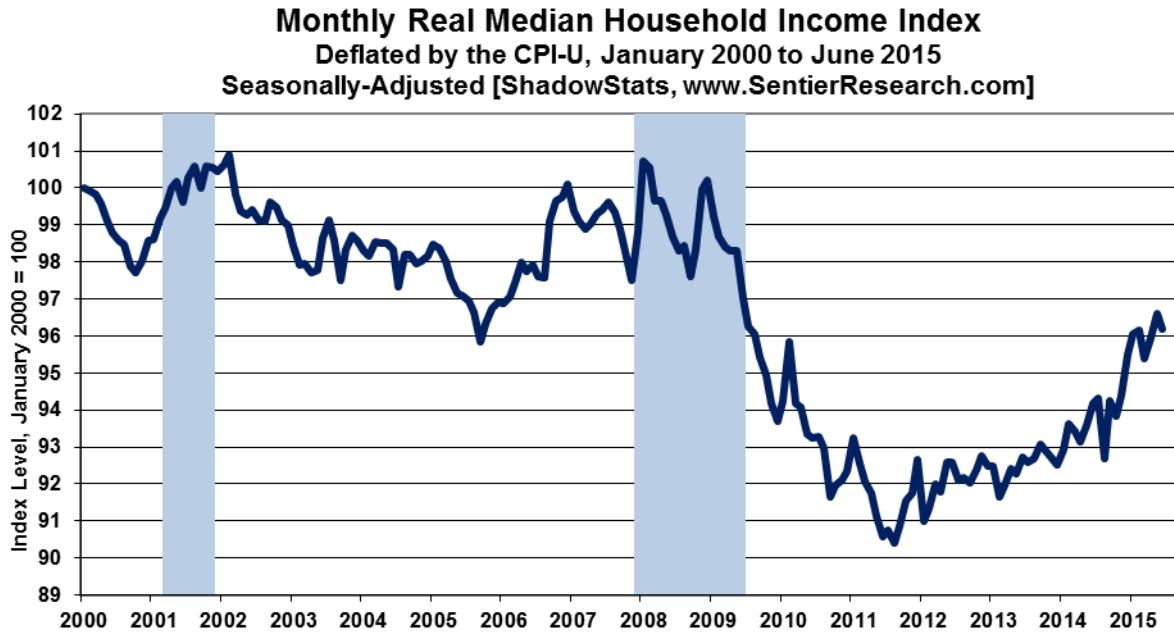
The Conference Board's July Consumer-Confidence and the just-updated University of Michigan's Early-August Consumer-Sentiment measures are shown in *Graphs 23 to 24*, along with the latest readings on various liquidity measures: June median real monthly household income (*Graph 21*), recently-updated June consumer credit outstanding (*Graph 26*) and real first-quarter household-sector credit-market debt outstanding (*Graph 27*).

The first graph shows monthly real median household income through June 2015, as reported by www.SentierResearch.com. This measure of real (inflation-adjusted) monthly median household income turned lower in June, reflecting flat, month-to-month nominal median income hit by rising consumer inflation. A similar circumstance generated a headline plunge in second-quarter 2015 real average weekly earnings, discussed in [Commentary No. 736](#). The income series has been in low-level stagnation, with a recent uptrend boosted by dropping gasoline prices. Where negative inflation boosts the level of real growth relative to nominal growth, recent relative "strength" in the series largely reflected temporary, gasoline-price-driven, headline month-to-month contractions in CPI-U reporting, and flat-to-minus annual inflation. That monthly inflation issue reversed in May and June reporting.

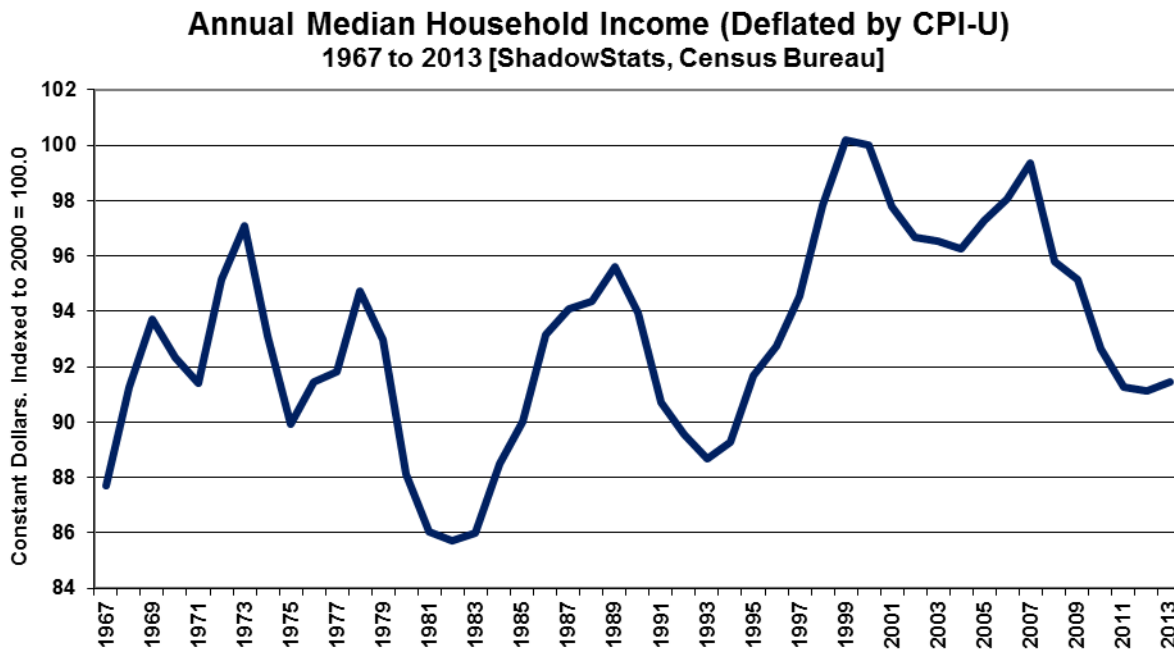
Where lower gasoline prices have provided some minimal liquidity relief to the consumer, indications are that any effective extra cash has been used to pay down unsustainable debt, not to fuel new consumption. Despite recent, renewed downside pressure on oil prices, relief from low-priced gasoline should prove increasingly fleeting. As the U.S. dollar resumes its decline, petroleum prices spike anew.

On a monthly basis, when headline GDP purportedly started its solid economic recovery in mid-2009, household income nonetheless plunged to new lows and has yet to recover its level seen during the formal recession, or the pre-recession highs either for the 2007 recession or the 2001 recession.

Graph 21: Monthly Real Median Household Income



Graph 22: Annual Real Median Household Income

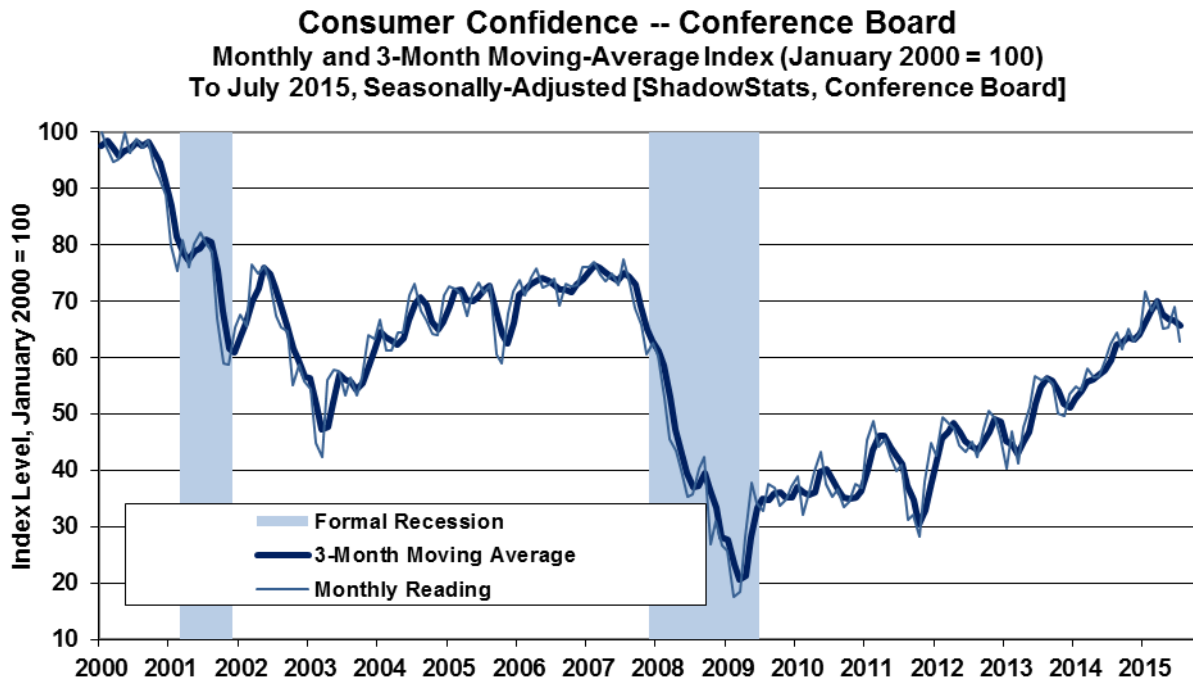


Shown in the *Graph 22*, the same series, published by the Census Bureau on an annual basis, deflated by headline CPI-U, confirmed that in 2013—the latest-available annual data—annual real median household income continued to hold at a low level of activity (2014 data will be released on September 16th). In

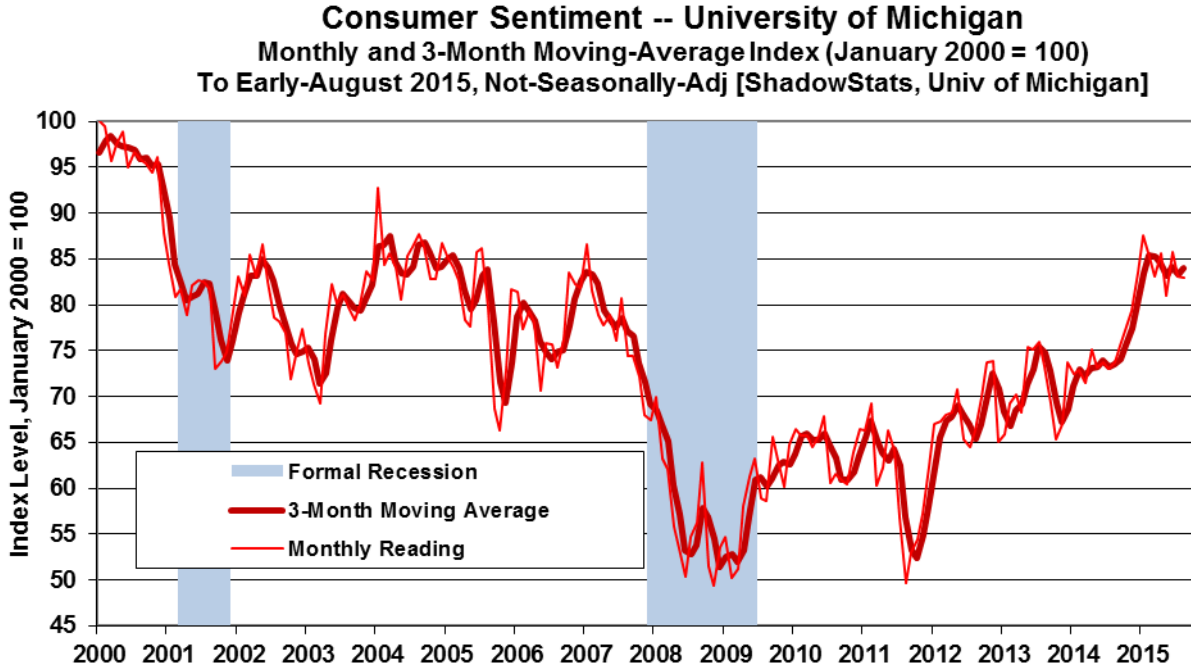
historical perspective, 2011, 2012 and 2013 income levels were below levels seen in the late-1960s and early-1970s. Such indicates the long-term nature of the evolution of the major structural changes squeezing consumer liquidity and impairing the current economy. Related discussion are found in [No. 742 Special Commentary: A World Increasingly Out of Balance](#), [No. 692 Special Commentary, Commentary No. 658](#), and in [2014 Hyperinflation Report—The End Game Begins – First Installment Revised](#) and [2014 Hyperinflation Report—Great Economic Tumble – Second Installment](#).

The next three graphs reflect the latest headline activity in consumer confidence and sentiment. The Conference Board's Consumer-Confidence Index and the University of Michigan's Consumer-Sentiment Index for July 2015 both fell in the month (and for the early-August 2015 sentiment measure), with downturns also seen in their respective three-month and six-month moving-average readings. The confidence and sentiment series tend to mimic the tone of headline economic reporting in the press, and often are highly volatile month-to-month, as a result. With increasingly-negative, headline economic reporting ahead, negative hits to both the confidence and sentiment readings are likely to continue in the months ahead.

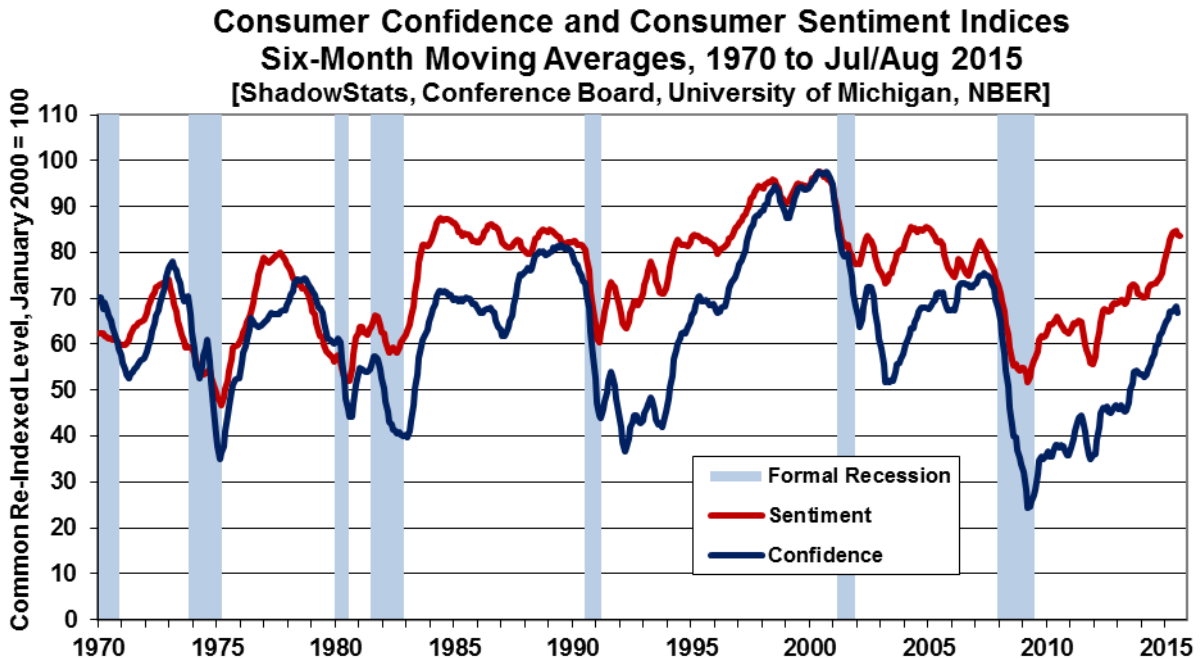
Graph 23: Consumer Confidence to July 2015



Graph 24: Consumer Sentiment to Early-August 2015



Graph 25: Comparative Consumer Confidence and Sentiment (6-Month Moving Averages) since 1970



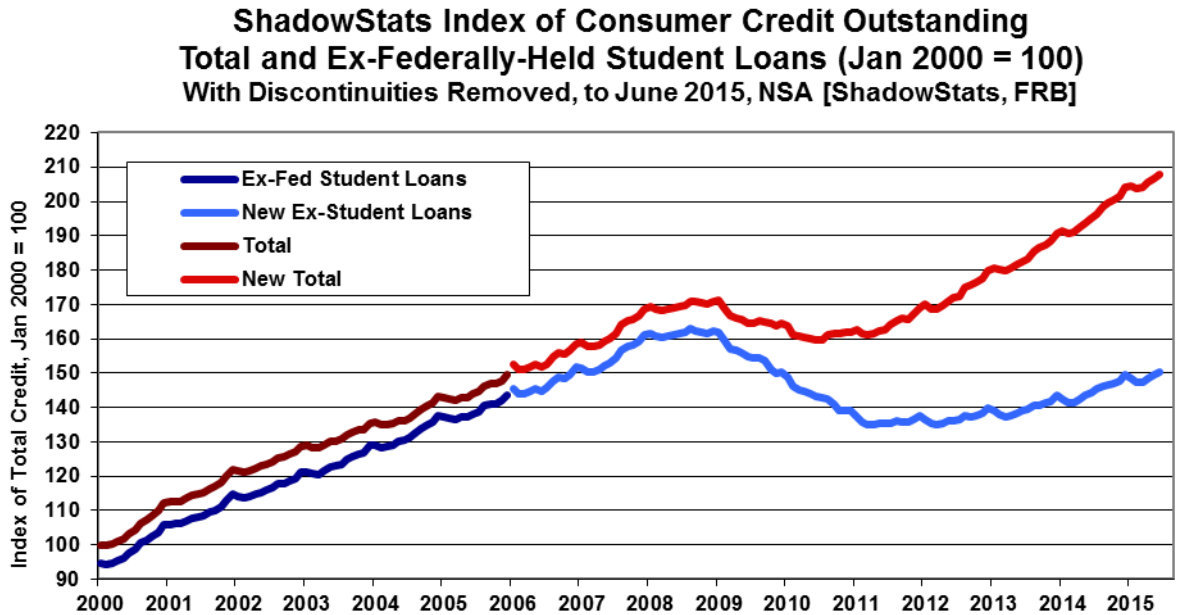
Smoothed for the irregular, short-term volatility, the two series remain at levels seen typically in recessions. Suggested in the third graph—plotted for the last 40 years—the latest readings of confidence and sentiment generally have not recovered levels seen preceding most formal recessions of the last four

decades. Generally, the consumer measures remain well below, or are inconsistent with, periods of historically-strong economic growth seen in 2014 and ongoing positive GDP growth as recently reported.

Graph 26: Household Sector, Real Credit Market Debt Outstanding



Graph 27: Nominal Consumer Credit Outstanding



The final two graphs in this section address consumer borrowing. Debt expansion can help to make up for a shortfall in income growth. Shown in *Graph 26 of Household Sector, Real Credit Market Debt Outstanding*, household debt declined in the period following the Panic of 2008, and it has not recovered. The series includes mortgages, automobile and student loans, credit cards, secured and unsecured loans, etc., all deflated by the headline CPI-U. The level of real debt outstanding has remained stagnant for several years, reflecting, among other issues, lack of normal lending by the banking system into the regular flow of commerce. Updated through first-quarter 2015, the graph reflects the most-recent detail available from the Federal Reserve's flow-of-funds data.

The slight upturn seen in the series in the two most-recent quarters, as with the median household income survey, was due partially to gasoline-price-driven, negative CPI inflation, which has begun to pass out of the system. It also reflected surging student loans, as shown in the next graph.

Updated through June 2015 reporting, *Graph 26* of monthly Consumer Credit Outstanding is a subcomponent of the prior graph on real household sector debt, but it is not adjusted for inflation. Post-2008 Panic, outstanding consumer credit has continued to be dominated by growth in federally-held student loans, not in bank loans to consumers that otherwise would fuel broad consumption growth. The nominal level of Consumer Credit Outstanding (ex-student loans) has not rebounded or recovered since the onset of the recession. These disaggregated data are available and plotted only on a not-seasonally-adjusted basis.

Again, consumer liquidity woes remain the basic constraint on broad economic activity in the United States, which remains heavily consumer oriented. Without real growth in income and/or debt expansion and willingness to take on new debt, and with consumer confidence and sentiment at levels consistent with a significant portion of consumers under financial stress, there has been no basis for a sustainable economic expansion since the Panic of 2008. There are no prospects for a recovery in the near term.

Producer Price Index (PPI)—July 2015—Final Demand PPI up by 0.18%, Perversely Boosted by Declining Energy Prices. The headline gain of 0.2% (0.18% at the second decimal point) in July 2015 PPI inflation was dominated by Final Demand Services inflation of 0.36%, which saw price increases across all major categories. Final Demand Goods inflation fell by 0.09% (-0.09%), dominated by declining energy prices. The falling energy prices, though, also had the effect of boosting some "margins" (not prices), which are used in calculating services inflation.

From a practical standpoint, the aggregate Final Demand Producer Price Index still has minimal relationship to real-world activity. Beyond issues of substitution and hedonic-quality-adjustment methodologies (see [Public Commentary on Inflation Measurement](#)), problems in the goods area have been and remain unstable seasonal factors (particularly as applied to energy), versus shifting market activity. In the services sector—the dominant component of the index, by weighting—inflation, again, is defined in terms of profit margins, not prices, where those margins often move initially in the opposite direction of related prices.

July 2015 Headline PPI Detail. The seasonally-adjusted, month-to-month, headline Producer Price Index (PPI) Final Demand inflation for July 2015 was up by 0.18%, versus a gain of 0.36% in June.

The broad impact of seasonal adjustments on headline PPI reporting remained negative in July, with unadjusted month-to-month July inflation rising by 0.27%. Also on a not-seasonally-adjusted basis—all annual growth rates are expressed unadjusted—year-to-year PPI Final Demand inflation dropped by a wider 0.81% (-0.81%) in July 2015, versus annual contraction of 0.72% (-0.72%) in June 2015.

For the three major subcategories of July 2015 Final Demand PPI, headline monthly Goods inflation fell by 0.09% (-0.09%), Services inflation rose by 0.36%, and Construction inflation rose by 0.53%. The unusually sharp increase in construction inflation has negative implications for real (inflation-adjusted) construction spending.

Final Demand Goods (Weighted at 34.67%). Running somewhat in parallel with the old Finished Goods PPI series, headline monthly Final Demand Goods inflation decline by 0.09% (-0.09%) in July 2015, versus an increase of 0.73% in June. There was a neutral aggregate impact on the headline July reading from underlying seasonal-factor adjustments. Not-seasonally-adjusted, July Final Demand Goods inflation also fell by 0.09% (-0.09%) for the month.

Unadjusted, year-to-year goods inflation was down by 3.73% (-3.73%) in July 2015, the same annual contraction as seen in June.

Headline seasonally-adjusted monthly changes by major components of the July 2015 Final Demand Goods:

- "Foods" inflation declined month-to-month by 0.08% (-0.08%) in July 2015, versus a 0.59% gain in June, with July's headline decline due to seasonal adjustments. Unadjusted, July foods inflation rose by 0.08% in the month. Unadjusted and year-to-year, July 2015 foods inflation contracted by 2.84% (-2.84%), versus a decline of 3.01% (-3.01%) in June 2015.
- "Energy" inflation fell by 0.57% (-0.57%) in July 2015, following a headline increase of 2.43% in June, with the July decline intensified by seasonal adjustments. Unadjusted, July energy inflation fell by 0.28% (-0.28%). Unadjusted and year-to-year, the annual contraction in energy prices narrowed to 17.63% (-17.63%) in July 2015, versus an annual drop of 17.90% (-17.90%) in June 2015.
- "Less foods and energy" ("Core" goods) inflation was unchanged at 0.00% in July 2015, following a 0.36% gain in June. Seasonal adjustments were negative for monthly core inflation, with the unadjusted July gain at 0.09%. Unadjusted and year-to-year, July 2015 core inflation rose by 0.55%, versus an annual gain of 0.64% in June 2015.

Final Demand Services (Weighted at 63.31% of the Aggregate). Headline monthly Final Demand Services inflation rose by 0.36% in July 2015, having been up by 0.27% in June. The overall seasonal-adjustment impact on headline June services inflation was negative, with an unadjusted monthly July gain of 0.46%.

Year-to-year, unadjusted July 2015 services inflation was 0.64%, versus 0.83% in June 2015.

The headline monthly changes by major component for July 2015 Final Demand Services inflation:

- "Services less trade, transportation and warehousing" inflation, or the "Other" category, showed monthly inflation of 0.37% in July 2015, versus a gain of 0.18% in June. Seasonal-adjustment

impact on the adjusted July detail was negative, where the unadjusted monthly change was a gain of 0.46%. Unadjusted and year-to-year, July 2015 "other" services inflation rose to 1.30%, versus an annual increase of 1.02% in June 2015.

- "Transportation and warehousing" inflation rose month-to-month by 0.17% in July, versus 0.61% in June. Seasonal adjustments had a positive impact on the headline July number, where the unadjusted monthly reading in July was unchanged at 0.00%. Unadjusted and year-to-year, July 2015 transportation inflation fell by 2.18% (-2.18%), the same level as the annual drop in June 2015 of 2.18% (-2.18%).
- "Trade" inflation rose by 0.36% month-to-month in July 2015, following a monthly gain of 0.18% in June. Seasonal adjustments had a negative impact here, where the unadjusted monthly inflation rose by 0.45% in July. Unadjusted and year-to-year, July 2015 trade inflation rose by 0.09%, having risen by 1.28% in June 2015.

Final Demand Construction (Weighted at 2.02% of the Aggregate). Although a fully self-contained subsection of the Final Demand PPI, Final Demand Construction inflation receives no formal headline coverage. Nonetheless, headline numbers are published, and month-to-month construction inflation jumped by 0.53% in July 2015, versus a gain of 0.09% in June 2015, which had been the third such consecutive monthly gain. The impact of seasonal factors on the July reading was neutral. On an unadjusted basis, month-to-month July 2015 construction inflation also was up by 0.53%.

On an unadjusted basis, year-to-year construction inflation increased to 1.99%, up from 1.81% in June 2015.

- "Construction for private capital investment" inflation in July 2015 was up by 0.71%, following a headline gain of 0.09% in June. Seasonal adjustments also had neutral impact here, where the unadjusted monthly inflation gain was 0.71%. Unadjusted and year-to-year, July 2015 private construction inflation was 2.08%, up from 1.72% in June.
- "Construction for government" inflation rose month-to-month by 0.44% in July 2015, following monthly increase of 0.18% in June. Seasonal adjustments also had neutral impact here, where unadjusted monthly July inflation was 0.44%. Unadjusted and year-to-year, July 2015 government construction inflation was 2.07%, versus an annual gain of 1.81% in June 2015.

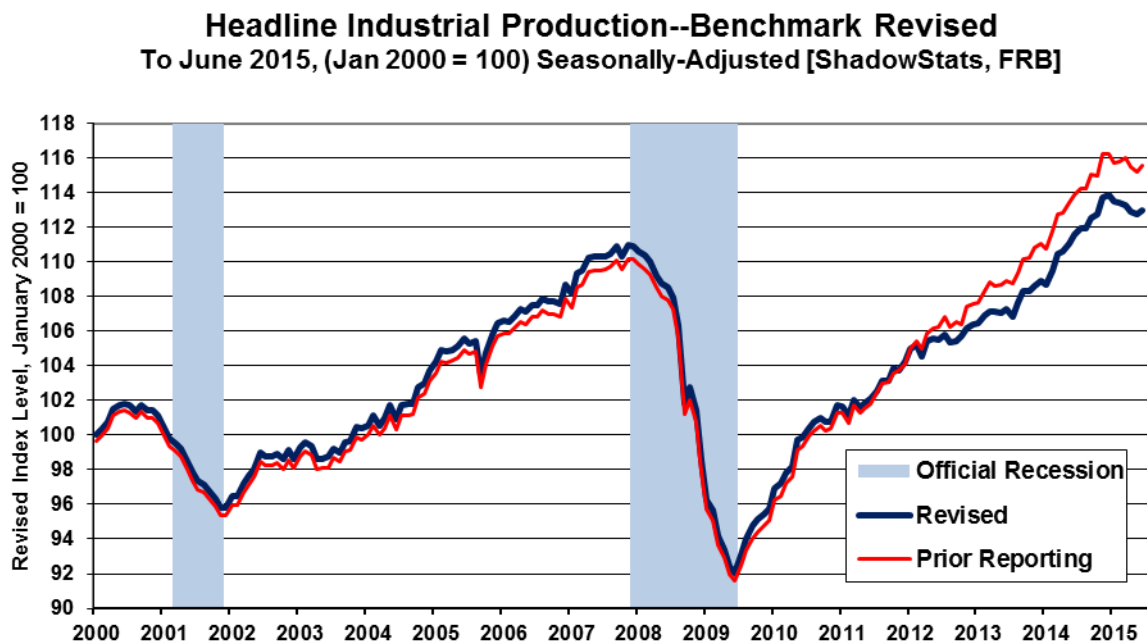
[The Reporting Detail section includes further coverage of Retail Sales, Industrial Production and the PPI numbers.]

REPORTING DETAIL

INDEX OF INDUSTRIAL PRODUCTION (July 2015)

Second-Quarter Contraction Deepened in Revision. The following detail from the August 14th release of headline July 2015 industrial production was reported in the context of the July 21st downside, comprehensive-benchmark revision to the industrial production series. Unless stated otherwise, revisions in this missive are just for the data in the headline July 2015 reporting versus the benchmark-revised data. Details of the benchmark revisions, versus the prior June 2015 headline numbers of July 15th, were discussed and covered fully in [Commentary No. 737](#). *Graph 28* shows the impact of the broad benchmark revision.

Graph 28: Aggregate 2015 Benchmark Revision to Industrial Production



In the context of the benchmark revisions and the July 2015 reporting, headline July production rose by an above-consensus headline 0.6% [consensus growth was 0.4% per Bloomberg and MarketWatch], but the July headline gain received a relative boost in the context of downside revisions to first- and second-quarter activity.

Given the benchmarking detail and July headline data, headline industrial production has not seen anything close to the current headline economic weakness since the economic collapse into 2009.

Patterns of Deepening Contractions. Using the Fed's measure of annualized growth by half year (second quarter of one half, versus the second quarter of the subsequent half), second-half 2014 industrial

production grew at an unrevised, annualized pace of 4.31%, while first-half 2015 production contracted at a revised annualized pace of 1.13% (-1.13%) [previously down by 0.96% (-0.96%)].

First-quarter 2015 production activity contracted a revised annualized quarterly pace of 0.21% (-0.21%) [previously down by 0.16% (-0.16%)]. Second-quarter 2015 production contracted at a revised annualized pace of 2.04% (-2.04%) [previously down by 1.75% (-1.75%)]. Based solely on the initial reporting for July 2015, annualized third-quarter growth would be 2.13%, yet year-to-year growth also fell to a post-collapse low of 1.12% for third-quarter 2015, from a revised 1.56% [previously 1.64%] in second-quarter 2015.

Year-to-year July 2015 production growth was 1.32%, versus a downwardly-revised 1.10% [previously 1.32%] in June, and a downwardly-revised 1.46% [previously 1.54%]. These patterns and levels of annual growth commonly are seen in, or at the onset of formal recessions.

The Fed's industrial production series still indicates that broad economic activity entered a "new" recession, likely to be timed officially from December of 2014.

Industrial Production—July 2015. The Federal Reserve Board released its first estimate of seasonally-adjusted, July 2015 industrial production on Friday, August 14th. Headline monthly production in July rose by 0.56%, following a revised gain of 0.09% [previously up by 0.23%] in June, and a revised decline of 0.27% (-0.27%) [previously down by 0.16% (-0.16%)] in May. Net of prior-period reporting, the headline July monthly gain would have been 0.39%, instead of 0.56%.

Detailed in *Graphs 5 to 7* of major industry groups in the *Opening Comments*, the headline July 2015 monthly aggregate production gain of 0.6% [June gain of 0.1%], was composed of a 0.8% gain in manufacturing activity [down by 0.3% (-0.3%) in June]; a July gain of 0.2% [June gain of 0.7%] in mining (including oil and gas production); and a July contraction of 1.0% (-1.0%) [June gain of 2.3%] in utilities.

Year-to-year growth in July 2015 production was 1.32%, versus a revised 1.10% [previously up by 1.32%] in June 2015, and a revised 1.46% [previously up by 1.54%] in June 2015. Annual growth slowing to these levels commonly is seen at the onset of formal recessions.

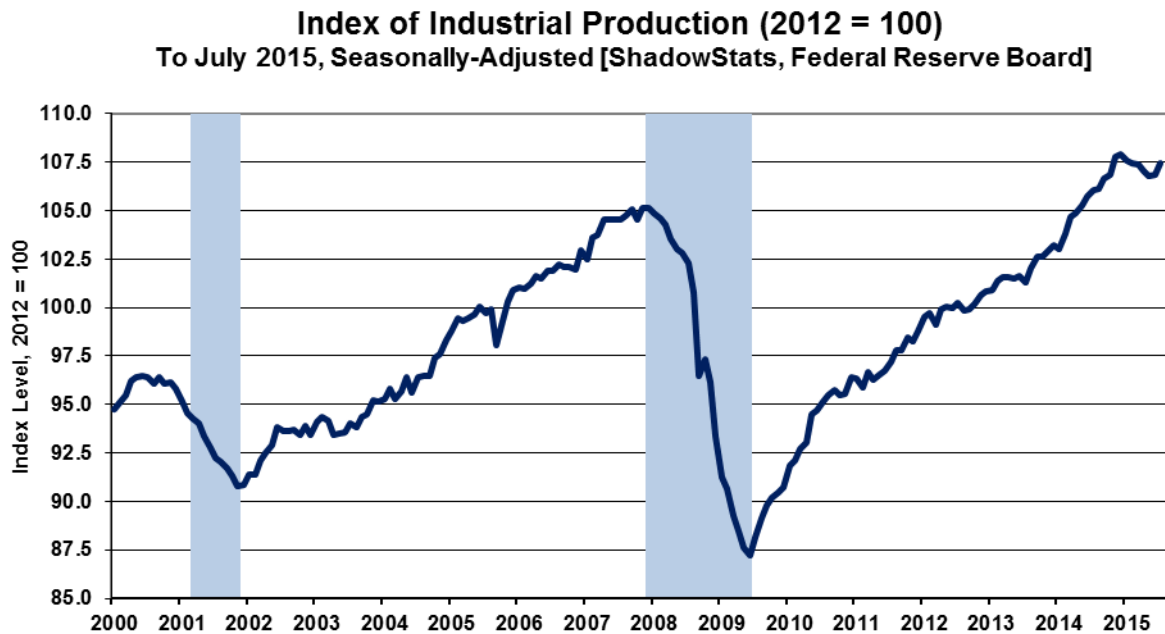
Production Graphs. The opening part of the *Opening Comments* section includes new drill-down detail reflected in a number of production graphs (*Graphs 5 to 13*). Going forward, those graphs will be incorporated into this *Reporting Detail* section.

The following two sets of graphs (*Graphs 29 and 30* and *Graphs 31 and 32*) show headline industrial production activity to date. *Graph 29* shows the monthly level of the production index, with a topping-out and renewed downturn—quarterly contractions in first- and second-quarter 2015—with a small bounce in the current reporting of June and July 2015. Such patterns of monthly and quarterly decline and stagnation were seen last in the economic collapse from 2007 (or earlier) into 2009.

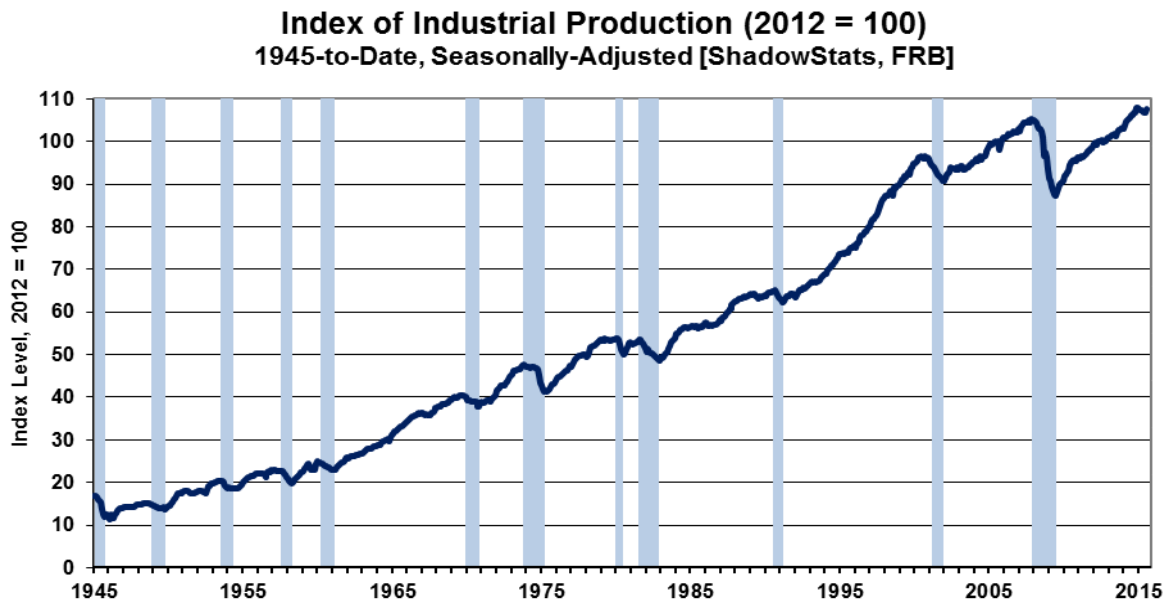
Graph 30 shows the year-to-year percent change in the same series for recent historical detail, beginning January 2000. Although off the revised 1.10% near-term for June 2015, the headline annual growth in July 2015 remained typical of activity seen at and consistent with the onset of a formal recession (the circumstance of the 2001 recession lingered into 2003, see [2014 Hyperinflation Report—Great Economic](#)

[Tumble](#)). The second set of graphs (*Graphs 30 and 31*) shows the same data in historical context since World War II.

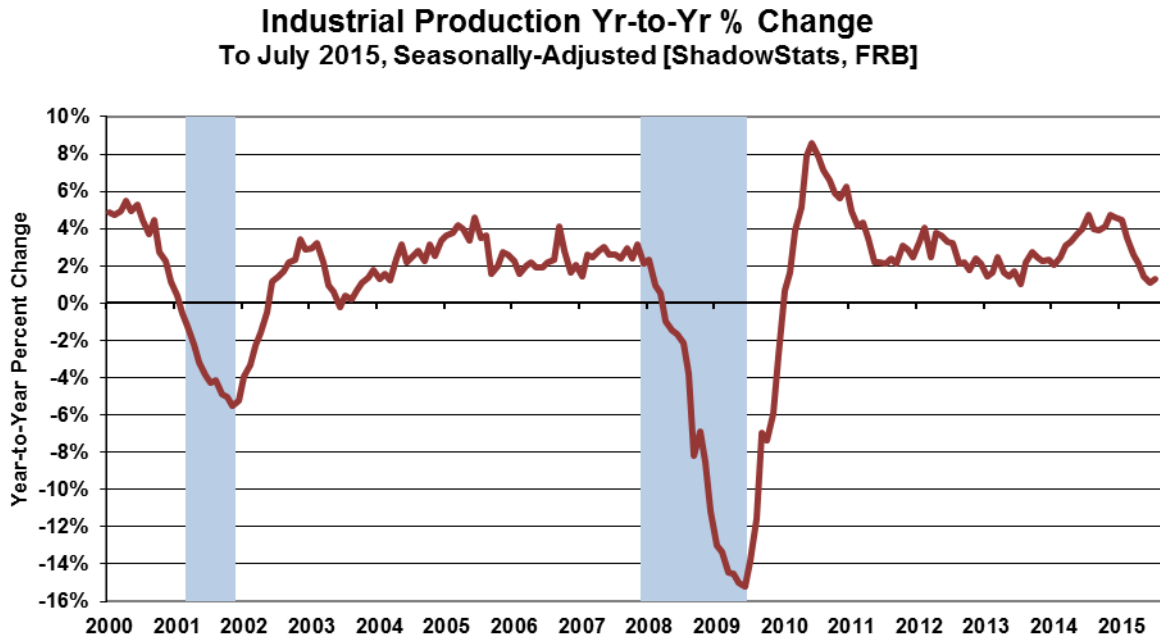
Graph 29: Index of Industrial Production since 2000



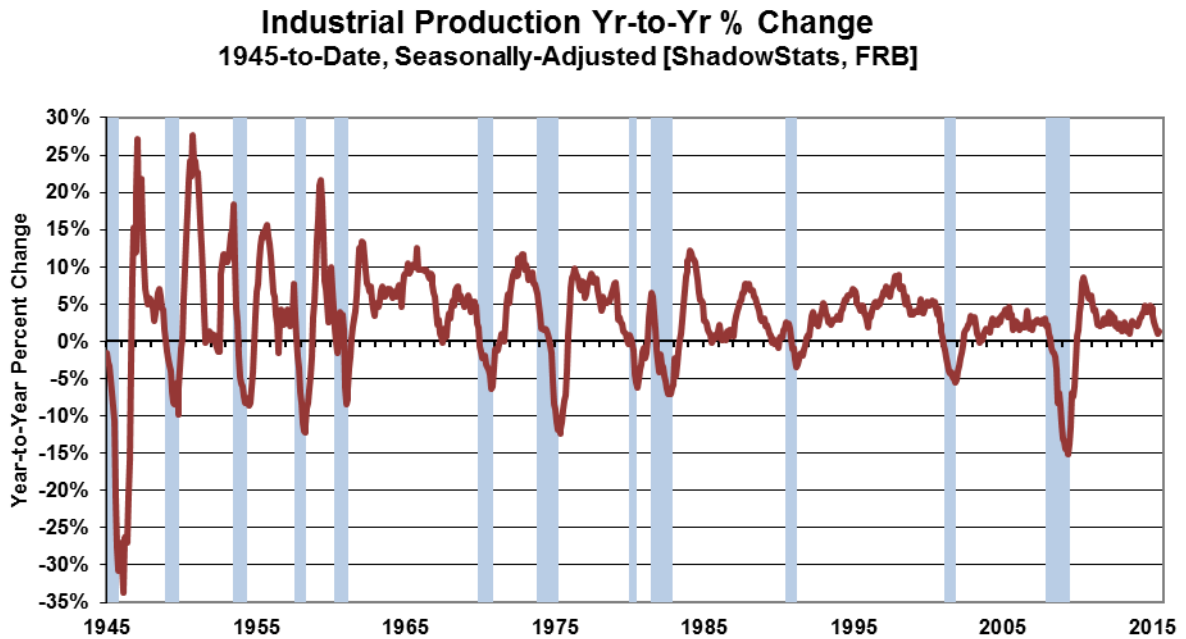
Graph 30: Index of Industrial Production since 1945



Graph 31: Industrial Production, Year-to-Year Percent Change since 2000



Graph 32: Industrial Production, Year-to-Year Percent Change since 1945



Shown more clearly in the first set of graphs, the pattern of year-to-year activity dipped anew in 2013, again, to levels usually seen at the onset of recessions, bounced higher into mid-2014, fluctuated thereafter and has headed lower again in recent months. Annual growth remains well off the recent relative peak for the series, which was a benchmark-revised 8.56% [previously 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 benchmark-revised year-to-year contraction of 15.20% (-15.20%) [previously down by 15.06% (-15.06%)] in June 2009—the end of second-quarter 2009—was the steepest annual decline in production since the shutdown of war-time production following World War II.

Although official production levels have moved higher since the June 2009 trough, corrected for the understatement of inflation used in deflating portions of the industrial production index (see the *Opening Comments* section, *Graph 20*) the series has shown more of a pattern of stagnation with a slow upside trend, since 2009, with irregular quarterly contractions interspersed. The slow uptrend continued into a topping out pattern in late-2014. Headline real growth contracted in both first- and second-quarter 2015. The "corrected" series did the same and remains well shy of a formal recovery.

NOMINAL RETAIL SALES (July 2015)

Nominal Retail Sales Gain Will Be Muted in Real Terms. In the context of upside revisions to prior reporting, and reflecting an expected pick-up in automobile sales, nominal retail sales in July 2015 rose by a near-consensus headline 0.6% (Bloomberg reported expectations of 0.7%, MarketWatch 0.5%). Such was before adjustment for rising inflation.

Expectations for a 0.2% gain in July CPI-U on Wednesday, August 19th, are likely to be light versus the actual headline reporting (see the *Week Ahead* section). Although real month-to-month activity in July, net of inflation, should still be positive, annual real growth still should continue generating a solid signal for a formal, new recession. Adjusting for realistic inflation (see [Commentary No. 736](#) and [No. 742](#) *Special Commentary: A World Increasingly Out of Balance*), real retail sales and the broad economy never truly recovered from the economic collapse into 2008 and 2009.

Structural Liquidity Issues Constrain Consumer Economic Activity. Discussed along with updated graphs and details in the *Opening Comments* section, the primary underlying issue with current retail sales activity remains intense, structural-liquidity woes besetting the consumer. That circumstance—in the last seven-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity.

Without real growth in income, and without the ability and/or willingness to offset declining purchasing power with debt expansion, the consumer lacks the ability to fuel traditional, consumption-based growth or recovery in U.S. economic activity, including retail sales and the still-dominant personal-consumption account of the GDP. With a significant portion of consumers under financial stress, there has been no basis for a sustainable economic expansion since the Panic of 2008, and there are no prospects for a recovery in the near future.

Nominal (Not-Adjusted-for-Inflation) Retail Sales—July 2015. In the context of upside revisions to May and June retail sales activity, which narrowed the headline July gain by 0.4% from what it would have been otherwise, and with the usual seasonal-adjustment aberrations that likely boosted the headline

July sales gain and the upwardly-revised June activity, July sales rose by a headline 0.6%, at the first decimal point. At the second decimal point, as reported August 13th by the Census Bureau, July 2015 retail sales showed a statistically-insignificant, seasonally-adjusted gain of 0.56% +/- 0.58% (this and all other confidence intervals are expressed at the 95% level). Net of prior-period revisions, though, the monthly gain in July sales was 1.01%, versus the headline 0.56%.

Such followed a statistically-insignificant, revised monthly change of "unchanged," at 0.00% +/- 0.24% [previously down by 0.27% (-0.27%)] in June 2015, and a revised 1.18% gain [previously up by 1.03%, initially up by 1.21%] in May.

Year-to-Year Annual Change. Year-to-year nominal retail sales in July 2015 increased by a statistically-significant 2.43% +/- 1.53%, versus a revised gain of 1.83% [initially up by 1.53%] in June 2015, and a revised gain of 2.42% [previously up by 2.26%, initially up by 2.65%] in May 2015.

Annualized Nominal Second-Quarter Gain, First-Quarter Contraction. The pace of annualized nominal retail sales change in first-quarter 2015 remained at 4.04% (-4.04%), the worst quarterly showing since the economic collapse.

The nominal annualized quarterly growth for second-quarter 2015 retail sales revised to 6.87% [previously up by 6.04% in initial reporting]. Based solely on July's reporting, the annualized third-quarter growth would be 3.94%.

Net of inflation, the real retail sales change in first-quarter 2015 remained at an annualized quarterly contraction of 1.02% (-1.02%). The quarterly change in second-quarter real retail sales revised to a gain of 3.78% [previously up by 2.98%]. July's indication will be assessed in the August 19th CPI-U *Commentary*, but it should be solidly in positive territory.

July Core Retail Sales—Core Sales Growth. Reflecting an environment of generally rising food prices and an unadjusted monthly decline of 0.17% (-0.17%) in gasoline prices [Department of Energy], seasonally-adjusted monthly grocery-store sales fell by 0.04% (-0.04%) in July 2015, with gasoline-station sales up by 0.35% for the month.

Under normal conditions, the bulk of non-seasonal variability in food and gasoline sales is in pricing, instead of demand. "Core" retail sales—consistent with the Federal Reserve's preference for ignoring food and energy prices when "core" inflation is lower than full inflation—are estimated using two approaches:

Version I: July 2015 versus June 2015 seasonally-adjusted retail sales series—net of total grocery store and gasoline station sales—reflected a monthly gain of 0.68%, versus the official headline aggregate sales increase of 0.56%.

Version II: July 2015 versus June 2015 seasonally-adjusted retail sales series—net of the monthly change in revenues for grocery stores and gas stations—reflected a monthly gain of 0.55%, versus the official headline aggregate sales increase of 0.56%.

Real (Inflation-Adjusted) Retail Sales—July 2015. The nominal gain of 0.56% in July 2015 retail sales was before accounting for inflation. The change in real retail sales for July will be published along with the headline estimate of consumer inflation for June 2015, to be covered in *Commentary No. 745* of Wednesday, August 19th. Consensus expectations [MarketWatch and Bloomberg] are for a 0.2% gain in the headline June CPI-U, but those expectations likely are somewhat shy of what will be headline reporting (see *Week Ahead* section).

Nonetheless, a consensus inflation reading would reduce the July headline nominal gain from 0.6% to about 0.4%. Annual real growth in July 2015 retail sales, though, will continue generating a strong, historical-warning signal of imminent recession.

Seasonal-Factor Distortions and Other Reporting Instabilities. The usual seasonal-factor distortions were at play, again, in the July 2015 reporting, where the headline data reflected concurrent seasonal adjustments. Given Census Bureau reporting procedures, the headline detail is not comparable with most earlier reporting. Accordingly, current data can reflect growth shifts from earlier periods, without the specifics being published. The principles and issues with the way the government reports economic series adjusted by concurrent seasonal factors were explored, in-depth, in [Commentary No. 695](#).

The adjustment issues here are the same as with the employment and unemployment series. The reporting fraud is not in the use of concurrent seasonal-factor adjustments *per se*, but rather in the Census Bureau's not publishing fully-consistent, historical data each month.

As is the common pattern in all the headline monthly reporting for the retail series, the year-ago numbers of June 2014 and July 2014 were revised, along with the publication of the July 2015 data and revised detail on May 2015 and June 2015. The year-ago revisions simply were junk reporting, due solely to shifts in their seasonal adjustments that resulted from the unique calculations of the seasonal factors that generated the headline July 2015 detail. The revisions were not due to the availability of any new historical data back in 2014, but due rather to just the inconsistent shifts in the published seasonal adjustments. Only the new details for June and July 2014 and for May and June 2015 were published on a basis consistent with the July 2015 number.

Specifically, the level of June 2014 revised minimally higher by 0.13%, following an upside revision of 0.14% last month. July 2014 revised higher by 0.12%, suggestive of upside, relative shifts in both the current June and July 2015 seasonals, from where they were implied to be last month and from what they likely would have been closer to in the old fixed-seasonal adjustment system. The effect was to add roughly 0.2- to 0.3-percentage point to the headline monthly level of July, with at least 0.1 percentage point of the headline July gain due to shifting, but unreported seasonal factors.

Indeed, most commonly, the year-ago number is revised higher each month, with the effect—desired or otherwise—of boosting the seasonal adjustments for the headline month, minimizing the reporting of headline monthly contractions or maximizing the headline gains. All this happens without the specifics as to where headline activity has been shifted month-to-month. Full detail is available internally to the Census Bureau, but the Bureau chooses not to publish the detail.

Beyond inconsistencies in the published, adjusted historical data, the stability of the seasonal-adjustment process (particularly the concurrent-seasonal-adjustment process) and sampling methods have been

disrupted severely by the unprecedented depth and length of the current economic downturn in the post-World War II era, the period of modern economic reporting.

Again, retail sales reporting suffers the same inconsistency issues seen with other series, such as payroll employment, the unemployment rate and durable goods orders. The highly variable and unstable seasonal factors here continued to cloud relative activity in the May 2015-to-July 2015, and in the June 2014-to-July 2014 periods, five months that are published on a non-comparable basis with all other historical data.

PRODUCER PRICE INDEX—PPI (July 2015)

July Final Demand PPI Rose by 0.18%, Perversely Boosted by Declining Energy Prices. The headline gain of 0.2% (0.18% at the second decimal point) in July 2015 PPI inflation was dominated by Final Demand Services inflation of 0.36%, which saw price increases across all major categories. Final Demand Goods inflation fell by 0.09% (-0.09%), dominated by declining energy prices. The falling energy prices, though, also had the effect of boosting some "margins" (not prices), which are used in calculating services inflation.

From a practical standpoint, the aggregate Final Demand Producer Price Index still has minimal relationship to real-world activity. Beyond issues of substitution and hedonic-quality-adjustment methodologies (see [Public Commentary on Inflation Measurement](#)), problems in the goods area have been and remain unstable seasonal factors (particularly as applied to energy), versus shifting market activity. In the services sector—the dominant component of the index, by weighting—inflation, again, is defined in terms of profit margins, not prices, where those margins often move initially in the opposite direction of related prices.

Inflation that Is More Theoretical than Real World? [This background text is as published previously.] Effective with January 2014 reporting, a new Producer Price Index (PPI) replaced what had been the traditional headline monthly measure of wholesale inflation in Finished Goods (see [Commentary No. 591](#)). In the new headline monthly measure of wholesale Final Demand, Final Demand Goods basically is the old Finished Goods series, albeit expanded.

The new and otherwise dominant Final Demand Services sector 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 subsequently would move to raise prices, in an effort to regain more-normal margins. In like manner, in the circumstance of "increased" margins—due to the lower cost of petroleum-related products not being passed along immediately to customers—competitive pressures to lower margins would tend to be reflected eventually in reduced retail prices (CPI). The oil-price versus margin gimmick works both way. In times of rapidly rising oil prices, it mutes the increase in Final Demand inflation, in times of rapidly declining oil prices; it tends to mute the decline in Final Demand inflation.

The new PPI series remains an interesting concept, but it appears limited as to its aggregate predictive ability versus general consumer inflation. Further, there is not enough history available on the new series (just six years of post-2008-panic data) to establish any meaningful relationship to general inflation or other economic or financial series.

July 2015 Headline PPI Detail. The Bureau of Labor Statistics (BLS) reported August 14th that the seasonally-adjusted, month-to-month, headline Producer Price Index (PPI) Final Demand inflation for July 2015 was up by 0.18%, versus a gain of 0.36% in June.

The broad impact of seasonal adjustments on headline PPI reporting remained negative in July, with unadjusted month-to-month July inflation rising by 0.27%. Also on a not-seasonally-adjusted basis—all annual growth rates are expressed unadjusted—year-to-year PPI Final Demand inflation dropped by a wider 0.81% (-0.81%) in July 2015, versus annual contraction of 0.72% (-0.72%) in June 2015.

For the three major subcategories of July 2015 Final Demand PPI, headline monthly Goods inflation fell by 0.09% (-0.09%), Services inflation rose by 0.36%, and Construction inflation rose by 0.53%.

Final Demand Goods (Weighted at 34.67%). Running somewhat in parallel with the old Finished Goods PPI series, headline monthly Final Demand Goods inflation decline by 0.09% (-0.09%) in July 2015, versus an increase of 0.73% in June. There was a neutral aggregate impact on the headline July reading from underlying seasonal-factor adjustments. Not-seasonally-adjusted, July Final Demand Goods inflation also fell by 0.09% (-0.09%) for the month.

Unadjusted, year-to-year goods inflation was down by 3.73% (-3.73%) in July 2015, the same annual contraction as seen in June. Headline seasonally-adjusted monthly changes by major components of the July 2015 Final Demand Goods:

- "Foods" inflation declined month-to-month by 0.08% (-0.08%) in July 2015, versus a 0.59% gain in June, with July's headline decline due to seasonal adjustments. Unadjusted, July foods inflation rose by 0.08% in the month. Unadjusted and year-to-year, July 2015 foods inflation contracted by 2.84% (-2.84%), versus a decline of 3.01% (-3.01%) in June 2015.
- "Energy" inflation fell by 0.57% (-0.57%) in July 2015, following a headline increase of 2.43% in June, with the July decline intensified by seasonal adjustments. Unadjusted, July energy inflation fell by 0.28% (-0.28%). Unadjusted and year-to-year, the annual contraction in energy prices narrowed to 17.63% (-17.63%) in July 2015, versus an annual drop of 17.90% (-17.90%) in June 2015.
- "Less foods and energy" ("Core" goods) inflation was unchanged at 0.00% in July 2015, following a 0.36% gain in June. Seasonal adjustments were negative for monthly core inflation, with the unadjusted July gain at 0.09%. Unadjusted and year-to-year, July 2015 core inflation rose by 0.55%, versus an annual gain of 0.64% in June 2015.

Final Demand Services (Weighted at 63.31% of the Aggregate). Headline monthly Final Demand Services inflation rose by 0.36% in July 2015, having been up by 0.27% in June. The overall seasonal-adjustment impact on headline June services inflation was negative, with an unadjusted monthly July gain of 0.46%.

Year-to-year, unadjusted July 2015 services inflation was 0.64%, versus 0.83% in June 2015. The headline monthly changes by major component for July 2015 Final Demand Services inflation:

- "Services less trade, transportation and warehousing" inflation, or the "Other" category, showed monthly inflation of 0.37% in July 2015, versus a gain of 0.18% in June. Seasonal-adjustment impact on the adjusted July detail was negative, where the unadjusted monthly change was a gain

of 0.46%. Unadjusted and year-to-year, July 2015 "other" services inflation rose to 1.30%, versus an annual increase of 1.02% in June 2015.

- "Transportation and warehousing" inflation rose month-to-month by 0.17% in July, versus 0.61% in June. Seasonal adjustments had a positive impact on the headline July number, where the unadjusted monthly reading in July was unchanged at 0.00%. Unadjusted and year-to-year, July 2015 transportation inflation fell by 2.18% (-2.18%), the same level as the annual drop in June 2015 of 2.18% (-2.18%).
- "Trade" inflation rose by 0.36% month-to-month in July 2015, following a monthly gain of 0.18% in June. Seasonal adjustments had a negative impact here, where the unadjusted monthly inflation rose by 0.45% in July. Unadjusted and year-to-year, July 2015 trade inflation rose by 0.09%, having risen by 1.28% in June 2015.

Final Demand Construction (Weighted at 2.02% of the Aggregate). Although a fully self-contained subsection of the Final Demand PPI, Final Demand Construction inflation receives no formal headline coverage. Nonetheless, headline numbers are published, and month-to-month construction inflation jumped by 0.53% in July 2015, versus a gain of 0.09% in June 2015, which had been the third such consecutive monthly gain. The impact of seasonal factors on the July reading was neutral. On an unadjusted basis, month-to-month July 2015 construction inflation also was up by 0.53%.

On an unadjusted basis, year-to-year construction inflation increased to 1.99%, up from 1.81% in June 2015.

- "Construction for private capital investment" inflation in July 2015 was up by 0.71%, following a headline gain of 0.09% in June. Seasonal adjustments also had neutral impact here, where the unadjusted monthly inflation gain was 0.71%. Unadjusted and year-to-year, July 2015 private construction inflation was 2.08%, up from 1.72% in June.
- "Construction for government" inflation rose month-to-month by 0.44% in July 2015, following monthly increase of 0.18% in June. Seasonal adjustments also had neutral impact here, where unadjusted monthly July inflation was 0.44%. Unadjusted and year-to-year, July 2015 government construction inflation was 2.07%, versus an annual gain of 1.81% in June 2015.

Discussed in [Commentary No. 740](#), ShadowStats uses the "final demand construction" index for deflating headline activity in the monthly construction-spending series. The August 2015 U.S. Construction Spending detail will be released on September 1st and covered in the ShadowStats *Commentary* of September 3rd.

PPI-Inflation Impact on Pending Reporting of Durable Goods. As to the upcoming reporting of July new orders for durable goods, unadjusted monthly inflation for new orders for manufactured durable goods continued in decline for July 2015, a decline of 0.12% (-0.12%) for the third consecutive month. Annual inflation turned down by 0.18% (-0.18%) in July 2015, versus positive annual inflation of 0.06% in June 2015. July 2015 durable goods orders will be released on August 26th and covered in the ShadowStats *Commentary* of that date.

WEEK AHEAD

Economic Reporting Should Trend Much Weaker than Expected; Inflation Will Rise Anew, Along with Higher Oil Prices. In a fluctuating trend to the downside, amidst mixed reporting in headline data, market expectations for business activity nonetheless tend to respond to the latest economic hype in the popular media. That general effect holds the market outlook at overly-optimistic levels, with current expectations still exceeding any potential, underlying economic reality, yet the trend does continue to soften.

Headline reporting of the regular monthly economic numbers increasingly should turn lower in the weeks and months ahead, along with significant downside revisions to second-quarter 2015 GDP and downside or otherwise much weaker-than-expected reporting for at least the next several quarters of GDP into 2016.

CPI-U consumer inflation—driven lower earlier this year by collapsing prices for gasoline and other oil-price related commodities—likely has seen its near-term, year-to-year low, having turned positive in June 2015, for the first time in six months. July indicators suggest still higher CPI inflation in the week ahead. Separately, year-to-year CPI inflation for the balance of the year increasingly will be going against weak or negative year-ago numbers.

Upside inflation pressures should continue to build, particularly as oil prices begin to rebound, once again, a process that should accelerate rapidly with the eventual sharp downturn in the exchange-rate value of the U.S. dollar. These areas, the general economic outlook and longer range reporting trends are reviewed broadly in [No. 742 Special Commentary: A World Increasingly Out of Balance](#) and [No. 692 Special Commentary: 2015 - A World Out of Balance](#).

A Note on Reporting-Quality Issues and Systemic-Reporting Biases. Significant reporting-quality problems remain with most major economic series. Beyond the pre-announced gimmicked changes to reporting methodologies of the last several decades, which have tended to understate actual inflation and to overstate actual economic activity, ongoing headline reporting issues are tied largely to systemic distortions of monthly seasonal adjustments. Data instabilities—induced partially by the still-evolving economic turmoil of the last eight-to-ten years—have been without precedent in the post-World War II era of modern-economic reporting. The severity and ongoing nature of the downturn provide particularly unstable headline economic results, when concurrent seasonal adjustments are used (as with retail sales, durable goods orders, employment and unemployment data, discussed and explored in the labor-numbers related [Commentary No. 695](#)).

Combined with recent allegations of Census Bureau falsification of data in its monthly Current Population Survey (the source for the Bureau of Labor Statistics' Household Survey), these issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular economic series (see [Commentary No. 669](#)).

PENDING RELEASES:

Residential Construction—Housing Starts (July 2015). The Census Bureau will release July 2015 residential construction detail, including housing starts tomorrow, Tuesday, August 18th. In line with common-reporting experience of recent years, monthly results are likely to be unstable and not statistically meaningful. Irrespective of the headline detail, the broad pattern should remain generally consistent with the low-level and down-trending stagnation seen currently in the series. Such is particularly evident with the detail viewed in the context of a six-month moving average of activity. This series also is subject to regular and extremely-large prior-period revisions.

As discussed in [Commentary No. 660](#) on the August 2014 version of this most-unstable of major monthly economic series, the monthly headline reporting detail here simply is worthless. Again, the series best is viewed in terms of a six-month moving average. Not only is month-to-month reporting volatility extreme, but also those headline monthly growth rates rarely come close to being statistically significant.

Consensus expectations are for a negligible headline decline of -0.5% (-0.5%) from June's initial headline reporting [both MarketWatch and Bloomberg]. Irrespective of those otherwise statistically-meaningless expectations, the broad, general pattern of down-trending stagnation almost certainly continued in headline July 2015 activity.

Consumer Price Index—CPI (July 2015). The Bureau of Labor Statistics (BLS) plans the July 2015 CPI for release for Wednesday, August 19th. The headline CPI-U should be on the plus-side, month-to-month, for the fifth straight month, with headline annual inflation turning increasingly positive for the second month.

The average gasoline price moved lower in July 2015, by 0.17% (-0.17%) for the month on a not-seasonally-adjusted basis, per the Department of Energy (DOE). BLS seasonal adjustments to gasoline prices in July traditionally move sharply to the plus-side, however, pushing the headline, unadjusted gain in gasoline prices enough higher to contribute 0.36% to the headline CPI-U monthly inflation rate. With higher food and “core” (net of food and energy) inflation, a headline gain above 0.3% is likely. Yet, the consensus headline expectation is for a 0.2% headline gain, as published by both Bloomberg and MarketWatch.

Annual Inflation Rate. Year-to-year, CPI-U inflation would increase or decrease in the July 2015 reporting, dependent on the seasonally-adjusted monthly change, versus the adjusted, minimal headline 0.01% monthly inflation gain for July 2014. The adjusted change is used here, since that is how consensus expectations are expressed. To approximate the annual unadjusted inflation rate for July 2015, the difference in July's headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the June 2015 positive annual inflation rate of 0.12%. A headline month gain of 0.3% in the CPI-U, for example would take the annual inflation rate to roughly 0.4%.