

COMMENTARY NUMBER 926

November Industrial Production and Retail Sales

December 15, 2017

**Despite Mixed Headline Economic Numbers,
Uncertainty Is Holding Back Real-World Business Activity**

**Booming Retail Sales Reflected Complications with Non-Seasonal,
Residual Hurricane Distortions Combined with Concurrent Seasonal Adjustments**

**November 2017 Retail Sales Jumped by 0.79%, up by 0.40% Net of Inflation,
On Top of Sharp Upside Revisions to September and October Activity**

**Running Contrary to the Strong Retail Sales Report,
November 2017 Consumer Goods Production Dropped by 0.39% (-0.39%) and
Revised Sharply Lower in October, September, August, July and June**

**November 2017 Total Industrial Production Rose 0.2% from an
Unrevised, Hurricane-Distorted/Boosted October Production Level, in the
Context of Sharp Downside Revisions to September and Earlier Activity**

**Net of an Oil Production Boost from Hurricane Nate Recovery,
November Industrial Production was “Unchanged” Month-to-Month, per the Fed**

**Dominant Manufacturing Sector of Industrial Production Remained
Shy of Recovering Its Pre-Recession Peak by 4.7% (-4.7%)**

**November Manufacturing Showed 119 Months of Continuous Non-Expansion, the
Longest Such Period in the 100-Year History of the Industrial Production Series;
Second Worst: 96-Months of Post-World War II Retooling from War to Consumer Production;
Third Worst: 88-Months of the First Down-Leg in the Great Depression**

PLEASE NOTE: The next Regular Commentary, Tuesday, December 19th, will cover November New Residential Construction (Housing Starts and Building Permits) with an extended Hyperinflation Watch, followed by an early-day missive on December 22nd, covering November New Orders for Durable Goods, New- and Existing-Home Sales and the third estimate of Third-Quarter 2017 GDP.

Best wishes —John Williams (707) 763-5786

Today's (December 15th) *Opening Comments and Executive Summary*. The *Opening Comments* discusses the broad economy in the context of current detail and background information. The *Executive Summary* (page 3) reviews highlights of November Retail Sales (real and nominal) and November Industrial Production.

The ***Reporting Detail*** (page 9) expands the discussion and graphics on the November Retail Sales and Industrial Production.

The ***Consumer Liquidity Watch*** (page 29) has not been revised since the prior *Commentary*.

The ***Week, Month and Year Ahead*** (page 39) provides background on recent *Commentaries* and previews next week's releases of November Existing- and New-Home Sales, New Residential Construction (Housing Starts and Building Permits), New Orders for Durable Goods and the third-estimate of Third-Quarter 2017 GDP.

OPENING COMMENTS

Anecdotal and Headline Evidence Continue to Show a Seriously-Troubled Economy and Suggest Very Dangerous Financial Markets. Against what appears to be a headline economic consensus that all is right again with the U.S. economy and financial markets, underlying real-world common experience suggests a much different outlook. Regularly discussed here, ongoing non-recovery, low-level stagnation and signs of renewed downturn remain patterns common to key elements of headline U.S. economic activity. Consider factors ranging from housing sales and broad construction activity, to today's headline reporting of domestic manufacturing, as discussed and graphed in the *Reporting Detail*.

Similar signals of such economic stress are seen in patterns of activity that move along with the real-world broad economy. They range from indicators such freight volume and domestic consumption of petroleum to factors such as levels of real consumer debt outstanding, real average weekly earnings and measures of employment stress in the broad economy. Those stresses are reflected in historically-low levels of the employment-population ratio and the labor force participation rate. With the liquidity-starved U.S. consumer driving three-quarters of the GDP, there is no way for the broad economy to boom—happy Retail Sales headlines aside—without some meaningful shift in underlying consumer circumstances. Links to background discussions in these various areas are found in the *Recent Commentaries of the Week, Month and Year Ahead Section*, along with links to background discussions on the quality of the more-politicized GDP and employment/unemployment details.

Beyond assessing headline economic numbers, ShadowStats also looks at anecdotal evidence, including comments by subscribers and clients, who live in the real world. Two broad observations have come from a number of recent conversations. First, real estate activity appears to be slowing in recently strong areas. Second, a number of major companies are “sitting on their hands,” holding back on issuing new contracts to third parties in areas such as upgrading computer systems. The companies cite the slowdown in contracts as “due to uncertainty,” uncertainty that encompasses:

- Unfolding circumstances in the Washington, D.C. political arena.
- Where the manic financial markets are headed.
- Ultimately what is, or will be, happening to near-term business activity?

Economic reporting, and business and financial-market stories sometimes receive happy year-end spikes in the press. That circumstance has been supplemented this year by near-term hurricane boosts to, and distortions of, some current economic activity, such as the November Retail Sales reporting. The latter circumstance should prove fleeting. The underlying, broadly-faltering U.S. economy should be dominating headline economic reporting, once again, and all too soon, most likely early in the New Year.

In the context of what ShadowStats views as the most dangerous, pending economic and financial market instabilities and crises of the last 90 years, holdings of physical gold and silver remain the ultimate hedges—stores of wealth—for preserving the purchasing power of one’s U.S. dollar assets. That is in the context of liquidity and portability, during extremely likely, unusually-difficult times that lie ahead. Such will be detailed in an extended *Hyperinflation Watch* in the next *Commentary No. 927* of December 19th.

Anyone who would like to comment on or discuss these areas is most welcome to call John Williams at (707) 763-5786.

EXECUTIVE SUMMARY: Retail Sales—November 2017—Sales Boomed into November, Reflecting Residual Hurricane Distortions and Concurrent Seasonal Factors. The unusual November 2017 retail sales report was headline strong, but only in the context of unstable concurrent seasonal factors in conjunction with residual impact from the Atlantic Hurricane Season data disruptions, which were not seasonal in nature. November sales showed a monthly nominal gain of 0.79%, which was 0.40% in real terms, net of inflation. That was on top of upside revisions to September and October activity. Net of revisions, the headline nominal monthly gain would have been 1.27%. Annual, year-to-year growth in nominal sales rose to 5.80%, real sales to 3.50% in November 2017, from upwardly revised annual gains in October 2017, respectively of 4.91% and 2.81%.

Nominal Retail Sales—November 2017. Headline nominal retail sales increased by 0.79% in November, against upwardly-revised monthly headline gains of 0.55% in October 2.04% in September. Net of the prior-month’s revisions, November 2017 sales gained 1.27% for the month.

The nominal year-to-year change in Retail Sales showed a statistically-significant increase of 5.50% in November 2017, versus upwardly-revised annual gains of 4.91% in October 2017 and 5.00% in September 2017.

Adjusted for November's stronger, headline CPI-U inflation (see the *Retail Sales* section of the *Reporting Detail*), seasonally-adjusted real month-to-month Retail Sales gained 0.40% in November 2017 and reflected upwardly-revised gains of 0.44% in October and 1.48% in September. Real annual Retail Sales growth rose to 3.50% in November, versus upwardly revised gains of 2.81% in October 2017 and 2.72% in September 2017.

With the headline real annual growth well above two-percent, the usual "Recession Signal" is in temporary abeyance, again, as discussed in the *Reporting Detail*.

Real Retail Sales Graphs, Corrected and Otherwise. In the *Reporting Detail*, *Graphs 5* and *7* show the level of real retail sales activity (deflated by the CPI-U), while *Graphs 6* and *8* show year-to-year percent change. The apparent "recovery" of headline real retail sales shown in the following *Graph 1* (again, see also *Graph 5* in the *Reporting Detail*) generally continued into late-2014. Although headline reporting turned down in December 2014, into first-quarter 2015, it turned higher into the third-quarter 2015, slowed to a near-standstill in fourth-quarter 2015 and contracted in first-quarter 2016, with an uptick in second-quarter 2016, with renewed slippage into third-quarter 2016, a further uptick in fourth-quarter 2016 and upturn into 2017, with a hurricane-induced or related jumps in September through November 2017.

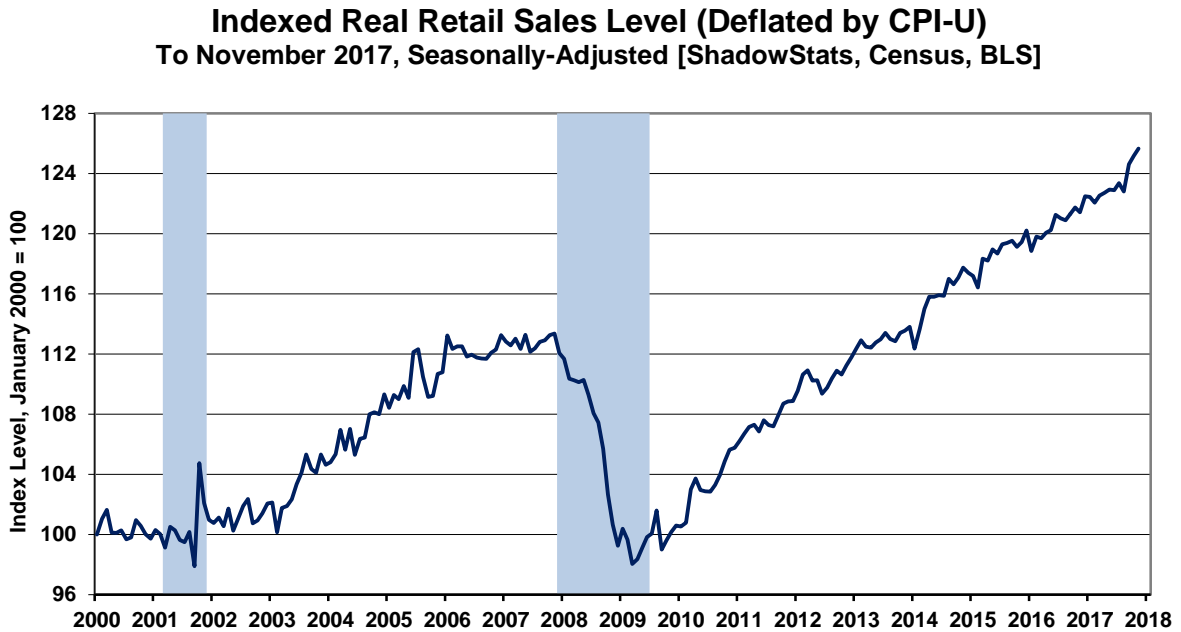
Nonetheless, headline real growth in retail sales continues to be overstated heavily, due to the understatement of CPI-U inflation used in deflating the retail sales series. Discussed more fully in *Chapter 9* of [2014 Hyperinflation Report—Great Economic Tumble – Second Installment](#) and [Public Commentary on Inflation Measurement](#), deflation by too-low an inflation number (such as the CPI-U) results in the deflated series overstating inflation-adjusted economic growth.

Both of the accompanying graphs are indexed to January 2000 = 100.0 to maintain consistency in the series of graphs related to corrected inflation-adjustment, including the regular plots of the "corrected" industrial production index (see *Graphs 3* and *4*) in the next section, the "corrected" new orders for durable goods and the "corrected" GDP. Those later "corrected" numbers are covered respectively in [Commentary No. 922](#) and [Commentary No. 923](#).

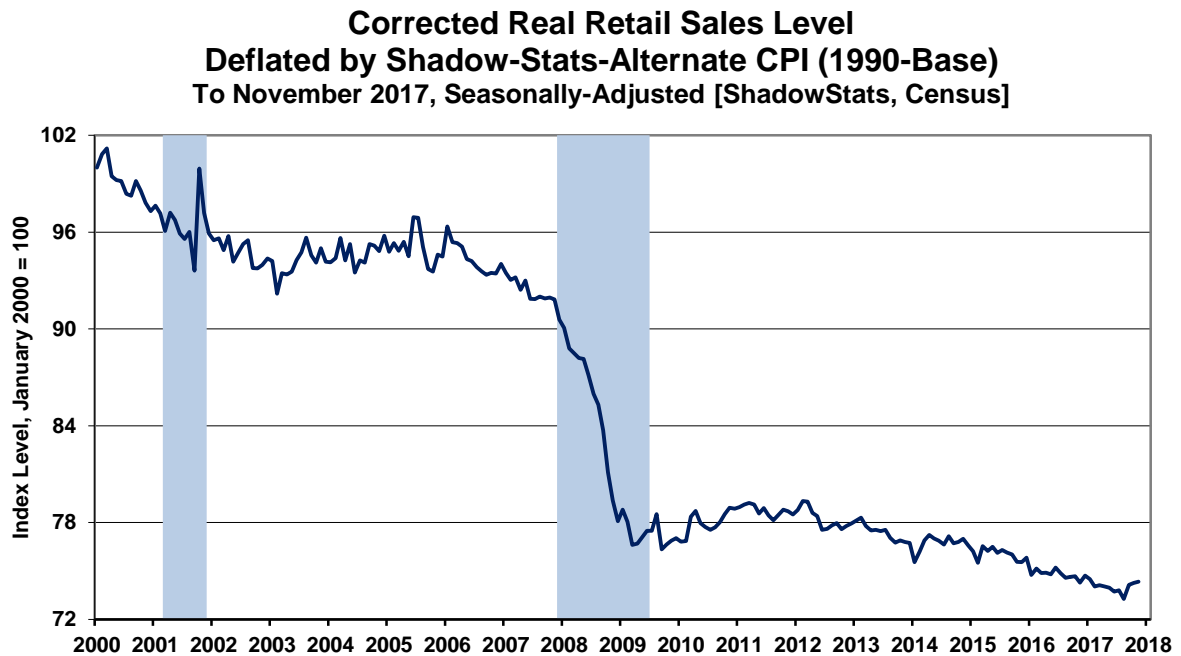
The first graph here reflects the official real retail sales series, except that it is indexed, instead of being expressed in dollars. The plotted patterns of activity and rates of growth are exactly the same for the official series, whether the series is indexed or expressed in dollars, again, as is evident in a comparison of *Graph 1* with *Graph 5* in the *Retail Sales—Nominal and Real* in the *Reporting Detail* section.

Instead of being deflated by the CPI-U, the "corrected" real retail sales numbers—in *Graph 2*—use the ShadowStats-Alternate Inflation Measure (1990-Base) for deflation. With the higher inflation of the ShadowStats measure, the revamped numbers show a pattern of plunge and stagnation and renewed downturn. That pattern generally is consistent with consumer indicators such as real average weekly earnings (see *Graph CLW-7* in the *Consumer Liquidity Watch*) and faltering consumer liquidity conditions (again, see the *Consumer Liquidity Watch* and the *ECONOMY* section of [No. 859 Special Commentary](#)). Extended coverage is found in the *Reporting Detail*.

Graph 1: Headline Real Retail Sales Level, Indexed to January 2000 = 100



Graph 2: "Corrected" Real Retail Sales Level, Indexed to January 2000 = 100



Industrial Production—November 2017—Production Was Flat, Except for Catch-Up Activity from Hurricane Nate. Headline reporting of a 0.24% monthly gain in November 2017 Industrial Production was no more than one-time catch-up oil-production activity from Hurricane Nate, as noted by the Fed.

Amidst Downside Revisions to September Detail and Earlier, Hurricane Boosts to Production Largely Have Run Their Course. The Federal Reserve continued to catch up in its November production estimate, measuring the impact of hurricanes on industrial production in recent months. Recently boosted production of automobiles, to fill the auto-sales pipeline with replacement vehicles for those damaged in the hurricanes, declined in November. With catch-up in place for the effects of Hurricane Nate, the last storm, odds are high that production will decline in December 2017, as still-inflated automobile production levels continue to unwind.

Headline Industrial Production—November 2017. With downside revisions to pre-October 2017 detail back through July 2017, November 2017 production increased by 0.24% month-to-month, having gained a revised 1.17% in October 2017 (although that was an upside revision to monthly growth, it reflected only a downside revision to the September 2017 index), September month-to-month growth revised lower to 0.26%. Net of prior-period revisions, November 2017 production still was 0.24%. Year-to-year November 2017 industrial production gained 3.55%, versus an unrevised 2.88% annual gain in October 2017 and a downwardly-revised gain of 1.87% in September 2017.

Growth by Major Sector. Detailed by major industry group (see *Graphs 13, 15, 20* and *22* in the *Reporting Detail*), the headline November 2017 monthly aggregate gain of 0.24% was composed of monthly gains of 0.18% in the dominant manufacturing sector activity, a decline of 1.85% (-1.85%) in utilities and a gain of 1.97% in mining activity (including oil and gas production). Again, the increase in mining activity reflected catch-up from Hurricane Nate disruptions, net of which, headline production was “unchanged.”

Production Activity and Graphs—Corrected and Otherwise. In the context of the downside 2017 benchmark revisions to production of March 31st (see [Commentary No. 877](#)), and the subsequent regular, albeit volatile, monthly reporting through November 2017, index-level and annual-growth production details are found in and plotted in the *Reporting Detail (Graphs 8 to 11)*, along with the drill-down graphs of major subcomponents of the production series (*Graphs 12 to 25*).

The level of headline production showed a topping-out process in third- and fourth-quarter 2014, followed by deepening quarterly downturns into first- and second-quarter 2015, with the second-quarter 2015 also beginning a string of quarterly year-to-year contractions. Third-quarter 2015 showed some bounce, but activity in fourth-quarter 2015 and in first- and second-quarter 2016 turned down anew, dropping sharply into negative quarter-to-quarter growth and continuing year-to-year decline. Third-quarter 2016 growth was positive on a quarter-to-quarter basis, but continued in annual contraction. That pattern repeated in fourth-quarter 2016. That seventh straight quarter of annual contraction was a circumstance never seen in industrial production reporting outside of periods that eventually were recognized formally as recessions.

With the reporting of first-quarter, second-quarter and third-quarter 2017 details, production showed both annual and quarterly gains, except for a quarterly contraction in the third-quarter, although the headline activity had remained below pre-recession highs seen in 2007, except for a brief recovery in third-quarter 2014, and one-quarter’s expansion in fourth-quarter 2014, before dropping back below the 2007 pre-recession peak. On a monthly basis, the pre-recession high of November 2007 was recovered briefly in

June of 2014, with October and November 2014 a short-lived peak. October 2017 recovered the monthly pre-recession high, for a second time, but the quarterly numbers remain shy of a second “recovery.”

Following *Graphs 3* and *4* address reporting-quality issues tied just to the overstatement of headline growth in the total series 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 [Chapter 9 of 2014 Hyperinflation Report—Great Economic Tumble](#)).

Graph 3 shows official, headline industrial production reporting, but indexed to January 2000 = 100, instead of the Fed’s formal index that is set at 2012 = 100. The 2000 indexing simply provides for some consistency in the series of revamped “corrected” graphics including, real retail sales (see *Graphs 1* and *2*) in the prior section), and the “corrected” new orders for durable goods and the “corrected” GDP. Those later “corrected” numbers are covered respectively in [Commentary No. 922](#) and [Commentary No. 923](#). The indexing does not affect the appearance of the graph or reported growth rates (as can be seen with a comparison of *Graph 4* here to *Graph 10* in the *Reporting Detail* section).

Graph 4 is a recast version of *Graph 3*, corrected for the estimated understatement of the inflation used in deflating certain components of the production index. Estimated hedonic-inflation adjustments have been backed-out of the official industrial-production deflators used for headline reporting.

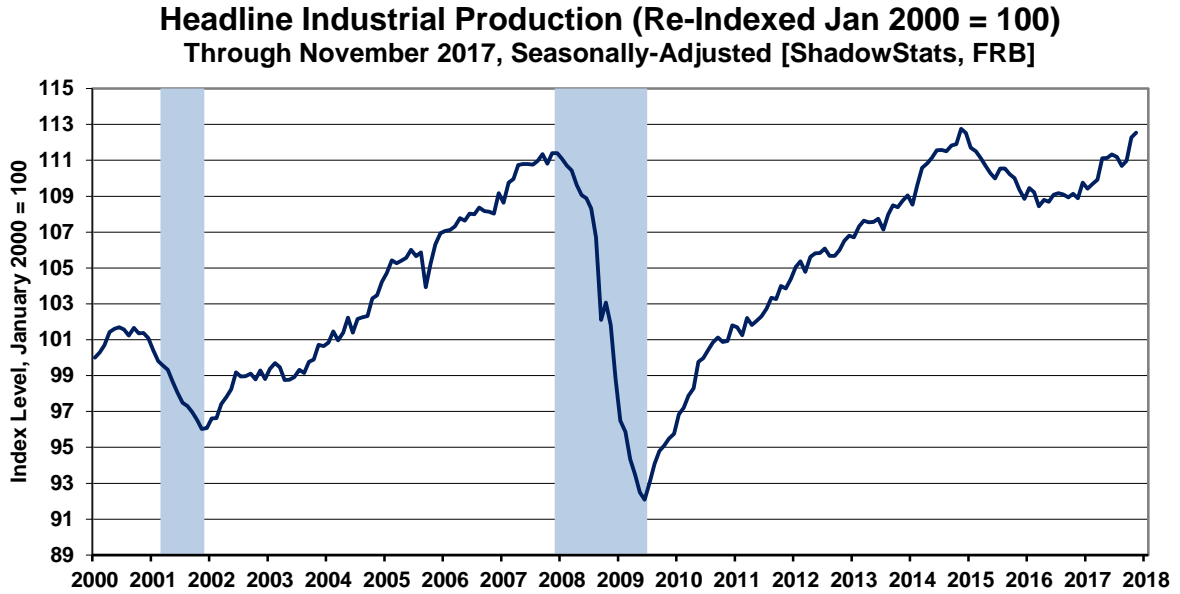
This “corrected” *Graph 4* shows some growth in the period subsequent to the official June 2009 trough in production activity, but that upturn has been far shy of the short-lived full recovery and the renewed expansion reported in official GDP estimation (see [Commentary No. 869](#) and the *ECONOMY* section of [No. 859 Special Commentary](#)). Unlike the headline industrial production data and the headline GDP numbers, corrected production levels never recovered their 2007 pre-recession highs, although the headline aggregate production index quickly backed off its official “recovery” in late-2014, only to recovery its pre-recession peak for only a second time, on a monthly basis, with the October 2017. That said, the dominant manufacturing sector of industrial production still never has recovered its December 2007 pre-recession peak. It shows a protracted period of economic non-expansion, unprecedented in its duration for the 100-year history of the Industrial Production series.

Instead, the “corrected” production series here entered a period of protracted low-level, but up-trending, stagnation in 2010, with irregular quarterly contractions seen through 2013, an irregular uptrend into 2014, a topping-out in late-2014, generally turning lower through fourth-quarter 2016 and into early-2017, with a small upturn, then downturn, with high volatility aggravated by natural-disaster impact of recent months, which appears to have plateaued with the November details and accompanying revisions.

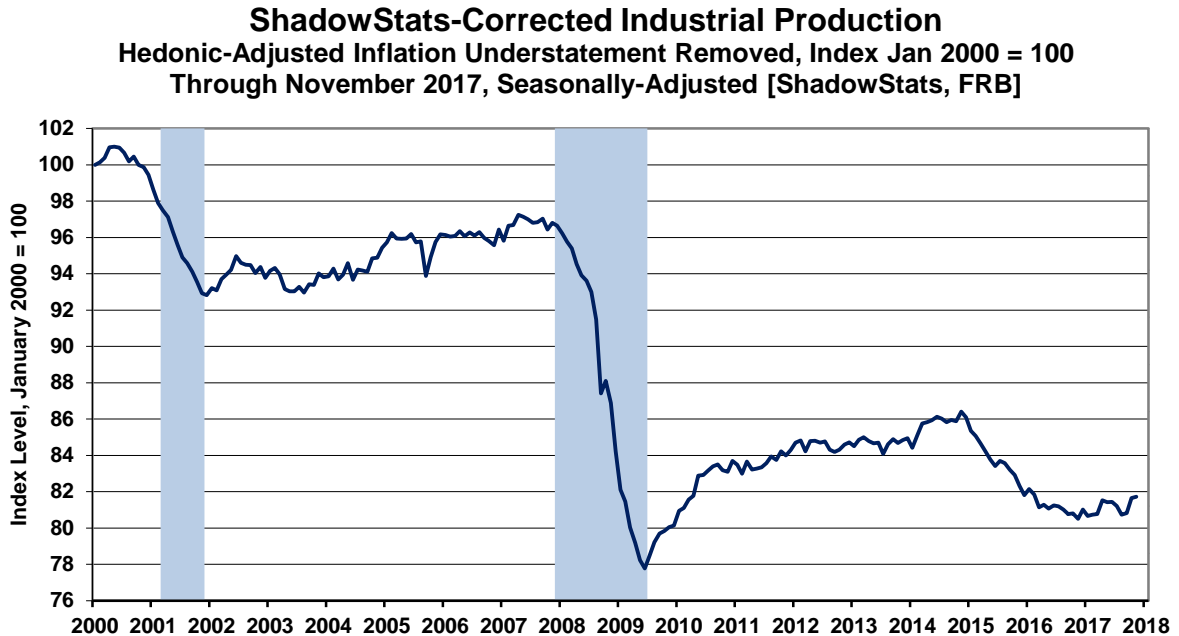
Where the corrected series has remained well shy of a formal recovery, both the official and corrected series suffered an outright contraction in both first- and second-quarter 2015; that is a pattern of severe economic weakness last seen during the economic collapse. Despite the brief third-quarter 2015 quarter-to-quarter uptick, headline fourth-quarter 2015 and first- and second-quarter 2016 industrial production continued in quarter-to-quarter contractions, but rallied thereafter. A string of seven quarters of year-to-year contraction began in second-quarter 2015 and continued through fourth-quarter 2016. First-quarter 2017 production grew both quarter-to-quarter and year-to-year, as did second-quarter 2017, with third-

quarter 2017 activity down quarter-to-quarter, partially due to the short-lived disruptions from natural disasters, but up year-to-year, as discussed in the *Reporting Detail*.

Graph 3: Indexed Headline Level of Industrial Production (Jan 2000 = 100)



Graph 4: Headline ShadowStats-Corrected Level of Industrial Production (Jan 2000 = 100)



[Extended analysis and graphics follow in the Reporting Detail.]

REPORTING DETAIL

RETAIL SALES (November 2017)

Retail Sales Boomed into November, on Top of Upside Revisions to October and September, and Well Beyond Soaring Consumer Inflation. The unusual reporting here was in the context of unstable concurrent seasonal factors in conjunction with residual, non-seasonal impact from the Atlantic Hurricane Season data disruptions. November 2017 Retail Sales showed a monthly nominal gain of 0.79%, which was 0.40% in real terms, net of inflation. That was on top of upside revisions to September and October activity. Net of the prior-period revisions, the headline nominal monthly gain would have been 1.27%. In terms of annual, year-to-year growth, nominal sales rose by 5.80%, real sales by 3.50% in November 2017, versus upwardly-revised annual nominal and real gains in October 2017, respectively, of 4.91% and 2.81%.

Hurricane-related disruptions to retail sales reporting were discussed in [Commentary No. 920](#) and [Commentary No. 916](#). Noted last month: “The hurricane-induced surge in replacement automobile sales in September 2017 continued into October, on top of an upside revision to related September activity. At the same time, hurricane-spiked gasoline prices of September abated somewhat.” Hurricane distortions largely should be worked out of various economic series by the headline reporting of January or February 2018 detail. To the extent that seasonal adjustments have been warped heavily, some data resolutions may await annual benchmark revisions in the year ahead.

While the initial, strongly-positive data in this increasingly-unstable series likely will go through major revisions in the next two months, and in the April/May 2018 benchmark revision, the current headline detail will boost consensus economic expectations, at least temporarily, until the next “negative” economic surprise comes along (today’s Industrial Production was a miserable report, in the context of prior revisions). The underlying ShadowStats outlook of non-recovering broad economic activity and renewed downturn has not changed.

As to the concurrent seasonal-adjustment instabilities (see *Headline Distortions from Shifting Concurrent-Seasonal Factors* in [Commentary No. 924](#), *Supplemental Labor-Detail Background* on page 30), only the headline retail sales data for September to November 2017, and October to November 2016 were published on a consistent basis, using the concurrent seasonal factors based on November 2017. The revisions to the October and November 2016 data showed an impact of the new seasonals creating a swing of 0.4% monthly October-to-November change in the underlying seasonal adjustment revisions.

Nominal Retail Sales—November 2017. The Census Bureau reported its “advance” estimate of November 2017 Retail Sales, yesterday, December 14th. Headline nominal activity increased by 0.79% in November, well in excess of 0.4% consensus expectations. In turn, October showed a revised monthly

headline gain of 0.55% [previously 0.23%], with September up by a revised 2.04% [previously 1.87%, initially 1.56%]. Net of the prior-month's revisions, November 2017 sales gained 1.27% for the month.

The headline, seasonally-adjusted November 2017 nominal monthly gain of 0.79% +/- 0.59% was statistically-significant (all confidence intervals are expressed at the 95% level). The revised headline September 2017 monthly retail sales gain of 0.55% +/- 0.23% also was statistically significant.

Year-to-Year Annual Change. The November 2017 nominal year-to-year change in Retail Sales showed a statistically-significant increase of 5.50% +/- 0.82%, versus upwardly revised annual gains of 4.91% [previously 4.55%] in October 2017 and 5.00% [previously 4.83%, initially 4.44%] in September 2017.

November 2017 Core Retail Sales, Net of Food and Gasoline. Reflecting an environment that in theory should be seeing the plus-side of flat, with seasonally-adjusted food prices [up by 0.02% in the November 2017 CPI-U per the Bureau of Labor Statistics (BLS)] and soaring gasoline prices [up by 7.31% for the month on a seasonally-adjusted basis, per the BLS], seasonally-adjusted grocery-store sales rose month-to-month by a headline 0.08%, with gasoline-station sales up by 2.82%.

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 historical preference for ignoring food and energy prices when “core” inflation is lower than full inflation (at times when the Fed is looking to downplay inflation)—are estimated using two approaches:

Version I: Nominal November 2017 versus October 2017 seasonally-adjusted retail sales series—net of total grocery store and gasoline-station sales—rose by 0.68%, versus the official headline aggregate sales gain of 0.79%.

Version II: Nominal November 2017 versus October 2017 seasonally-adjusted retail sales series—net of the monthly *change* in grocery store and gasoline-station revenues—rose by 0.55%, versus the official headline aggregate sales gain of 0.79%.

Real Retail Sales—November 2017—In the Context of Soaring CPI Inflation and Continued Headline Reporting Distortions, Real Sales Gained 0.40%. November 2017 CPI-U inflation (released December 13th, see prior [Commentary No. 925](#), showed a monthly gain in seasonally-adjusted consumer inflation of 0.39% in November 2017, versus 0.11% in October and 0.55% in September, with year-to-year seasonally-adjusted CPI-U inflation of 2.23% in November 2017, 2.05% in October 2017 and 2.23% in September 2017.

Accordingly, real month-to-month retail sales gained 0.40% in November 2017 versus upwardly revised monthly gains of 0.44% in October 2017 and 1.48% in September 2017. Real annual Retail Sales growth rose to 3.50% in November, versus upwardly revised annual gains of 2.81% in October 2017 and 2.72% in September 2017.

Recession Signal in Abeyance. During normal economic times, annual real growth in Retail Sales at or below 2.0% signals an imminent recession. That signal broadly had been in play since February 2015 (a “new” recession likely still will be timed from December 2014, based on industrial production, retail sales and other indicators), suggesting a deepening, broad economic downturn. November headline detail has pushed that signal back into abeyance, once more.

When that annual growth signal had moved higher, close to three-percent earlier in 2017, ShadowStats had viewed that recession signal as in temporary abeyance. Post-2017 benchmarking ([Commentary No. 882](#) of April 27th), however, annual growth rates shifted lower, towards two-percent, and then below, reviving that recession signal. In the context of volatile near-term revisions, 1.22% year-to-year real growth reported initially in August 2017 was the most-solid recession signal since the economy crashed anew into early-2015.

That August reading revised higher to 1.58% in October, along with headline annual real growth in September 2017 at a revised 2.55% and October at 2.46%, still broadly within the recession-signal range, particularly in the context of the near-term, short-lived spikes. More significantly, year-to-year real quarterly growth then stood at 2.02% in third-quarter 2017, versus 1.94% in second-quarter 2017, both close to 2.0%.

With the headline November 2017 detail, annual growth jumped to 3.50%. Despite the upside revision to September (now 2.72%), third-quarter 2017 real year-to-year was 2.08%, still in recession territory. Given the upside revision to October (now 2.81%) and the initial estimate for November (3.50%), fourth-quarter 2017 is on early trend for annual growth of 2.90%.

Annualized Real Quarterly Growth/Upside revisions to Fourth-Quarter 2016. Reflecting an upside revision to October and even greater downside revision to November 2016 real retail sales activity, fourth-quarter 2016 annualized quarterly growth revised to 2.69%, [previously 2.89%], with first-quarter 2017 annualized growth firming to 1.54% [previously 1.34%] as a result. Those revisions reflect the concurrent November 2017 seasonal-factor revisions published only for October and November 2016, aside from the two most-recent months of September and October 2017.

Second-quarter 2017 annualized real quarterly growth was unrevised at 1.68%, with third-quarter 2017 reporting, including hurricane-boosted and upwardly-revised September detail, now at 2.18% [previously 2.08%]. Based on just the spiked Novembers 2017 and spiked and upwardly revised October 2017 details, fourth-quarter 2017 real retail sales are on early track for annualized growth of 6.02%. Such was against an early-estimate of 3.43%, based solely on the initial October reporting.

Structural Liquidity Issues Continue to Impair Retail Sales. An extreme consumer-liquidity bind increasingly constrains retail sales activity (discussed in the *Consumer Liquidity Watch*). Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including retail sales, real or nominal. That circumstance—in the last ten-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad, inflation-adjusted U.S. economic activity, 72.8% of which (third-quarter 2017 real GDP activity) is dependent on personal spending and residential real estate.

As headline consumer inflation generally continues its upside climb in the year ahead, and as overall Retail Sales—net of natural-disaster impacts—continue to suffer from the ongoing consumer liquidity squeeze, the real Retail Sales data shortly should resume trending meaningfully lower, in what likely still will gain recognition as a formal “new” recession, another down-leg in the economic collapse that began in 2006, known formally as the 2007 recession.

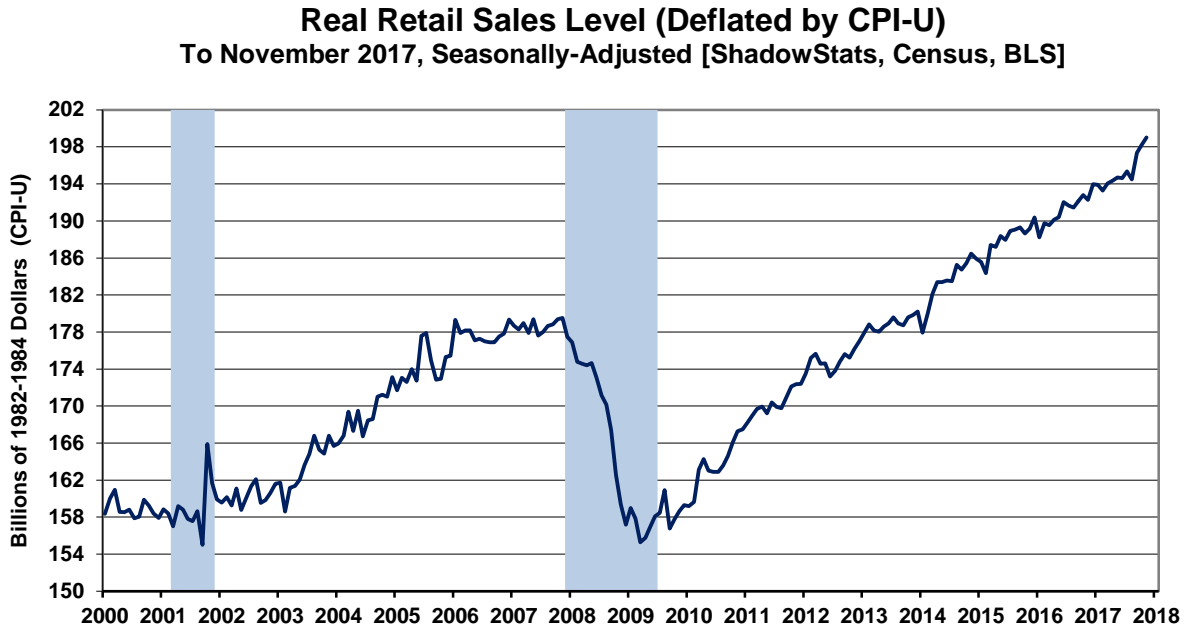
Real Retail Sales Graphs. The first of the four graphs following, *Graph 5* shows the level of real retail sales activity (deflated by the CPI-U) since 2000; *Graph 6* shows the year-to-year percent change for the

same period. Annual real growth had slowed markedly into fourth-quarter 2015 and 2016, generating an intense recession signal. With the new, near-term volatility, including the jump in November and upside revisions to real annual real growth in September and October, that recession signal, again is in temporary abeyance. *Graphs 7 and 8* show the level of, and annual growth in, real retail sales (and its predecessor series) in full post-World War II detail.

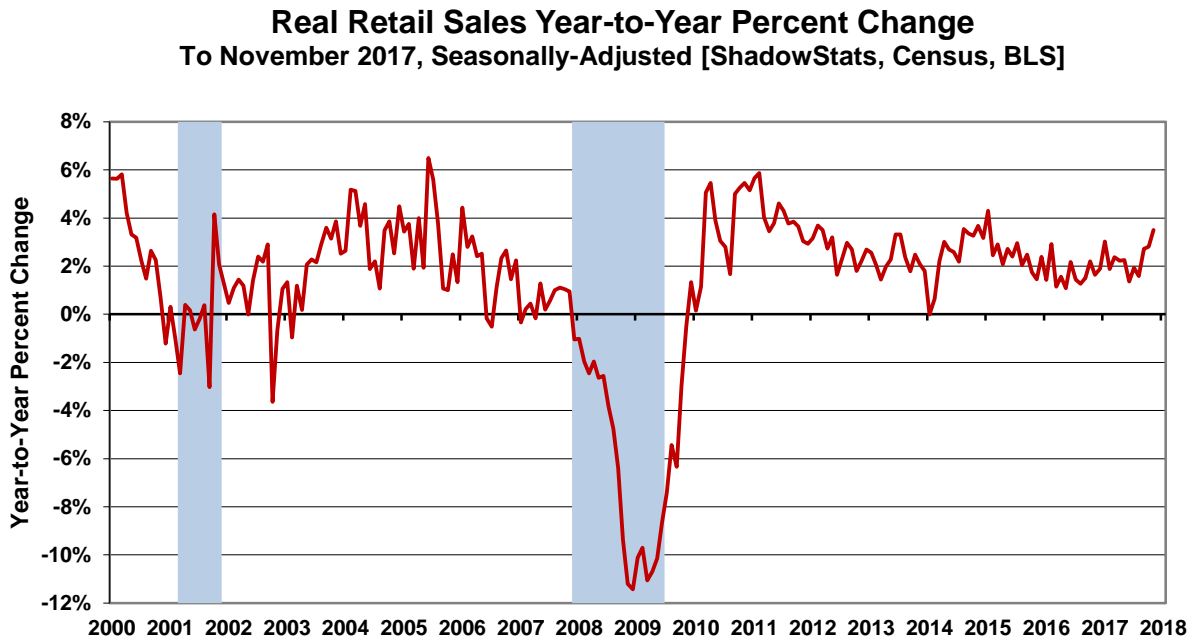
The relative strength seen in the real retail series since the economic trough in 2009 largely has reflected the understatement of the rate of inflation used in deflating the series. Discussed more fully in *Chapter 9 of [2014 Hyperinflation Report—Great Economic Tumble – Second Installment](#)*, deflation by too low an inflation number (such as the CPI-U) results in the deflated series overstating inflation-adjusted, real economic growth. Shown in the latest “corrected” real retail sales—*Graph 2* in the *Executive Summary* section—with the deflation rates corrected for the understated inflation reporting of the CPI-U, the recent pattern of real sales activity has turned increasingly negative, allowing for a brief, hurricane-related spike in September. The corrected graph shows that the post-2009 period of protracted stagnation ended, and a period of renewed and ongoing contraction began in second-quarter 2012 and continues to date. The corrected real retail sales numbers use the ShadowStats-Alternate Inflation Measure (1990-Base) for deflation instead of the CPI-U.

[Graphs 5 to 8 begin on the next page.]

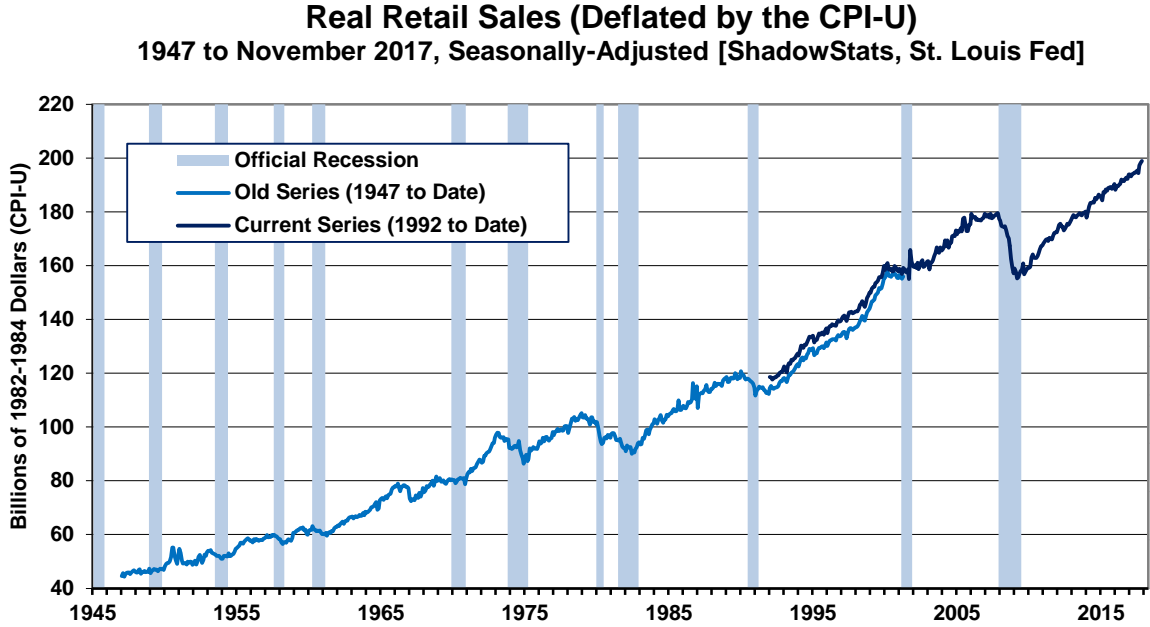
Graph 5: Level of Real Retail Sales (2000 to Date)



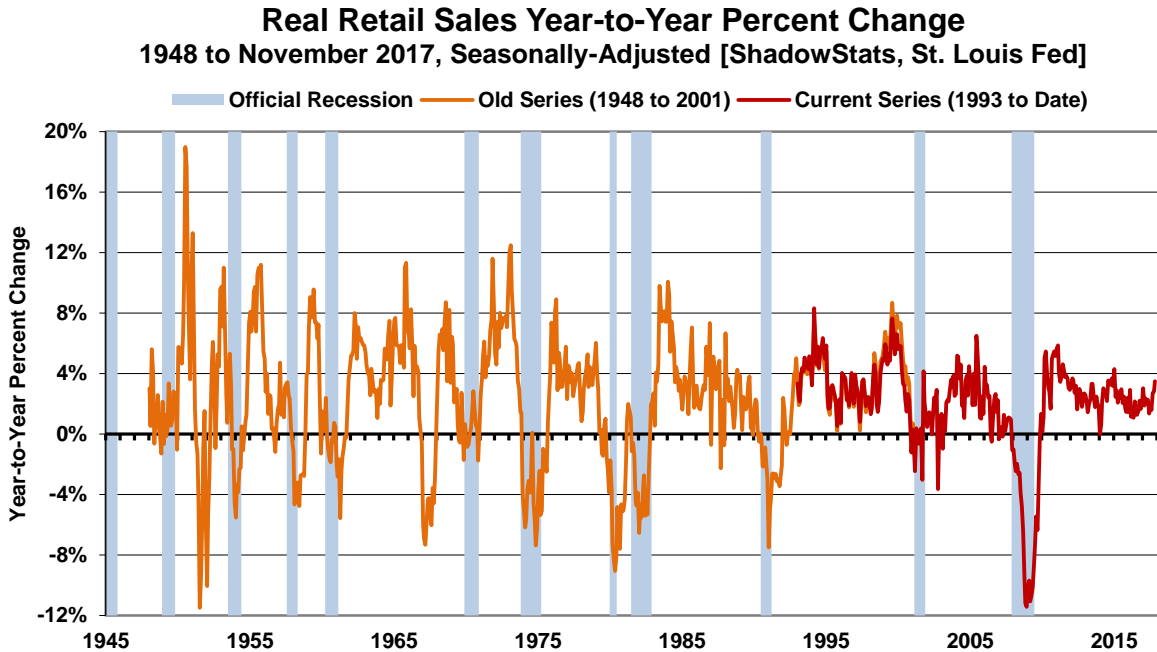
Graph 6: Real Retail Sales (2000 to Date), Year-to-Year Percent Change



Graph 7: Level of Real Retail Sales (1947 to Date)



Graph 8: Real Retail Sales (1948 to Date), Year-to-Year Percent Change



INDUSTRIAL PRODUCTION (November 2017)

November 2017 Industrial Production Would Have Been Unchanged, But for Catch-Up Oil Activity from Hurricane Nate Disruption. Along with the headline reporting of a 0.24% monthly gain in November 2017 aggregate Industrial Production, the issuing Federal Reserve Board noted that, “The index for mining increased 2.0% percent, as oil and gas extraction returned to normal levels after being held down in October by Hurricane Nate. Excluding the post-hurricane rebound in oil and gas extraction, total industrial production would have been unchanged in November.”

Amidst Downside Revisions to September Detail and Earlier, Hurricane Boosts to Production Largely Have Run Their Course. The Federal Reserve continued to catch up with measuring the impact of hurricanes on industrial production in recent months, with October 2017 activity reflecting some upside revision to hurricane-boosted production of automobiles, to fill the auto-sales pipeline with replacement vehicles for those damaged in the hurricanes. Nonetheless, that October detail also reflected a net-downside revision to consumer goods production (including increased automobiles). Automobile production slowed in November, but remained elevated. The final catch-up could trigger a monthly decline in headline December production. Separately, aggregate production levels revised lower from September 2017 back to June 2017.

Last month, the Fed had left in place in the prior-month’s downside revisions to pre-hurricane production activity. As usually is the case, the Fed overestimates headline activity with overly positive assumptions (a common flaw in most government-related economic estimates). Near-term catch-up for current reporting usually is in the next annual benchmark revision, which the Fed announced today would be “around the end of the first quarter of 2018.” [For background, ShadowStats coverage of the prior annual benchmarking of April 2, 2017 is found here: [Commentary No. 877](#). Separately, as background, the prior two months of coverage on the hurricane distortions are found here: [Commentary No. 921](#) and [Commentary No. 917](#).]

Where the near-term hurricane boosts to, and the distortions of, current economic activity should prove to be fleeting, the underlying, broadly-faltering U.S. economy should be dominating headline economic reporting, once again, and all too soon, most likely by early-2018, as discussed, again, in the *Opening Comments*.

Monthly Production Still Has Just Recovered Its 2007 Pre-Recession High for a Second Time. With the reporting of first-quarter and second-quarter 2017 details, production showed both annual and quarterly gains, although the headline activity had remained below pre-recession highs seen in 2007, except for a brief recovery in third-quarter 2014, and one-quarter’s expansion in fourth-quarter 2014, before dropping back below the 2007 pre-recession peak. On a monthly basis, the pre-recession high of November 2007 for industrial production was recovered briefly in June of 2014, with October and November 2014 a short-lived peak. Headline October 2017 activity recovered the monthly pre-recession high, for a second time, but the quarterly numbers, through the latest third-quarter 2017 reporting, still remained shy of a second “recovery.” With October 2017 at 0.77% above the pre-recession peak, and November 2017 above the peak by 1.01%, with monthly production likely to fall back in December, whether or not fourth-quarter 2017 activity will be a new recovery still remains to be seen.

In contrast, the broadly stagnant (just-revised to uptrending due solely to a downside revision in October activity), dominant Manufacturing Sector in November 2017 remained 4.70% (-4.70%) shy of recovering

its pre-recession peak of December 2007. The Manufacturing sector is showing its longest stretch of economic non-expansion in the 100-year history of Industrial Production, now at 119-months and counting. In contrast, it took the post-war U.S. economy 96-months to retool and rebuild domestic manufacturing to its World War II peak. In the first down-leg of the Great Depression, it took 88-months to recover the pre-collapse high.

One of the Better-Quality Series, Industrial Production Still Overstates Headline Activity. Despite the March 31, 2017 benchmark revisions, which hit historical production detail hard, current headline production reporting still overstates economic activity tied to understated inflation. With the benchmarked 2016 industrial production representing 59% of the real value of Gross Domestic Product (GDP), the broad economy remains in the harsh reality of ongoing recession, one that has continued from somewhat before 2007. Headline production remains troubled by its dominant Manufacturing Sector (76.4% of aggregate production), which, again, never has recovered its pre-recession peak, continuing in low-level, non-recovered economic stagnation (again, see *Graph 12*).

All this is despite the continuing happy hype out of the Bureau of Economic Analysis (BEA), which has guesstimated second-estimate, third-quarter 2017 real GDP activity at 14.5% above its pre-recession peak (see [Commentary No. 923](#)). No other major economic series shows anything close to that purported level of activity (see also the discussions in [Commentary No. 877](#) and [No. 859 Special Commentary](#)).

Headline Industrial Production—November 2017. The Federal Reserve Board released its first estimate of seasonally-adjusted, November 2017 Industrial Production, this morning, December 15th. The new detail reflected downside revisions to pre-October 2017 detail, where headline October activity likely reflected the peak in positive growth distortions from recent hurricane activity. Headline November 2017 production increased by 0.24% month-to-month, having gained a revised 1.17% [previously 0.94%] October 2017. The revised, increased monthly growth in October only reflected a downside revision to the September 2017 index, with continuing downside index-level revisions back to July. In that context September month-to-month activity revised lower to 0.26% [previously 0.40%], having declined by a revised 0.45% (-0.45%) [previously 0.46% (-0.46%)] in August, a revised decline of 0.13% (-0.13%) [previously down by 0.01% (-0.01%)] in July, following a revised gain of 0.18% [previously 0.16%] in June. Net of prior-period revisions, November 2017 production still was 0.24%.

Headline Monthly November 2017 Growth by Major Sector. Detailed by major industry group (see *Graphs 13, 15, 20 and 22*), the headline November 2017 monthly aggregate gain of 0.24% was composed of monthly gains of 0.18% dominant in manufacturing activity, a decline of 1.85% (-1.85%) in utilities and a gain of 1.97% in mining activity (including oil and gas production). Again, as noted in the opening paragraph of this section, the increase in mining activity reflected catch-up from Hurricane Nate disruptions. Distorted reporting aside, headline November production was “unchanged.”

Year-to-Year Change. Year-to-year November 2017 industrial production gained 3.55%, versus an unrevised 2.88% annual gain in October 2017, against a downwardly-revised gains of 1.87% [previously 2.10%] in September 2017, 1.46% [previously 1.54%] in August 2017, 1.84% [previously 1.94%] July 2017 and versus 2.06% [previously 2.04%] in June 2017.

Quarterly and Annual Production Changes. Year-to-year growth rates in quarterly production had continued to slow and then decline, ranging from a positive 1.72% in first-quarter 2015, to year-to-year

declines of 0.76% (-0.76%) in second-quarter 2015, 1.08% (-1.08%) in the third-quarter 2015 and 2.66% (-2.66%) in fourth-quarter 2015.

The annual declines continued, down by 2.17% (-2.17%) in first-quarter 2016, by 1.34% (-1.34%) in second-quarter 2016 and by 1.24% (-1.24%) in third-quarter 2016. Fourth-quarter 2016 production contracted year-to-year for the seventh-straight quarter by 0.14% (-0.14%).

First-quarter 2017 detail, annual change rose by a revised 0.58%, the first annual gain since first-quarter 2015. Second-quarter 2017 production gained year-to-year by a 2.14%, with the third estimate of third-quarter 2017 at an annual gain of 1.72% [previously 1.86%].

Annualized Quarter-to-Quarter. Going back to first-quarter 2015 industrial production contracted at an annualized quarterly pace of 3.30% (-3.30%), having gained by 2.72% in fourth-quarter 2014. That was followed by a quarterly contraction of 3.97% (-3.97%) in second-quarter 2015, with a third-quarter 2015 production gain of 0.37%, followed by a fourth-quarter 2015 contraction of 3.66% (-3.66%).

The first-quarter 2016 annualized quarterly contraction was 1.34% (-1.34%), with second-quarter 2016 down at an annualized 0.68% (-0.68%). Third quarter 2016 gained at an annualized pace of 0.78%, followed by a gain of 0.70% in fourth-quarter 2016,

The first-quarter 2017 annualized quarterly gain was 1.54%. The second-quarter 2017 gain was a revised 5.663% [previously 5.54%], with hurricane-disrupted third-quarter 2017 growth now showing a revised annual contraction of 0.87% (-0.87%) [previously 0.31% (-0.31%)].

Production Graphs. The regular two sets of long- and short-term plots of industrial production levels and annual growth rates (*Graphs 8 to 11*) set the background for the drill-down detail graphs of various components of the aggregate industrial series (*Graphs 12 to 25*).

Graphs 8 and 9, and Graphs 10 and 11 show headline industrial production activity to date. *Graph 8* shows the monthly year-to-year percent change in the aggregate series, in historical context since World War II. Post-benchmarking, activity was somewhat stronger coming into 2014, but much weaker going into 2015, as detailed in [Commentary No. 877](#).

Graph 8 shows the monthly level of the production index post-World War II, with a topping-out and renewed downturn—deepening quarterly contractions in first- and second-quarter 2015, with a bounce in third-quarter 2015, followed by renewed and deeper contractions in fourth-quarter 2015 and first- and second-quarter 2016, turning to the plus-side in second-half 2016 into second-quarter 2017 and the recent third-quarter hurricane disruptions and accompanying near-term volatility, with a relatively stagnant November 2017 reading. Such patterns of monthly, quarterly and annual declines post late-2014 to the onset of 2017 (see *Graph 9*) were seen last in the economic collapse into 2009, and historically never seen outside of what would be recognized as formal recessions. *Graphs 10 and 11* show the same series in near-term detail, beginning in January 2000.

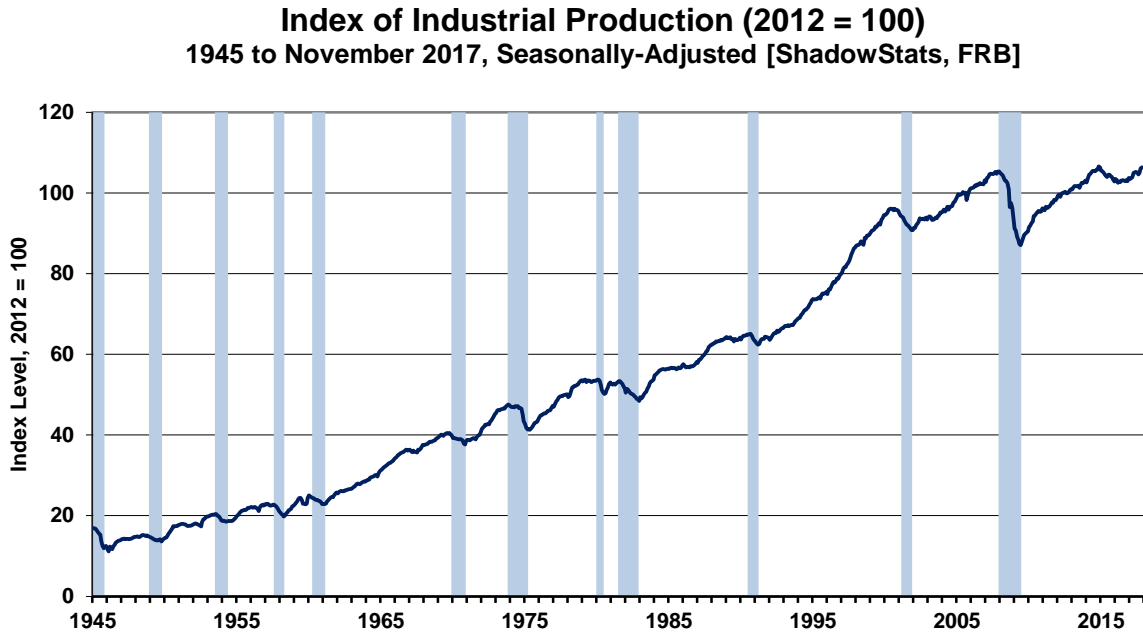
Seen most clearly in *Graph 13*, year-to-year activity dipped anew in 2013, to levels usually seen at the onset of recent recessions, bounced higher into mid-2014, fluctuated thereafter, turning negative, again, into 2015 and through 2016 as seen only in formal recessions. In the context of the 2017 benchmark revisions, year-to-year growth remains well off the recent relative peak for the series, which was 8.55% in June 2010, going against the official June 2009 trough of the economic collapse. Indeed, as shown in

Graph 9, the June 2009 (the end of second-quarter 2009) year-to-year contraction of 15.43% (-15.43%) was the steepest annual decline in production since the shutdown of wartime production following World War II.

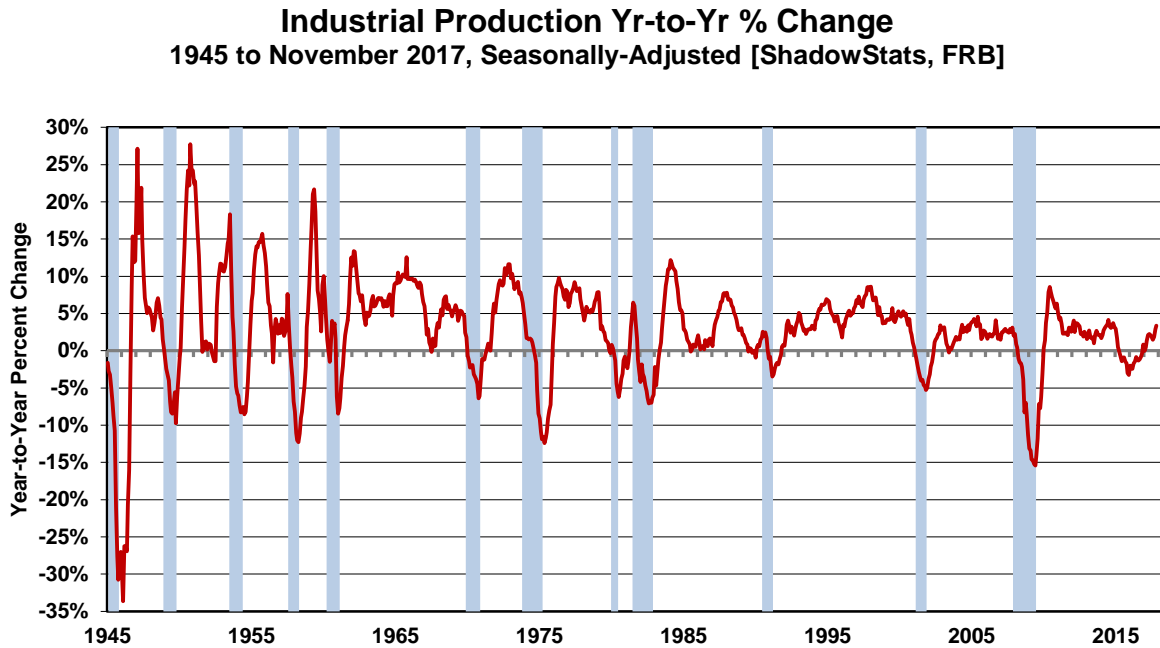
Although generally now in low-level stagnation, official production levels had moved higher since the June 2009 trough, corrected for the understatement of inflation used in deflating portions of the industrial production index (see the *Executive Summary* section, *Graph 4*). That series has shown more 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 growth—purportedly already neutered of any inflation impact—contracted in both first- and second-quarter 2015, moved minimally higher into 2016 through mid-2017. The “corrected” series has contracted quarter-to-quarter throughout 2016 and with some leveling off and minimal uptick into early-2017, with a downturn thereafter, now with an uptick in the post-disaster recovery.

[Graphs 8 to 11 begin on the next page.]

Graph 8: Index of Industrial Production (Aggregate) since 1945

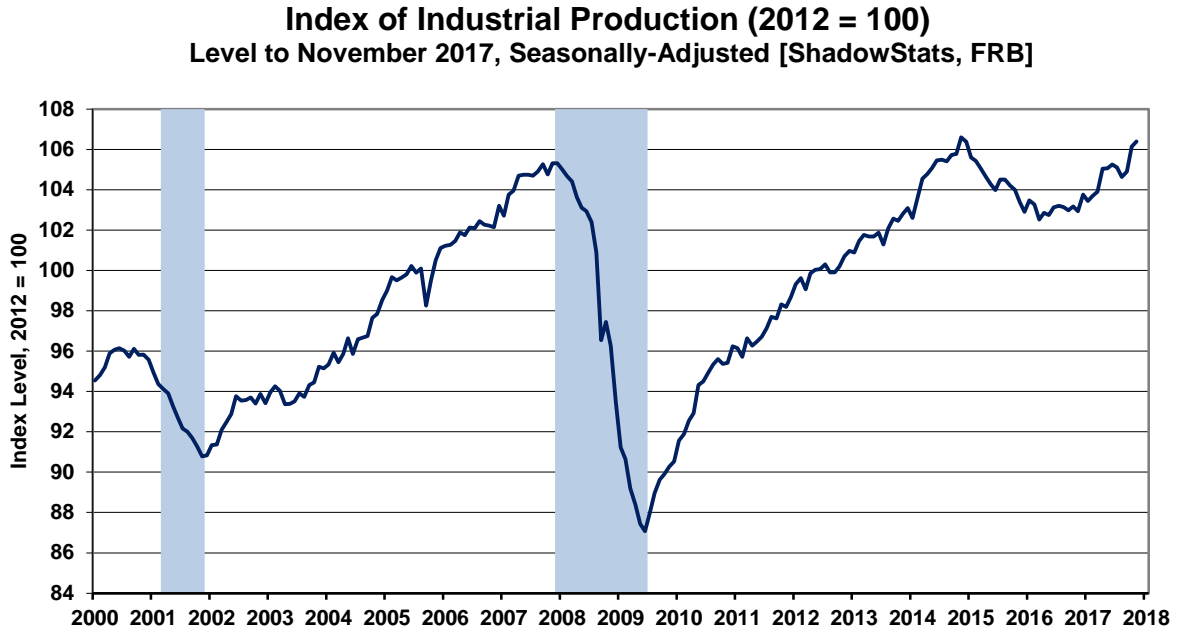


Graph 9: Industrial Production, Year-to-Year Percent Change since 1945

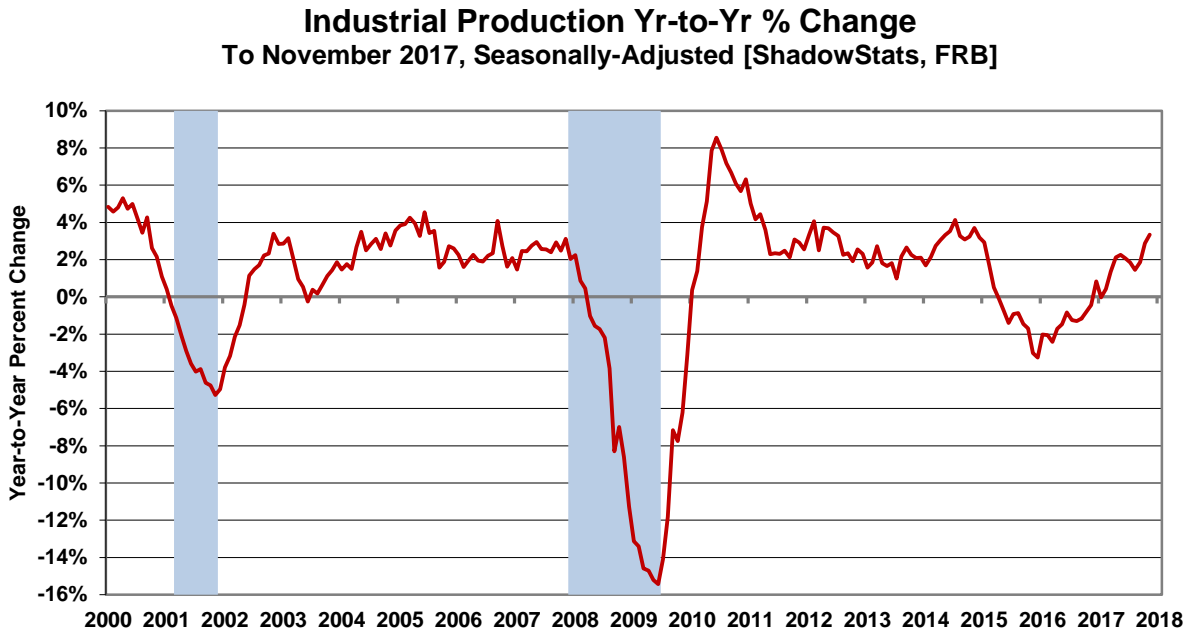


Drilling Down into the November 2017 U.S. Industrial Production Detail. Graphs 10, 12, 17 and 19 show headline reporting of industrial production and its major components.

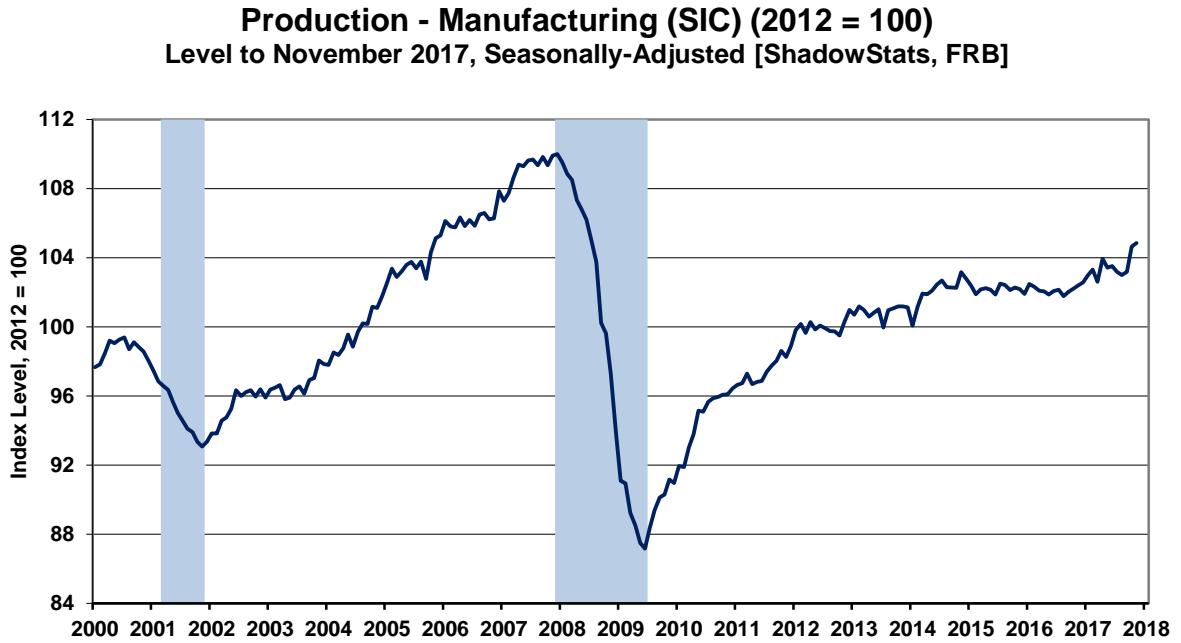
Graph 10: Index of Aggregate Industrial Production since 2000



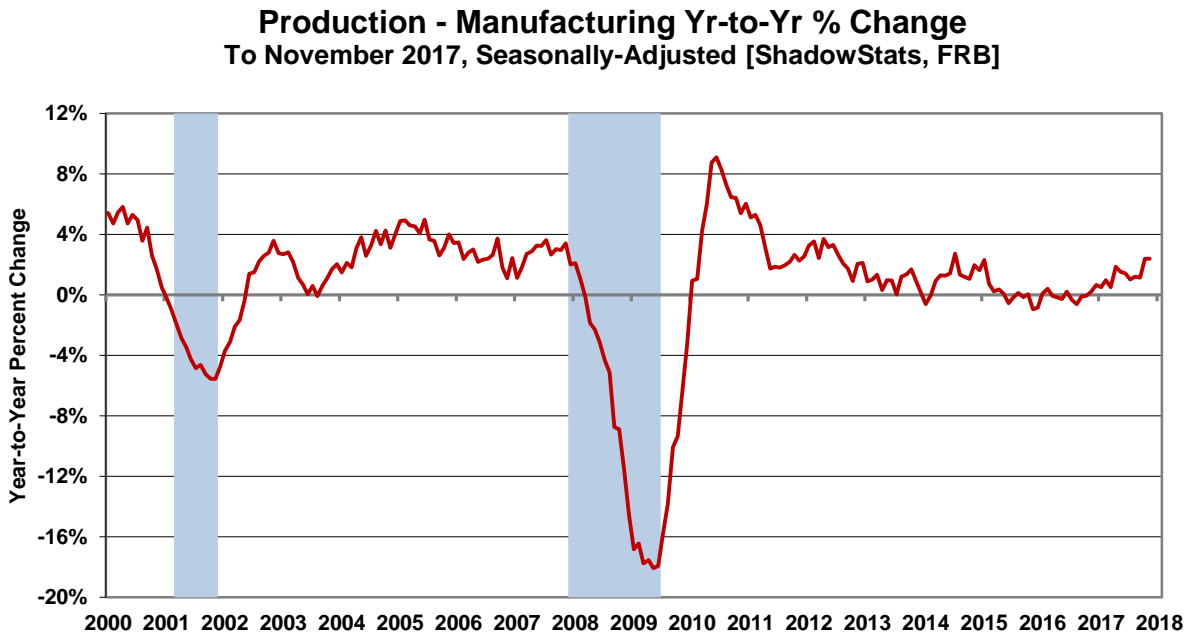
Graph 11: Aggregate Industrial Production, Year-to-Year Percent Change since 2000



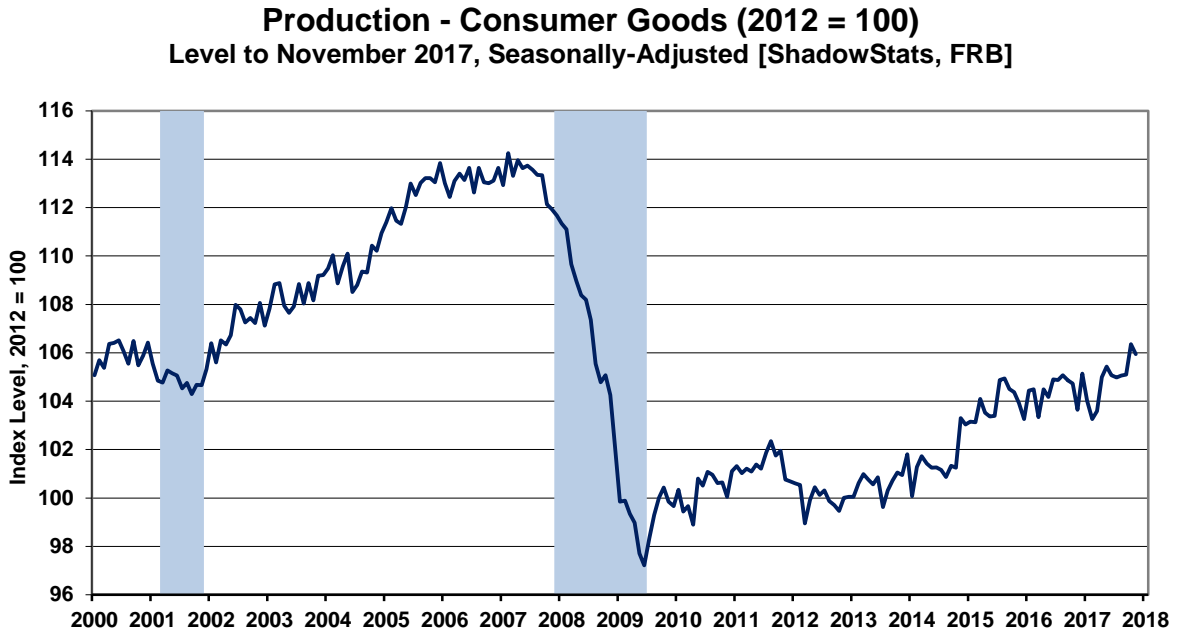
Graph 12: Industrial Production - Manufacturing (76.4% of the IIP in 2016)



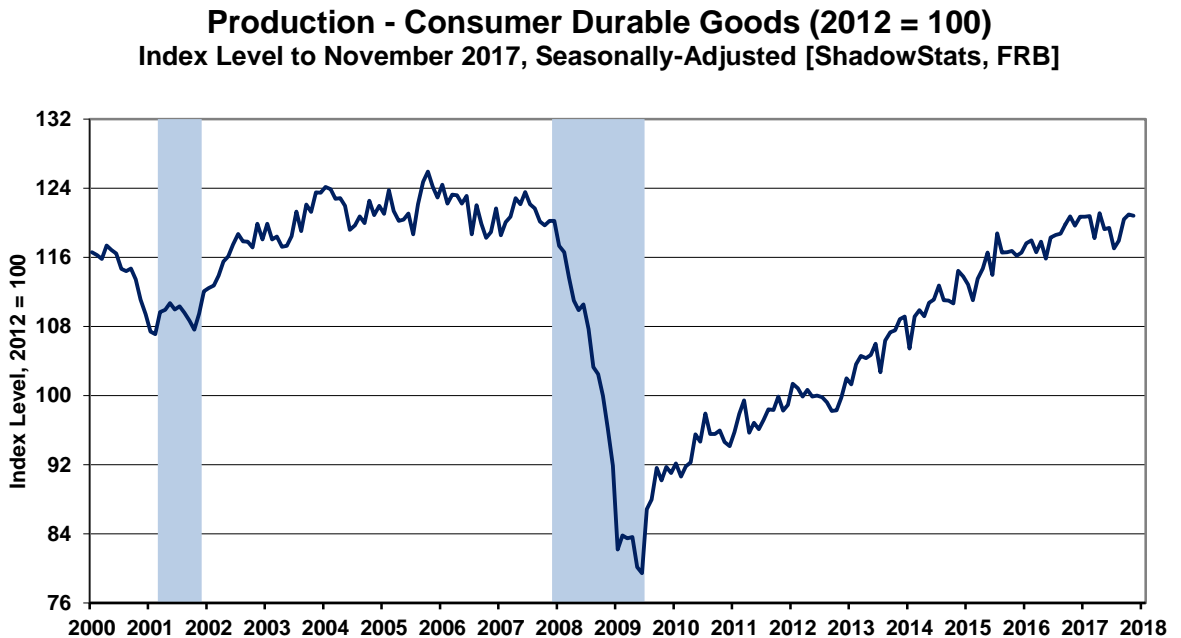
Graph 13: Industrial Production - Manufacturing, Year-to-Year Percent Change Since 2000

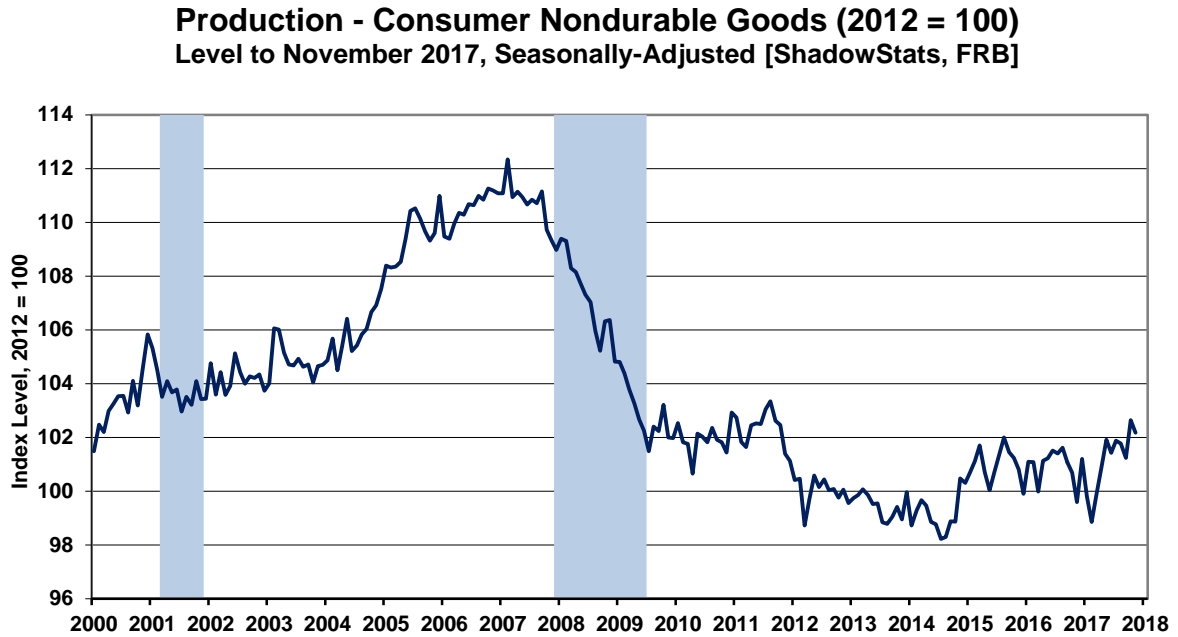


Graph 14: Consumer Goods (28.2% of the Aggregate in 2016)



Graph 15: Durable Consumer Goods (6.3% of the Aggregate in 2016)



Graph 16: Nondurable Consumer Goods (21.9% of the Aggregate in 2016)

The aggregate production index (*Graph 10*) contracted quarter-to-quarter in both first- and second-quarter 2015, with a third-quarter 2015 bounce, followed by ongoing, consecutive quarterly contractions from fourth-quarter 2015 through second-quarter 2016. Year-to-year declines by quarter were seen for seven consecutive quarters, from second-quarter 2015 through fourth-quarter 2016, with first-quarter 2017 activity positive on both a quarterly and annual basis, flipped to fluctuating monthly and quarterly volatility by lingering and varied hurricane disruptions and continuing recovery from same.

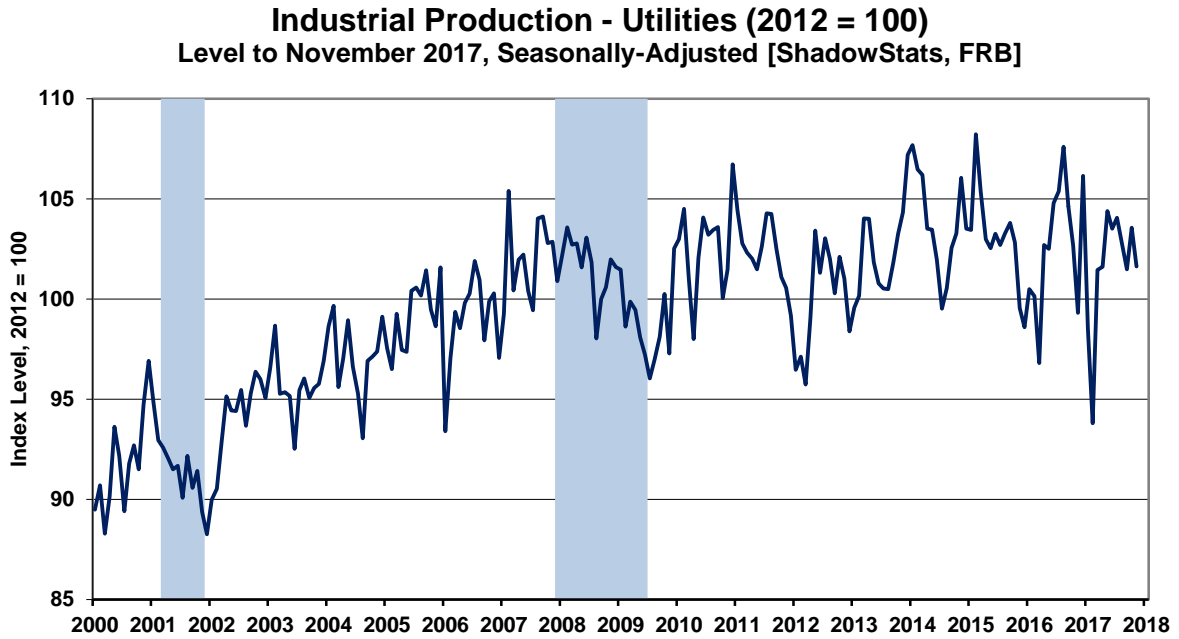
Shown in *Graphs 12, 17 and 19* are the three major industry sectors, Manufacturing, Utilities and Mining, all of which were distorted heavily to the downside by weather in the August 2017 detail, all sectors down month-to-month. In the context of downside prior-period revisions and declining impact from hurricane distortions, all three major industry sectors moved higher month-to-month with the September 2017 detail, and again, in October, except for Mining, which was hit by Hurricane Nate. Hurricane Nate spiked November Mining Activity, without which November Industrial Production was flat, per the Fed.

The Manufacturing graphs precede this, the other graphs follow, updated for the latest disrupted detail, subject to further revisions and added commentary in the next couple of months. *Graphs 13, 18 and 20*, show the respective plots of year-to-year change for those series.

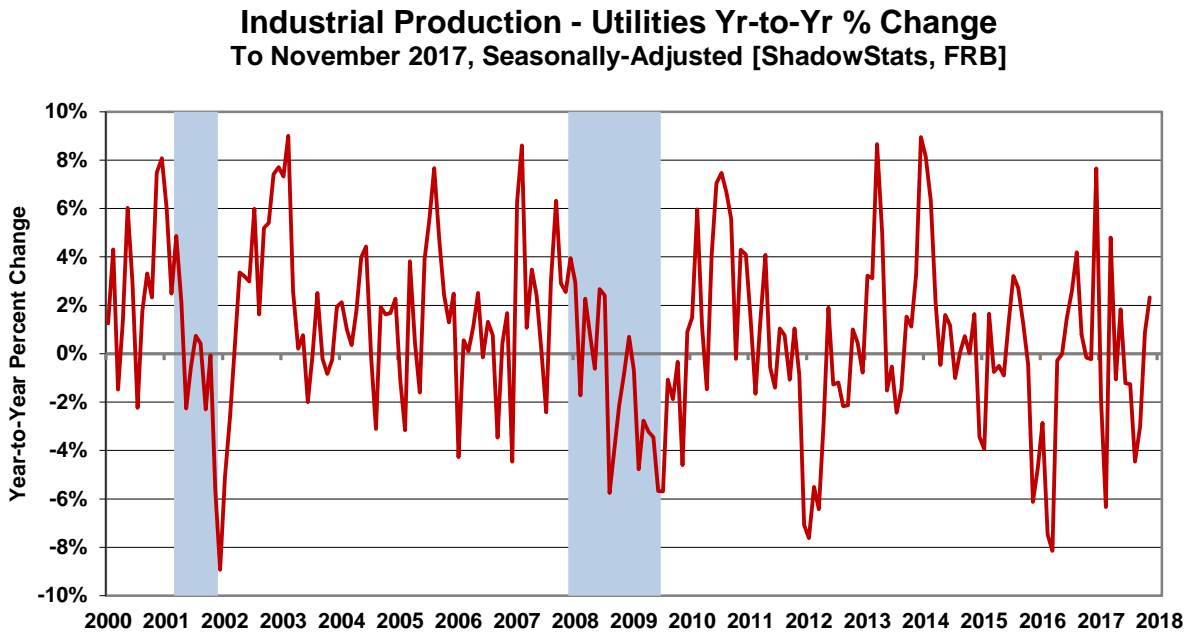
The preceding Manufacturing *Graphs 12 to 16* include reflect various levels of consumer goods production (*Graphs 14 to 16*), all impacted by weather distortions and recovery from same. Faltering and waning replacement-auto manufacturing in November is reflected in the aggregate and durable consumer goods graphs.

The next two *Graphs 17 and 18* reflect weather-impacted Utilities activity.

Graph 17: Industrial Production - Utilities (10.6% of the Aggregate in 2016)



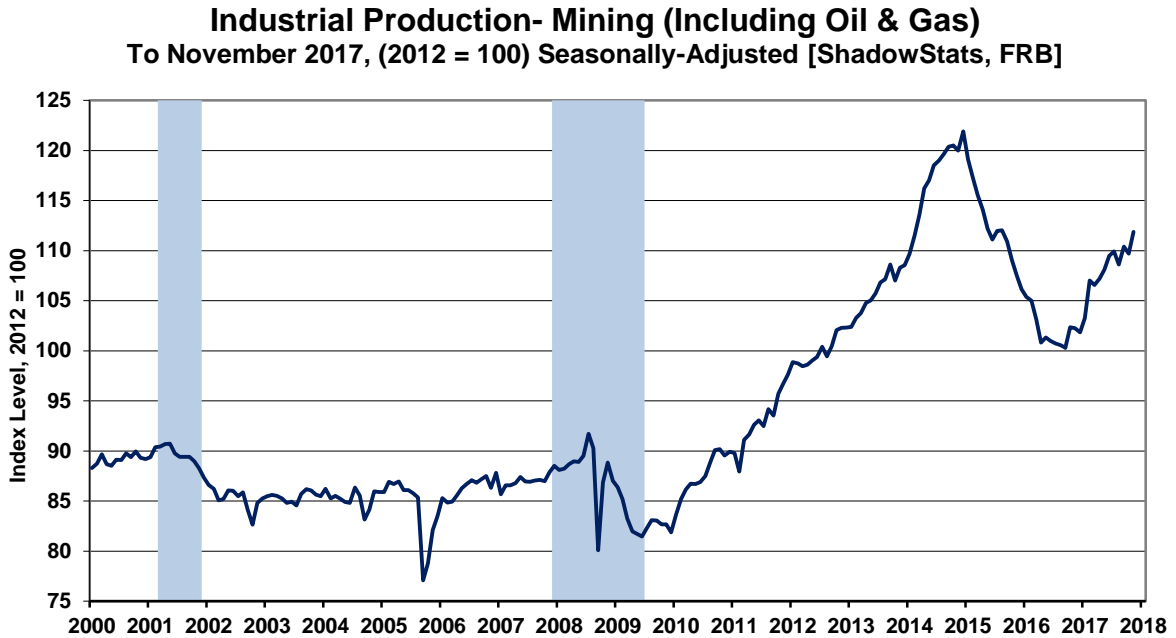
Graph 18: Industrial Production - Utilities, Year-to-Year Percent Change Since 2000



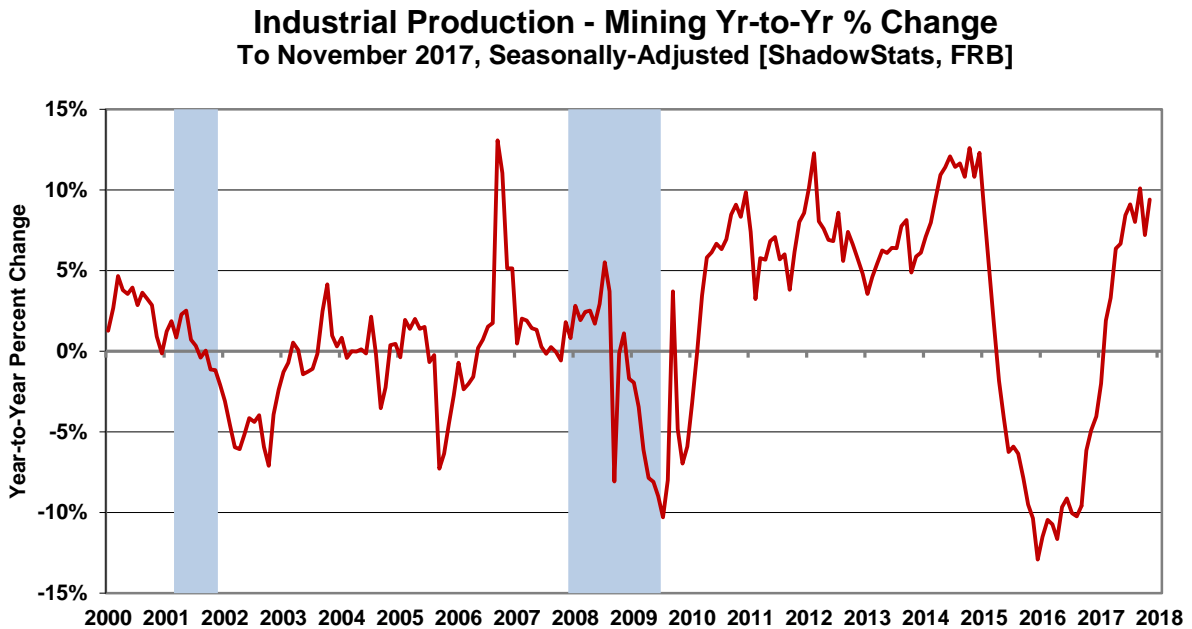
The final set of Mining *Graphs 19 to 25*, encompasses plots of related mining/oil production or exploration activity. Where gold mining activity continued to rally, month-to-month, in November, coal mining activity continued to sink. Oil and gas extraction rebounded in November 2017, exceeding pre-

hurricane levels of activity, oil and gas drilling continued in decline. Gulf Coast activity was impacted directly by Hurricanes Harvey in August and September, and by Hurricane Nate hit in October 2017.

Graph 19: Industrial Production - Mining, Including Oil and Gas (12.9% of the Aggregate in 2016)



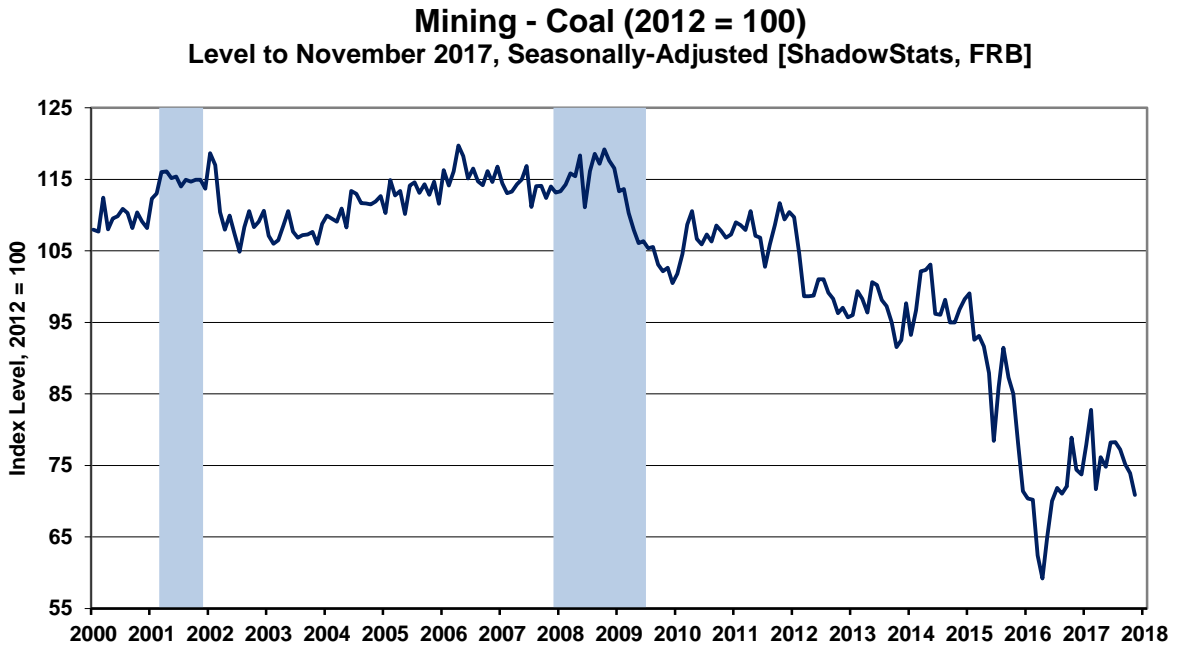
Graph 20: Industrial Production - Mining, Year-to-Year Percent Change



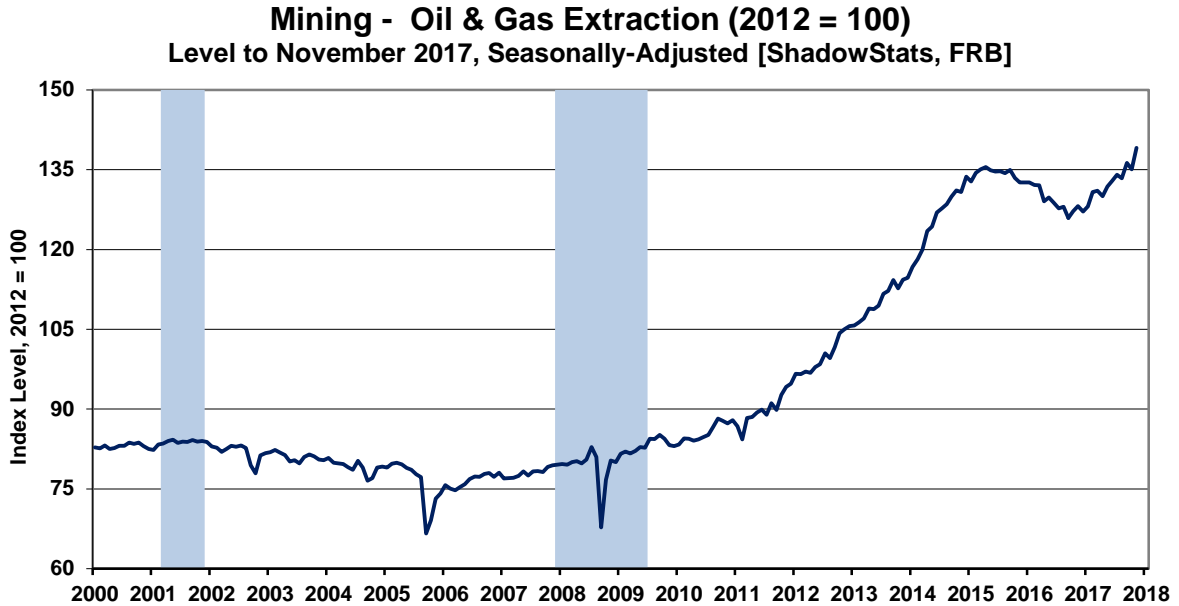
Graph 21: Mining – Gold and Silver Mining (Since 2000)



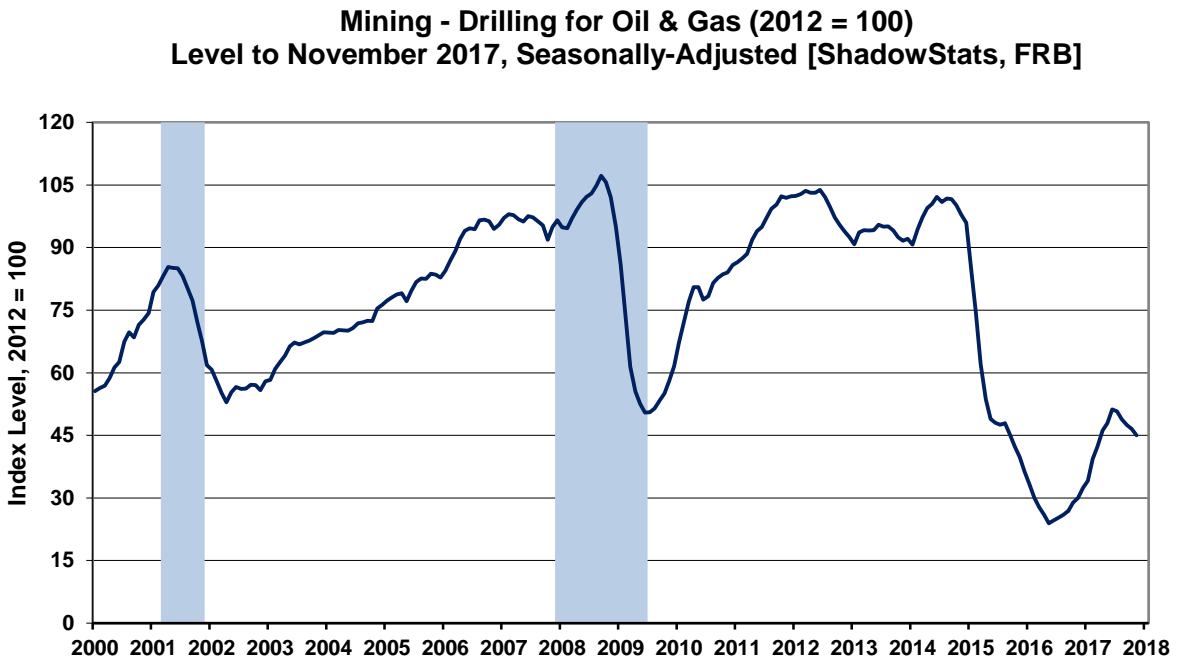
Graph 22: Mining - Coal Mining (Since 2000)



Graph 23: Mining – U.S. Oil & Gas Extraction (Since 2000)



Graph 24: U.S. Drilling for Oil & Gas (Since 2000)



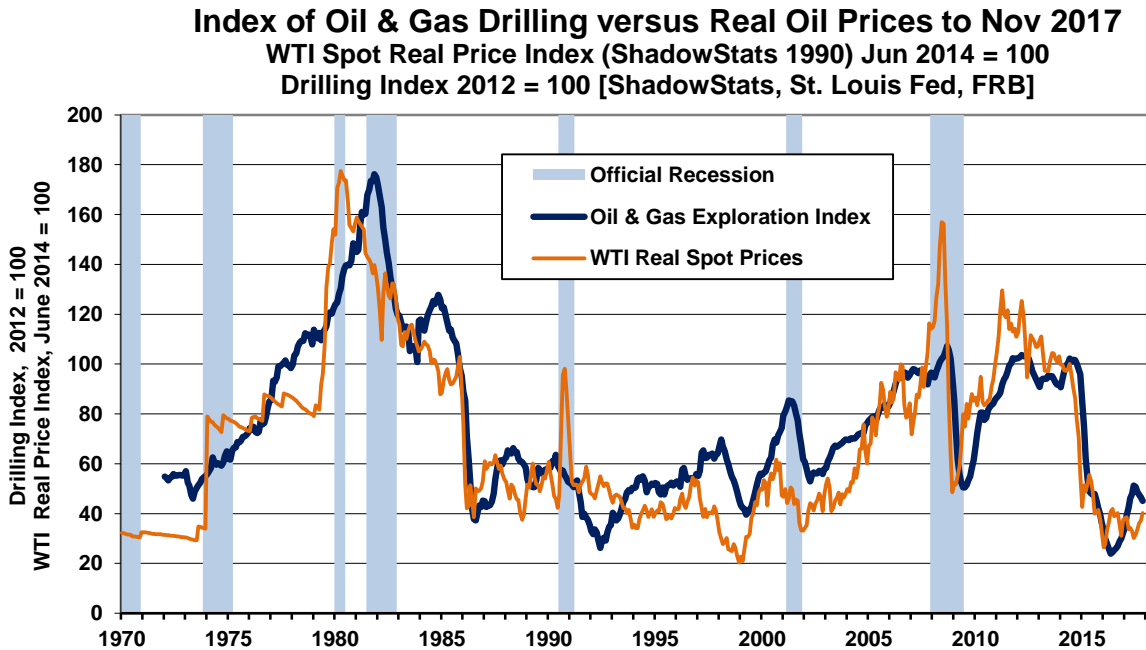
Shown in *Graph 25*, with some lag following sharp movements in oil prices, oil and gas exploration tends to move in tandem, and an upswing in exploration, indeed, appeared to have been in place with what was at least a short-term bottoming in oil prices in early 2016. Prices rallied into mid-2016, then plateaued, and had been moving lower into 2017, with oil and gas exploration easing in July 2017 versus June 2017,

the first month without a sharp month-to-month gain, since the boost from the 2016 upturn in oil prices. Yet, oil prices have risen in recent months, with exploration marred somewhat by hurricane disruptions. The oil price index used here is for the West Texas Intermediate (WTI) monthly average spot price, deflated using the ShadowStats Alternate CPI measure (1990 Base). The graph lines have been highlighted to show more clearly the price-level movement, which visually had coincided graphically with the movement in the drilling levels recently.

When the dollar weakens, dollar-denominated oil prices also begin to strengthen, even in a circumstance with excess supply conditions. At such time as the U.S. dollar declines meaningfully—ShadowStats looks for a massive sell-off in the dollar in the year ahead—U.S. dollar-denominated oil prices should rally sharply in response (see also [General Commentary No. 811](#)). That said, post-election, the U.S. dollar had rallied, but there had not been quite a commensurate decline in oil prices, and recently the dollar has begun to pull back. Where supply had been tightened artificially (see the discussion in [No. 859 Special Commentary](#)), oil prices showed some increase and oil and gas extraction and exploration continued to pick up accordingly, again with some lag. As the dollar substantially weakens anew, artificial supply constraints likely will ease in tandem, although both the dollar and oil prices have backed off recent, relative peaks.

That said, both oil prices and drilling activity had been meaningfully boosted and hit, respectively in August and September, due particularly to the impact of Hurricane Harvey on the Gulf Coast. Prices, extraction and drilling have begun, and should continue to move back to more-regular movement, but those factors also remain subject to, and are reflective of, political developments in the Middle East.

Graph 25: Mining – U.S. Drilling for Oil & Gas versus Real Oil Prices (WTI ShadowStats 1990 Base)



[The Consumer Liquidity Watch begins on the next page.]

CONSUMER LIQUIDITY WATCH

CONSUMER LIQUIDITY CONDITIONS: INCOME, CREDIT AND RELATIVE OPTIMISM.

[There have been no revisions to this section from the version published in prior Commentary No. 926.]

Consumer Liquidity Stresses Continue to Constrain Broad Economic Activity. The U.S. consumer faces continuing financial stress, increasingly reflected in renewed softening of fundamental headline economic activity, including Payroll-Employment, Real Retail Sales, Housing and the impacted Manufacturing/Production sector, net of what have been mixed, but significant, near-term hurricane distortions. Those distortions broadly should have passed from headline economic reporting by January 2018 headline detail. Those effects have been and will continue to be discussed in separate analyses of the relevant series.

Where those series have faced near-term, disaster-triggered reporting disruptions, liquidity stresses nonetheless intensified, at least temporarily, in hurricane-hit regions of the United States, where, for example, related September and October 2017 employment/ unemployment details were heavily disrupted/distorted (see [Commentary No. 919-B](#)).

Liquidity Issues Limit Economic Activity. Severe and persistent constraints on consumer liquidity of the last decade or so drove economic activity into collapse through 2009, and those conditions have prevented meaningful or sustainable economic rebound, recovery or ongoing growth since. The limited level of, and growth in, sustainable real income, and the inability and/or unwillingness of the consumer to take on new debt have remained at the root of the liquidity crisis and ongoing economic woes.

These same pocket-book issues contributed to the anti-incumbent electoral pressures in the 2016 presidential race. The post-election environment showed a near-term surge in both the consumer confidence and sentiment measures to levels generally not seen since before the formal onset of the recession in 2002, let alone 2007. Yet, underlying liquidity conditions, economic reality and lack of positive actions out of the government to turn the economy meaningfully, all have continued to remain shy of consumer hopes. Mirroring the economic hype in the popular press, consumer optimism had rallied strongly in recent months, although monthly changes have begun to falter anew. The “strong” reading in November 2017 Consumer Confidence was the highest level seen since December 2000, when the confidence number was collapsing into the onset of the 2001 recession, still the early-December 2017 reading of Consumer Sentiment has continued to back off its recent multi-year peak.

Including the various consumer income stresses discussed in [Special Commentary No. 888](#), broad, underlying consumer-liquidity fundamentals simply have not supported, and still do not support a turnaround in general economic activity—a post “Great Recession” expansion—and broadly are consistent with a “renewed” downturn in that non-recovered economic activity. Indeed, never truly recovering post-Panic of 2008, limited growth in household income and credit have eviscerated and

continue to impair broad, domestic U.S. business activity, which is driven by the relative financial health and liquidity of consumers. These underlying liquidity conditions and reality—particularly income and credit—remain well shy of consumer hopes and needs.

The combined issues here have driven the housing-market collapse and ongoing, long-term stagnation in consumer-related real estate sales and construction activity, and have constrained both nominal and real retail sales. Related, personal-consumption-expenditure and residential-construction categories accounted for 73% of the headline real, third-quarter 2017 U.S. GDP.

With the better-quality economic indicators and underlying economic reality never having recovered fully from the collapse into 2009, consumers increasingly should pull back on consumption in the months ahead. Underlying reality is evident in more-meaningful economic indicators—not the GDP—irrespective of the transient, gimmicked boosts to, and current headline slowing in, that most worthless of economic series, discussed most in the *Executive Summary* of [Commentary No. 923](#).

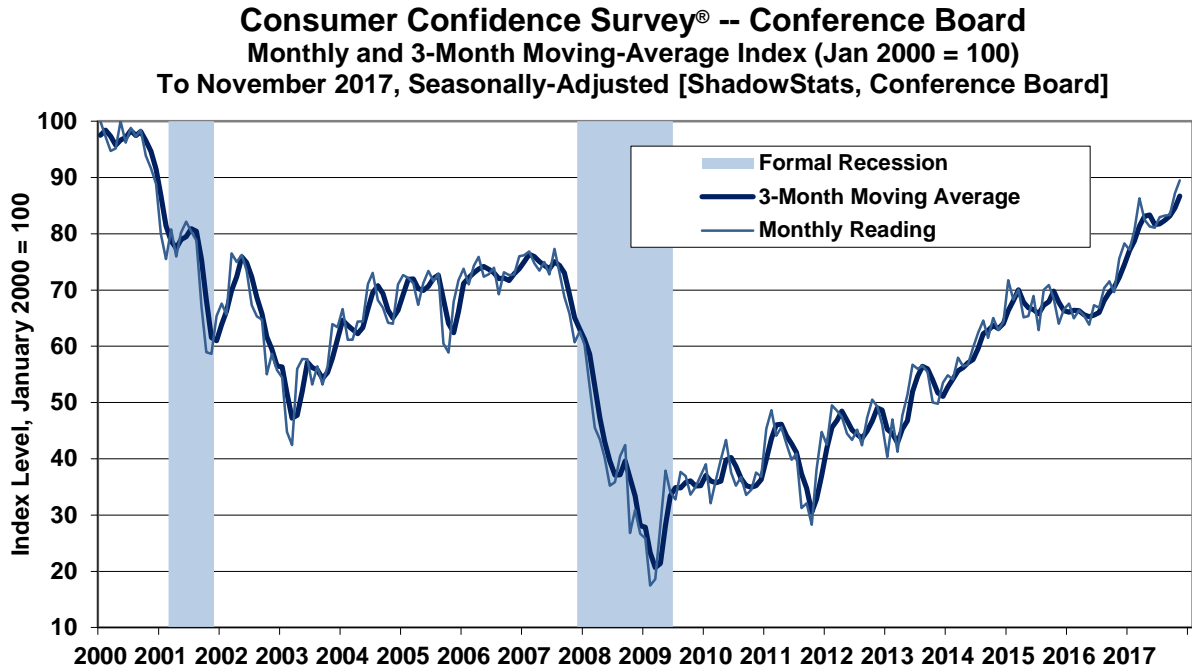
Consumer Optimism: November Consumer Confidence and Early-December Sentiment Continue Mixed in Direction; Confidence Is at Highest Level Since It Collapsed into the 2001 Recession but Sentiment Is Pulling Back. This detail reflects the November 2017 readings of The Conference Board’s Consumer-Confidence Index[®] (Confidence) as of November 28th and the early-December reading of the University of Michigan’s Consumer Sentiment Index (Sentiment) as of December 8th. Reflected in *Graphs CLW-1* and *CLW-2*, both Confidence and Sentiment jumped sharply to multi-year highs in October, but the November Sentiment reading pulled back sharply and continued to do so in early-December, retrenching from its October jump. November Confidence jumped to a new 17-year high; the strongest reading since December 2000, as that series was plummeting into the 2001 recession. That December 2000 reading still was down by 10.5% (-10.5%) from the series high in May of 2000.

A year or so ago September 2016 Confidence and Sentiment jumped and then plunged in October 2016, likely reflecting concerns as to the direction of the presidential race. Post-election, both measures rallied sharply, reflecting surges in consumer optimism into early-2017. Both series then topped and pulled back, with mixed numbers into August and September 2017, but with the October 2017 Sentiment measure showing an large jump, purportedly because consumers were willing to accept diminished prospects for their living standards (see [Commentary No. 916](#))? Nonetheless, the Sentiment measure retrenched in November and early-December. The Conference Board blamed hurricane impact in Texas and Florida for its downturn in September 2017 Confidence, but those numbers exploded into October and November 2017.

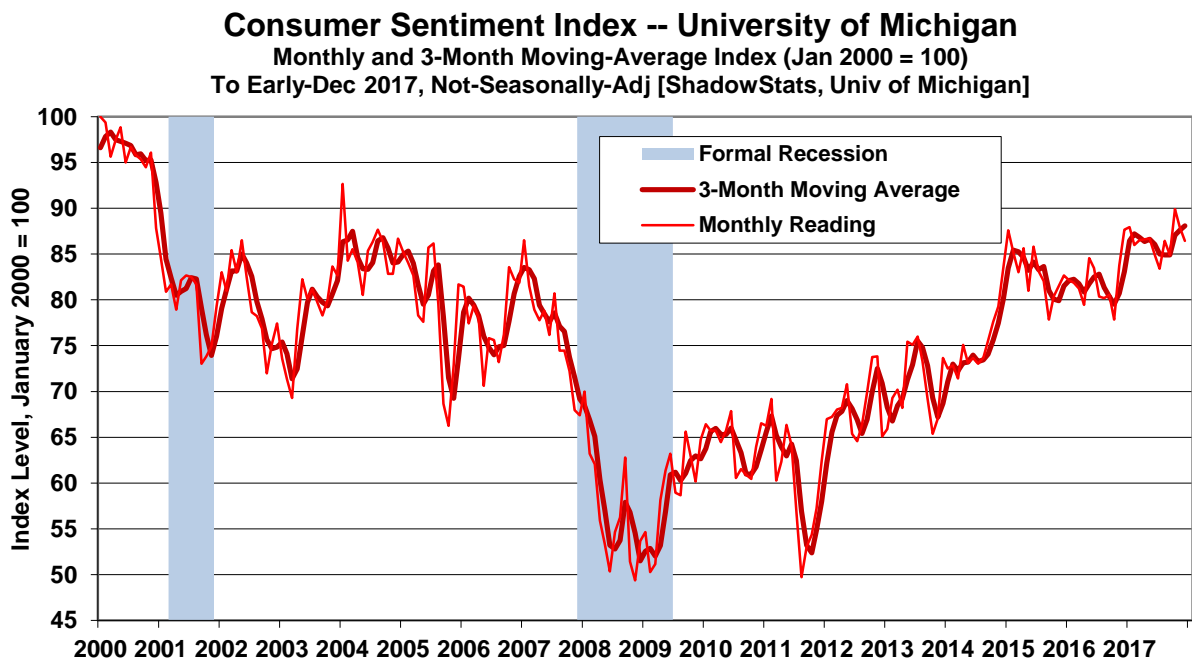
For both the Conference Board’s seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index[®] (*Graph CLW-1*), and the University of Michigan’s not-seasonally-adjusted Consumer-Sentiment Index (*Graph CLW-2*), the three-month moving averages also are above pre-2007 recession highs, with Confidence hitting levels last seen falling into the 2001 recession, yet the still-high moving averages also had begun to falter in September 2017, before the unusual October and November surges.

Showing the Consumer Confidence and Consumer Sentiment measures on something of a comparable basis, *Graphs CLW-1* to *CLW-3* reflect both measures re-indexed to January 2000 = 100 for the monthly reading. Standardly reported, the Conference Board’s Consumer Confidence Index[®] is set with 1985 = 100, while the University of Michigan’s Consumer Sentiment Index is set with January 1966 = 100.

Graph CLW-1: Consumer Confidence (2000 to 2017)



Graph CLW-2: Consumer Sentiment (2000 to 2017)



The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in [Commentary No. 764](#)), and often are highly volatile month-to-month, as a result. Recent headlines have been highly positive on the economy, reflecting short-lived hurricane distortions

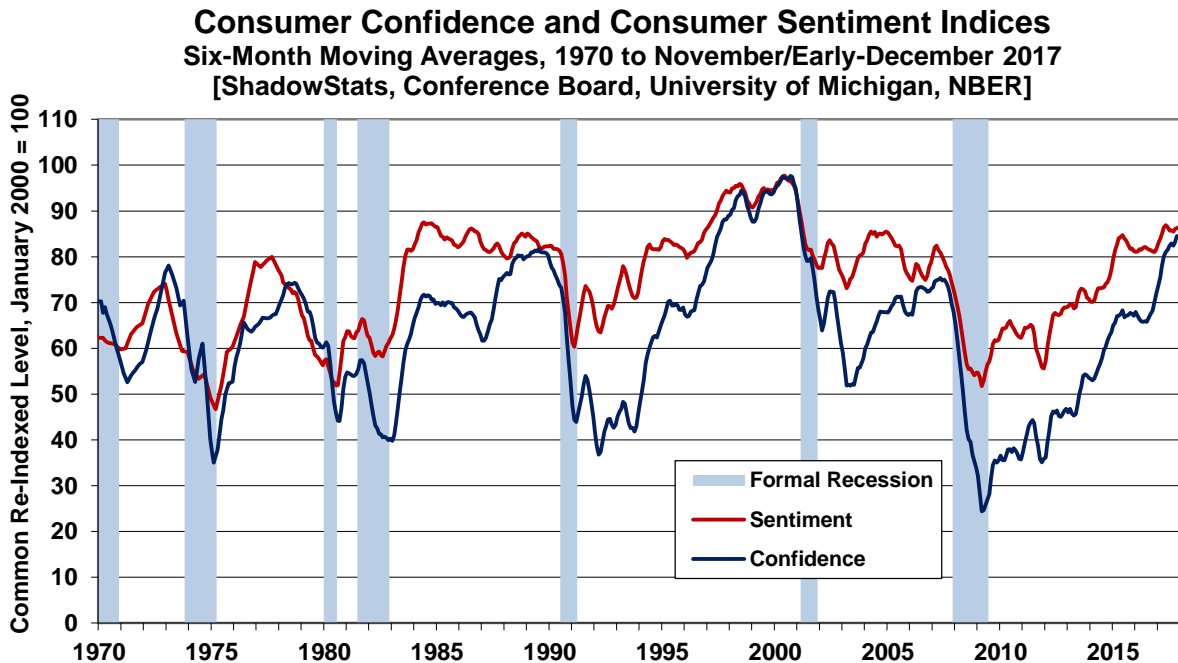
particularly on unemployment (not payroll employment), retail sales and industrial production. Headline financial and economic reporting in the next month or two should turn increasingly-negative and unstable.

With near-term headline financial and economic reporting increasingly suggestive of a renewed and intensifying downturn likely in the next couple of months, successive negative hits to both the confidence and sentiment readings are increasingly likely in the near future, again, despite the artificial, headline-spiked October and November 2017 readings. Again, they likely were built upon some temporary or faux, hurricane-boosted data, which already have begun to unwind (see [Commentary No. 922](#) and [Commentary No. 923](#)).

Broadly, though, the harder, financial consumer measures remain well below, or are inconsistent with, periods of historically-strong economic growth as suggested by headline GDP growth in 2014, for second-and third-quarter 2015 and for third-quarter 2016 and into third-quarter 2017. Beyond having happy feelings about the future, consumers still need actual income, cash-in-hand or credit in order to increase their spending.

Smoothed for irregular, short-term volatility, the two series still generally had held at levels seen typically in recessions, until the post-2016 election circumstance. Suggested in *Graph CLW-3*—plotted for the last 47 years—the latest readings of Confidence and Sentiment recently have recovered levels seen in periods of normal, positive economic activity of the last four decades, with their six-month moving averages at levels last seen going into the 2001 recession, although they appear to be topping out.

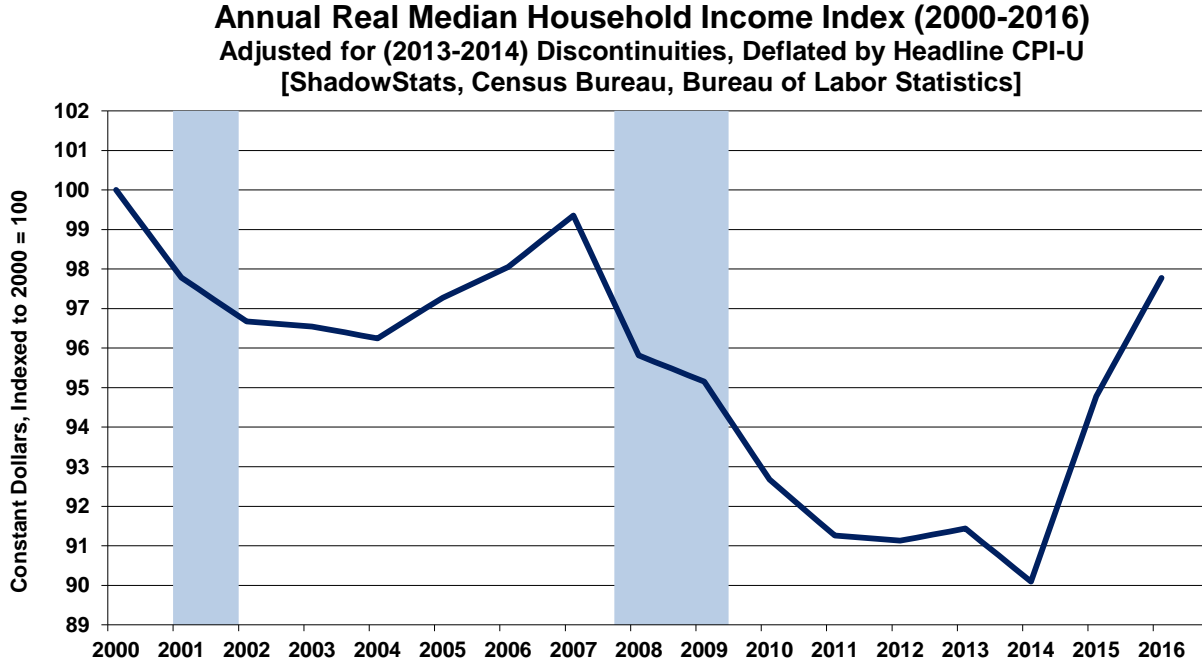
Graph CLW-3: Comparative Confidence and Sentiment (6-Month Moving Averages, 1970 to 2017)



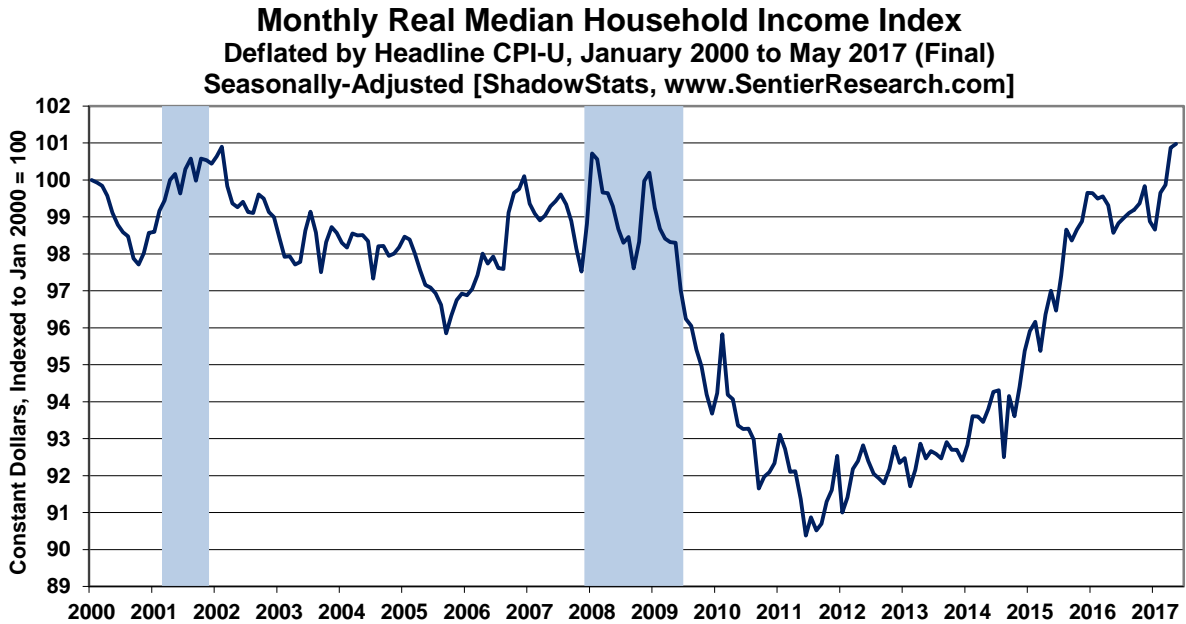
2016 Annual Real Median Household Income Still Was Below Its 2007 Pre-Recession High, Below Activity in the Late-1990s, About Even with the Mid-1970s. The measure of real monthly median household income, which has been provided by www.SentierResearch.com, generally can be considered

as a monthly version of the annual detail shown in *Graph CLW-4*, based on the annual detail recently released by the Census Bureau and as discussed the *Opening Comments* of [Commentary No. 909](#).

Graph CLW-4: Annual Real Median U.S. Household Income (1967 to 2016)



Graph CLW-5: Monthly Real Median Household Income (2000 to May 2017) Index, January 2000 = 100

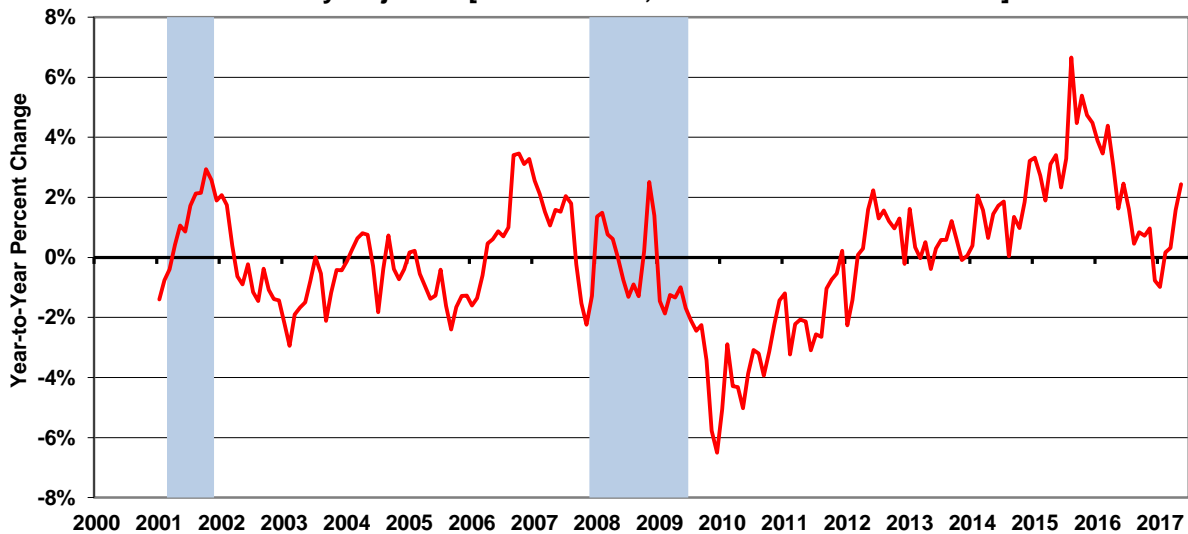


The 3.16% headline gain in 2016 real annual median household income for 2016 left the level of income not only below that seen at the purported pre-recession peak of 2007, but also below levels seen in the late-1990s, and minimally above activity seen in the mid-1970s (see *Graph OC-1* in *No. 909*). The Sentier details, as far as they go, from January 2000 to May 2017, suggested annual real median income was on track for further increase in 2017, having also indicated the 2015 and 2016 annual increases.

Last Monthly Estimate Showed Stagnating Monthly Real Growth. As last reported by Sentier Research, May 2017 Real Median Household Income was statistically unchanged, despite a boost from falling gasoline prices. Discussed in [General Commentary No. 894](#), and in the contexts of then-faltering gains in post-election consumer optimism, and inflation-adjusted activity boosted by declining headline Consumer Price Index (CPI-U) inflation (weakened by seasonally-adjusted gasoline price declines), May 2017 Real Median Monthly Household Income was “statistically unchanged” (a statistically-insignificant monthly gain of 0.10%). That followed a statistically-significant monthly gain of 1.00% in April 2017. Shown in *Graph CLW-4*, such enabled May 2017 real monthly median household income to hold a level regained in April and otherwise last seen in February 2002. Year-to-year real median household income rose to 2.44% in May 2017, the highest level since June 2016, following an annual gain of 1.57% in April 2017 (see *Graph CLW-5*). The May detail, however, may have been the final reporting of the monthly series (see the *Special Note* that follows).

Graph CLW-6: Monthly Real Median Household Income (2000 to May 2017) Year-to-Year Change

Monthly Real Median Household Income Yr/Yr Change
 Deflated by Headline CPI-U, January 2001 to May 2017
 Seasonally-Adjusted [ShadowStats, www.SentierResearch.com]



Where real monthly median income plunged into the headline trough of the economic collapse in 2009, it did not then rebound in tandem with the headline GDP activity. When the GDP purportedly started its solid economic recovery in mid-2009, the monthly household income numbers nonetheless plunged to new lows, hitting bottom in 2011. The income series then held in low-level stagnation, until collapsing gasoline prices and the resulting negative CPI-U inflation drove a post-2014 uptrend in the inflation-adjusted monthly income index. The index approached pre-recession levels in the December 2015 reporting, but it remained minimally below the pre-recession highs for both the formal 2007 and 2001 recessions until recent months. Real median household income had the potential to resume turning down anew, as the headline pace of monthly consumer inflation picked up anew, with the August 2017 CPI.

Nonetheless, the most-recent recent “rebound” reported in the series still left consumers financially strapped. Where lower gasoline prices had provided some minimal liquidity relief to the consumer, indications are that any effective extra cash largely was used to help pay down unsustainable debt or other obligations, not to fuel new consumption. Except for mixed gyrations in first-half 2017, the effects of changing gasoline prices in the headline CPI-U generally had reversed, pushing headline consumer inflation higher and beginning to push real income lower.

Differences in the Monthly versus Annual Median Household Income. The general pattern of relative monthly historical weakness has been seen in the headline reporting of the annual Census Bureau numbers, again, shown in *Graph CLW-4*, with 2014 real annual median household income having hit a ten-year low, and, again, with the historically-consistent 2015 and 2016 annual number still holding below the 2007 pre-recession high. The Sentier numbers had suggested a small increase in 2014 versus 2013 levels, low-inflation induced real increases in 2015 and 2016. Allowing for the direction difference in 2014, and continual redefinitions and gimmicks in the annual series (again, see the *Opening Comments* of [Commentary No. 909](#)) the monthly and annual series had remained broadly consistent, although based on separate questions within the Consumer Population Series (CPS), as conducted by the Census Bureau.

Where Sentier used monthly questions surveying current annual household income, the headline annual Census Bureau detail is generated by a once-per-year question in the March CPS survey, as to the prior year’s annual household income. The Median Household Income surveying results are broadly consistent with Real Average Weekly Earnings.

Special Note: Accompanying the release of the May 2017 data by Sentier Research was this [Notice of Final Report](#):

Dear Friends, This will be our final report in the monthly series of median household income. We can no longer afford to provide these estimates given our current level of resources. We believe, as we hope you do, that these estimates provided an important new dimension regarding the economic situation of American households as we slowly climbed out of the Great Recession. The story continues but we must move on. Our hope is that someone will be able to continue this work. Should you or someone you know be interested please contact us. Thanks to all of you for your kind support.. John and Gordon

ShadowStats hopes a circumstance will unfold that enables continued reporting of this extraordinarily valuable and timely indicator of consumer liquidity. Gordon Green and John Coder, the authors of the monthly report, both are former senior officials at the U.S. Census Bureau and have a unique understanding of the underlying monthly data. The Census Bureau publishes a broadly-similar series on an annual basis, but with an extraordinary time lag. The 2016 Census annual detail is due for release and publication in September 2017. Again, see [Commentary No. 833](#) for the 2015 detail published in 2016.

Real Average Weekly Earnings—November 2007—Monthly Real Earnings Continued to Contract, Fourth-Quarter on Solid Track for Second Consecutive Quarterly Contraction. For the production and nonsupervisory employees category—the only series for which there is a meaningful history (see the full discussion on in today’s *Reporting Detail*, the regularly-volatile, real average weekly earnings declined month-to-month in November 2017, the third month down in the last four. With a revised, deepened quarterly contraction for third-quarter 2017 activity, the quarterly contraction unfolding for fourth-quarter 2017 also deepened, with two out of three months in place.

Graph CLW-7 plots the seasonally-adjusted earnings as officially deflated by the BLS (red-line), and as adjusted for the ShadowStats-Alternate CPI Measure, 1990-Base (blue-line). When inflation-depressing

methodologies of the 1990s began to kick-in, the artificially-weakened CPI-W (also used in calculating Social Security cost-of-living adjustments) helped to prop up the reported real earnings. Official real earnings today still have not recovered their inflation-adjusted levels of the early-1970s, and, at best, have been in a minimal uptrend for the last two decades (albeit spiked recently by negative headline inflation). Deflated by the ShadowStats (1990-Based) measure, real earnings have been in fairly-regular decline for the last four decades, which is much closer to common experience than the pattern suggested by the CPI-W. See the [Public Commentary on Inflation Measurement](#) for further detail.

Graph CLW-7: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date



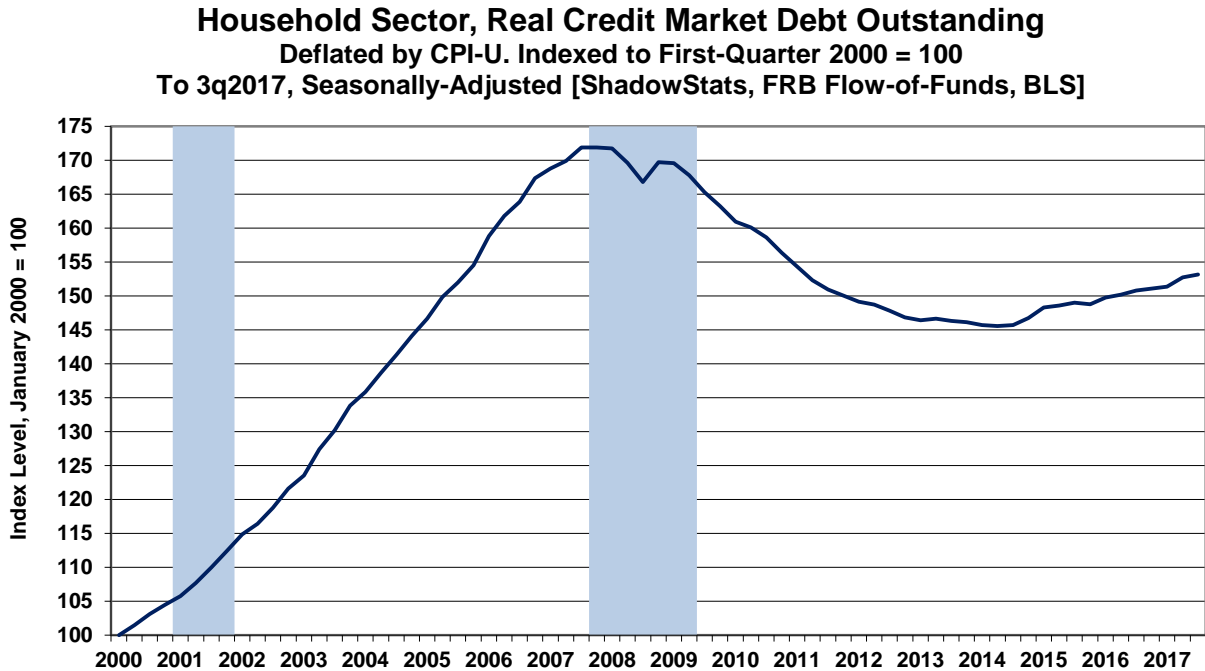
Consumer Credit: Lack of Meaningful Real Consumer Credit Growth Remains an Economic Constraint. The final four graphs on consumer conditions address consumer borrowing. Where debt expansion can help make up for a shortfall in income growth, adequate expansion of consumer debt, which would help fuel growth in personal consumption, has been lacking.

Quarterly Series. Consider *Graph CLW-8 of Household Sector, Real Credit Market Debt Outstanding*. The level of real household debt declined in the period following the Panic of 2008, reflecting loan defaults and reduced banking lending, and it has not recovered fully, based on the Federal Reserve’s flow-of-funds accounting through third-quarter 2017, released on December 7th. Household Sector, Real Credit Market Debt Outstanding in third-quarter 2017 still was down by 10.9% (-10.9%) from its pre-recession peak of third-quarter 2007. That was against a second-quarter 2017 decline of 11.2% (-11.2%). The flattened visual uptick at the latest point in *Graph CLW-8* reflected a slowing in real year-to-year change from 1.70% in second-quarter 2017, to 1.55% in third-quarter 2017.

The series includes mortgages, automobile and student loans, credit cards, secured and unsecured loans, etc., all deflated by the headline quarterly 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. The slight upturn seen in the series through 2015 and into 2016 was due primarily to gasoline-price-driven, negative CPI inflation, which continued to impact the system through second-quarter 2016 and intermittently into second-quarter 2017. Current activity also has reflected continuing relative strength from student loans, as shown in the *Graphs CLW-9 to CLW-11*.

Graph CLW-8: Household Sector, Real Credit Market Debt Outstanding (2000 through Third-Quarter 2017)

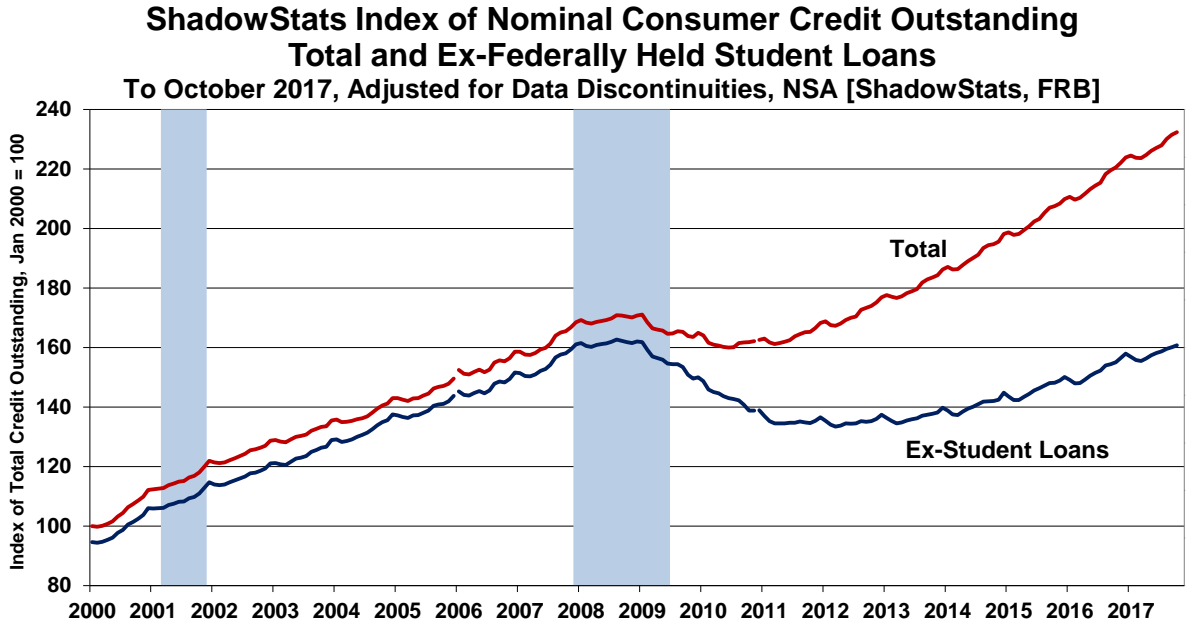


Monthly Series. The ShadowStats analysis usually focuses on the particular current and continuing weakness in monthly levels of consumer credit, net of what has been rapidly expanding government-sponsored student loans. Where detail on that series is only available not-seasonally-adjusted, the following three graphs are so plotted.

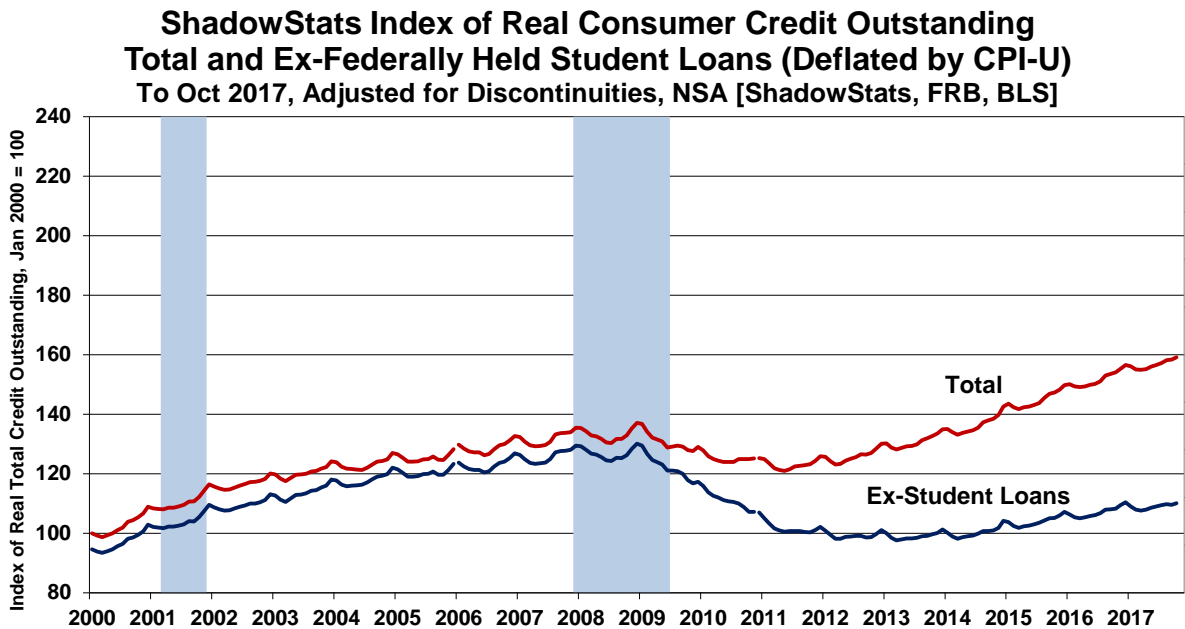
Shown through the October 2017 reading (released December 7th), *Graph CLW-9* of monthly Consumer Credit Outstanding is a subcomponent of the preceding *Graph CLW-8* on real Household Sector debt. Where *Graph CLW-9* reflects the nominal reporting, real or inflation-adjusted activity for monthly Consumer Credit Outstanding is shown in terms of both level (*Graph CLW-10*) and year-to-year change (*Graph CLW-11*).

Post-2008 Panic, growth in 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 or housing growth. Although in slow uptrend, the nominal level of Consumer Credit Outstanding (ex-student loans) has not recovered since the onset of the recession. These disaggregated data are available and plotted only on a not-seasonally-adjusted basis, with the pattern of monthly levels during one year reflecting some regular, unadjusted seasonal dips or jumps.

Graph CLW-9: Nominal Consumer Credit Outstanding (2000 to 2017)



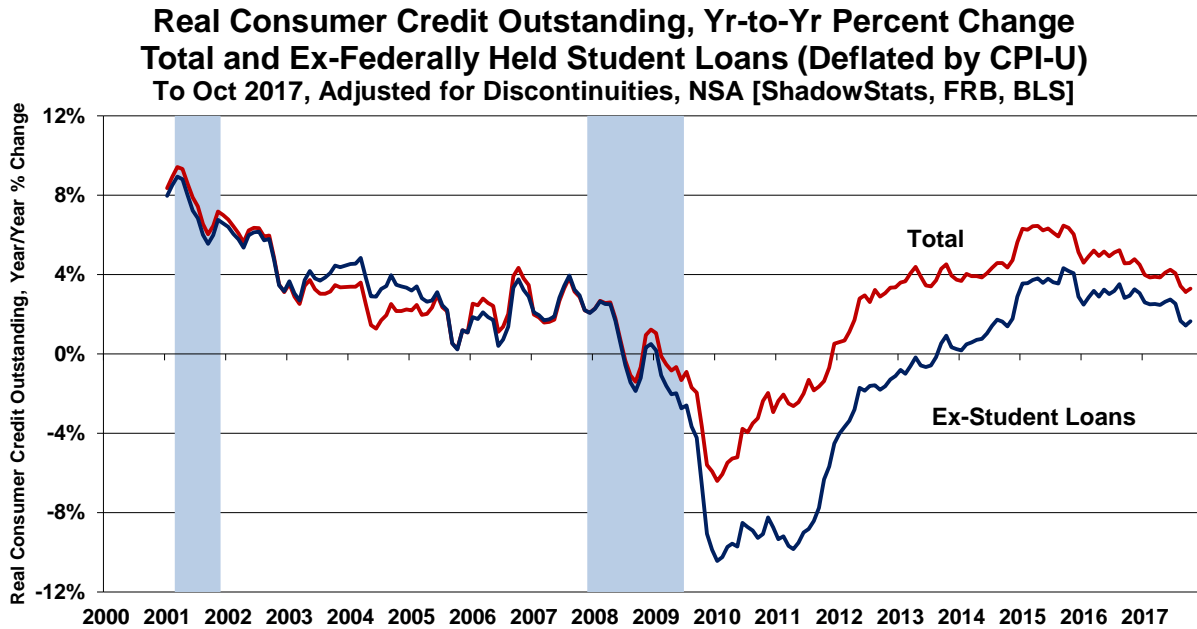
Graph CLW-10: Real Consumer Credit Outstanding (2000 to 2017)



Adjusted for inflation, the lack of recovery in the ex-student loan area is more obvious. Although the recent monthly upside move in the not-seasonally-adjusted consumer credit reflected a seasonal pattern, the pace of year-to-year growth has continued to slow sharply, suggesting some tightening of credit conditions. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in

October 2017 was down from its December 2007 pre-recession peak by 15.0% (-15.0%) [that previously had been down by 12.3% (-12.3%) in June 2017, before a recent downside revision to the last five years of activity]. Year-to-year real growth shown in *Graph CLW-11* tends to resolve most of the monthly distortions in the not-seasonally-adjusted data.

Graph CLW-11: Year-to-Year Percent Change, Real Consumer Credit Outstanding (2000 to 2017)



WEEK, MONTH AND YEAR AHEAD

Financial-Market Instabilities and Turmoil Remain Increasingly Likely in the Near Future; Along with Continued Deterioration of Domestic and Global Economic and Political Circumstances.

Irrespective of the FOMC’s rate hike and continued tightening, the economy is not recovering or booming, irrespective of a heavily distorted November retail sales surge and as confirmed partially in today’s broadly deteriorating November industrial production detail. Allowing for hurricane disruptions and recovery from same, most series should be back to normal, reflecting “unexpected” downtrending economic activity, by the time of headline reporting for January or February 2018 economic activity.

Negative economic “surprises” increasingly should shock the markets and the U.S. dollar on the downside. As the reported the economic downturn intensifies, the FOMC most likely will be forced into an “unexpected” policy retrenchment, moving back towards quantitative easing.

In such circumstances, the U.S. dollar and financial markets remain at extraordinarily-high risk of panicked declines, increasingly likely in the very near term. Today’s (December 15th) *Opening Comments* review some background to real-world economic conditions.

Continuing from the *Opening Comments* and brief *Hyperinflation Watch* of [Commentary No. 925](#), a very substantive and fully-updated *Hyperinflation Watch* follows in the next *Commentary No. 927* of December 19th, with expanded coverage on the U.S. dollar and gold.

Holding physical gold and silver remain the ultimate hedges—stores of wealth—for preserving the purchasing power of one’s U.S. dollar assets, in the context of liquidity and portability during times of high inflation currency debasement and/or political-system upheaval, discussed regularly here. See the comments linked to other recent *Hyperinflation Watches*, provided in the next section.

Following this note, other than for the *Pending Releases* paragraphs and updated links, language changes in this section from the prior *Commentary No. 925* are minimal. Please call (707) 763-5786, if you would like to discuss current circumstances, or otherwise. *Best wishes – John Williams*

Recent Hyperinflation Watch and Special Comments. Previous background to the markets and potential near-term FOMC activity have been reviewed recently in the *Hyperinflation Watches* of [Commentary No. 920](#) and [Special Commentary No. 918-B](#) of October 30th, with the nomination for the new Fed Chairman, as touched upon in the *Hyperinflation Watch* [Commentary No. 919-A](#) of November 3rd, not likely to have immediate, near-term market impact.

Discussed in *Hyperinflation Watch* of [Commentary No. 909](#), given the continuing and broadening weakness in the U.S. economy and shifting political instabilities/circumstances in Washington, mixed pronouncements of sharp, near-term rate hikes and aggressive balance-sheet liquidation remain unlikely to solidify as promised. Accordingly, selling pressure against the U.S. dollar still should re-intensify, shortly, pressuring inflation and the prices of precious metals on the upside. Increasingly, foreign capital should flee the U.S. equity and credit markets at an accelerating pace.

In the context of the *Opening Comments* and *Hyperinflation Watch* of the August 14th [Special Commentary No. 904](#) and the *Opening Comments* of [Commentary No. 905](#), underlying reality remains a weakening and vulnerable, seriously-impaired U.S. economy, as seen, for example with the latest employment and construction detail, and in likely weak data in the week ahead, all amidst continuing domestic and global political instabilities and unfolding natural disasters.

Unfolding circumstances still threaten the promised shift in FOMC policy, combined with the mounting political discord discussed in [Special Commentary No. 904](#) (see also the *Opening Comments* of [Commentary No. 901](#) and [Special Commentary No. 888](#)), odds continue to mount for intensifying financial-market turmoil in the near future, particularly as would be triggered by a market-related, intensifying heavy sell-off in the U.S. Dollar.

Broad economic activity never recovered fully from its crash into 2009, and it has started to turn down anew. As explored previously in the *Hyperinflation Watches* of [Commentary No. 899](#) and [General Commentary No. 894](#), and further to the *Opening Comments* and *Hyperinflation Watch* of [Commentary No. 892](#), headline economic reporting during June, July and early August of 2017, had shown a marked

downturn versus consensus forecasts. While these circumstances usually signal an unfolding, major downshift in underlying economic reality, at present, they also forewarn of a potential shift in FOMC activity. Where such an event remains well removed from consensus expectations, at this time, in terms of Fed policy, that would mean a cessation of incremental rate hikes and a shift back towards expanded quantitative easing.

Immediate effects of such a policy change likely would include a massive sell-off in the U.S. dollar, which otherwise has been propped by recent FOMC rate hikes and continual jawboning for same. In parallel, heavy selling in the U.S. equity and credit markets would follow. As consensus economic forecasts have begun to soften, so too has the U.S. dollar exchange rate, while gold prices generally have firmed.

The circumstances here and the outlook still remain as broadly outlined in [No. 859 Special Commentary](#); currently shifting headlines only reflect the continued movement and evolution forward in time of the Fed's difficulties discussed in that missive.

The problem for the Federal Reserve remains that faltering domestic economic activity stresses banking-system solvency. Aside from formal obligations of the Fed to maintain healthy domestic economic and inflation conditions, the central bank's primary function (in practice) always has been to keep the banking system afloat. The near-absolute failure of that function in 2008 remains the primary ongoing and unresolved problem for the Fed, and it continues as one of the ongoing primary issues preventing the return of U.S. economic activity to normal functioning. Contrary to the recent purported headline comments of "not in our lifetime" by Federal Reserve Chair Janet Yellen, the continued unfolding of "unexpected" economic deterioration suggests that the next major systemic financial crisis is likely to break in the next several months.

Generally, 2017 benchmark revisions to Construction Spending (see [Commentary No 897](#)), the Trade Deficit ([Commentary No. 890](#)), Industrial Production ([Commentary No. 877](#)), Manufacturers' Shipments ([Special Commentary No. 888](#)), Housing Starts ([Commentary No. 887](#)) and Retail Sales ([Commentary No. 882](#)), and reporting subsequent to the benchmarks, confirmed that historical activity in recent years has been overstated and/or that it was turning down anew, particularly in 2015, with the availability of better-quality historical detail. Again, that is despite some recent near-term improvement in details, such as the headline unemployment rate, which increasingly suffers from dysfunctional definitional and sampling issues, and the latest headline GDP detail.

The reporting patterns of the better-quality, less-gimmicked series likely will continue to weaken with increasing intensity in the weeks and months ahead. Adding a negative uncertainty to unfolding financial-market risks remains potential political surprise, discussed in [Special Commentary No. 888](#). Otherwise, the broad outlook has not changed. Reflected in common experience, actual U.S. economic activity generally continues in stagnation or downturn, never having recovered its level of pre-economic-collapse (its pre-2007-recession peak), while the latest GDP reporting shows an otherwise unconfirmed economic expansion of 14.4%.

Discussed in [No. 859 Special Commentary](#), the Trump Administration continues to face extraordinarily difficult times, but still has a chance to turn the tide on factors savaging the U.S. economy and on highly negative prospects for long-range U.S. Treasury solvency and stability. Any forthcoming economic stimulus faces a nine-month to one-year lead-time, once in play, before it meaningfully affects the broad

economy. Increasing and continuing delays from political discord continue to push targeted programs back in time. Needed at the same time are a credible plan for bringing the U.S. long-term budget deficit (sovereign solvency issues) under control and action to bring the Federal Reserve under control and/or to reorganize the banking system. These actions broadly are necessary to restore domestic-economic and financial-system tranquility (see [No. 859](#)), but they cannot happen without the meaningful participation and cooperation of Congress. The financial crisis at hand likely will intensify well before the 2018 Congressional Election will have any chance to stabilize the political outlook for economic policy.

[No. 859 Special Commentary](#) updated the post-election, near-term economic and inflation conditions, including general economic, inflation and systemic distortions, which had evolved out of the Panic of 2008, have continued in play and, again, need to be addressed by the Trump Administration and Congress (see also the *Hyperinflation Watch* of [Commentary No. 862](#) and [Commentary No. 869](#)).

Contrary to the official reporting of an economy that collapsed from 2007 into 2009 and then recovered strongly into ongoing expansion, underlying domestic reality remained and remains that the U.S. economy started to turn down somewhat before 2007, collapsed into 2009 but never recovered fully. While the economy bounced off its 2009 trough, it entered a period of low-level stagnation and then began to turn down anew in December 2014, a month that eventually should mark the beginning of a “new” formal recession (see [General Commentary No. 867](#)). Formal economic expansion does not begin until economic recovery breaks above its pre-recession high.

Coincident with and tied to the economic crash and the Panic of 2008, the U.S. banking system moved to the brink of collapse, a circumstance from which U.S. and global central-bank policies never have recovered. Unwilling to admit its loss of systemic control, the Federal Reserve has made loud noises in the last year or so of needing to raise interest rates, in order to contain an “overheating” economy, but that “overheating” activity—never recognized by Main Street, U.S.A.—has been fading quickly. As this ongoing crisis evolves towards its unhappy end, the U.S. dollar ultimately should face unprecedented debasement with a resulting runaway domestic inflation.

Broad economic and systemic conditions are reviewed regularly, with the following *Commentaries* of particular note: [Commentary No. 902-B](#), [General Commentary No. 894](#), [Special Commentary No. 885](#), [Commentary No. 869](#), [No. 859 Special Commentary](#), [No. 777 Year-End Special Commentary](#) (December 2015), [No. 742 Special Commentary: A World Increasingly Out of Balance](#) (August 2015) and [No. 692 Special Commentary: 2015 - A World Out of Balance](#) (February 2015). Those publications updated hyperinflation and economic outlooks published in [2014 Hyperinflation Report—The End Game Begins – First Installment Revised](#) (April 2014) and [2014 Hyperinflation Report—Great Economic Tumble – Second Installment](#) (April 2014). The two *Hyperinflation* installments remain the primary background material for the hyperinflation circumstance. Other references on underlying economic reality are the [Public Commentary on Inflation Measurement](#) and the [Public Commentary on Unemployment Measurement](#).

Recent Commentaries. [*Listed here are Commentaries of the last month or so, plus recent Special Commentaries and others covering a variety of non-monthly issues, including annual benchmark revisions, dating back through the beginning of 2017. Please Note: Complete ShadowStats archives back to 2004 are found at www.ShadowStats.com (left-hand column of home page).*]

[Commentary No. 925](#) (December 13th) reviewed November 2017 headline detail on the CPI and PPI, along with an update on the FOMC actions and the regular U.S. dollar, gold graphs.

[Commentary No. 924](#) (December 8th) discussed the November 2017 Employment and Unemployment details and Conference Board Help Wanted OnLine[®] Advertising, the October Trade Deficit and Construction Spending and updated Monetary Conditions in November.

[Commentary No. 923](#) (November 29th) covered the second estimate of Third-Quarter 2017 GDP, including initial estimates for Third-Quarter GNP, GDI and Per Capita Real Disposable Income, the October Trade Deficit, Cass Freight Index and New-Home Sales.

[Commentary No. 922](#) (November 22nd) reviewed October 2017 New Orders for Durable Goods and Existing-Home Sales.

[Commentary No. 921](#) (November 17th) reviewed October 2017 Industrial Production, Housing Starts and Building Permits.

[Commentary No. 920](#) (November 15th) reviewed October 2017 Retail Sales along with the monthly Consumer and Producer Price Indices (CPI and PPI) and updated *Hyperinflation Watch*.

[Commentary No. 919-B](#) (November 6th) provided more in-depth detail on the October 2017 labor detail.

[Commentary No. 919-A](#) (November 3rd) provided initial detail and background on October labor data, and reviewed the October 2017 Conference Board Help Wanted OnLine[®] Advertising, the September Cass Freight Index[™], Trade Deficit and Construction Spending, and updated Monetary Conditions.

[Special Commentary No. 918-B](#) (October 30th) provided a more comprehensive review of the initial third-quarter 2017 GDP detail, along with update versions of the *Hyperinflation Watch* and *Consumer Liquidity Watch*.

[Advance Commentary No. 918-A](#) (October 27th) provided a brief summary of the headline detail of the first or “advance” estimate of third-quarter 2017 GDP.

[Commentary No. 917](#) (October 26th/27th) reviewed September Industrial Production, New Orders for Durable Goods, New Residential Construction (Housing Starts and Building Permits) and New- and Existing-Home Sales.

[Commentary No. 916](#) (October 20th) reviewed the September 2017 Retail Sales details along with the headline Consumer and Producer Price Indices for September.

[Commentary No. 915](#) (October 6th) reviewed the September 2017 Employment and Unemployment details, along with September 2017 monetary conditions.

[Commentary No. 913](#) (September 28th) reviewed the third-estimate of second-quarter 2017 GDP, with a further consideration of some unusual economic reporting in the near future.

[Commentary No. 910](#) (September 15th) reviewed the August 2017 releases of Industrial Production and nominal and real Retail Sales.

[Commentary No. 909](#) (September 14th) assessed the annual release of 2016 Real Median Household Income, along with a review of August Consumer Price Index (CPI) and the Producer Price Index (PPI) and an updated *Alert* on the financial markets

[Commentary No. 908-B](#) (September 6th) provided extended detail of the August 2017 Labor and Monetary conditions and July 2017 Construction Spending, along with coverage of the July 2017 Trade Deficit and the initial estimate of the 2017 Payroll Employment benchmarking.

[Special Commentary No. 904](#) (August 14th) issued an “Alert” on the financial markets (including U.S. equities, the U.S. dollar gold and silver, as well as FOMC policy), in the context of historical activity and unfolding circumstances of deteriorating economic and political conditions. Separately, headline details were reviewed for the July Consumer Price Index (CPI) and the Producer Price Index (PPI).

[Commentary No. 903](#) (August 7, 2017) discussed new signals of economic deterioration in terms of political and FOMC considerations, along with headline coverage of the July labor data, M3 and The Conference Board Help Wanted OnLine[®], and June trade deficit and construction spending.

[Commentary No. 902-B](#) (July 31, 2017) reviewed the 2017 annual benchmark revisions of GDP and related series, along with the “advance” estimate of second-quarter 2017 GDP.

[Commentary No. 900](#) (July 19, 2017) reviewed June 2017 New Residential Investment (Housing Starts and Building Permits), and previewed the upcoming annual GDP benchmark revisions and the coincident “advance” estimate of second-quarter 2017 GDP.

[Commentary No. 897](#) (July 6, 2017) reviewed the headline May 2017 Construction Spending and the annual revisions to same, along the May Trade Deficit, and June The Conference Board Help Wanted OnLine[®] Advertising and the May Cass Freight Index[™].

[General Commentary No. 894](#) (June 23, 2017) reviewed unfolding economic, financial and political circumstances in the context of market expectations shifting towards an “unexpected” headline downturn in broad economic activity, along with headline details on May 2017 Real Median Household Income (Sentier Research) and New- and Existing-Home Sales.

[Commentary No. 890](#) (June 5, 2017) covered the negative-downside annual benchmark revisions to the trade deficit, the May 2017 estimates of labor conditions, ShadowStats Ongoing Money Supply M3, The Conference Board Help Wanted OnLine[®] Advertising and April 2017 estimates of the Cass Freight Index[™], and the monthly trade deficit and construction spending.

[Special Commentary No. 888](#) (May 22, 2017) discussed evolving political circumstances that could impact the markets and the economy, reviewed the annual benchmark revisions to Manufacturers’ Shipments and New Orders for Durable Goods and updated Consumer Liquidity Conditions.

[Commentary No. 887](#) (May 18, 2017) reported on the April 2017 detail for Industrial Production and Residential Construction (Housing Starts), with some particular attention to historic, protracted periods of economic non-expansion, of which the current non-recovery is the most severe.

[Special Commentary No. 885](#), entitled *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*, (May 8, 2017) reviewed the unusual nature of the headline reporting of the April 2017 employment and unemployment details.

[Commentary No. 882](#) (April 27, 2017) summarized the annual benchmark revisions to Retail Sales and reviewed the March 2017 releases of New Orders for Durable Goods and New- and Existing-Home Sales.

[Commentary No. 877](#) (April 2, 2017) outlined the nature of the downside annual benchmark revisions to industrial production, along with implications for pending annual revisions to Retail Sales, Durable Goods Orders and the GDP.

[Commentary No. 876](#) (March 30, 2017) current headline economic activity in the context of formal definitions of the business cycle (no other major series come close to the booming GDP, which is covered in its third revision to fourth-quarter activity. Also the February 2017 SentierResearch reading on real median household income was highlighted.

[Commentary No. 875](#) (March 24, 2017) assessed and clarified formal definitions of the U.S. business cycle, which were expanded upon significantly, subsequently, in *No. 876*. It also provided the standard review of the headline February 2017 New Orders for Durable Goods, New- and Existing-Home Sales and the Cass Freight Index™.

[General Commentary No. 867](#) (February 24, 2017) assessed mixed signals for a second bottoming of the economic collapse into 2009, which otherwise never recovered its level of pre-recession activity. Such was in the context of contracting and faltering industrial production that now rivals the economic collapse in the Great Depression as to duration. Also covered were the prior January 2017 New- and Existing Home Sales.

[Commentary No. 864](#) (February 8, 2017) analyzed January 2017 Employment and Unemployment detail, including benchmark and population revisions, and estimates of December Construction Spending, Household Income, along with the prior update to Consumer Liquidity.

[Commentary No. 861](#) (January 13, 2017) covered the December 2016 nominal Retail Sales, the PPI, with a brief look at some summary GAAP reporting on the U.S. government's fiscal 2016 operations.

[No. 859 Special Commentary](#) (January 8, 2017) reviewed and previewed economic, financial and systemic developments of the year passed and the post-election year ahead.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. In the context of historical background provided in [Special Commentary No. 885: Numbers Games that Statistical Bureaus, Central Banks and Politicians Play](#), 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 both to understate inflation and to overstate economic activity meaningfully—as generally viewed in the common experience of Main Street, U.S.A.—ongoing, near-term headline reporting issues often reflect systemic distortions of monthly seasonal adjustments.

Data instabilities—induced partially by the still-evolving economic turmoil of the last eleven 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, with the use of concurrent seasonal adjustments (as seen with retail sales, durable goods orders, employment and unemployment data). While historical seasonal-factor adjustments are revised every month, based on the latest, headline monthly data, the consistent, revamped historical data are not released or reported at the same time. That issue is discussed and explored in the labor-numbers related [Supplemental Commentary No. 784-A](#) and [Commentary No. 695](#).

Further, discussed in [Commentary No. 778](#), a heretofore unheard of spate of “processing errors” surfaced in 2016 surveys of earnings (Bureau of Labor Statistics) and construction spending (Census Bureau). This is suggestive of deteriorating internal oversight and control of the U.S. government's headline economic reporting. That construction-spending issue now appears to have been structured as a gimmick to help boost the July 2016 GDP benchmark revisions, aimed at smoothing the headline reporting of the GDP business cycle, instead of detailing the business cycle and reflecting broad economic trends accurately, as discussed in [Commentary No. 823](#).

Combined with ongoing allegations in the last several years of Census Bureau falsification of data in its monthly Current Population Survey (the source for the BLS 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](#)). Investigative-financial/business reporter John Crudele of the *New York Post* has written extensively on such reporting irregularities: [Crudele Investigation](#), [Crudele on Census Bureau Fraud](#) and [John Crudele on Retail Sales](#).

PENDING ECONOMIC RELEASES: Existing- and New-Home Sales (November 2017). Reporting of November 2017 Existing-Home Sales is due for release on Wednesday, December 20th, from the National Association of Realtors (NAR), while November 2017 New-Home Sales from the Census Bureau is scheduled for Friday, December 22nd. Both series will be covered in *Commentary No. 928* of December 22nd.

The extreme liquidity bind besetting consumers continues to constrain residential real estate activity, as discussed the *Consumer Liquidity Watch* and as reviewed in the *Consumer Liquidity* section of [No. 859 Special Commentary](#). Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including residential real estate activity and related demand for residential construction. That circumstance—in the last ten-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity.

Where the private housing sector never recovered from the business collapse of 2006 into 2009, there remains no chance of a near-term, sustainable turnaround in home-sales activity, without a fundamental upturn in consumer and banking-liquidity conditions. That does not appear to be in the offing. Smoothed for month-to-month variability, patterns of low-level downtrending stagnation should remain in play for the Existing-Home Sales series.

New Residential Construction—Housing Starts and Building Permits (November 2017). The Census Bureau will release the November 2017 estimate of New Residential Construction, including Housing Starts and Building Permits on Tuesday, December 19th, with detail covered in *Commentary No. 927* of that date. The *Consumer Liquidity* issues here are the same as expressed above for the Existing- and New-Home Sales series.

In line with common-reporting experience of recent years, monthly results are likely to be unstable, heavily revised and not statistically meaningful, holding in a general pattern of down-trending stagnation, as seen increasingly in recent months. That said, in the wake of frequent, although irregular extreme monthly swings, almost anything remains possible in this unstable series in a given month, despite what usually are positive consensus expectations for the headline reporting detail. Given an extreme, but still statistically-insignificant October surge, however, some fall-back in November is a reasonable bet.

Irrespective of the usual lack of significance in the headline detail, the broad pattern of Housing Starts should remain consistent with the low-level, stagnant-to-downtrending activity, seen at present. Both Housing Starts and Building Permits showed patterns of continuing non-recovery, in the context of respective October 2017 activity down by 43.2% (-43.2%) and by 42.7% (-42.7%) from recovering pre-recession highs. Such low-level stagnation is particularly evident with headline detail viewed in the

context of a six-month moving average. Again, these series remains subject to regular and extremely-large, prior-period revisions.

New Orders for Durable Goods (November 2017). The Census Bureau will report November New Orders for Durable Goods on Friday, December 22nd, to be covered in *Commentary No. 928* of that date. Net of irregular activity in commercial aircraft orders, aggregate orders likely continued a pattern of down-trending real stagnation, albeit with some possible, residual positive impact on order activity from hurricane disruptions. To the extent that durable goods, ranging from automobiles and furniture to business equipment, were damaged or destroyed in Hurricanes Harvey and Irma, there still could be some related boost to orders activity in November, but today’s industrial production is suggestive of a winding down in replacement automobiles.

Separately, where commercial aircraft orders are booked for the long-term—years in advance—they have only limited impact on near-term production. Further, by their nature, these types of orders do not lend themselves to seasonal adjustment. As a result, the durable goods measure that best serves as a leading indicator to broad production—a near-term leading indicator of broad economic activity and the GDP—is the activity in new orders, ex-commercial aircraft, adjusted for inflation.

In inflation-adjusted real terms, reflecting PPI-related inflation for “manufactured durable goods,” relative month-to-month and year-to-year order activity will be dampened for November 2017. Month-to-month inflation for November 2017 rose by 0.12%, having gained 0.41% in October and 0.06% in September. Year-to-year annual inflation rose to 1.92% in November 2017, versus 1.86% in October 2017 and 1.74% (see prior [Commentary No. 925](#)).

Gross Domestic Product—GDP (Third-Estimate, Second-Revision Third-Quarter 2017). The Bureau of Economic Analysis (BEA) will release its third estimate of, second- revision to Third-Quarter 2017 GDP on Thursday, December 21st, along with the second estimates of, first revisions to Third-Quarter 2017 Gross Domestic Income (GDI) and Gross National Product (GNP), all to be covered in *Commentary No. 928* of December 22nd.

Given the rush to get the GDP revisions out a week early, ahead of the Christmas holiday, meaningful revisions to these series are not likely to the previous headline estimate of annualized real third-quarter 2017 real growth of 3.30%.
